

## Emergent quasiparticles in Euclidean tiling

F. Crasto de Lima<sup>1,\*</sup> and A. Fazzio<sup>1,†</sup>

<sup>1</sup>*Brazilian Nanotechnology National Laboratory CNPEM,  
C.P. 6192, 13083-970, Campinas, SP, Brazil*

(Dated: February 9, 2021)

### Abstract

....

## $k = 6$ LATTICES

### t6001

Tiling reference number t6001 with space-group ' $Cmmm$ ' (65) and 22 sites in the unit cell, with vertex type indicated in Tab. S1. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S1.

TABLE S1. Tiling t6001 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	12	0	0	0	0	0	0	0	2	0	0	4	4

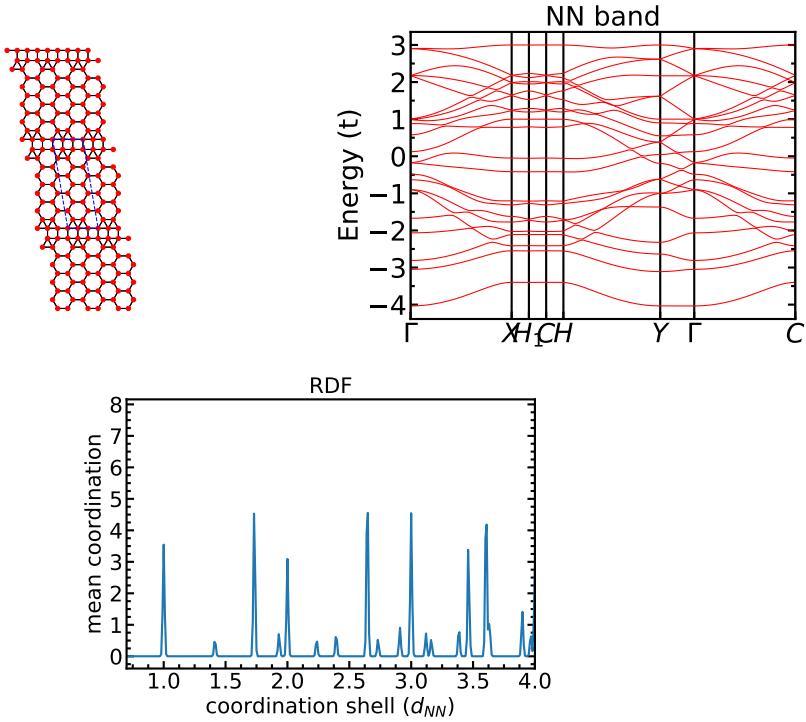


FIG. S1. t6001 lattice framework, nearest neighbors band structure and radial distribution function.

## t6002

Tiling reference number t6002 with space-group ' $Cmmm$ ' (65) and 19 sites in the unit cell, with vertex type indicated in Tab. S2. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S2.

TABLE S2. Tiling t6002 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	12	0	0	0	0	0	0	0	0	0	0	0	6

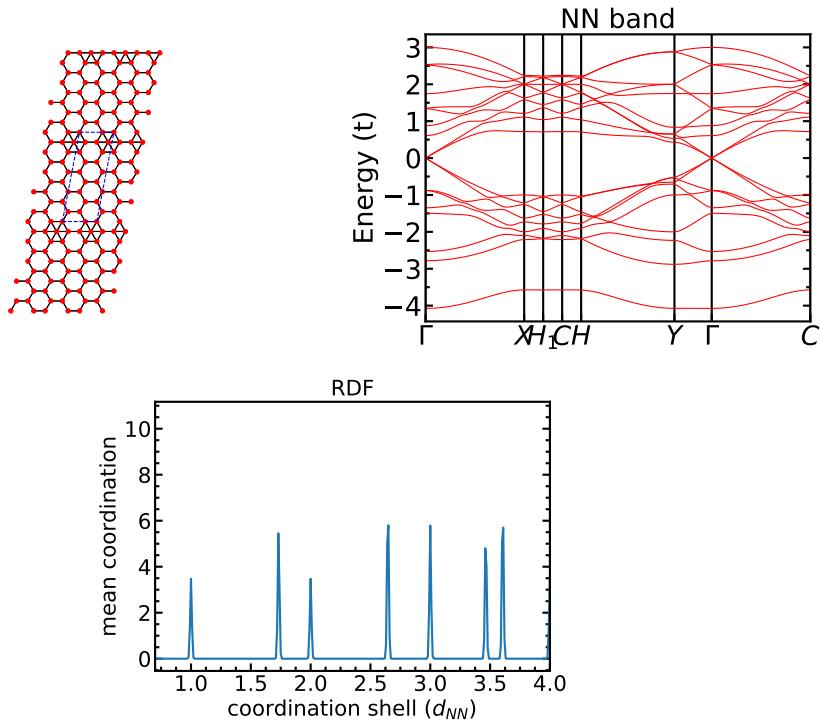


FIG. S2. t6002 lattice framework, nearest neighbors band structure and radial distribution function.

## t6003

Tiling reference number t6003 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S3. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S3.

TABLE S3. Tiling t6003 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	12	0	0	0	0	0	4	0	0	0	0	0	4

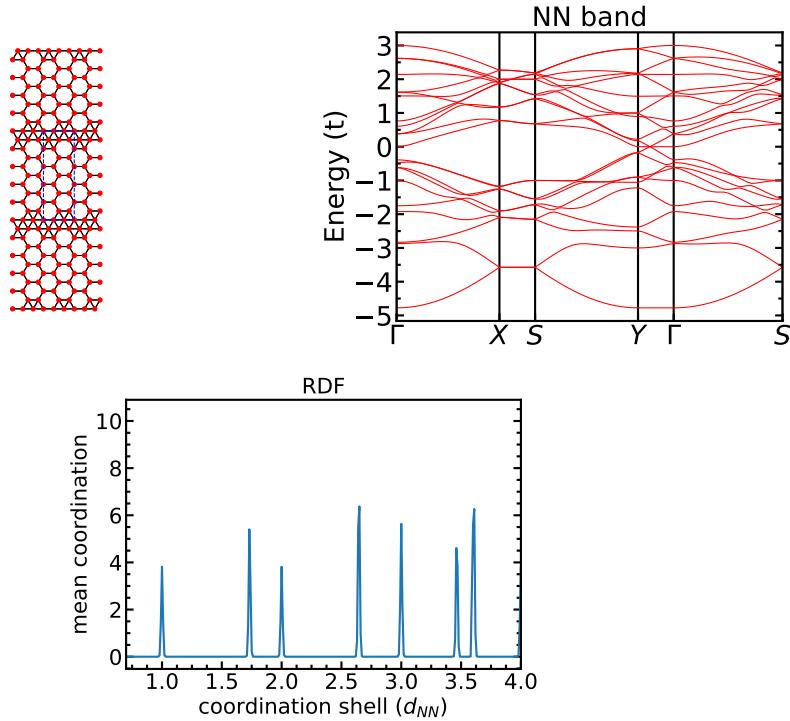


FIG. S3. t6003 lattice framework, nearest neighbors band structure and radial distribution function.

## t6004

Tiling reference number t6004 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S4. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S4.

TABLE S4. Tiling t6004 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	8	0	0	0	0	0	0	0	0	0	0	0	12

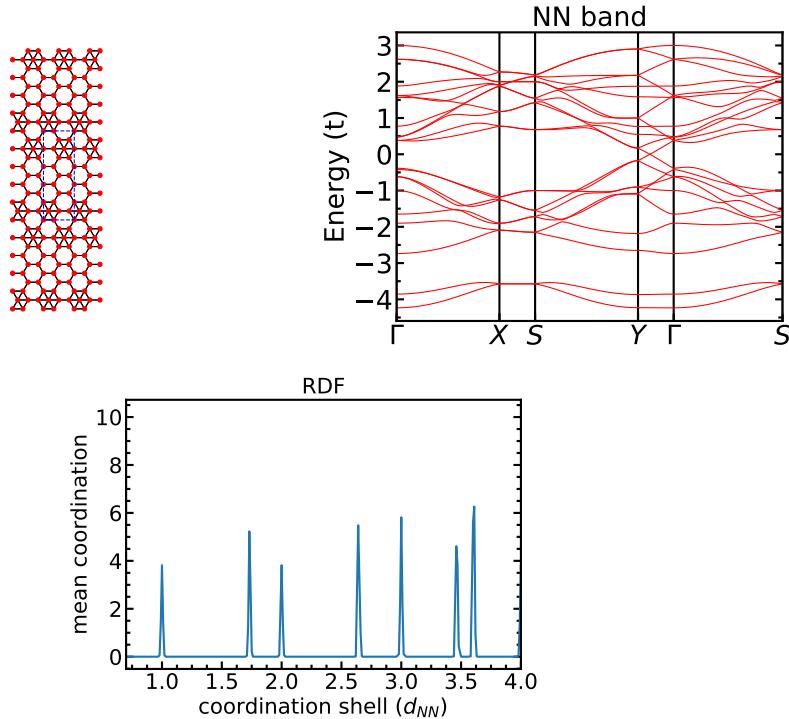


FIG. S4. t6004 lattice framework, nearest neighbors band structure and radial distribution function.

## t6005

Tiling reference number t6005 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S5. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S5.

TABLE S5. Tiling t6005 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	8	0	0	0	0	0	2	0	0	0	0	0	8

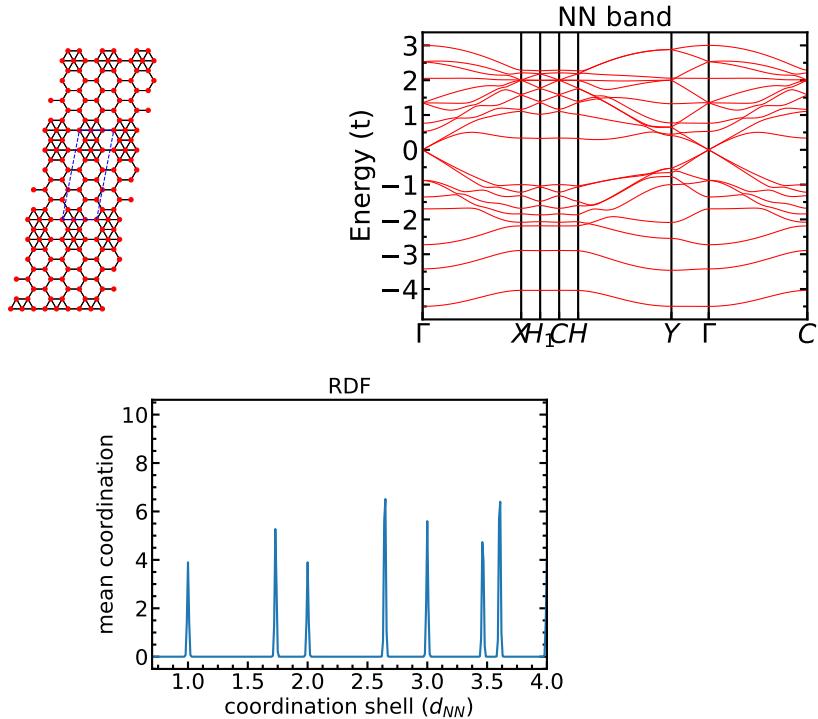


FIG. S5. t6005 lattice framework, nearest neighbors band structure and radial distribution function.

## t6006

Tiling reference number t6006 with space-group ' $P6/mmm$ ' (191) and 45 sites in the unit cell, with vertex type indicated in Tab. S6. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S6.

TABLE S6. Tiling t6006 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	24	0	0	0	0	9	0	0	0	0	0	0	12

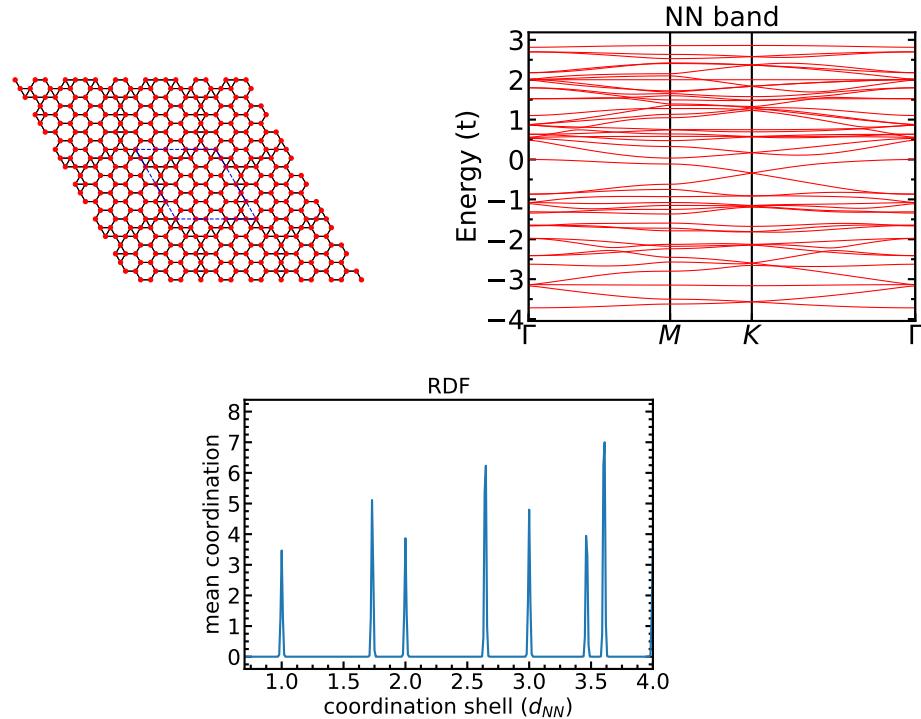


FIG. S6. t6006 lattice framework, nearest neighbors band structure and radial distribution function.

## t6007

Tiling reference number t6007 with space-group '*Amm2'* (38) and 48 sites in the unit cell, with vertex type indicated in Tab. S7. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S7.

TABLE S7. Tiling t6007 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	12	0	0	0	6	0	0	0	6	0	0	12	12

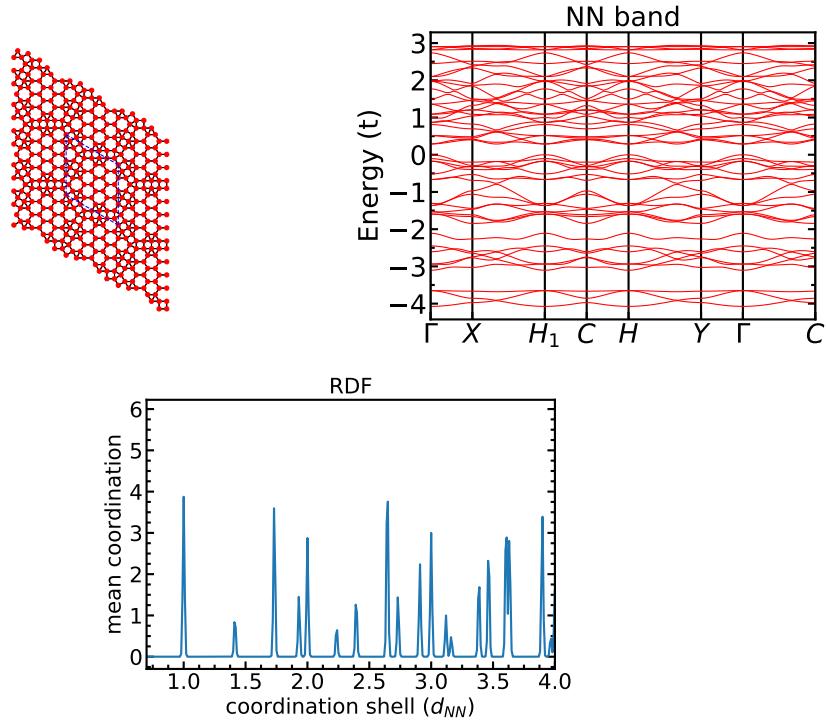


FIG. S7. t6007 lattice framework, nearest neighbors band structure and radial distribution function.

## t6008

Tiling reference number t6008 with space-group ' $P6/mmm$ ' (191) and 35 sites in the unit cell, with vertex type indicated in Tab. S8. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S8.

TABLE S8. Tiling t6008 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	14	0	0	0	0	0	0	0	0	0	0	0	18

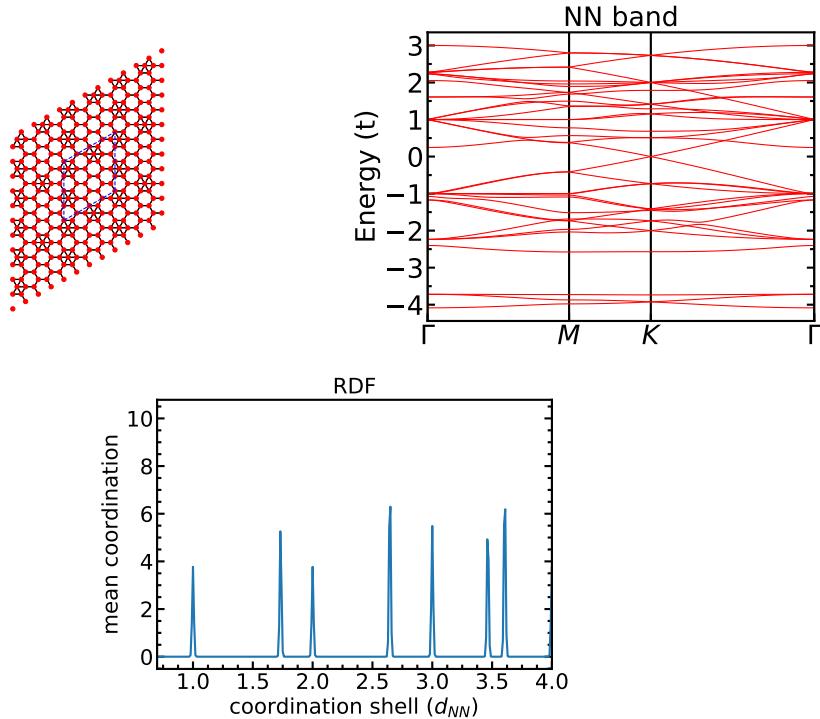


FIG. S8. t6008 lattice framework, nearest neighbors band structure and radial distribution function.

## t6009

Tiling reference number t6009 with space-group ' $P2/m$ ' (10) and 36 sites in the unit cell, with vertex type indicated in Tab. S9. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S9.

TABLE S9. Tiling t6009 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	12	0	0	0	0	6	6	0	0	0	0	0	12

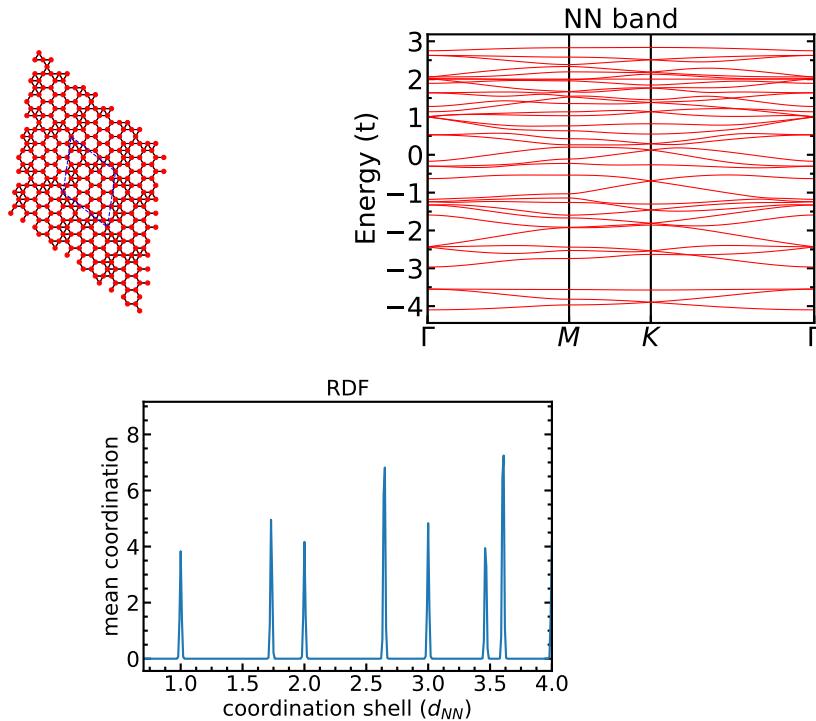


FIG. S9. t6009 lattice framework, nearest neighbors band structure and radial distribution function.

## t6010

Tiling reference number t6010 with space-group '*Cmmm*' (65) and 12 sites in the unit cell, with vertex type indicated in Tab. S10. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S10.

TABLE S10. Tiling t6010 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	6	0	0	0	0	2	0	0	0	0	0	0	4

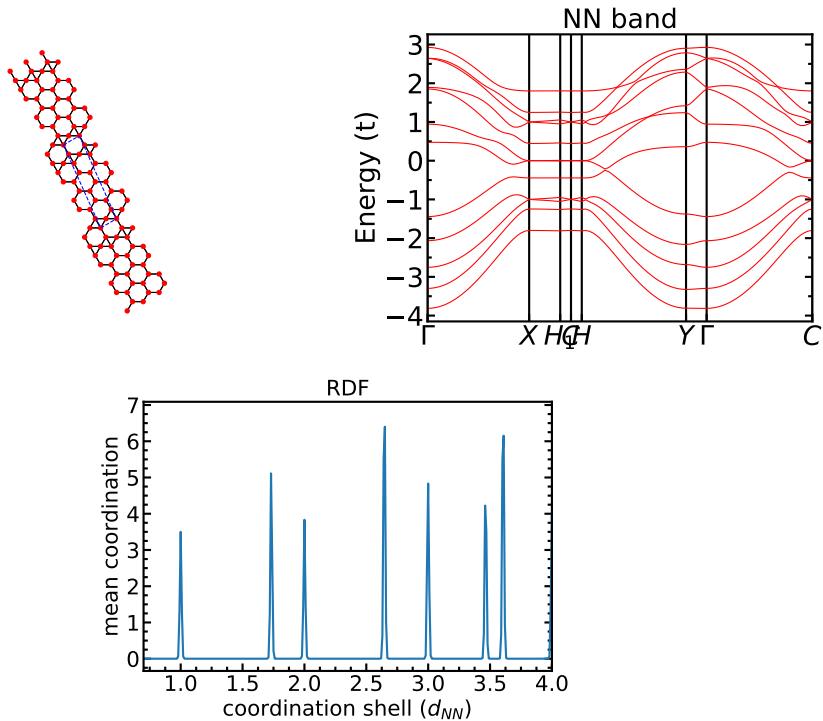


FIG. S10. t6010 lattice framework, nearest neighbors band structure and radial distribution function.

## t6011

Tiling reference number t6011 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S11. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S11.

TABLE S11. Tiling t6011 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	6	0	0	0	0	0	2	0	0	0	0	0	2

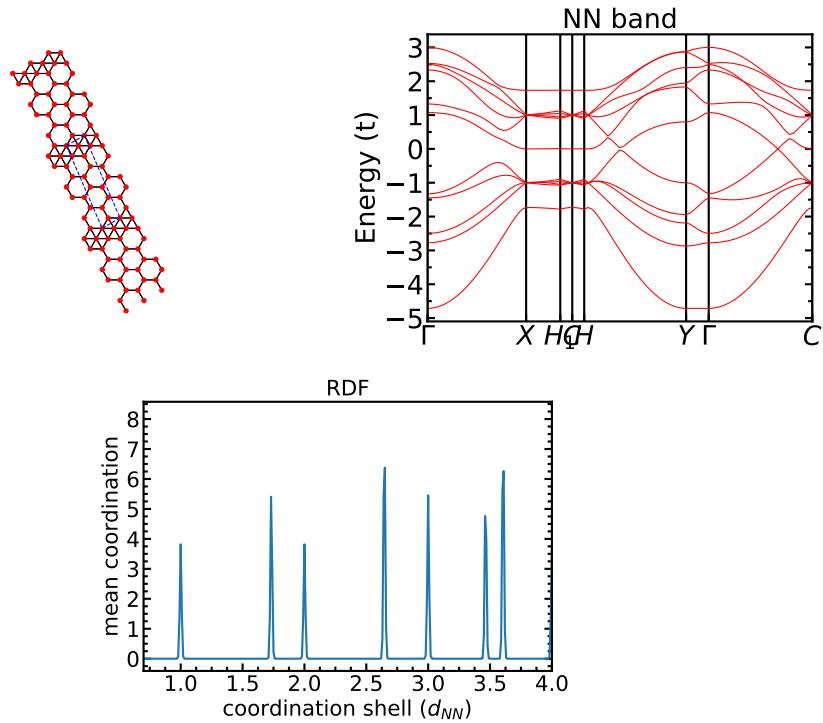


FIG. S11. t6011 lattice framework, nearest neighbors band structure and radial distribution function.

## t6012

Tiling reference number t6012 with space-group '*Pmma*' (51) and 12 sites in the unit cell, with vertex type indicated in Tab. S12. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S12.

TABLE S12. Tiling t6012 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	6	0	0	0	0	0	2	0	0	0	0	0	2

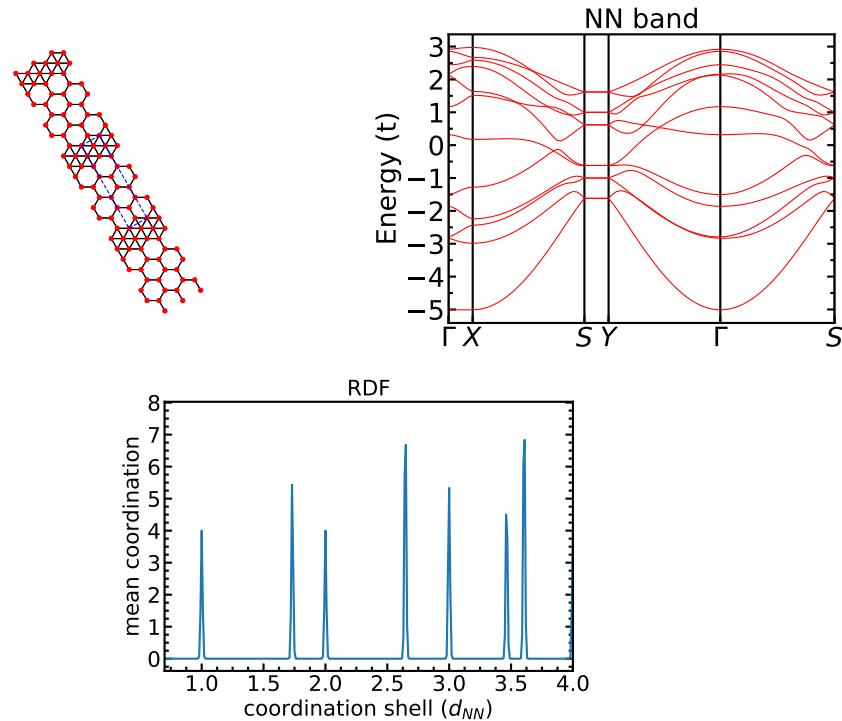


FIG. S12. t6012 lattice framework, nearest neighbors band structure and radial distribution function.

## t6013

Tiling reference number t6013 with space-group '*Cmmm*' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S13. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S13.

TABLE S13. Tiling t6013 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	3	4	0	0	0	0	0	0	0	2	0	0	4	4

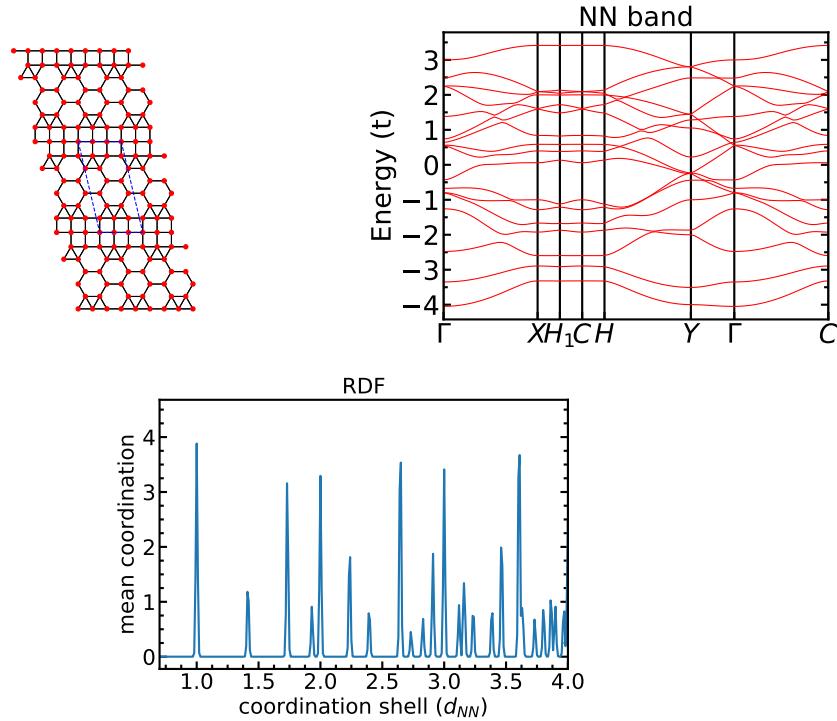


FIG. S13. t6013 lattice framework, nearest neighbors band structure and radial distribution function.

## t6014

Tiling reference number t6014 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S14. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S14.

TABLE S14. Tiling t6014 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	4	0	0	0	0	0	0	0	2	0	0	4	4

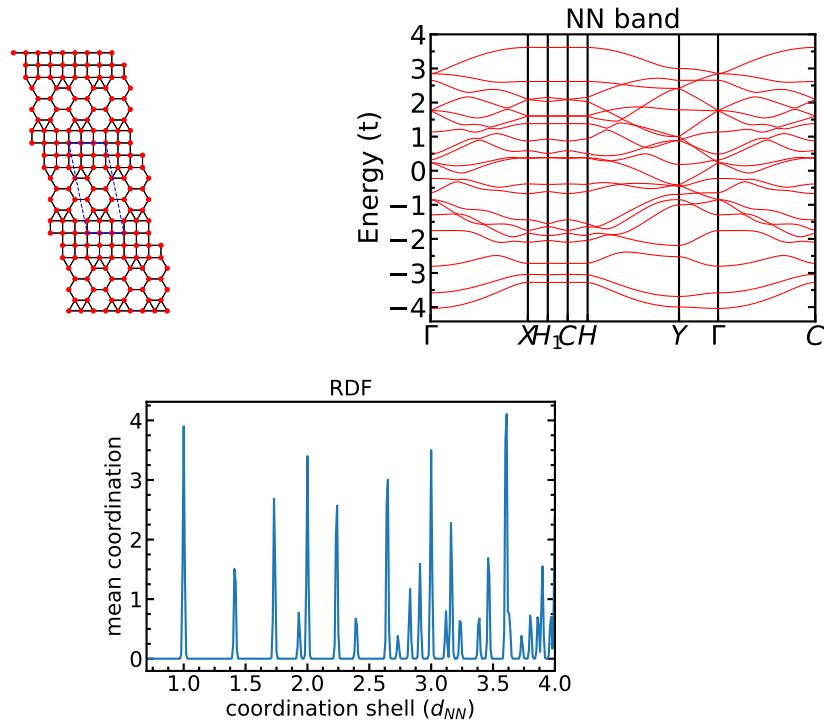


FIG. S14. t6014 lattice framework, nearest neighbors band structure and radial distribution function.

## t6015

Tiling reference number t6015 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S15. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S15.

TABLE S15. Tiling t6015 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	4	0	0	0	0	0	0	0	8	0	0	4	4

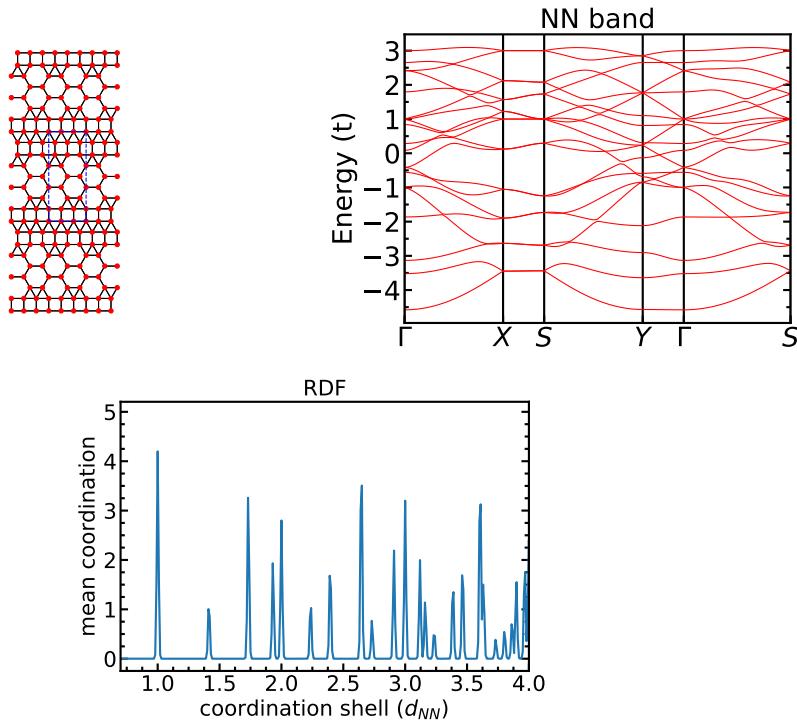


FIG. S15. t6015 lattice framework, nearest neighbors band structure and radial distribution function.

## t6016

Tiling reference number t6016 with space-group ' $Cmmm$ ' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S16. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S16.

TABLE S16. Tiling t6016 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	6	0	0	0	0	0	0	0	0	0	0	0	12

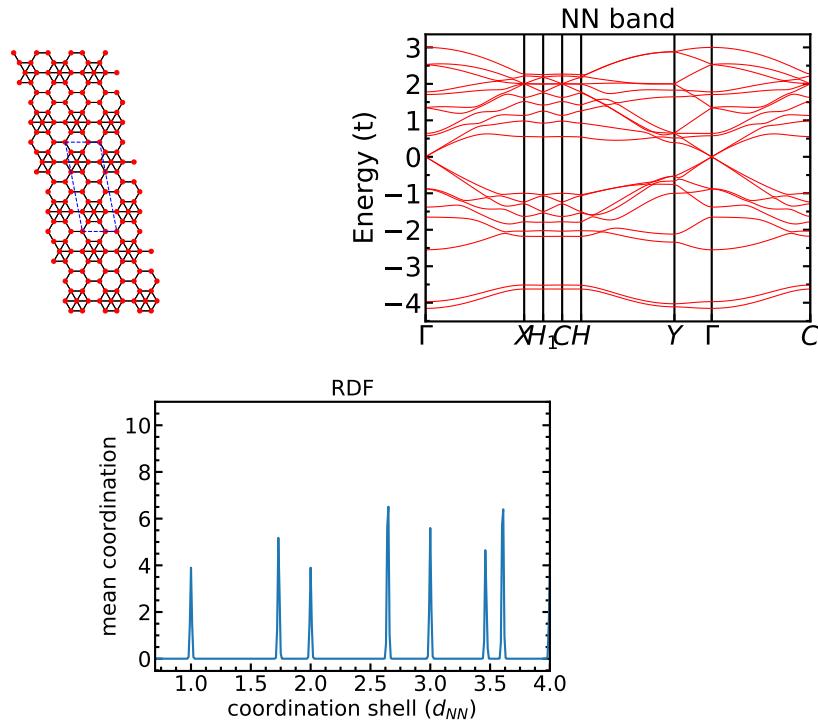


FIG. S16. t6016 lattice framework, nearest neighbors band structure and radial distribution function.

## t6017

Tiling reference number t6017 with space-group ' $Cmmm$ ' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S17. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S17.

TABLE S17. Tiling t6017 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	4	0	0	0	0	0	4	0	6	0	0	0	4

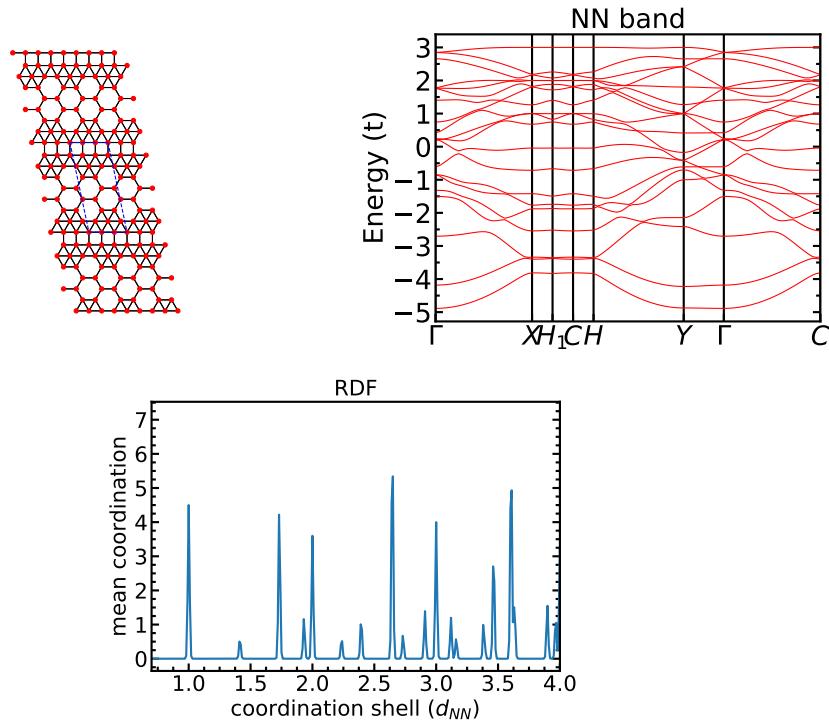


FIG. S17. t6017 lattice framework, nearest neighbors band structure and radial distribution function.

## t6018

Tiling reference number t6018 with space-group ' $Cmmm$ ' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S18. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S18.

TABLE S18. Tiling t6018 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	4	0	0	0	0	0	4	0	0	0	0	0	4

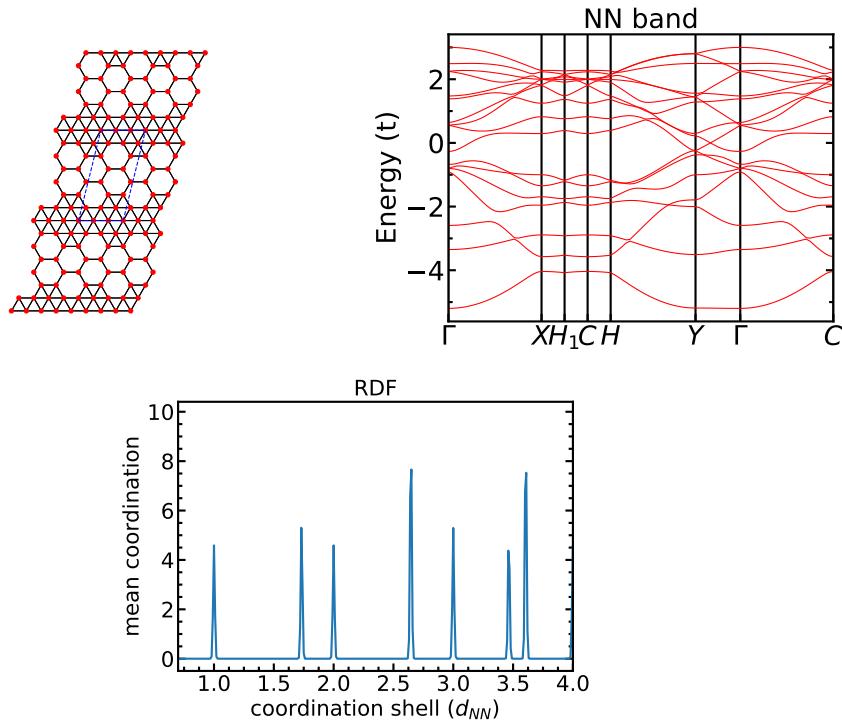


FIG. S18. t6018 lattice framework, nearest neighbors band structure and radial distribution function.

## t6019

Tiling reference number t6019 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S19. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S19.

TABLE S19. Tiling t6019 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	4	0	0	0	0	0	4	0	0	0	0	0	4

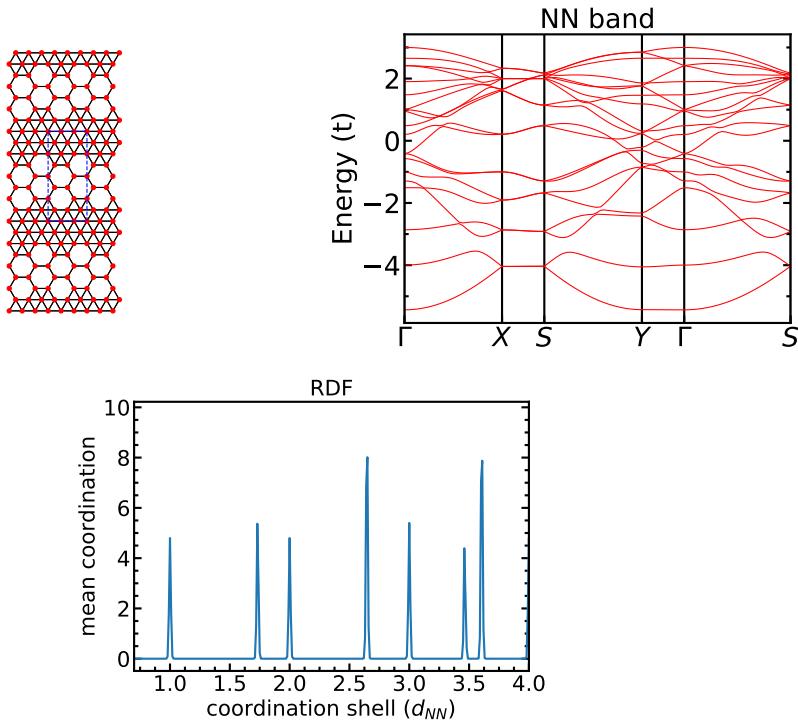


FIG. S19. t6019 lattice framework, nearest neighbors band structure and radial distribution function.

## t6020

Tiling reference number t6020 with space-group ' $Pm'$  (6) and 54 sites in the unit cell, with vertex type indicated in Tab. S20. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S20.

TABLE S20. Tiling t6020 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	6	0	0	0	1	0	0	6	0	0	0	23	6

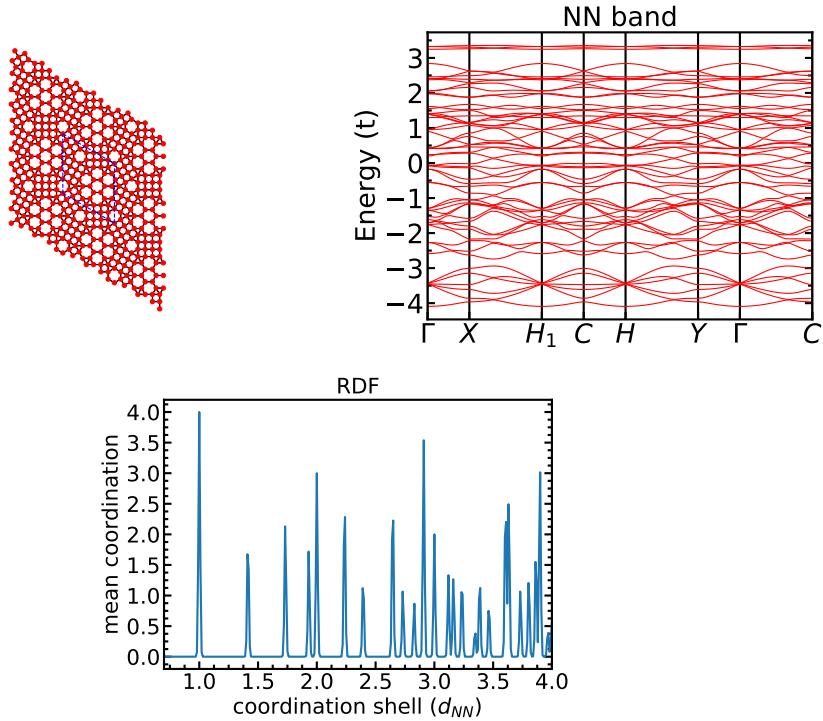


FIG. S20. t6020 lattice framework, nearest neighbors band structure and radial distribution function.

## t6021

Tiling reference number t6021 with space-group ' $Pm'$  (6) and 42 sites in the unit cell, with vertex type indicated in Tab. S21. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S21.

TABLE S21. Tiling t6021 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	6	0	0	0	0	0	0	6	6	0	0	12	6

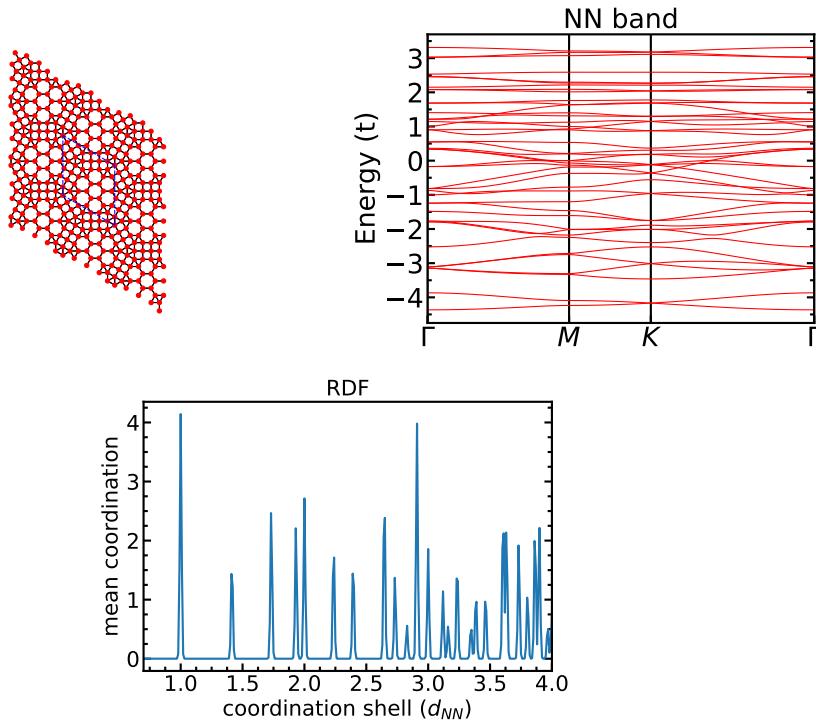


FIG. S21. t6021 lattice framework, nearest neighbors band structure and radial distribution function.

## t6022

Tiling reference number t6022 with space-group ' $Pm'$  (6) and 48 sites in the unit cell, with vertex type indicated in Tab. S22. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S22.

TABLE S22. Tiling t6022 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	6	0	0	0	0	0	0	12	0	0	0	24	6

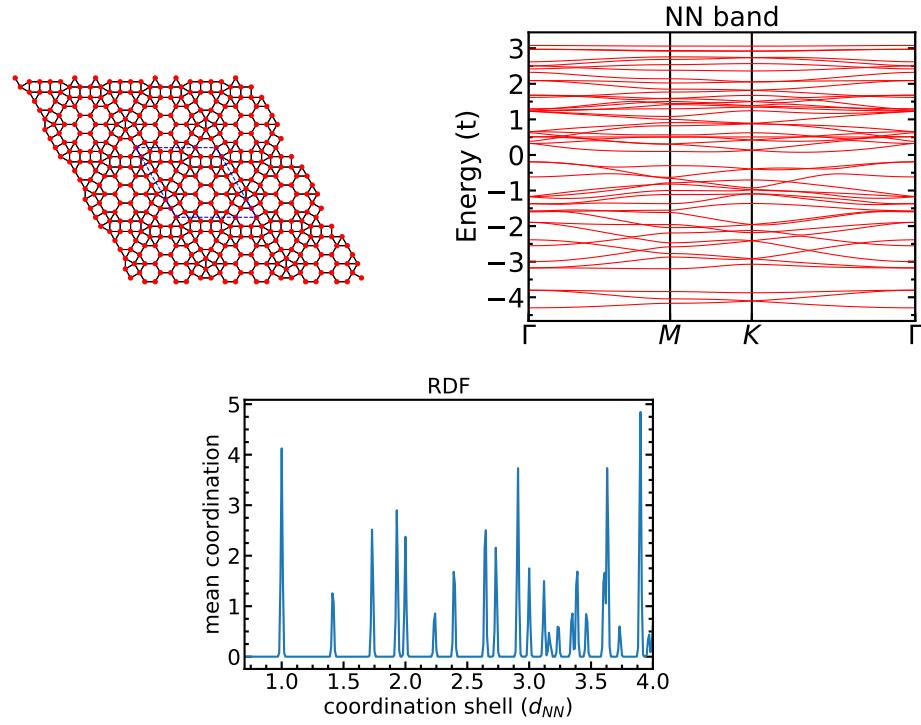


FIG. S22. t6022 lattice framework, nearest neighbors band structure and radial distribution function.

## t6023

Tiling reference number t6023 with space-group ' $P6/mmm$ ' (191) and 48 sites in the unit cell, with vertex type indicated in Tab. S23. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S23.

TABLE S23. Tiling t6023 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	6	0	0	0	0	18	6	0	0	0	0	0	18

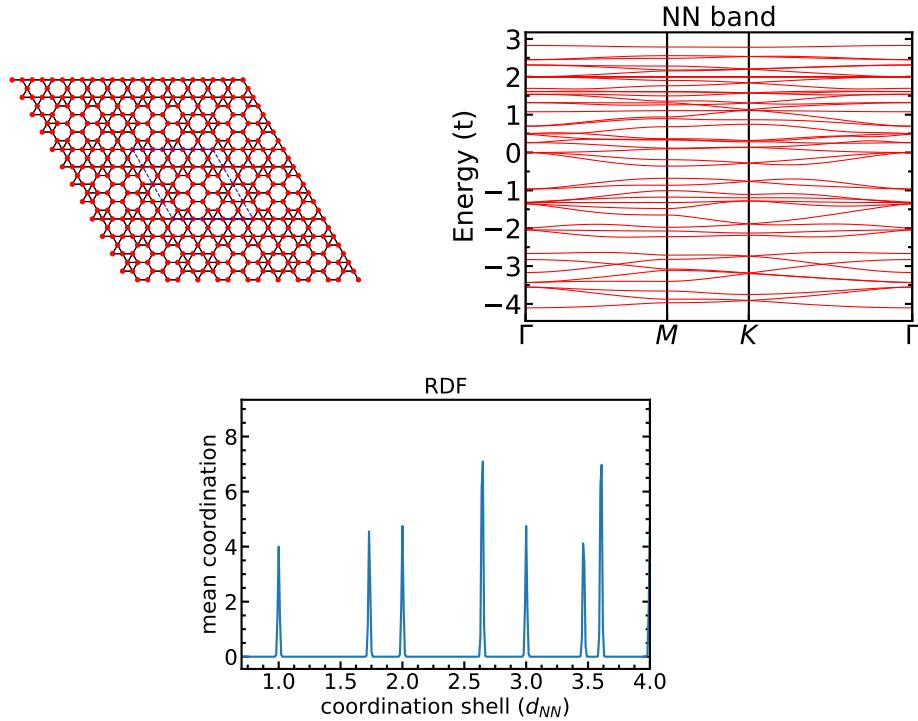


FIG. S23. t6023 lattice framework, nearest neighbors band structure and radial distribution function.

## t6024

Tiling reference number t6024 with space-group ' $Pm'$  (6) and 38 sites in the unit cell, with vertex type indicated in Tab. S24. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S24.

TABLE S24. Tiling t6024 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	6	0	0	0	0	0	6	0	0	0	0	0	18

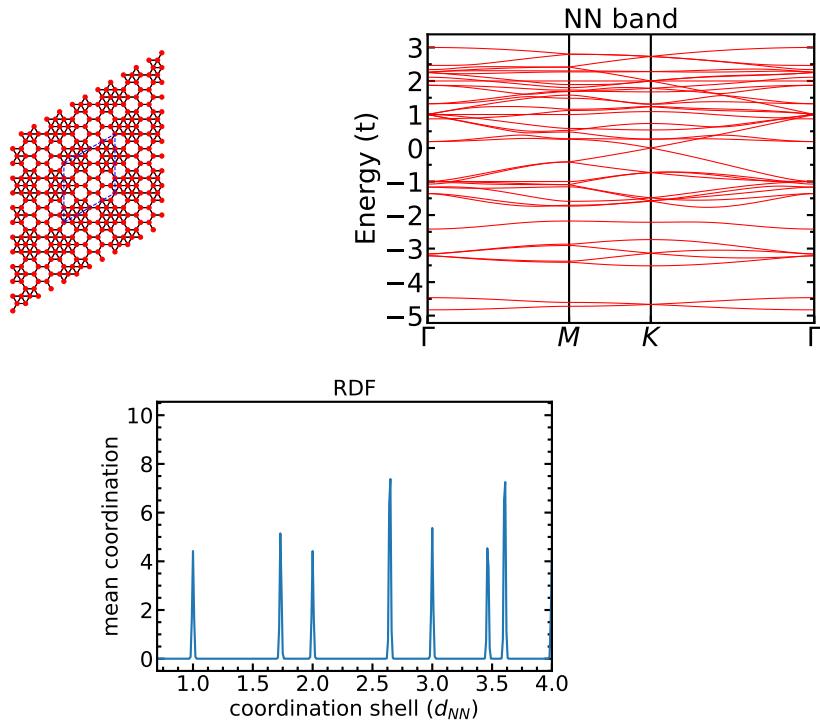


FIG. S24. t6024 lattice framework, nearest neighbors band structure and radial distribution function.

## t6025

Tiling reference number t6025 with space-group ' $P - 6m2'$  (187) and 28 sites in the unit cell, with vertex type indicated in Tab. S25. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S25.

TABLE S25. Tiling t6025 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	6	0	0	0	0	0	6	0	0	0	0	0	12

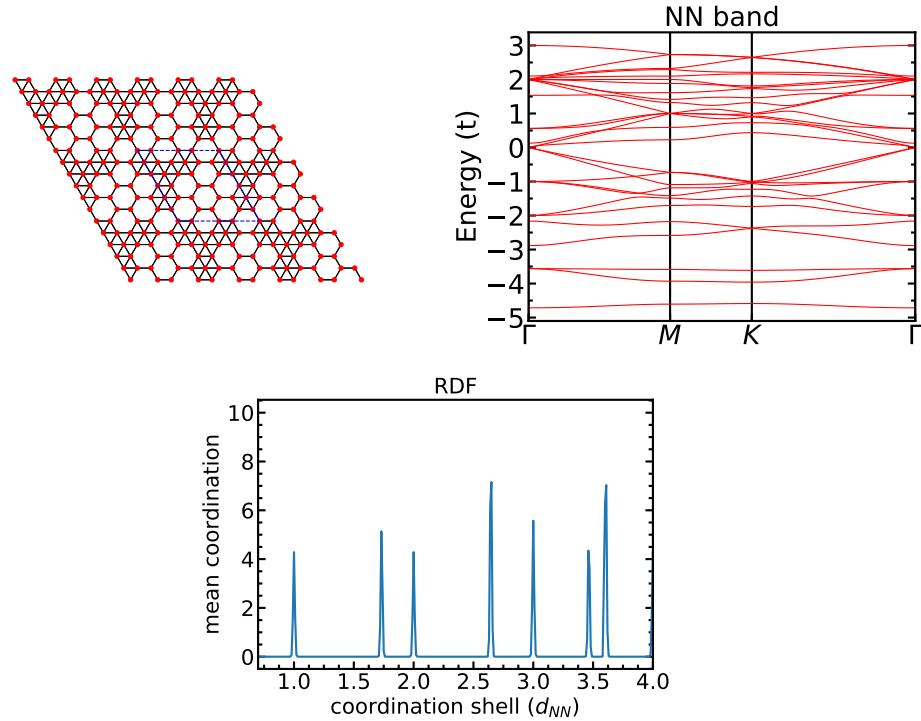


FIG. S25. t6025 lattice framework, nearest neighbors band structure and radial distribution function.

## t6026

Tiling reference number t6026 with space-group ' $Pm'$  (6) and 35 sites in the unit cell, with vertex type indicated in Tab. S26. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S26.

TABLE S26. Tiling t6026 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	8	0	0	0	0	15	0	0	0	0	0	0	12

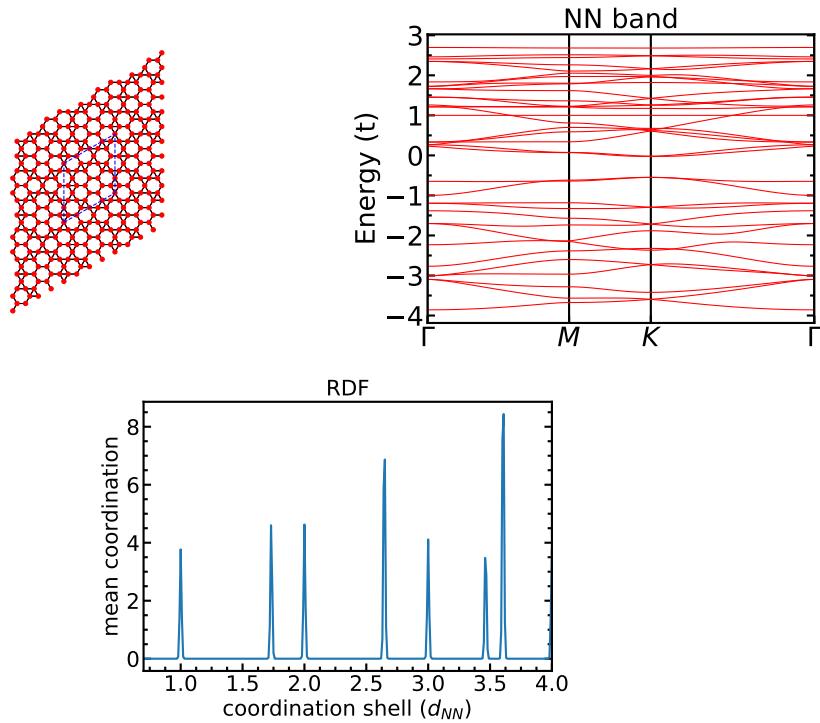


FIG. S26. t6026 lattice framework, nearest neighbors band structure and radial distribution function.

## t6027

Tiling reference number t6027 with space-group ' $Pm'$  (6) and 39 sites in the unit cell, with vertex type indicated in Tab. S27. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S27.

TABLE S27. Tiling t6027 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	6	0	0	0	0	0	24	0	0	0	0	0	6

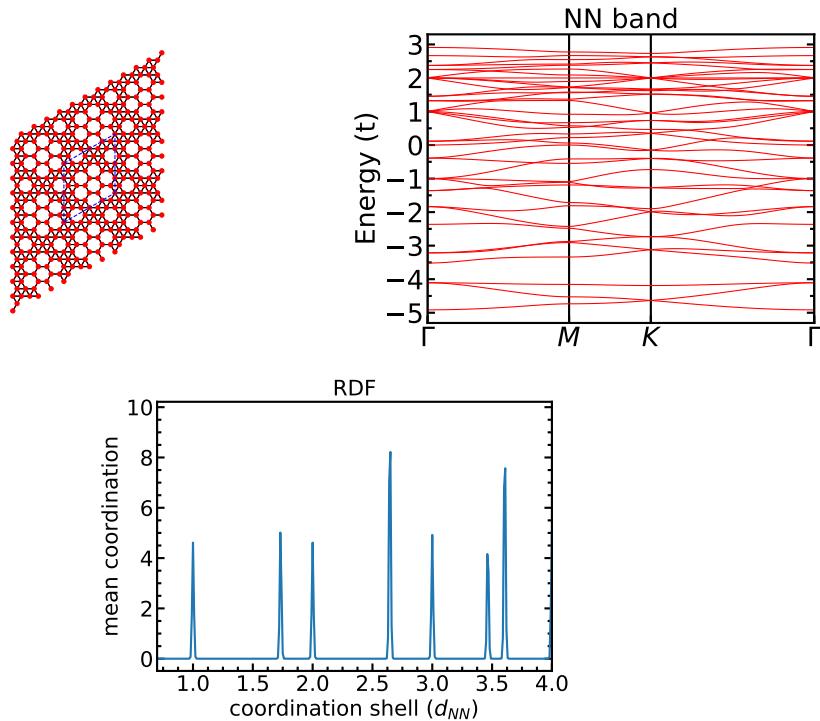


FIG. S27. t6027 lattice framework, nearest neighbors band structure and radial distribution function.

## t6028

Tiling reference number t6028 with space-group ' $P6/mmm$ ' (191) and 42 sites in the unit cell, with vertex type indicated in Tab. S28. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S28.

TABLE S28. Tiling t6028 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
18	0	6	0	0	0	0	0	12	0	0	0	0	0	6

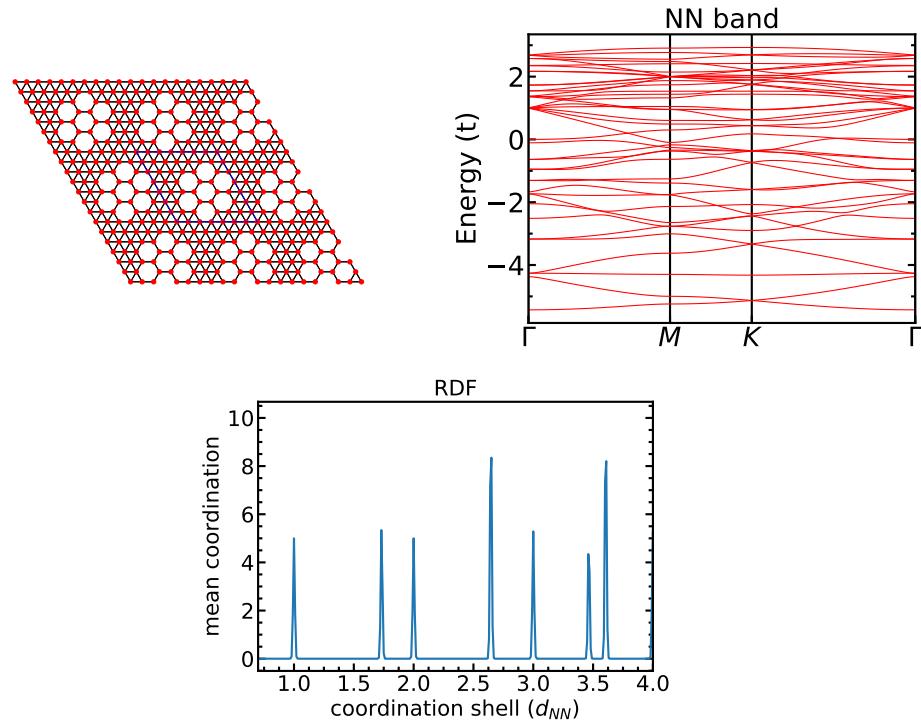


FIG. S28. t6028 lattice framework, nearest neighbors band structure and radial distribution function.

## t6029

Tiling reference number t6029 with space-group ' $P6/m$ ' (175) and 32 sites in the unit cell, with vertex type indicated in Tab. S29. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S29.

TABLE S29. Tiling t6029 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	6	0	0	0	0	0	12	0	0	0	0	0	6

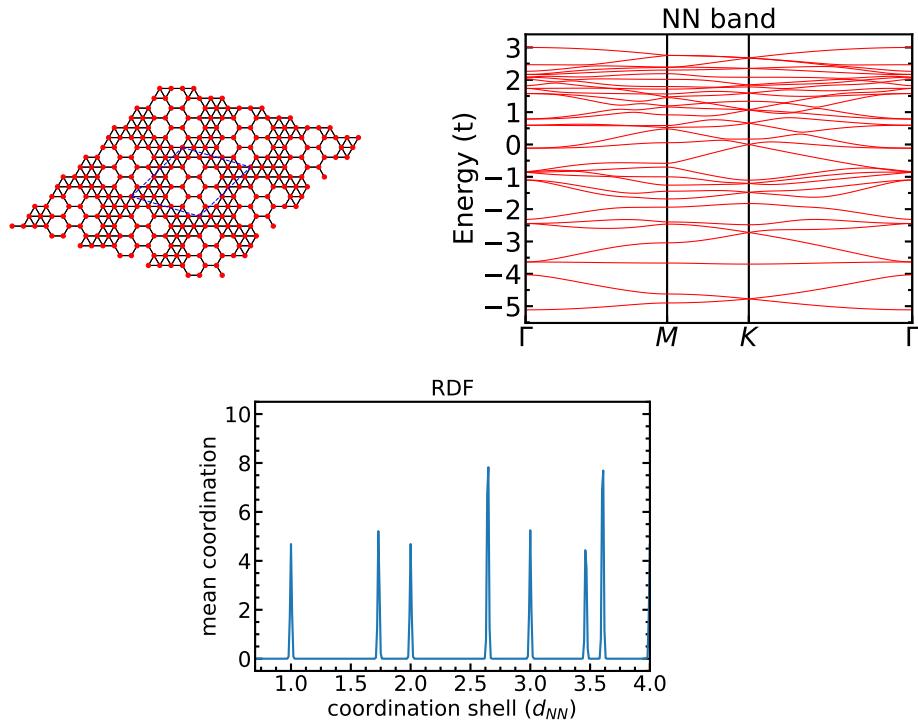


FIG. S29. t6029 lattice framework, nearest neighbors band structure and radial distribution function.

## t6030

Tiling reference number t6030 with space-group ' $P6/m$ ' (175) and 36 sites in the unit cell, with vertex type indicated in Tab. S30. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S30.

TABLE S30. Tiling t6030 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
12	0	6	0	0	0	0	0	12	0	0	0	0	0	6

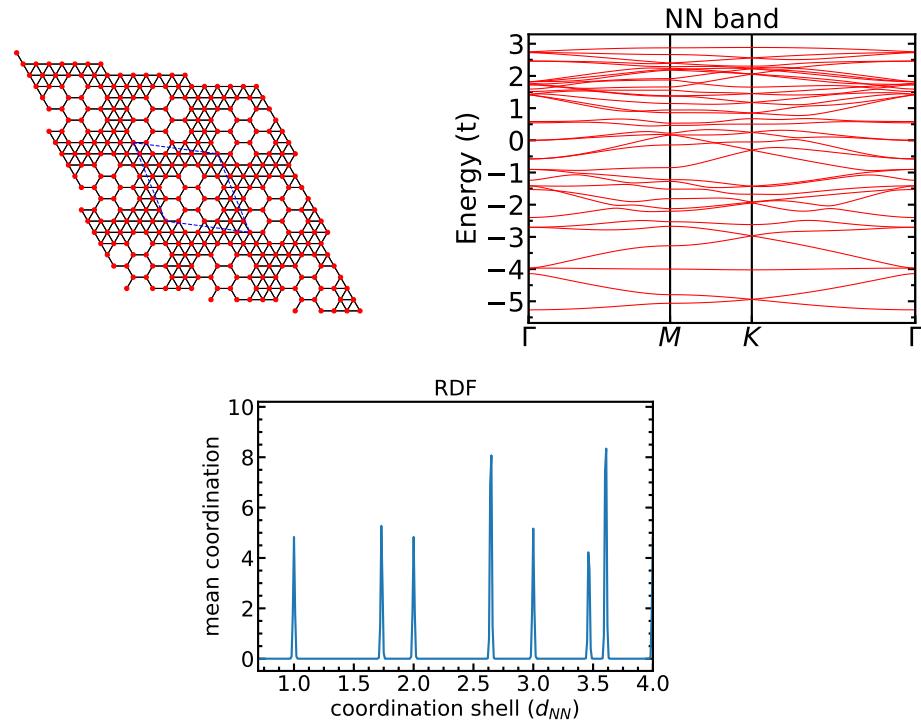


FIG. S30. t6030 lattice framework, nearest neighbors band structure and radial distribution function.

## t6031

Tiling reference number t6031 with space-group ' $Cmmm$ ' (65) and 12 sites in the unit cell, with vertex type indicated in Tab. S31. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S31.

TABLE S31. Tiling t6031 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	6	0	0	0	0	2	0	0	0	0	0	0	4

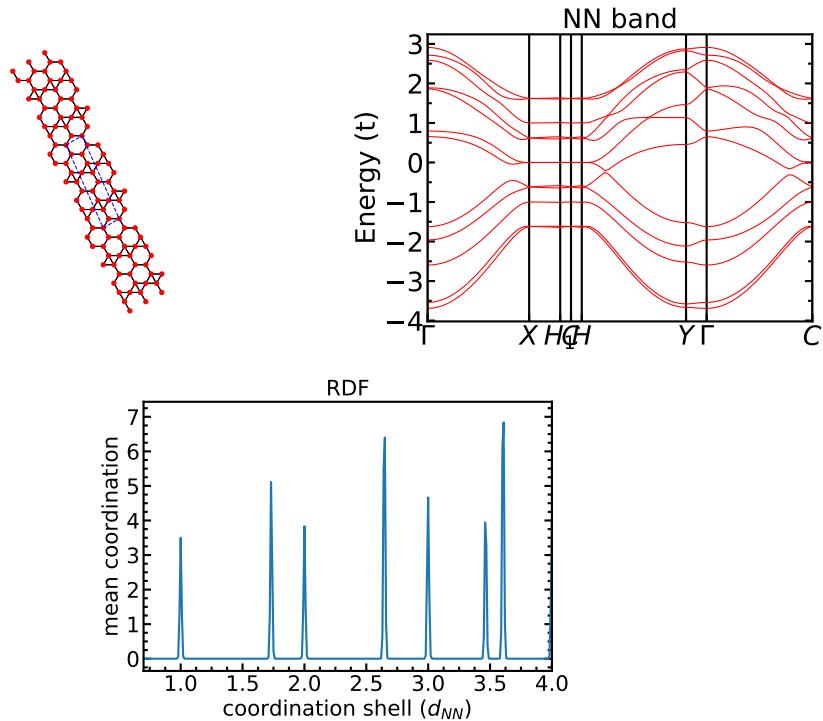


FIG. S31. t6031 lattice framework, nearest neighbors band structure and radial distribution function.

## t6032

Tiling reference number t6032 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S32. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S32.

TABLE S32. Tiling t6032 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	3	0	0	0	0	0	0	6

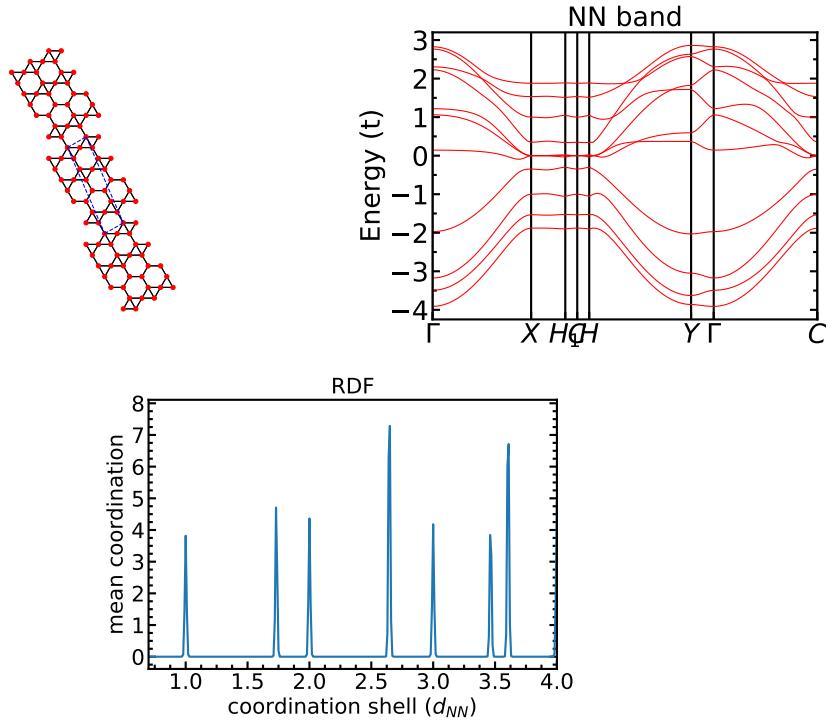


FIG. S32. t6032 lattice framework, nearest neighbors band structure and radial distribution function.

### t6033

Tiling reference number t6033 with space-group '*Pmma*' (51) and 12 sites in the unit cell, with vertex type indicated in Tab. S33. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S33.

TABLE S33. Tiling t6033 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	2	2	0	0	0	0	0	6

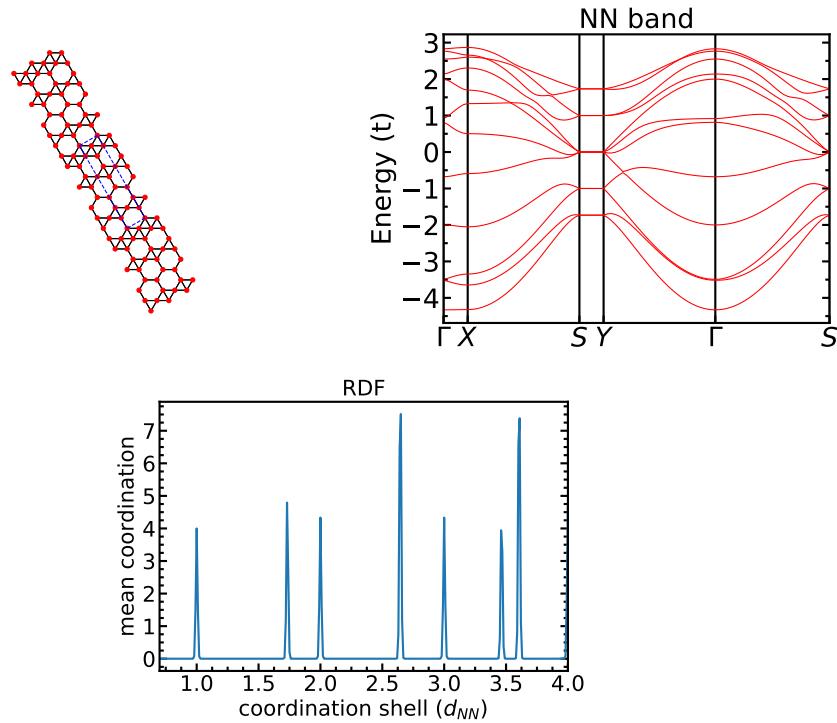


FIG. S33. t6033 lattice framework, nearest neighbors band structure and radial distribution function.

## t6034

Tiling reference number t6034 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S34. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S34.

TABLE S34. Tiling t6034 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	2	0	0	0	0	0	4	0	0	0	0	0	4

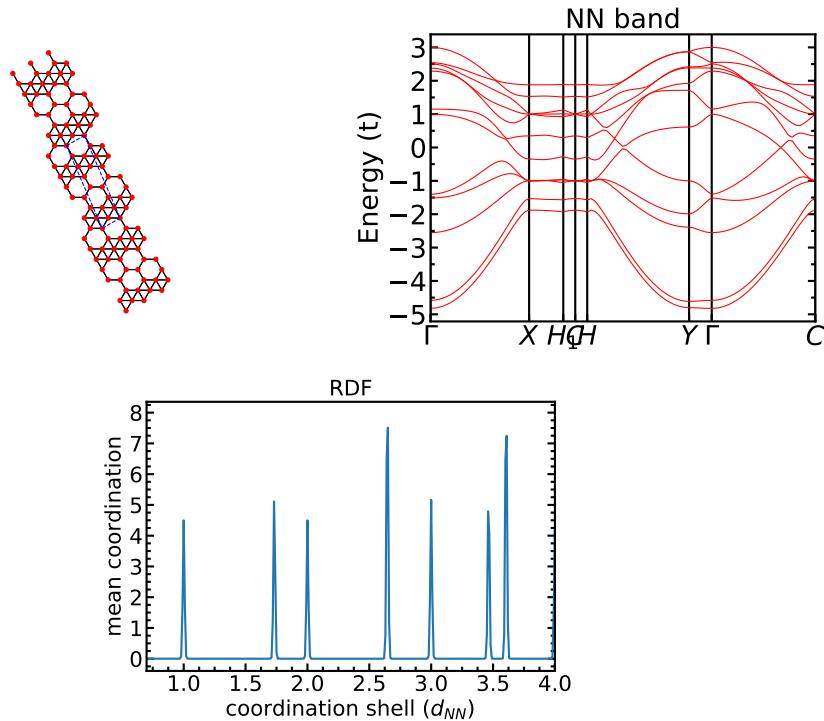


FIG. S34. t6034 lattice framework, nearest neighbors band structure and radial distribution function.

## t6035

Tiling reference number t6035 with space-group '*Cmmm*' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S35. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S35.

TABLE S35. Tiling t6035 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	2	0	0	0	0	0	2	0	0	0	0	0	2

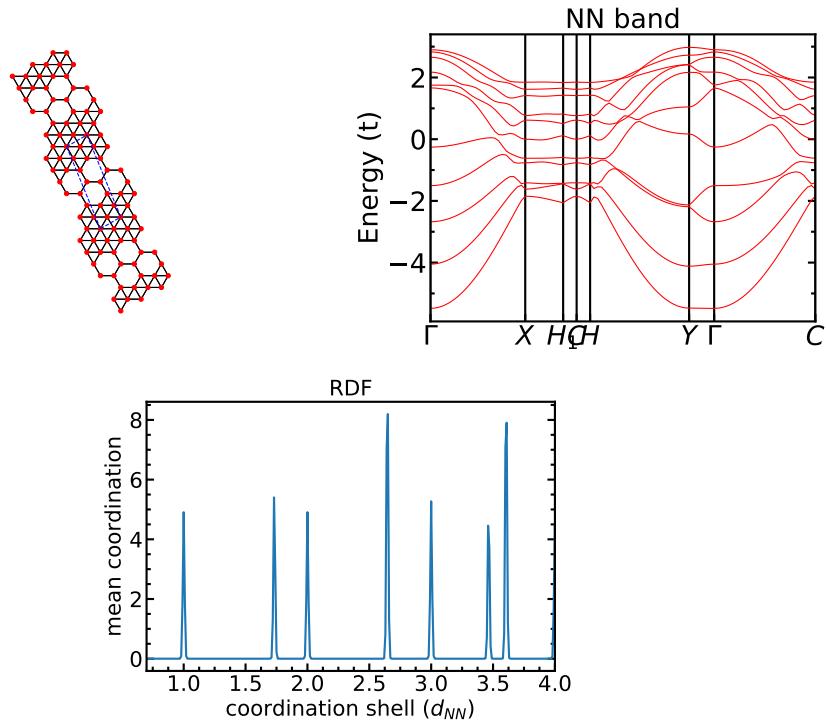


FIG. S35. t6035 lattice framework, nearest neighbors band structure and radial distribution function.

## t6036

Tiling reference number t6036 with space-group '*Pmma*' (51) and 12 sites in the unit cell, with vertex type indicated in Tab. S36. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S36.

TABLE S36. Tiling t6036 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	2	0	0	0	0	0	2	0	0	0	0	0	2

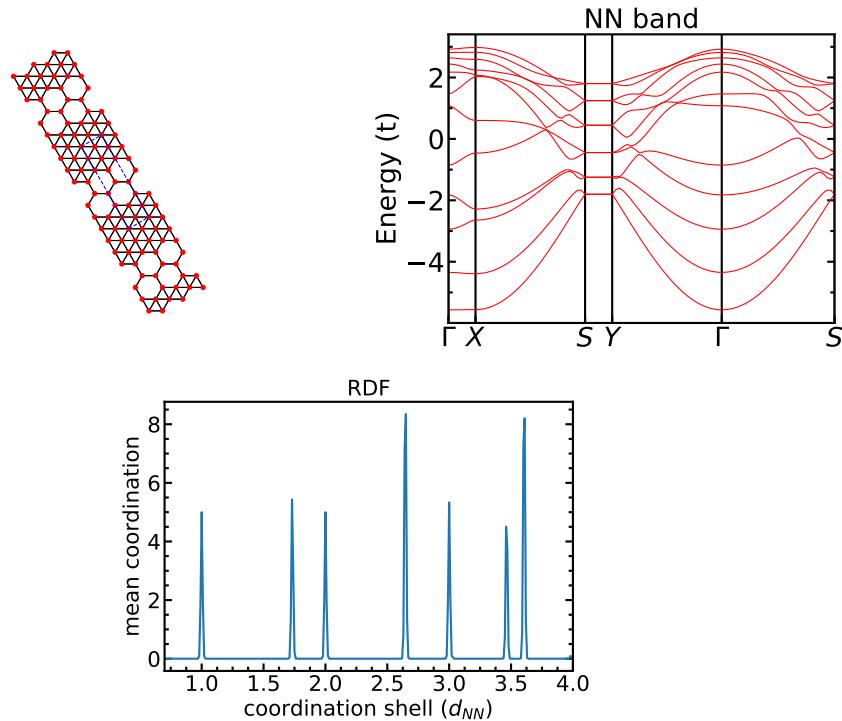


FIG. S36. t6036 lattice framework, nearest neighbors band structure and radial distribution function.

## t6037

Tiling reference number t6037 with space-group ' $Pmmm$ ' (47) and 20 sites in the unit cell, with vertex type indicated in Tab. S37. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S37.

TABLE S37. Tiling t6037 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	10	0	0	0	0	0	0	0	2	0	0	4	4

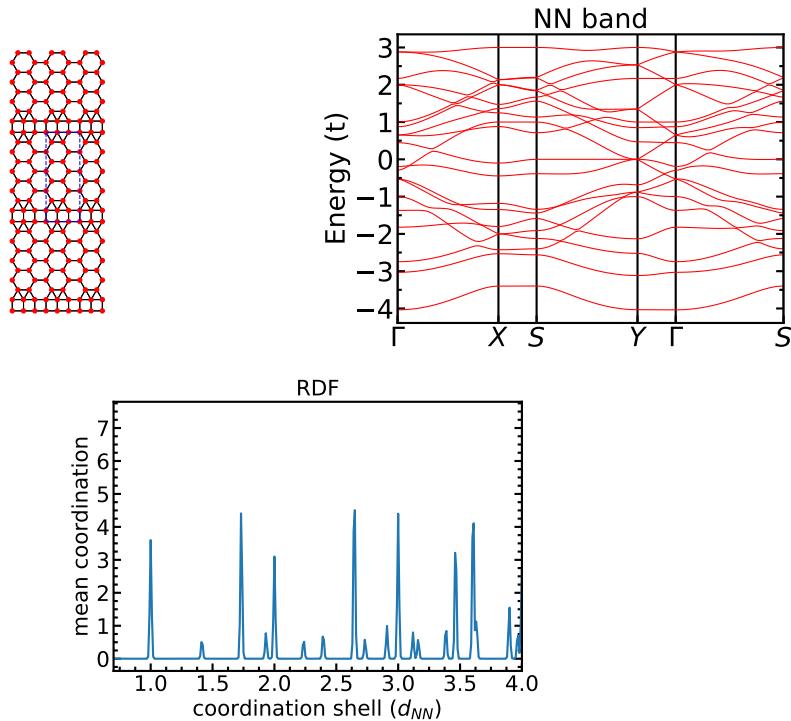


FIG. S37. t6037 lattice framework, nearest neighbors band structure and radial distribution function.

## t6038

Tiling reference number t6038 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S38. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S38.

TABLE S38. Tiling t6038 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	10	0	0	0	0	0	0	0	0	0	0	0	6

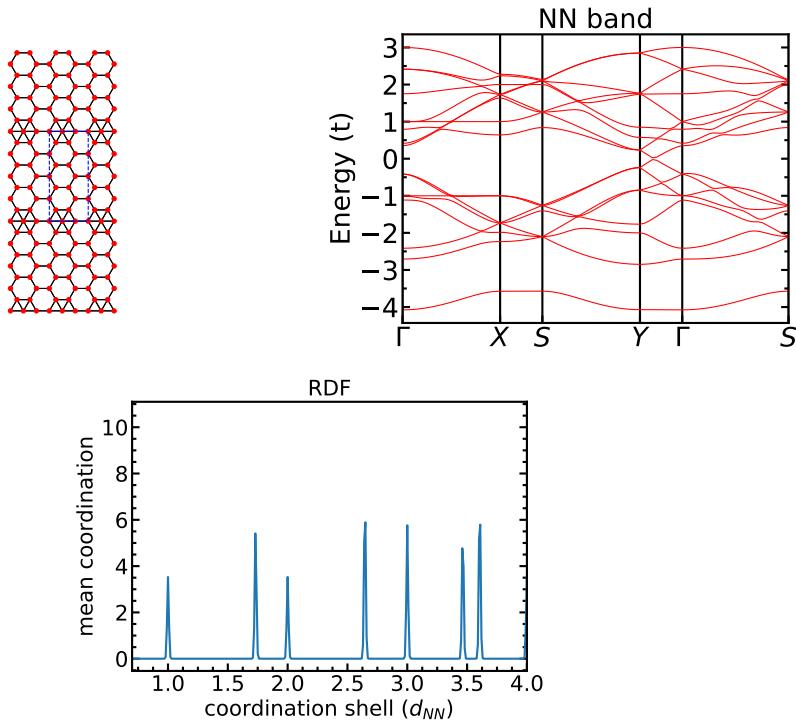


FIG. S38. t6038 lattice framework, nearest neighbors band structure and radial distribution function.

## t6039

Tiling reference number t6039 with space-group ' $Cmmm$ ' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S39. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S39.

TABLE S39. Tiling t6039 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	10	0	0	0	0	0	4	0	0	0	0	0	4

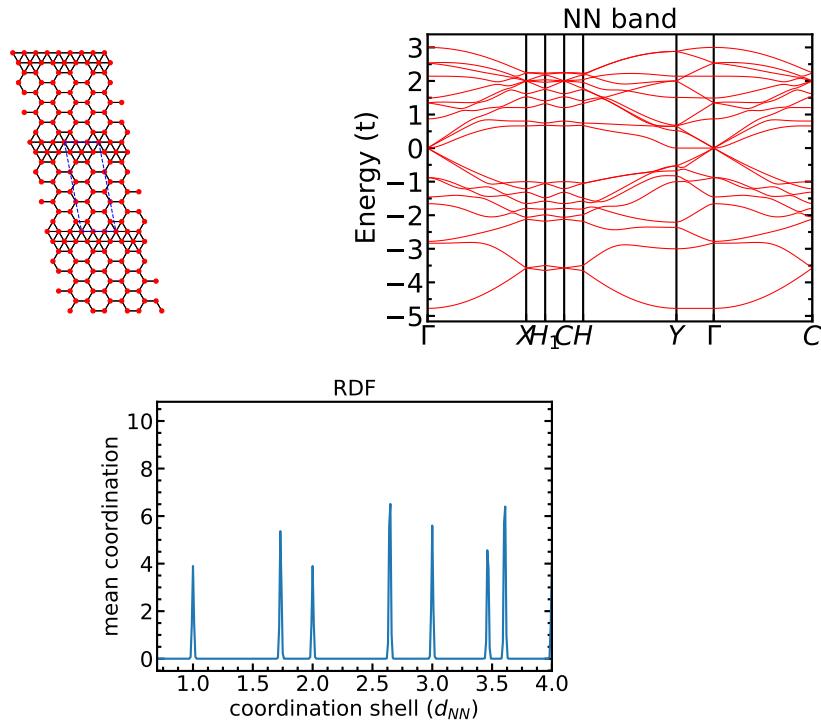


FIG. S39. t6039 lattice framework, nearest neighbors band structure and radial distribution function.

## t6040

Tiling reference number t6040 with space-group ' $Cmmm$ ' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S40. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S40.

TABLE S40. Tiling t6040 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	6	0	0	0	0	0	0	0	0	0	0	0	12

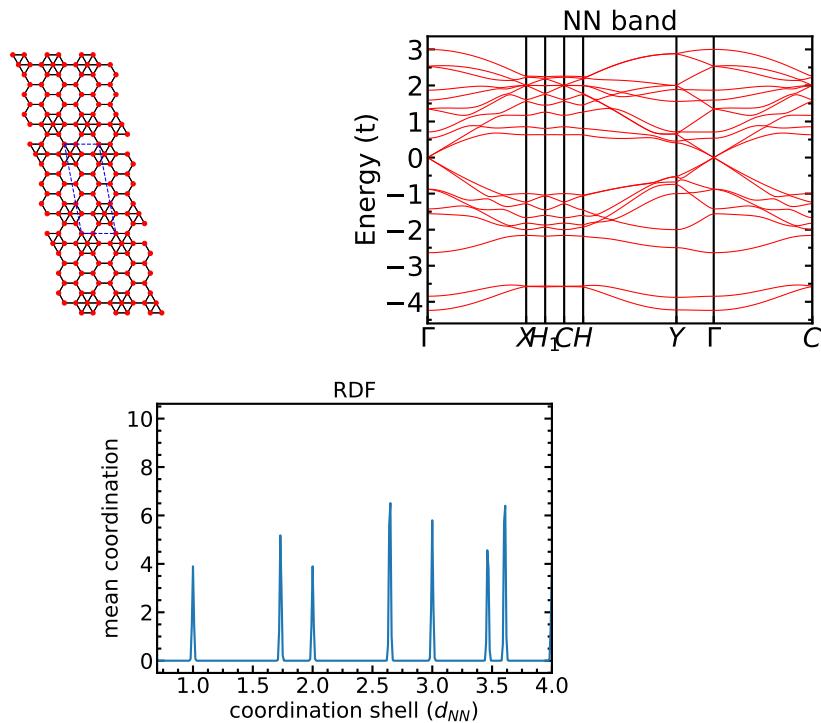


FIG. S40. t6040 lattice framework, nearest neighbors band structure and radial distribution function.

## t6041

Tiling reference number t6041 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S41. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S41.

TABLE S41. Tiling t6041 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	6	0	0	0	0	0	2	0	0	0	0	0	8

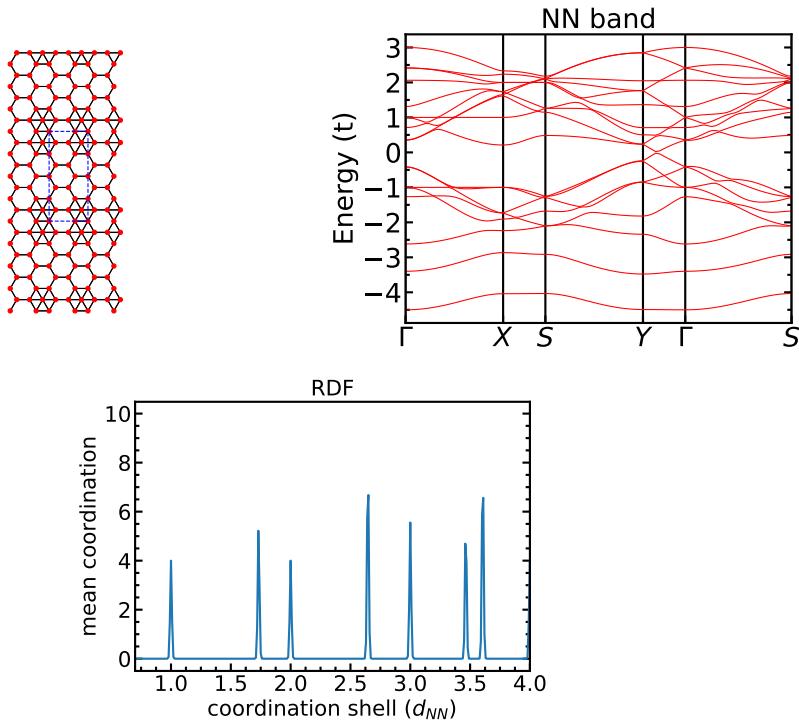


FIG. S41. t6041 lattice framework, nearest neighbors band structure and radial distribution function.

## t6042

Tiling reference number t6042 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S42. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S42.

TABLE S42. Tiling t6042 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	8	0	0	0	0	1	0	0	0	0	0	0	2

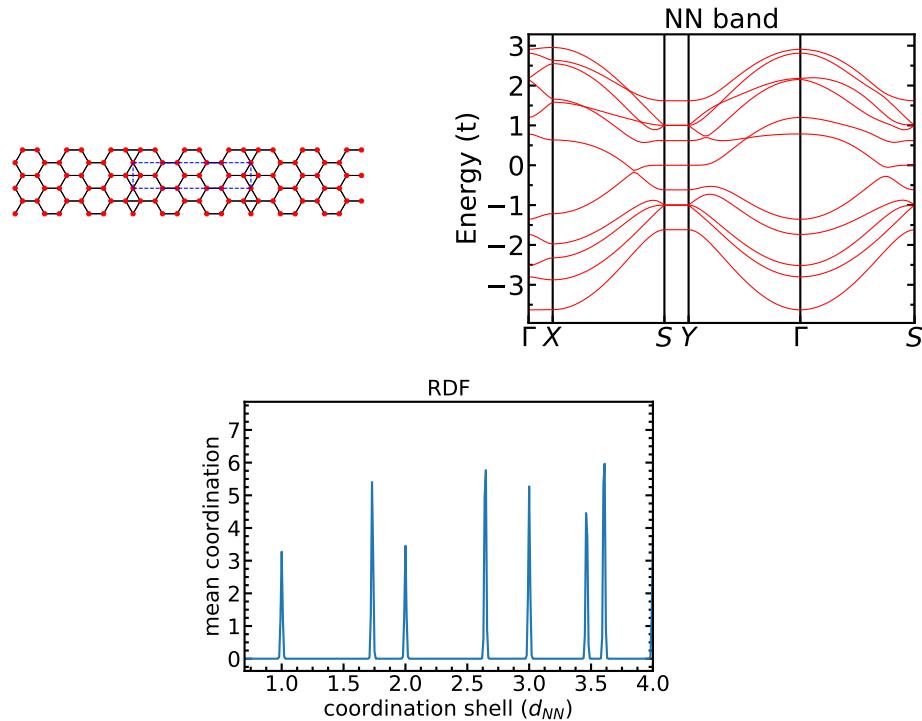


FIG. S42. t6042 lattice framework, nearest neighbors band structure and radial distribution function.

## t6043

Tiling reference number t6043 with space-group ' $Cmmm$ ' (65) and 12 sites in the unit cell, with vertex type indicated in Tab. S43. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S43.

TABLE S43. Tiling t6043 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	8	0	0	0	0	0	2	0	0	0	0	0	2

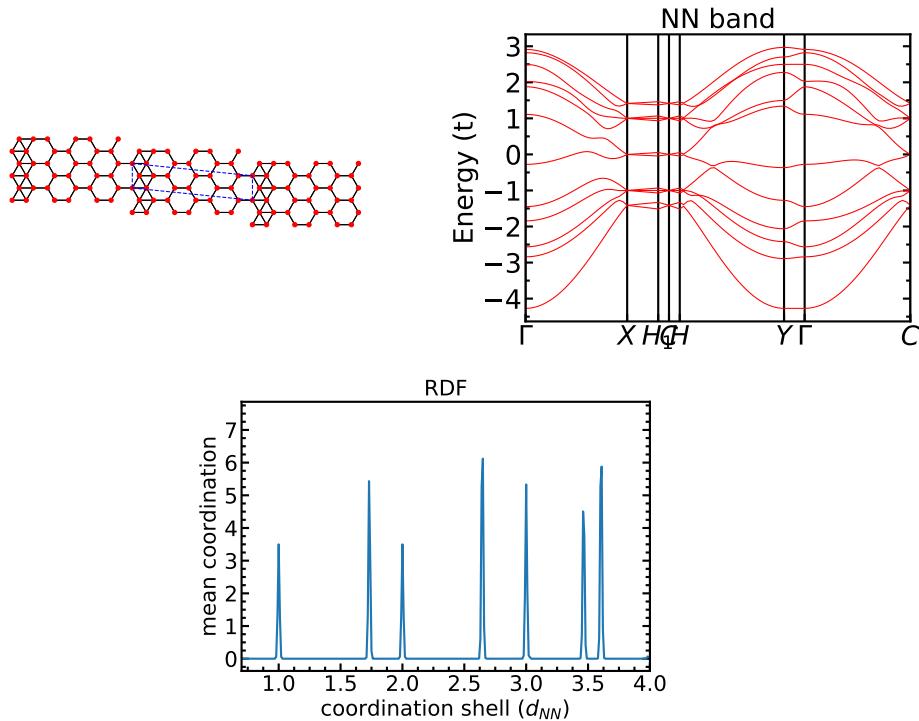


FIG. S43. t6043 lattice framework, nearest neighbors band structure and radial distribution function.

## t6044

Tiling reference number t6044 with space-group ' $Pmmm$ ' (47) and 12 sites in the unit cell, with vertex type indicated in Tab. S44. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S44.

TABLE S44. Tiling t6044 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	4	0	0	0	0	0	4	0	0	0	0	0	4

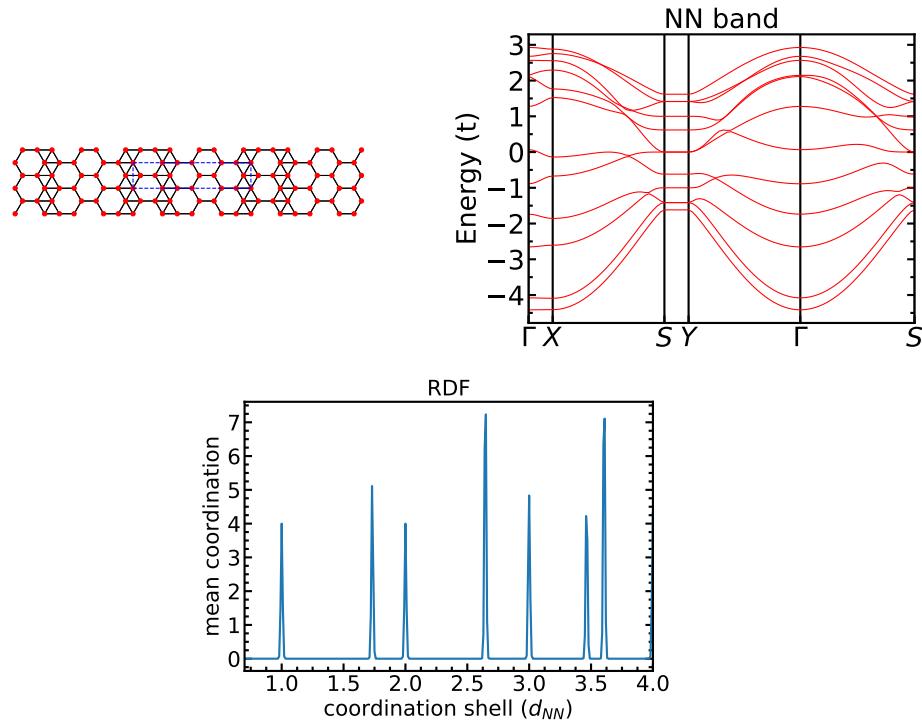


FIG. S44. t6044 lattice framework, nearest neighbors band structure and radial distribution function.

## t6045

Tiling reference number t6045 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S45. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S45.

TABLE S45. Tiling t6045 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	4	0	0	0	0	0	2	0	0	0	0	0	2

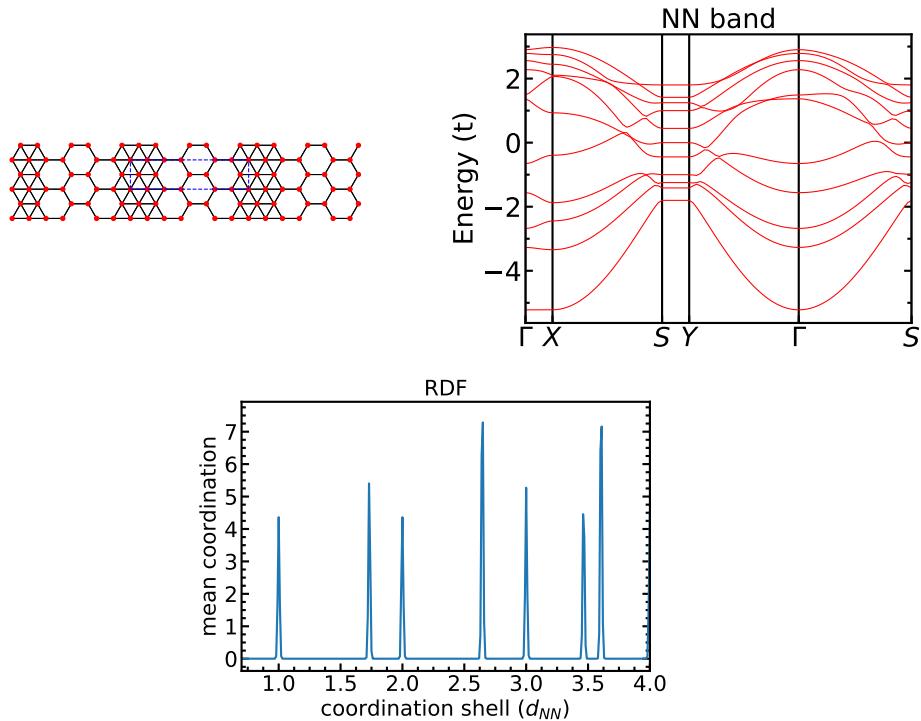


FIG. S45. t6045 lattice framework, nearest neighbors band structure and radial distribution function.

## t6046

Tiling reference number t6046 with space-group '*Cmmm*' (65) and 12 sites in the unit cell, with vertex type indicated in Tab. S46. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S46.

TABLE S46. Tiling t6046 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	4	0	0	0	0	0	2	0	0	0	0	0	2

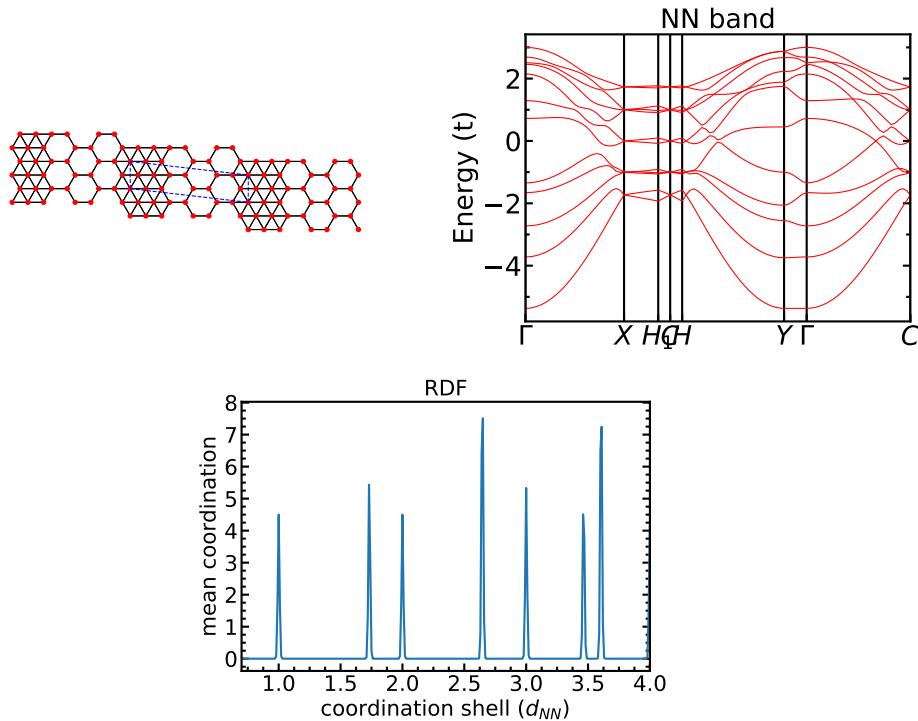


FIG. S46. t6046 lattice framework, nearest neighbors band structure and radial distribution function.

## t6047

Tiling reference number t6047 with space-group ' $Cmmm$ ' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S47. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S47.

TABLE S47. Tiling t6047 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	6	0	0	0	0	0	2	0	0	0	0	0	8

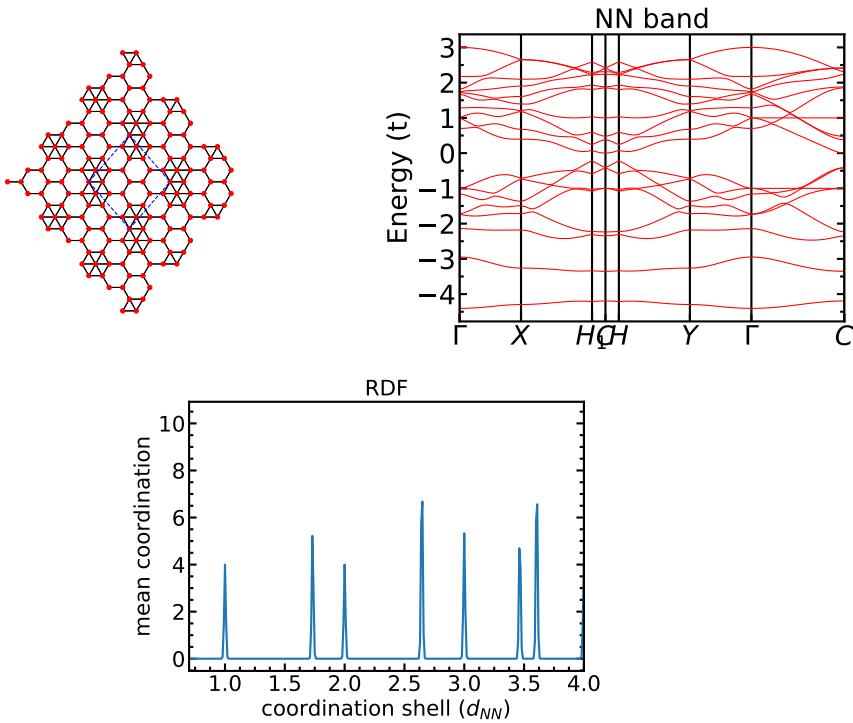


FIG. S47. t6047 lattice framework, nearest neighbors band structure and radial distribution function.

## t6048

Tiling reference number t6048 with space-group ' $Pm'$  (6) and 33 sites in the unit cell, with vertex type indicated in Tab. S48. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S48.

TABLE S48. Tiling t6048 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	26	0	0	0	0	0	0	0	0	0	0	0	6

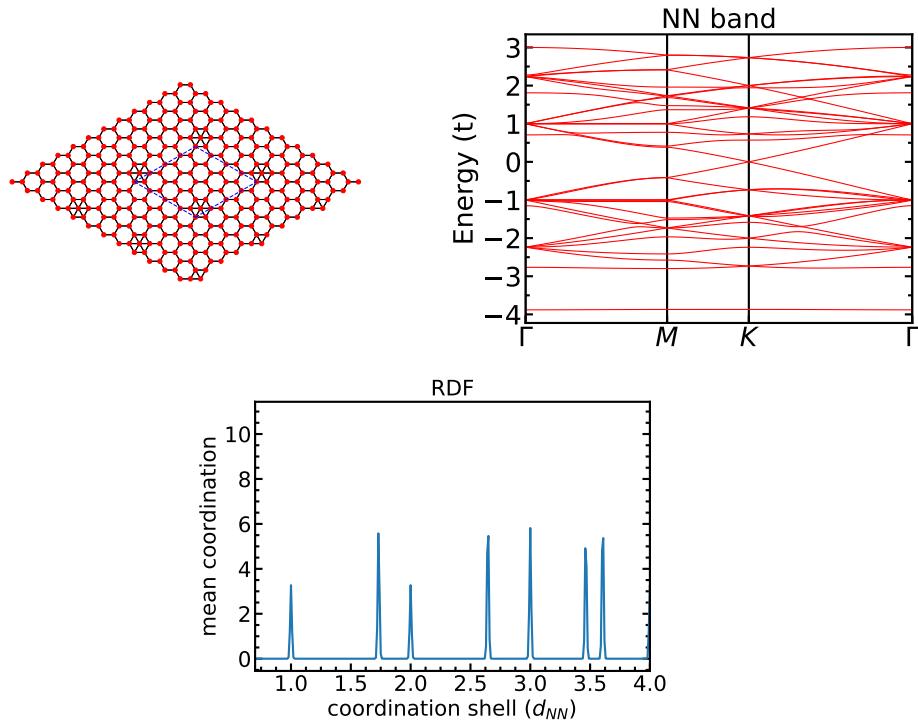


FIG. S48. t6048 lattice framework, nearest neighbors band structure and radial distribution function.

## t6049

Tiling reference number t6049 with space-group ' $Cmmm$ ' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S49. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S49.

TABLE S49. Tiling t6049 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	10	0	0	0	0	0	0	0	0	0	0	0	6

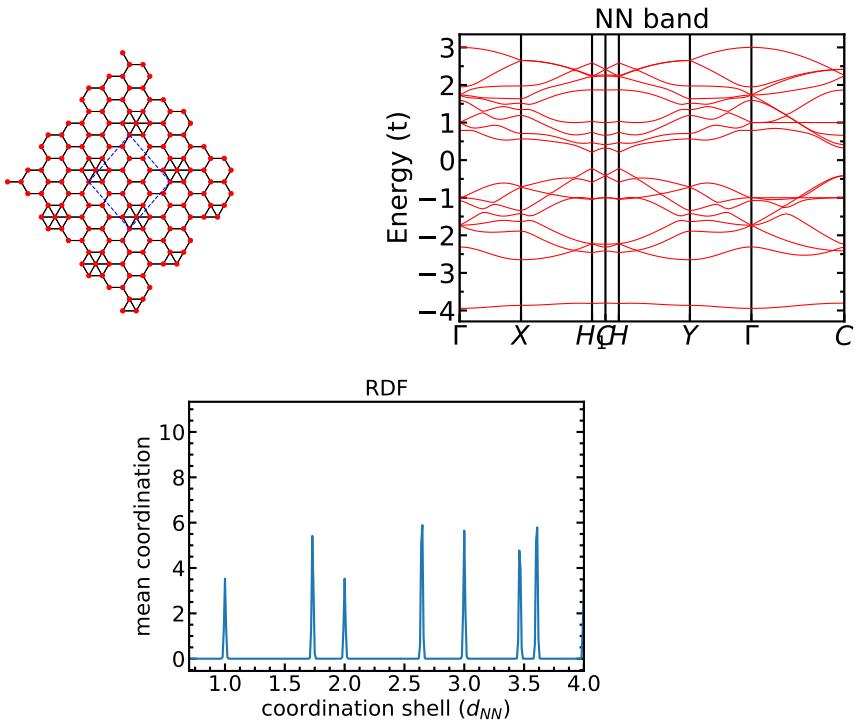


FIG. S49. t6049 lattice framework, nearest neighbors band structure and radial distribution function.

## t6050

Tiling reference number t6050 with space-group ' $P6/m'$  (175) and 27 sites in the unit cell, with vertex type indicated in Tab. S50. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S50.

TABLE S50. Tiling t6050 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	20	0	0	0	0	0	0	0	0	0	0	0	6

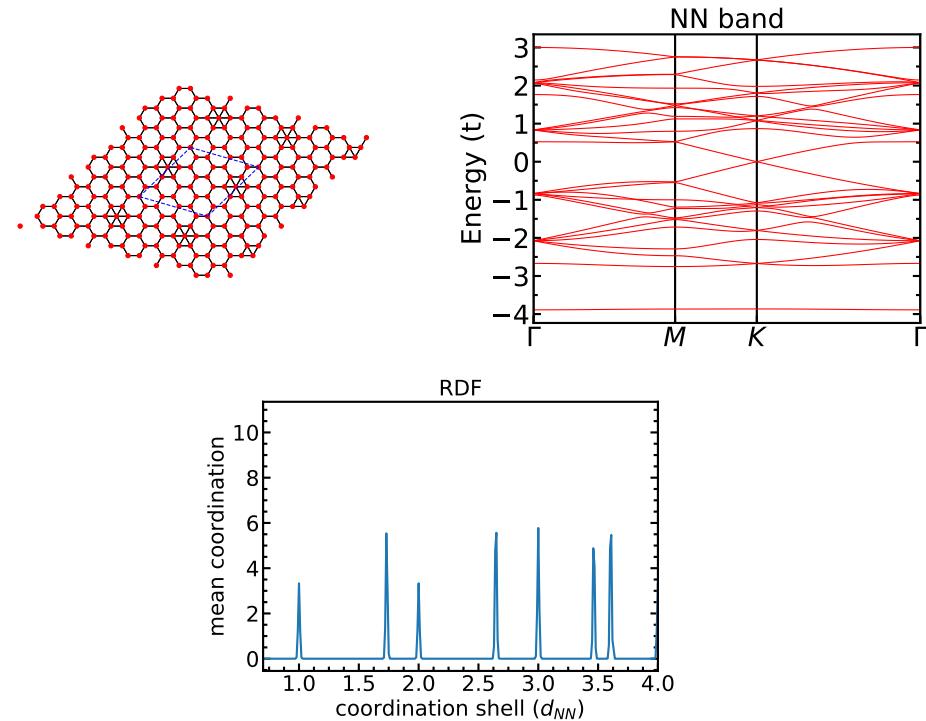


FIG. S50. t6050 lattice framework, nearest neighbors band structure and radial distribution function.

## t6051

Tiling reference number t6051 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S51. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S51.

TABLE S51. Tiling t6051 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	4	0	0	0	0	1	2	0	0	0	0	0	4

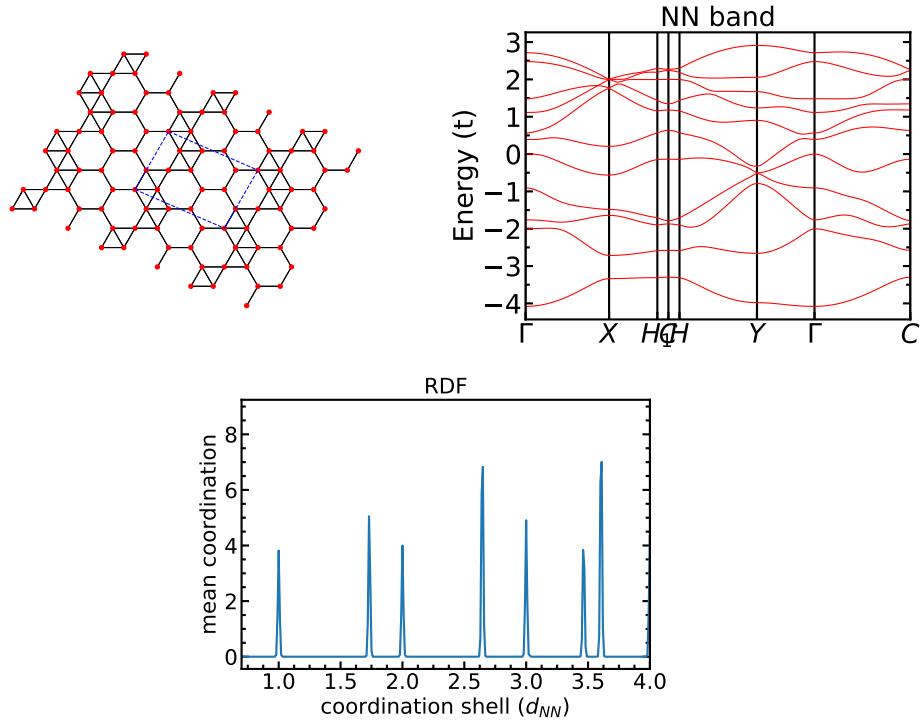


FIG. S51. t6051 lattice framework, nearest neighbors band structure and radial distribution function.

## t6052

Tiling reference number t6052 with space-group ' $Pmm2'$  (25) and 15 sites in the unit cell, with vertex type indicated in Tab. S52. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S52.

TABLE S52. Tiling t6052 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	3	2	0	0	0	0	0	0	0	2	0	0	4	4

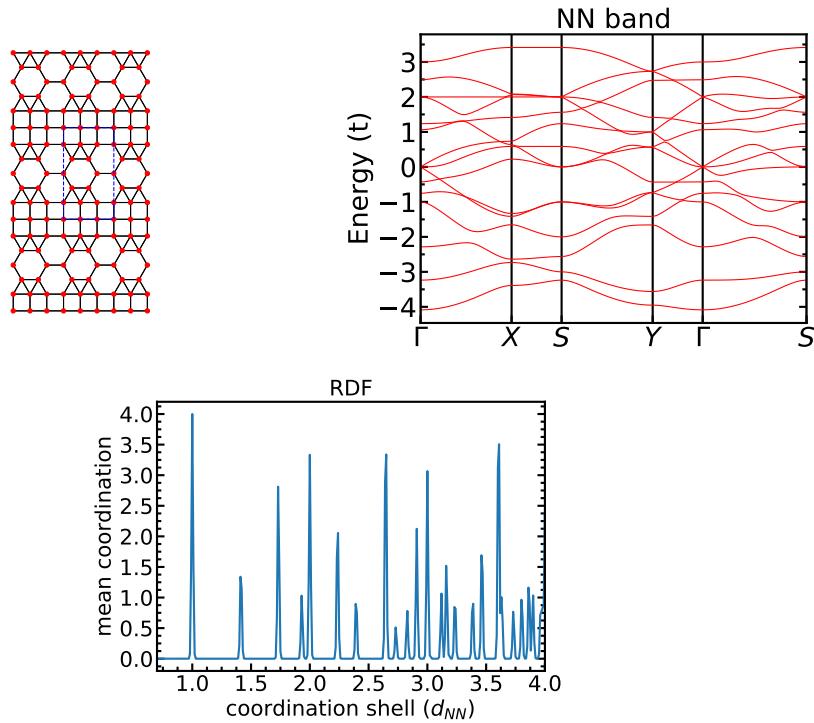


FIG. S52. t6052 lattice framework, nearest neighbors band structure and radial distribution function.

## t6053

Tiling reference number t6053 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S53. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S53.

TABLE S53. Tiling t6053 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	2	0	0	0	0	0	0	0	2	0	0	4	4

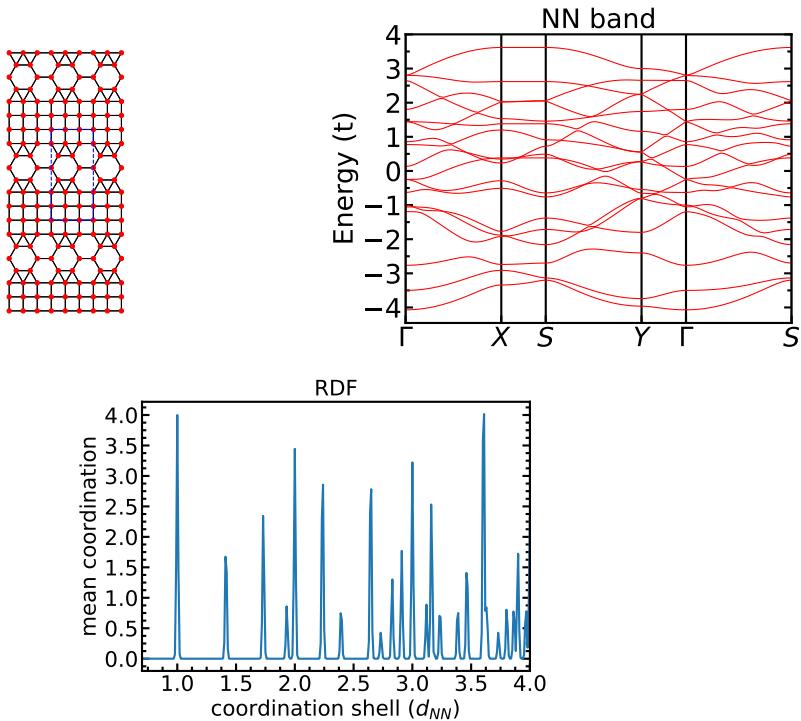


FIG. S53. t6053 lattice framework, nearest neighbors band structure and radial distribution function.

## t6054

Tiling reference number t6054 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S54. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S54.

TABLE S54. Tiling t6054 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	0	0	0	8	0	0	4	4

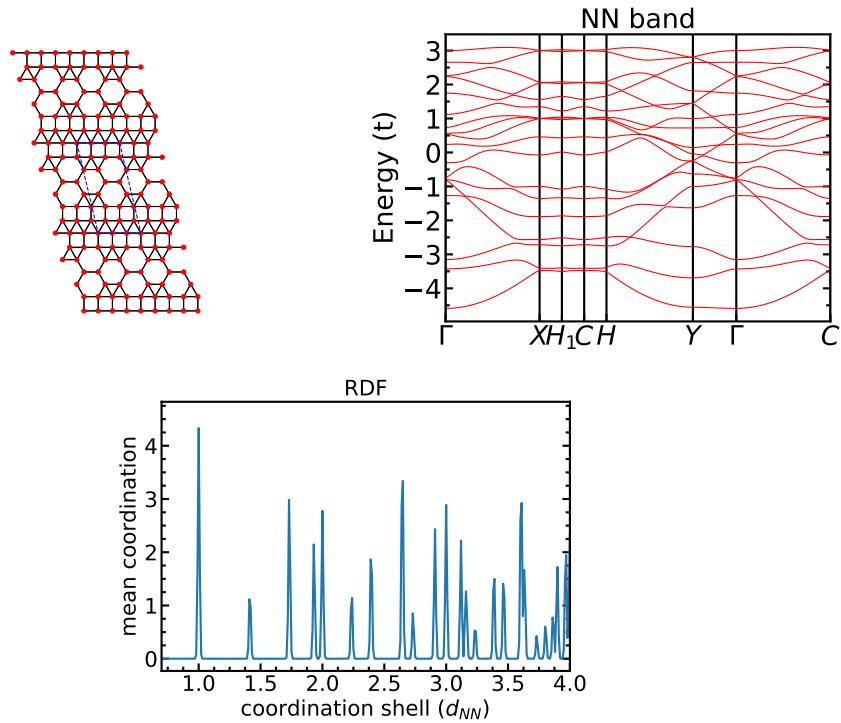


FIG. S54. t6054 lattice framework, nearest neighbors band structure and radial distribution function.

## t6055

Tiling reference number t6055 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S55. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S55.

TABLE S55. Tiling t6055 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	2	0	0	0	0	0	4	0	6	0	0	0	4

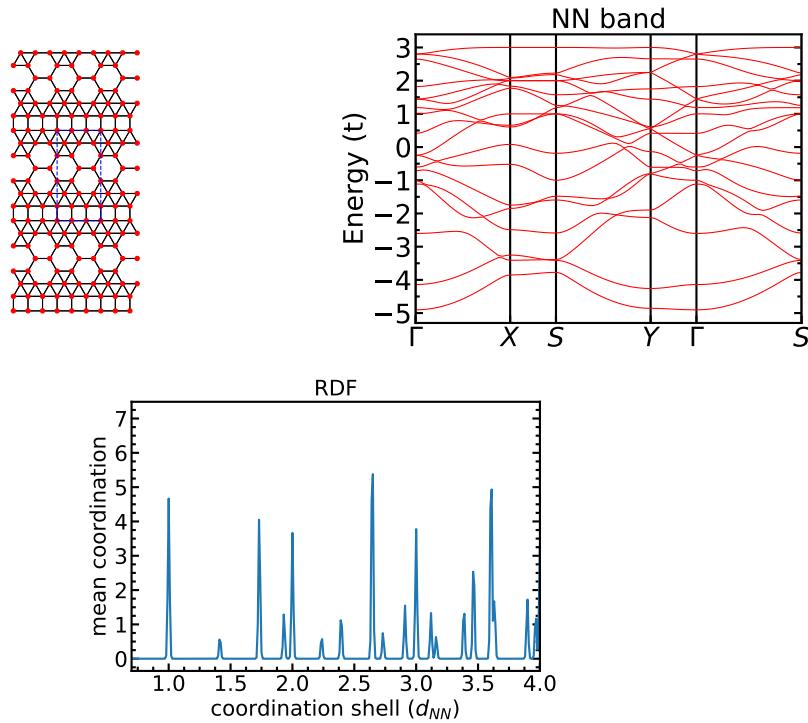


FIG. S55. t6055 lattice framework, nearest neighbors band structure and radial distribution function.

## t6056

Tiling reference number t6056 with space-group ' $Pmmm$ ' (47) and 15 sites in the unit cell, with vertex type indicated in Tab. S56. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S56.

TABLE S56. Tiling t6056 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	2	0	0	0	0	0	4	0	0	0	0	0	4

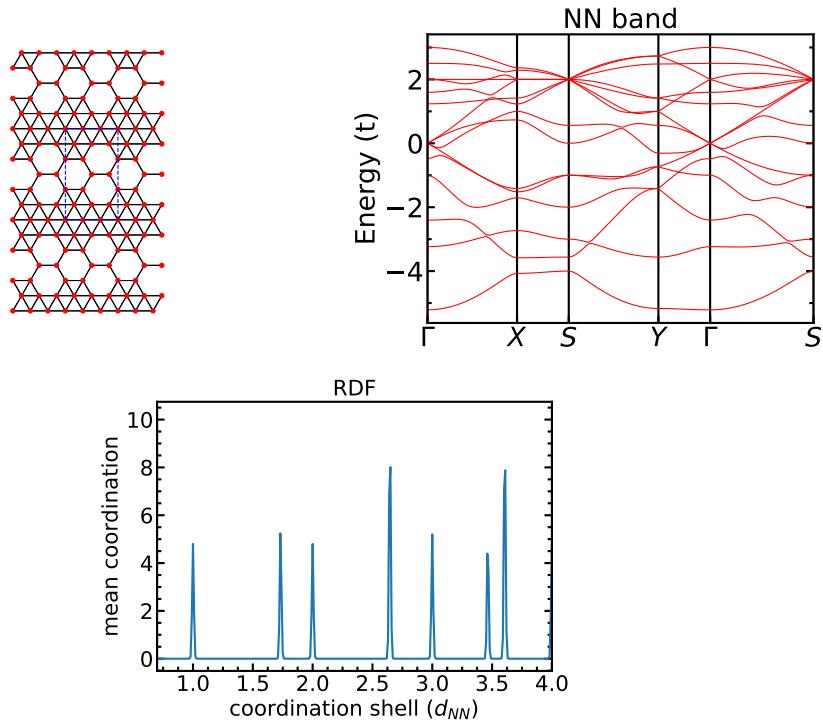


FIG. S56. t6056 lattice framework, nearest neighbors band structure and radial distribution function.

## t6057

Tiling reference number t6057 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S57. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S57.

TABLE S57. Tiling t6057 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	2	0	0	0	0	0	4	0	0	0	0	0	4

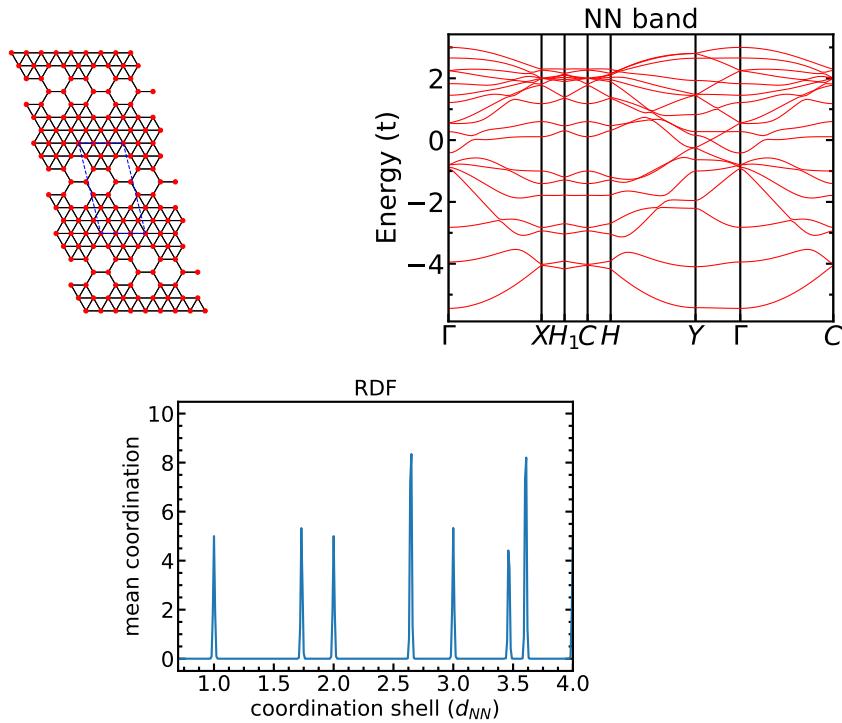


FIG. S57. t6057 lattice framework, nearest neighbors band structure and radial distribution function.

## t6058

Tiling reference number t6058 with space-group ' $Pm'$  (6) and 20 sites in the unit cell, with vertex type indicated in Tab. S58. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S58.

TABLE S58. Tiling t6058 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	2	0	0	4	0	0	0	8	4

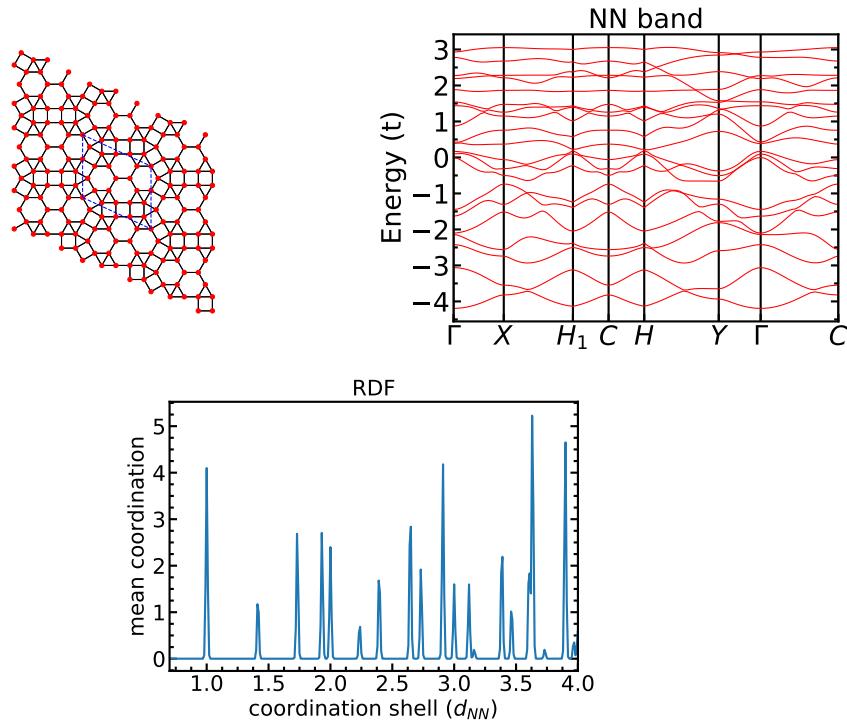


FIG. S58. t6058 lattice framework, nearest neighbors band structure and radial distribution function.

## t6059

Tiling reference number t6059 with space-group ' $Pmmm$ ' (47) and 15 sites in the unit cell, with vertex type indicated in Tab. S59. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S59.

TABLE S59. Tiling t6059 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	5	2	0	0	0	0	0	6

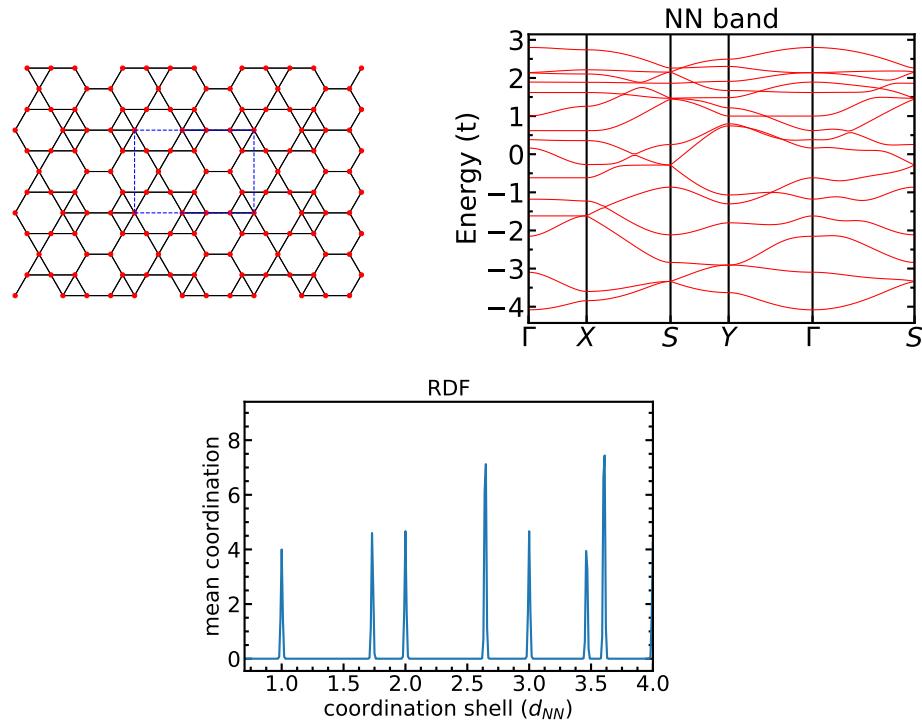


FIG. S59. t6059 lattice framework, nearest neighbors band structure and radial distribution function.

## t6060

Tiling reference number t6060 with space-group '*Cmmm*' (65) and 19 sites in the unit cell, with vertex type indicated in Tab. S60. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S60.

TABLE S60. Tiling t6060 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	5	4	0	0	0	0	0	8

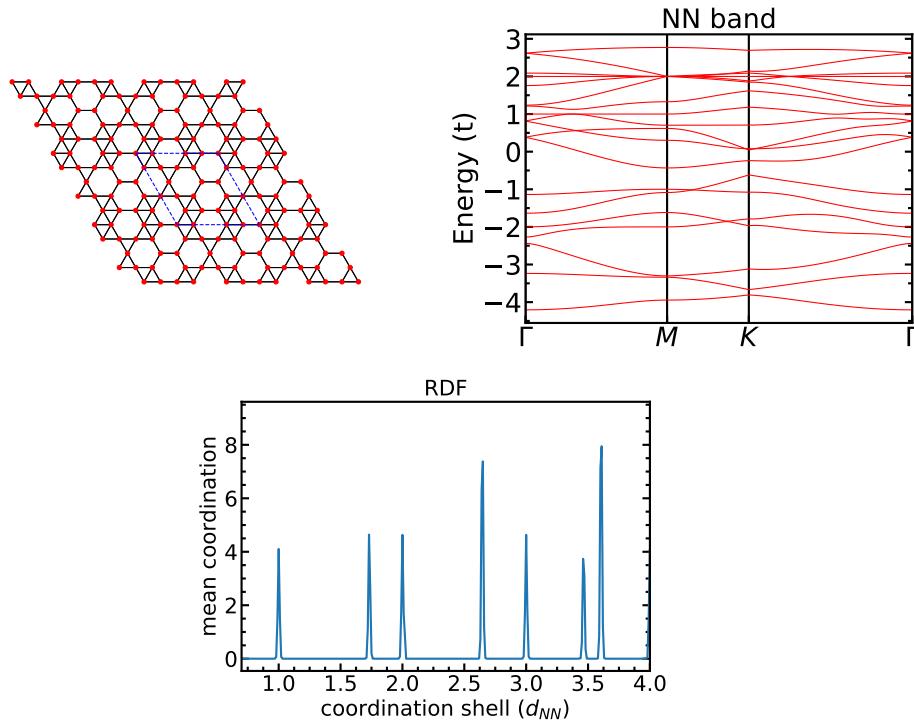


FIG. S60. t6060 lattice framework, nearest neighbors band structure and radial distribution function.

## t6061

Tiling reference number t6061 with space-group ' $P6/mmm$ ' (191) and 37 sites in the unit cell, with vertex type indicated in Tab. S61. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S61.

TABLE S61. Tiling t6061 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	6	0	0	0	0	12	6	0	0	0	0	0	12

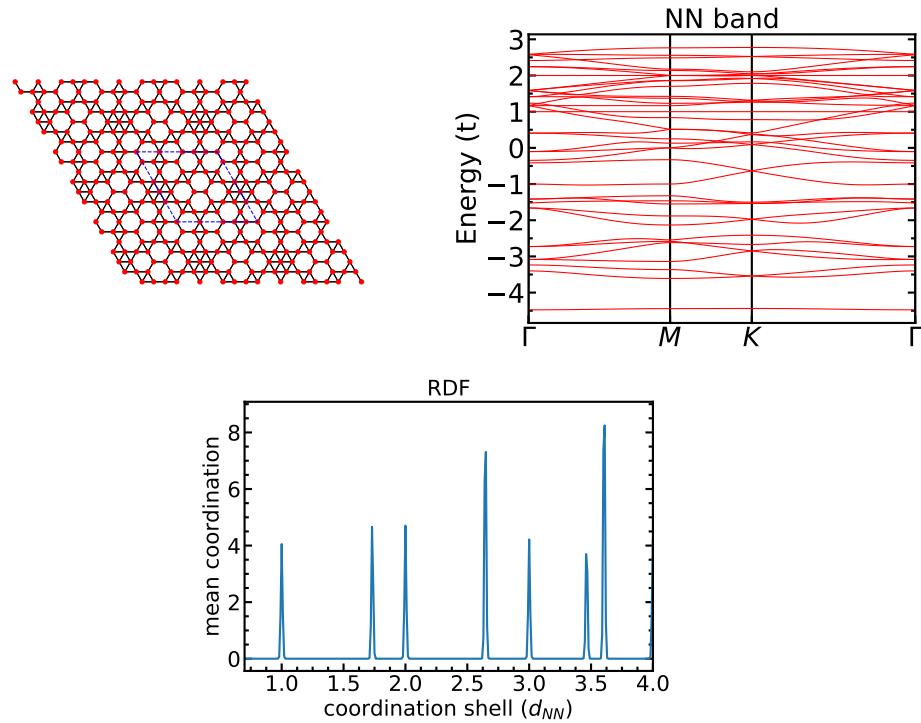


FIG. S61. t6061 lattice framework, nearest neighbors band structure and radial distribution function.

## t6062

Tiling reference number t6062 with space-group ' $Cmmm$ ' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S62. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S62.

TABLE S62. Tiling t6062 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	2	0	0	0	0	0	6	0	0	0	0	0	6

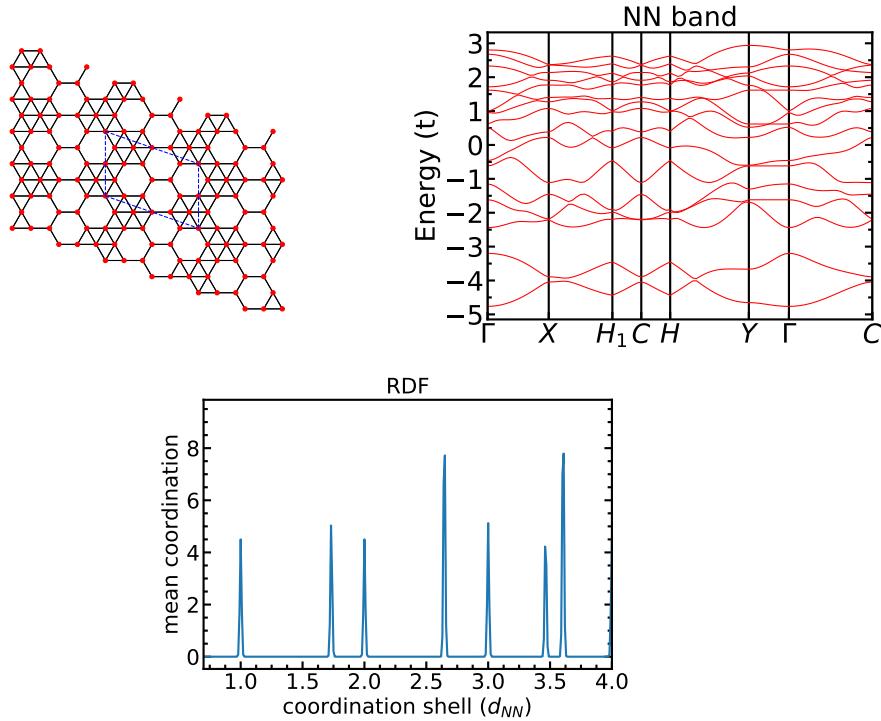


FIG. S62. t6062 lattice framework, nearest neighbors band structure and radial distribution function.

## t6063

Tiling reference number t6063 with space-group ' $Cmmm$ ' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S63. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S63.

TABLE S63. Tiling t6063 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	2	0	0	0	0	0	10	0	0	0	0	0	4

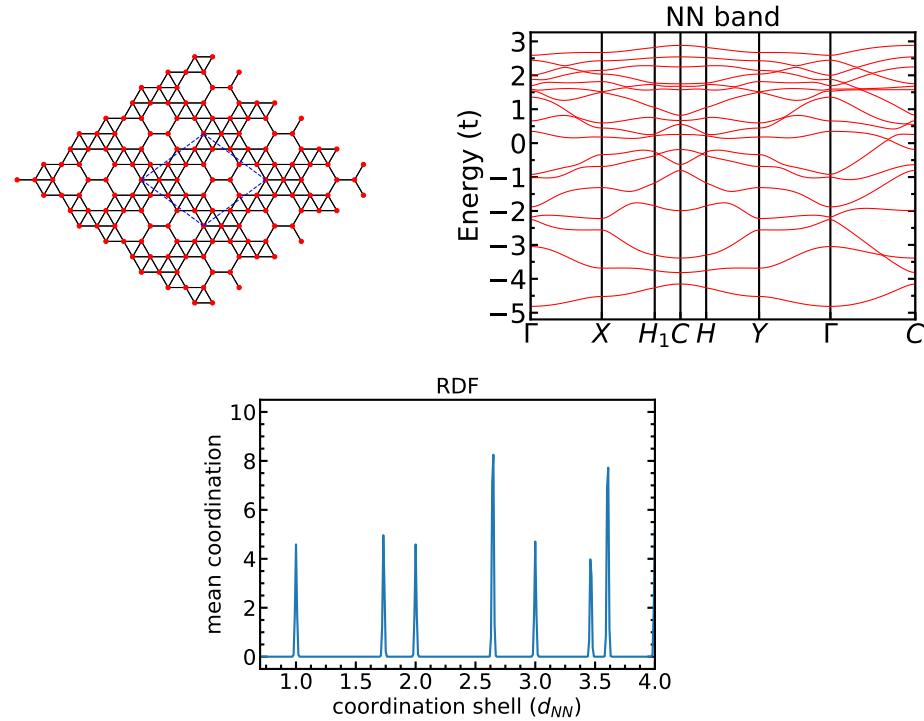


FIG. S63. t6063 lattice framework, nearest neighbors band structure and radial distribution function.

## t6064

Tiling reference number t6064 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S64. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S64.

TABLE S64. Tiling t6064 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	0	0	0	2	0	0	4	4

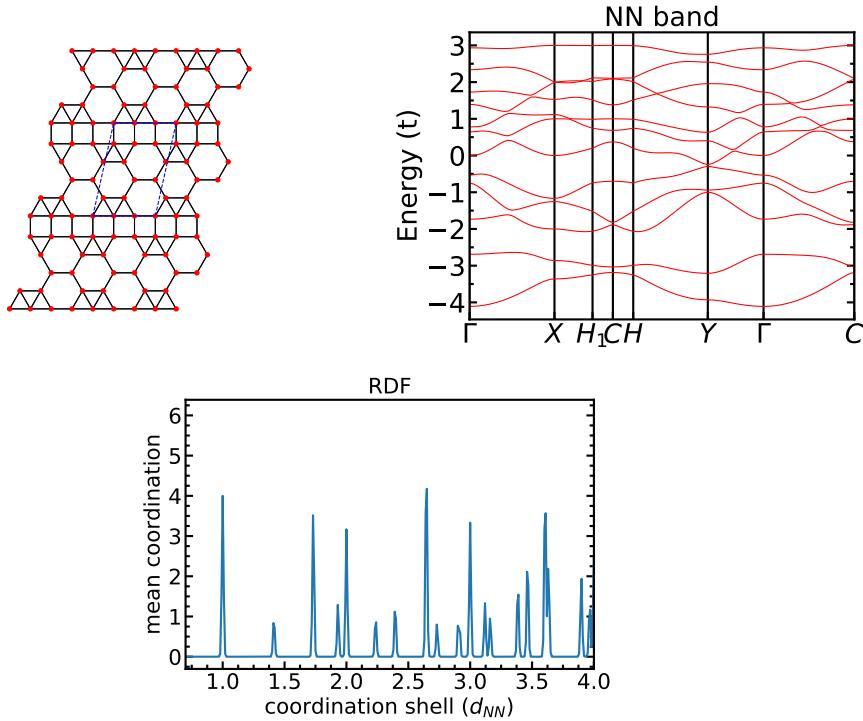


FIG. S64. t6064 lattice framework, nearest neighbors band structure and radial distribution function.

## t6065

Tiling reference number t6065 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S65. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S65.

TABLE S65. Tiling t6065 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	2	0	0	0	0	0	4	0	0	0	0	0	4

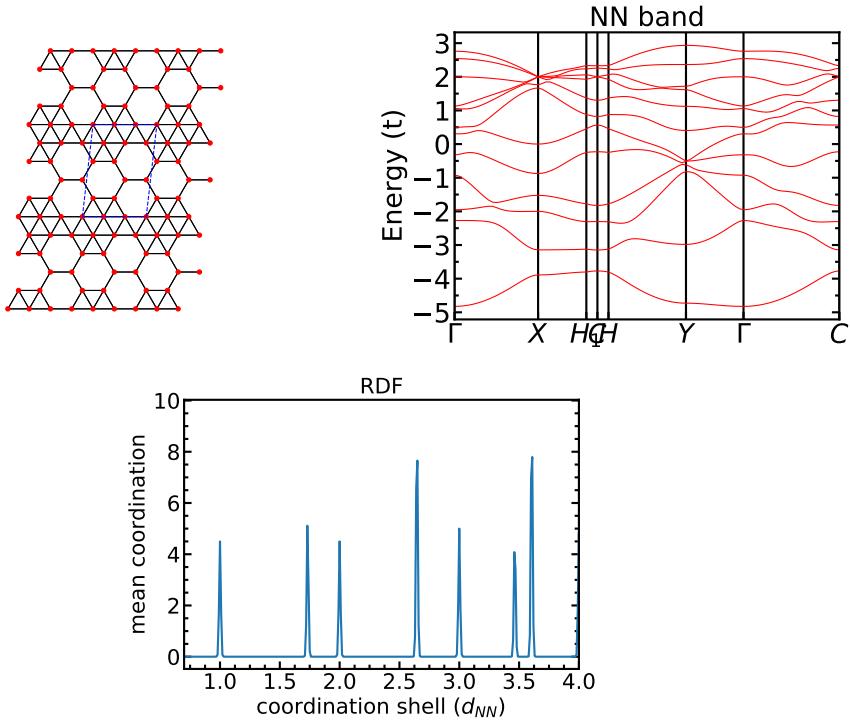


FIG. S65. t6065 lattice framework, nearest neighbors band structure and radial distribution function.

## t6066

Tiling reference number t6066 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S66. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S66.

TABLE S66. Tiling t6066 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	2	2	0	0	0	0	0	6

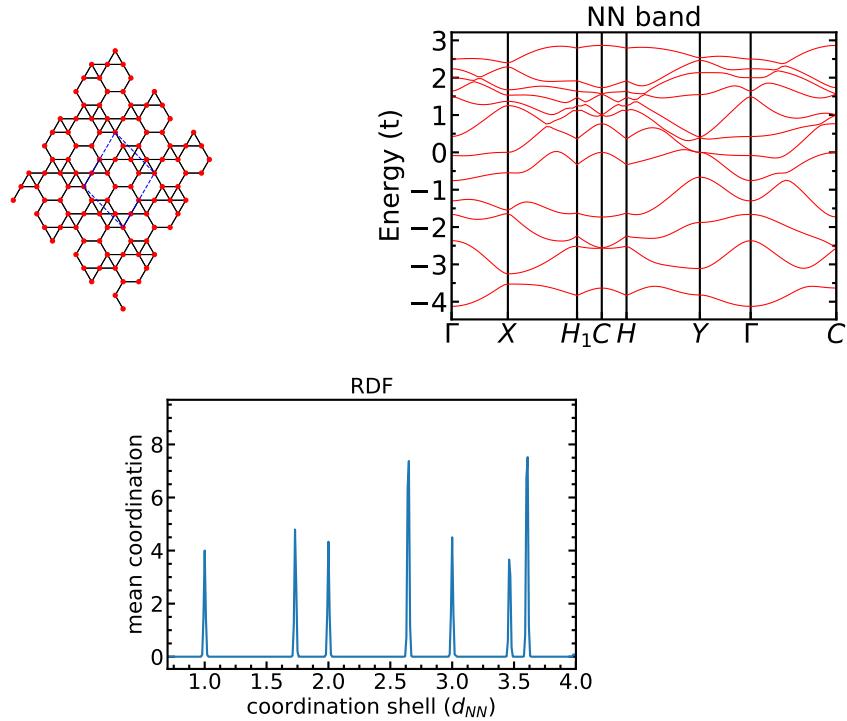


FIG. S66. t6066 lattice framework, nearest neighbors band structure and radial distribution function.

## t6067

Tiling reference number t6067 with space-group ' $Pm'$  (6) and 35 sites in the unit cell, with vertex type indicated in Tab. S67. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S67.

TABLE S67. Tiling t6067 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	8	0	0	0	0	15	0	0	0	0	0	0	12

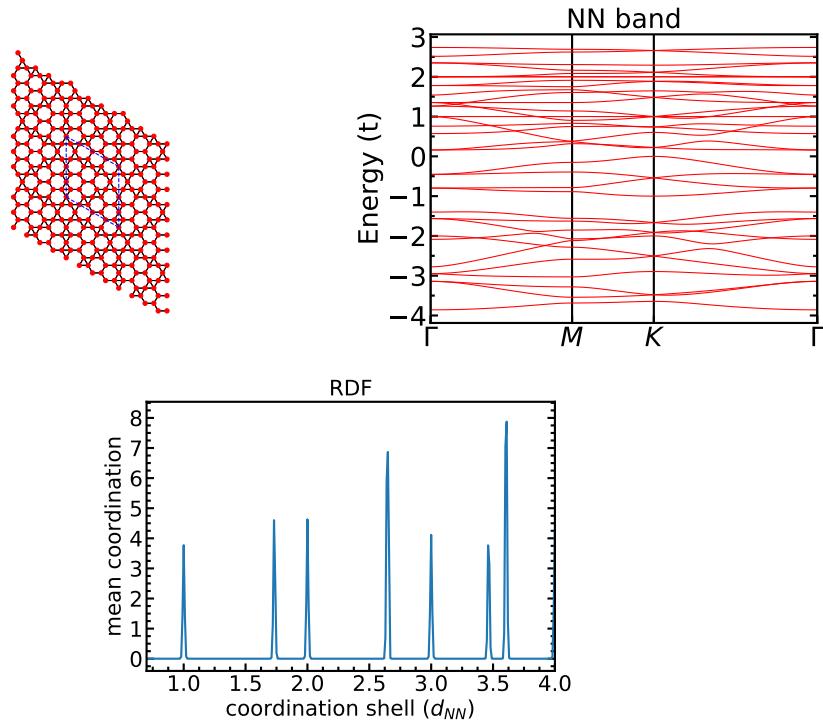


FIG. S67. t6067 lattice framework, nearest neighbors band structure and radial distribution function.

## t6068

Tiling reference number t6068 with space-group ' $P6/mmm$ ' (191) and 38 sites in the unit cell, with vertex type indicated in Tab. S68. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S68.

TABLE S68. Tiling t6068 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	8	0	0	0	0	0	12	0	0	0	0	0	12

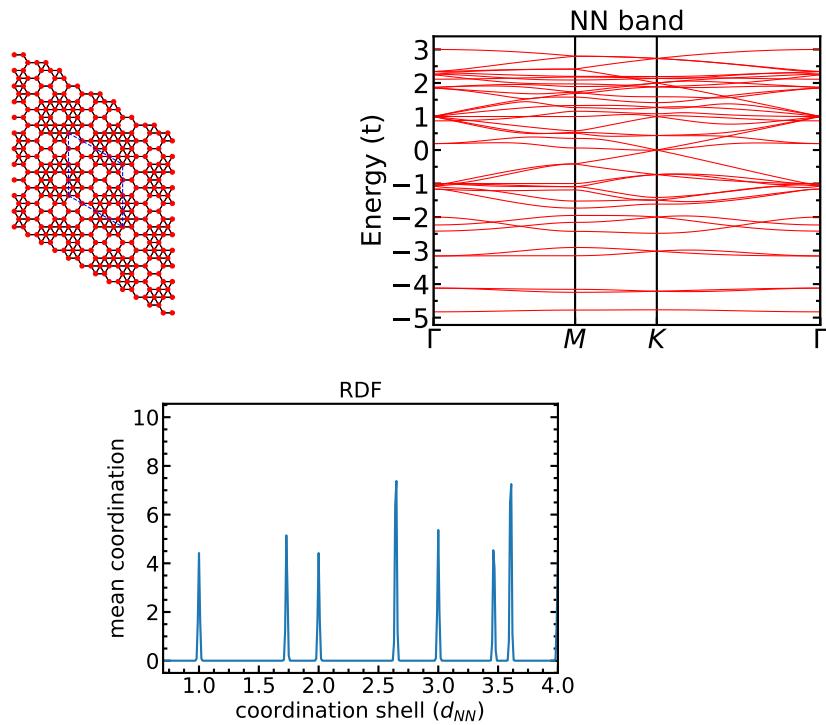


FIG. S68. t6068 lattice framework, nearest neighbors band structure and radial distribution function.

## t6069

Tiling reference number t6069 with space-group ' $Pmc2_1'$  (26) and 22 sites in the unit cell, with vertex type indicated in Tab. S69. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S69.

TABLE S69. Tiling t6069 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	8	0	0	0	0	2	4	0	0	0	0	0	8

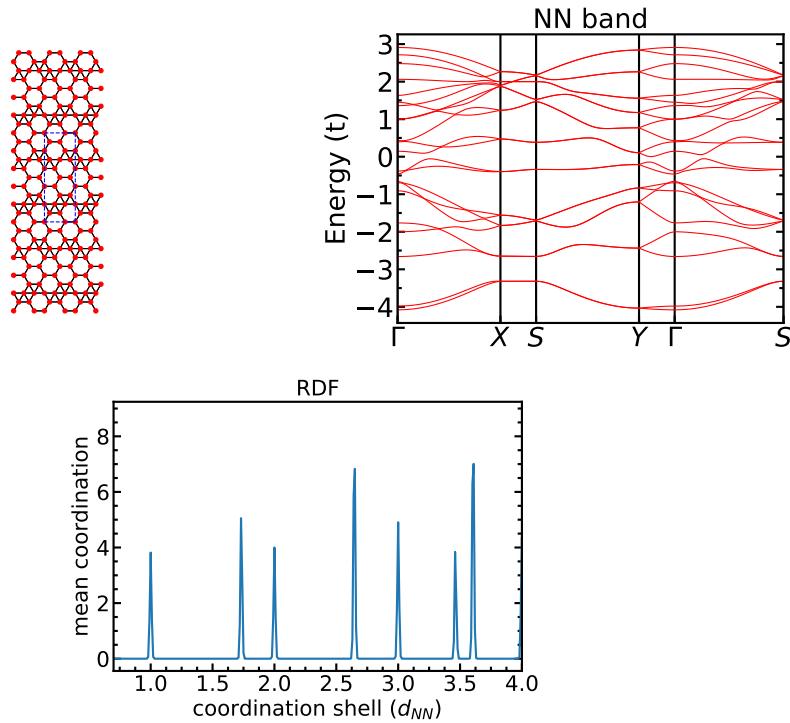


FIG. S69. t6069 lattice framework, nearest neighbors band structure and radial distribution function.

## t6070

Tiling reference number t6070 with space-group '*Cmmm*' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S70. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S70.

TABLE S70. Tiling t6070 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	4	0	0	0	0	1	2	0	0	0	0	0	4

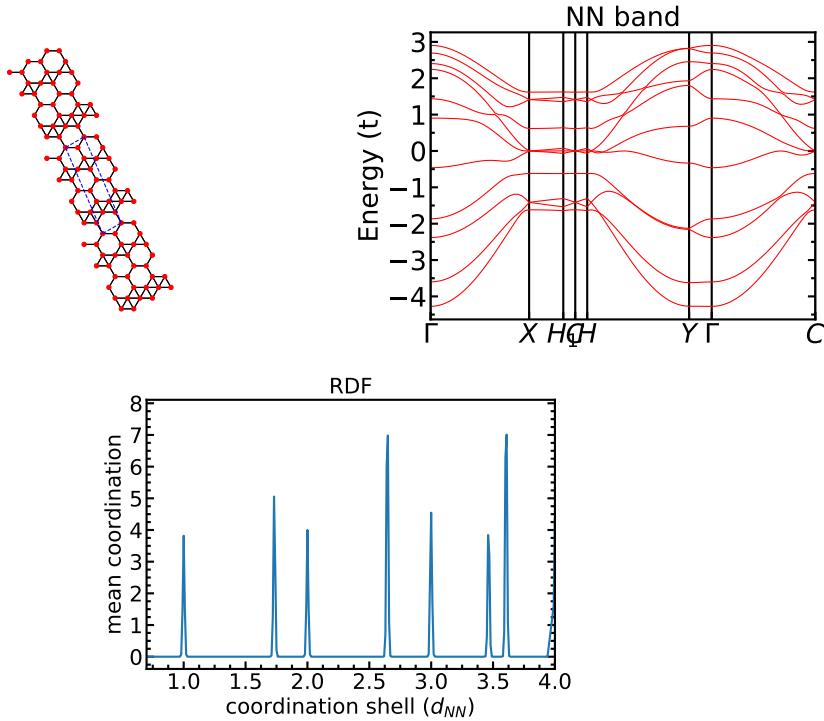


FIG. S70. t6070 lattice framework, nearest neighbors band structure and radial distribution function.

## t6071

Tiling reference number t6071 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S71. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S71.

TABLE S71. Tiling t6071 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	4	0	0	0	0	2	4	0	0	0	0	0	8

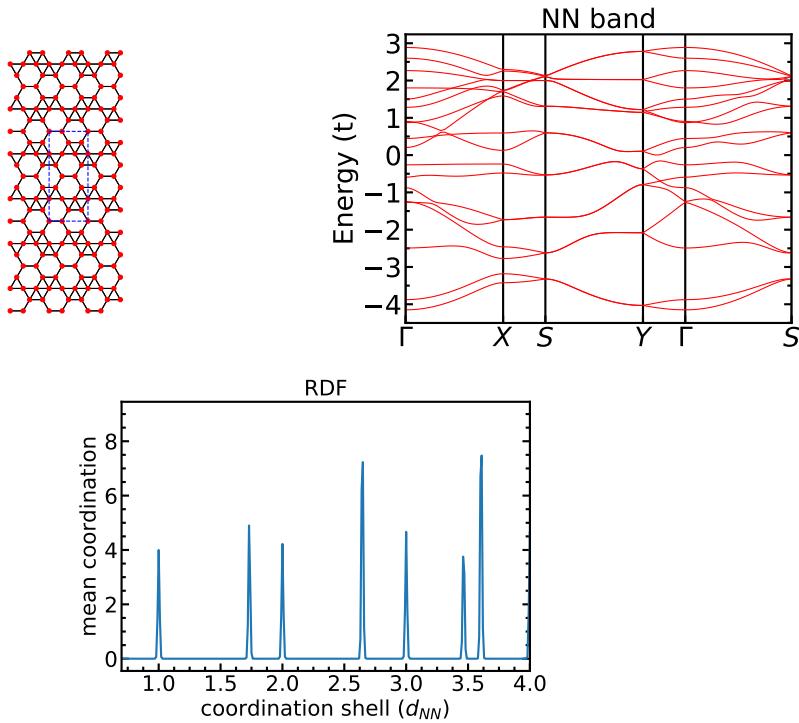


FIG. S71. t6071 lattice framework, nearest neighbors band structure and radial distribution function.

## t6072

Tiling reference number t6072 with space-group ' $P - 6'$  (174) and 16 sites in the unit cell, with vertex type indicated in Tab. S72. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S72.

TABLE S72. Tiling t6072 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	1	0	0	0	0	3	3	0	0	0	0	0	9

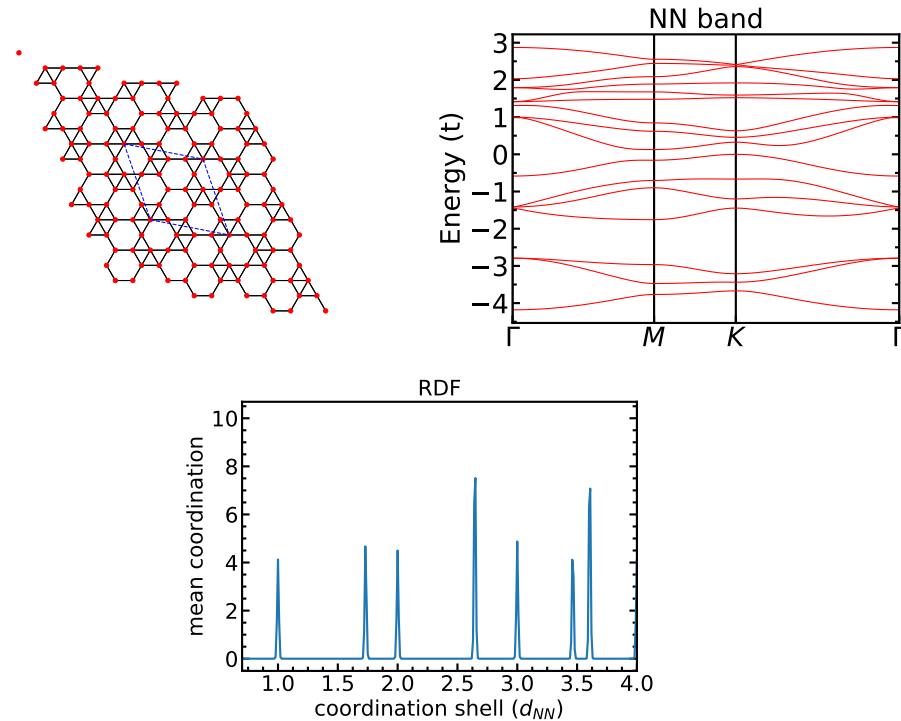


FIG. S72. t6072 lattice framework, nearest neighbors band structure and radial distribution function.

## t6073

Tiling reference number t6073 with space-group ' $Pm'$  (6) and 32 sites in the unit cell, with vertex type indicated in Tab. S73. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S73.

TABLE S73. Tiling t6073 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	2	0	0	0	0	0	12	0	0	0	0	0	12

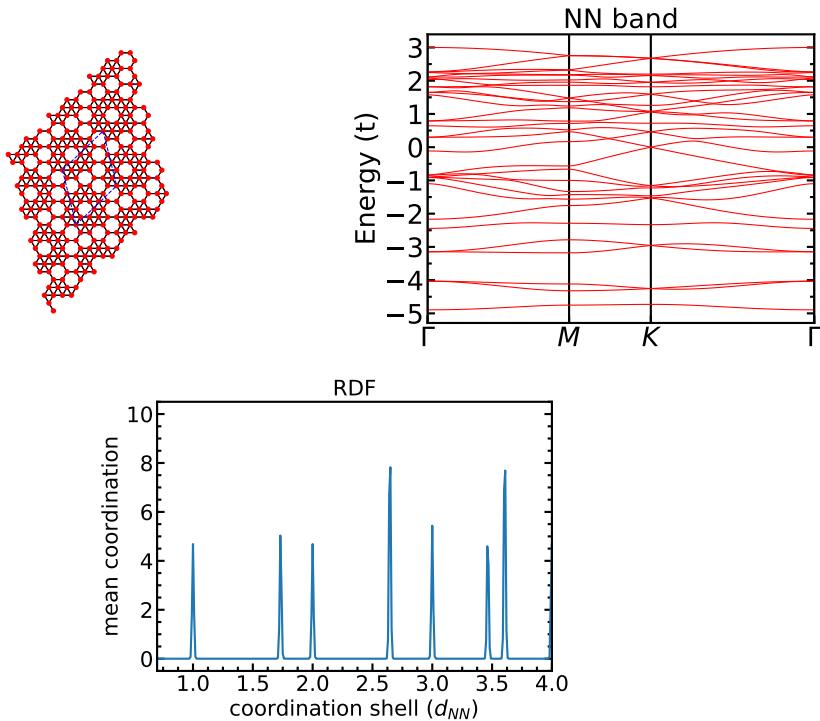


FIG. S73. t6073 lattice framework, nearest neighbors band structure and radial distribution function.

## t6074

Tiling reference number t6074 with space-group ' $P6/m'$  (175) and 29 sites in the unit cell, with vertex type indicated in Tab. S74. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S74.

TABLE S74. Tiling t6074 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	3	18	0	0	0	0	0	6

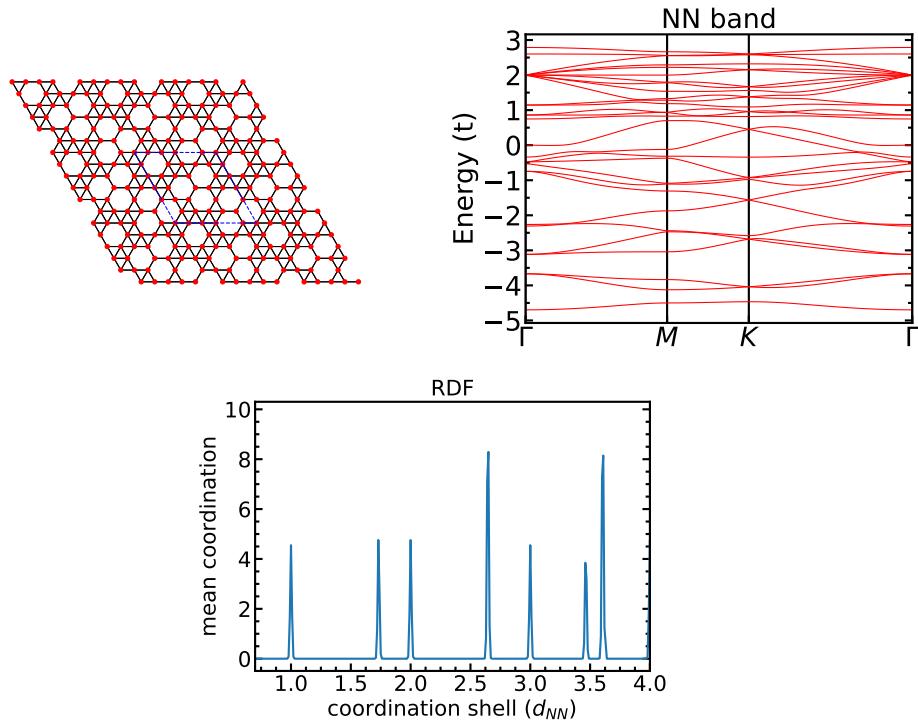


FIG. S74. t6074 lattice framework, nearest neighbors band structure and radial distribution function.

## t6075

Tiling reference number t6075 with space-group ' $P - 62m'$  (189) and 22 sites in the unit cell, with vertex type indicated in Tab. S75. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S75.

TABLE S75. Tiling t6075 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
9	0	1	0	0	0	0	0	9	0	0	0	0	0	3

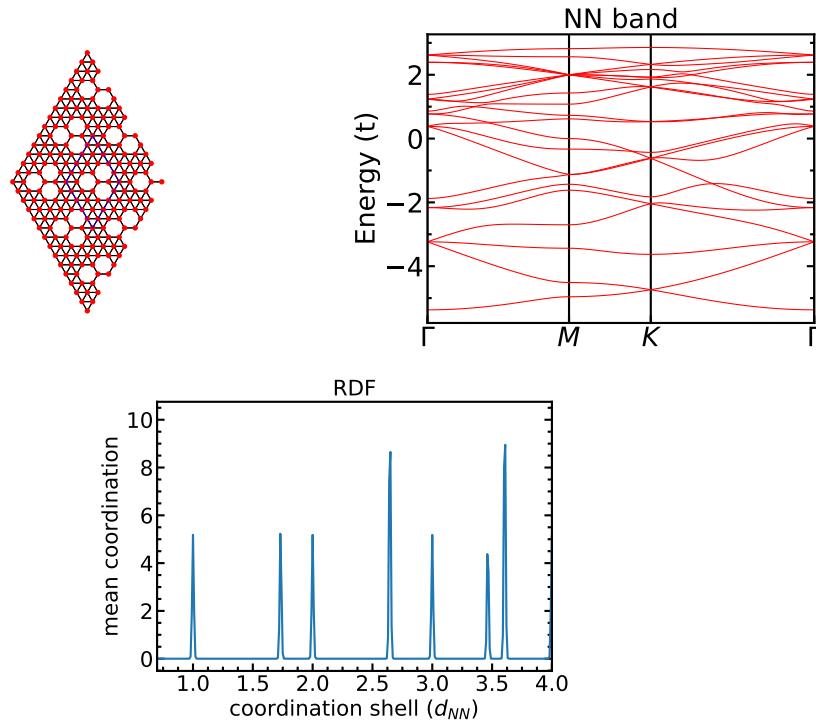


FIG. S75. t6075 lattice framework, nearest neighbors band structure and radial distribution function.

## t6076

Tiling reference number t6076 with space-group ' $P6/m$ ' (175) and 32 sites in the unit cell, with vertex type indicated in Tab. S76. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S76.

TABLE S76. Tiling t6076 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	0	24	0	0	0	0	0	6

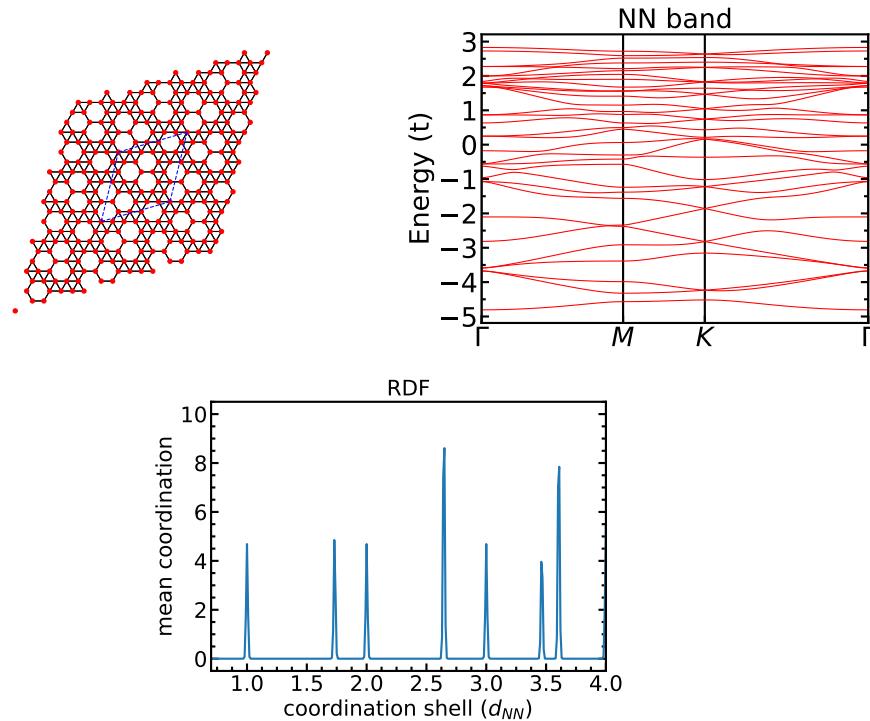


FIG. S76. t6076 lattice framework, nearest neighbors band structure and radial distribution function.

## t6077

Tiling reference number t6077 with space-group ' $P - 6'$  (174) and 16 sites in the unit cell, with vertex type indicated in Tab. S77. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S77.

TABLE S77. Tiling t6077 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	1	0	0	0	0	0	9	0	0	0	0	0	3

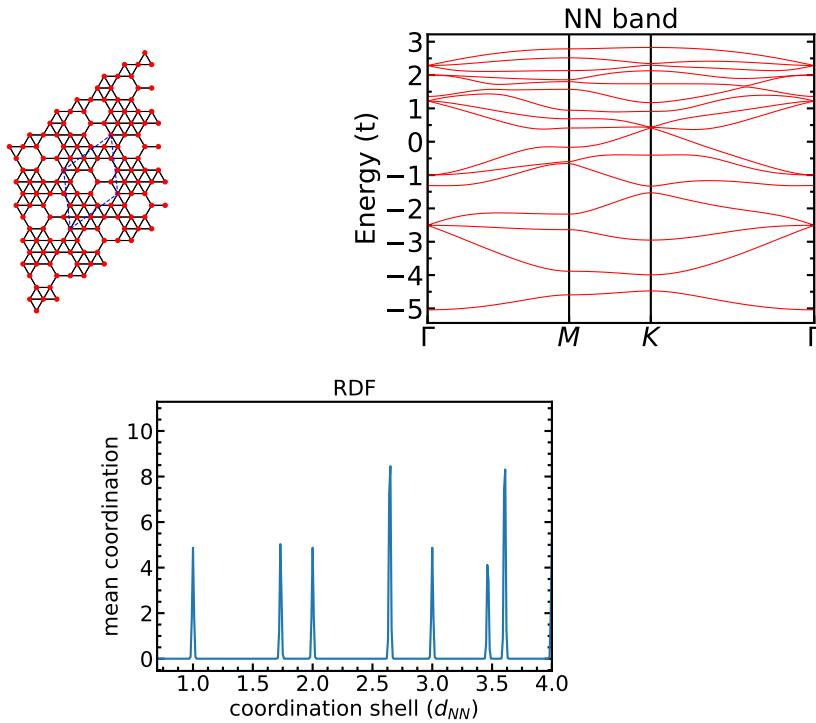


FIG. S77. t6077 lattice framework, nearest neighbors band structure and radial distribution function.

## t6078

Tiling reference number t6078 with space-group ' $Pm'$  (6) and 15 sites in the unit cell, with vertex type indicated in Tab. S78. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S78.

TABLE S78. Tiling t6078 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	5	2	0	0	0	0	0	6

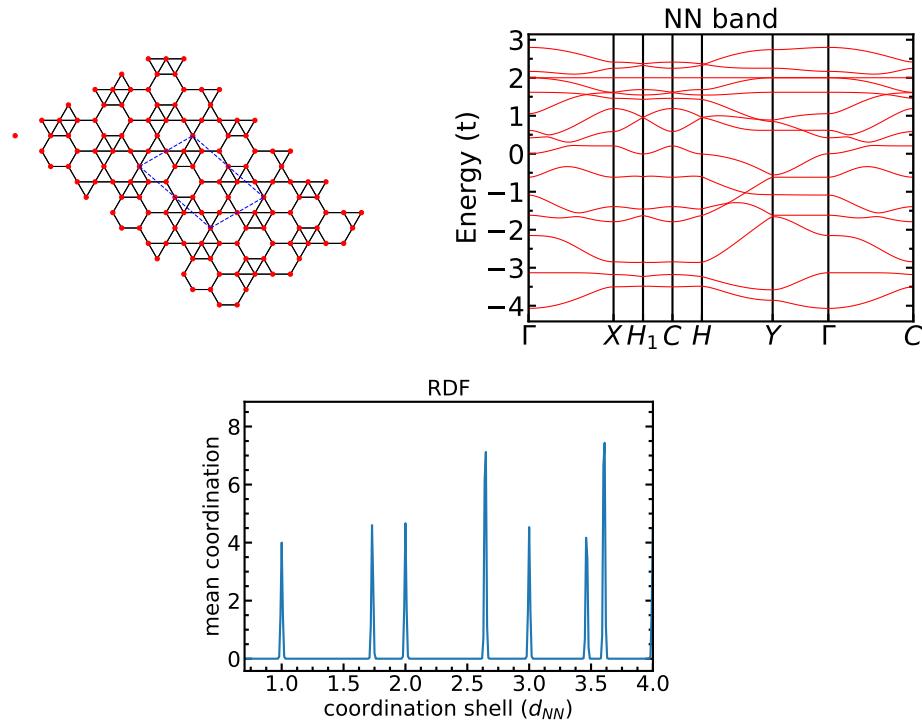


FIG. S78. t6078 lattice framework, nearest neighbors band structure and radial distribution function.

## t6079

Tiling reference number t6079 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S79. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S79.

TABLE S79. Tiling t6079 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	2	0	0	0	0	4	2	0	0	0	0	0	10

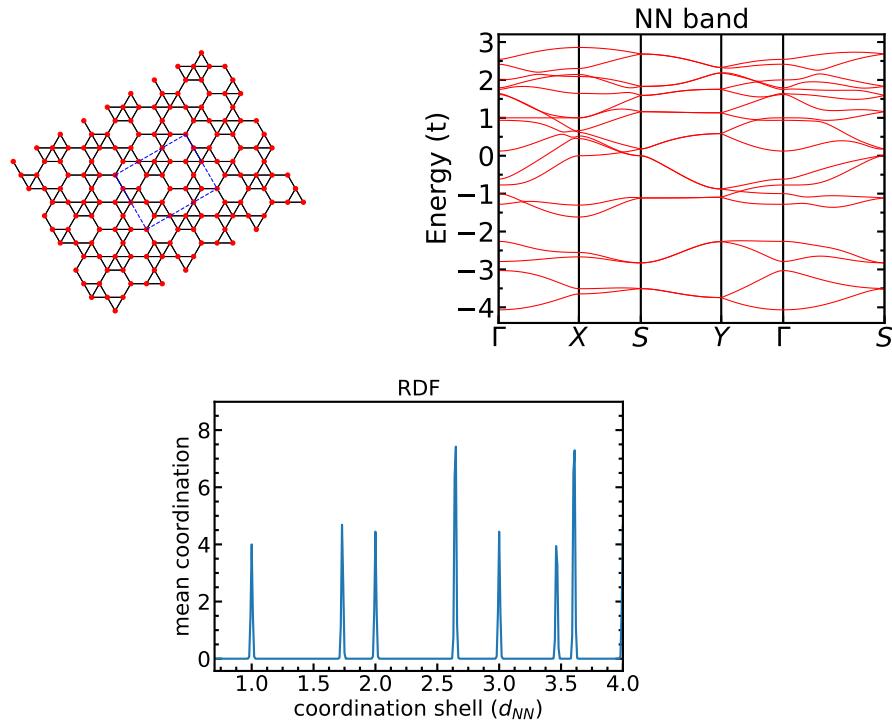


FIG. S79. t6079 lattice framework, nearest neighbors band structure and radial distribution function.

## t6080

Tiling reference number t6080 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S80. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S80.

TABLE S80. Tiling t6080 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	2	0	0	0	0	0	6	0	0	0	0	0	6

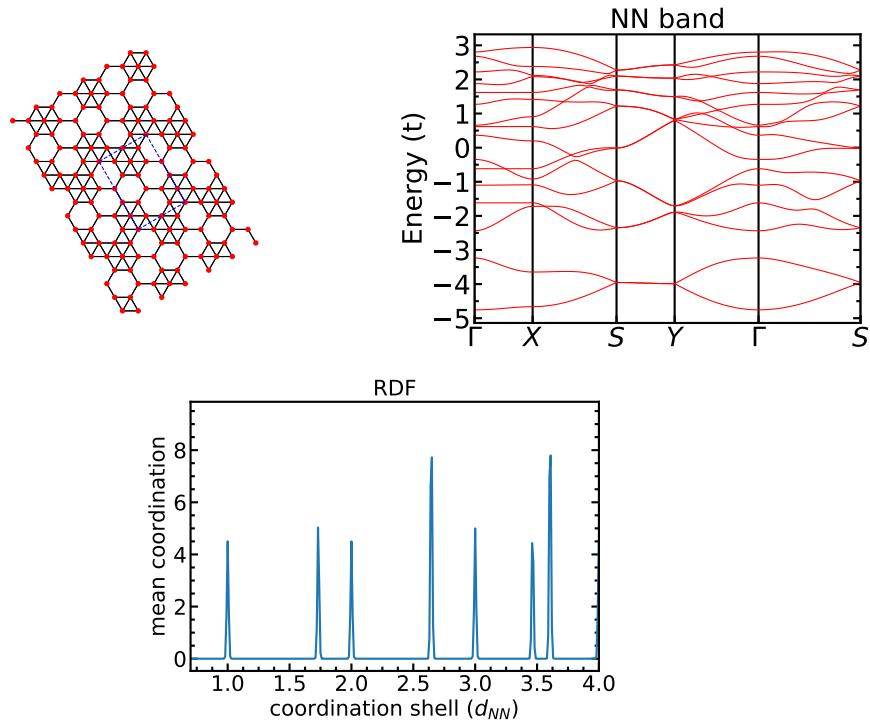


FIG. S80. t6080 lattice framework, nearest neighbors band structure and radial distribution function.

## t6081

Tiling reference number t6081 with space-group ' $Pm'$  (6) and 66 sites in the unit cell, with vertex type indicated in Tab. S81. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S81.

TABLE S81. Tiling t6081 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	22	0	0	0	0	0	0	32	0

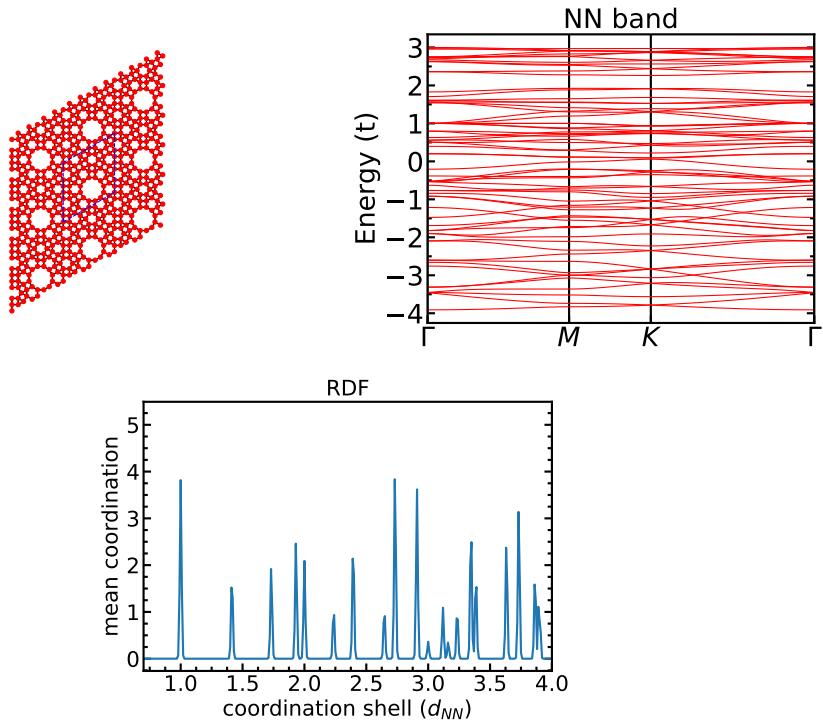


FIG. S81. t6081 lattice framework, nearest neighbors band structure and radial distribution function.

## t6082

Tiling reference number t6082 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S82. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S82.

TABLE S82. Tiling t6082 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	0	0	6	6	12	0	0	12	12

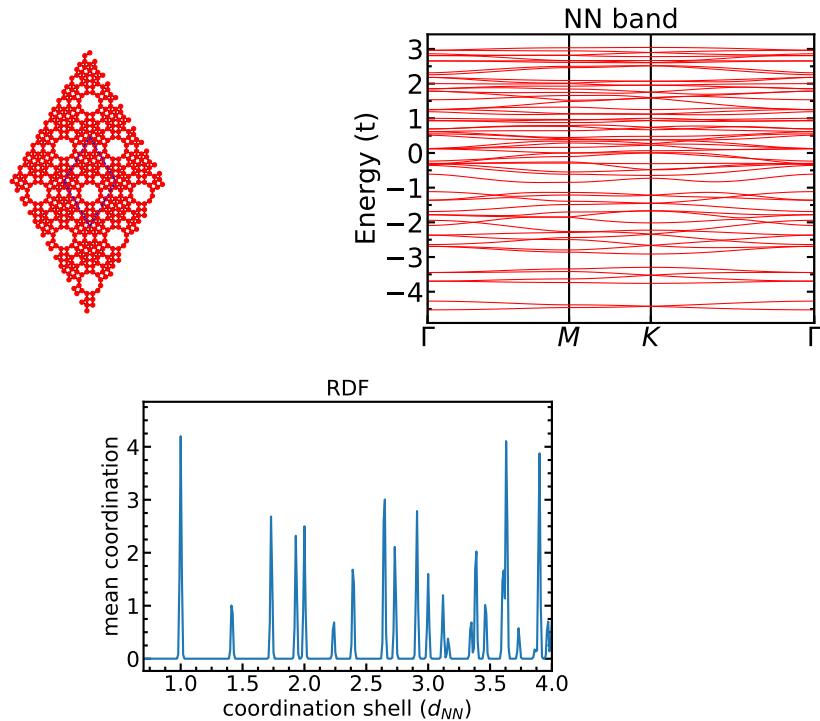


FIG. S82. t6082 lattice framework, nearest neighbors band structure and radial distribution function.

### t6083

Tiling reference number t6083 with space-group ' $Pm'$  (6) and 57 sites in the unit cell, with vertex type indicated in Tab. S83. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S83.

TABLE S83. Tiling t6083 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	6	15	0	0	0	0	0	24	0

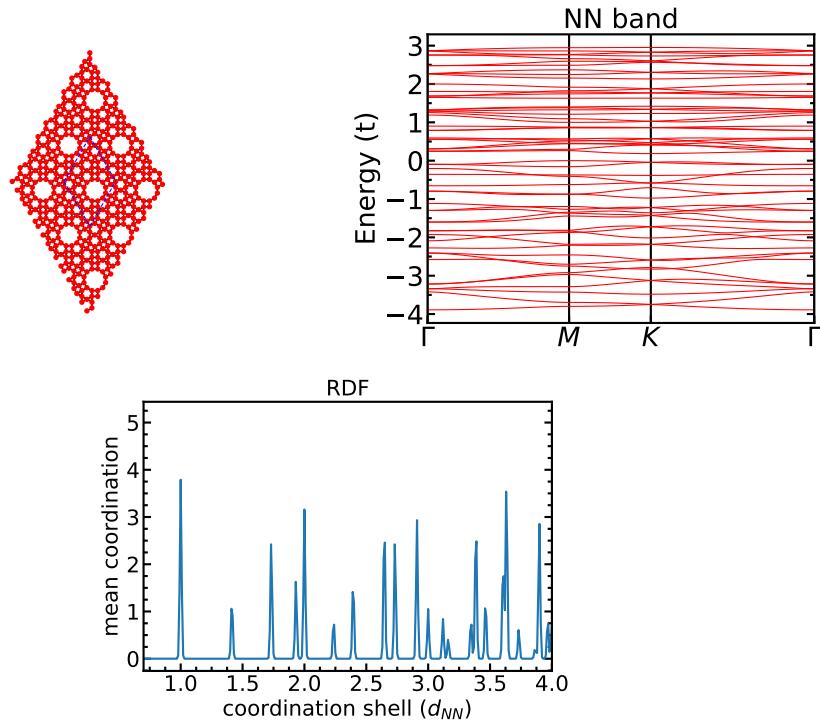


FIG. S83. t6083 lattice framework, nearest neighbors band structure and radial distribution function.

## t6084

Tiling reference number t6084 with space-group '*Amm2'* (38) and 66 sites in the unit cell, with vertex type indicated in Tab. S84. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S84.

TABLE S84. Tiling t6084 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	0	0	12	0	6	24	0	12	0

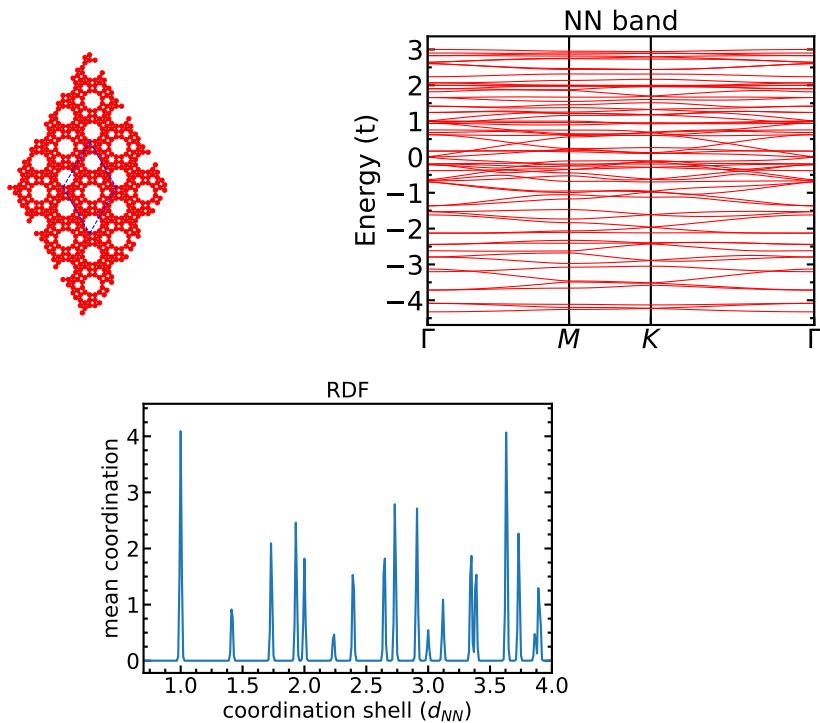


FIG. S84. t6084 lattice framework, nearest neighbors band structure and radial distribution function.

## t6085

Tiling reference number t6085 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S85. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S85.

TABLE S85. Tiling t6085 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
12	0	0	0	12	0	0	0	12	0	12	0	0	12	0

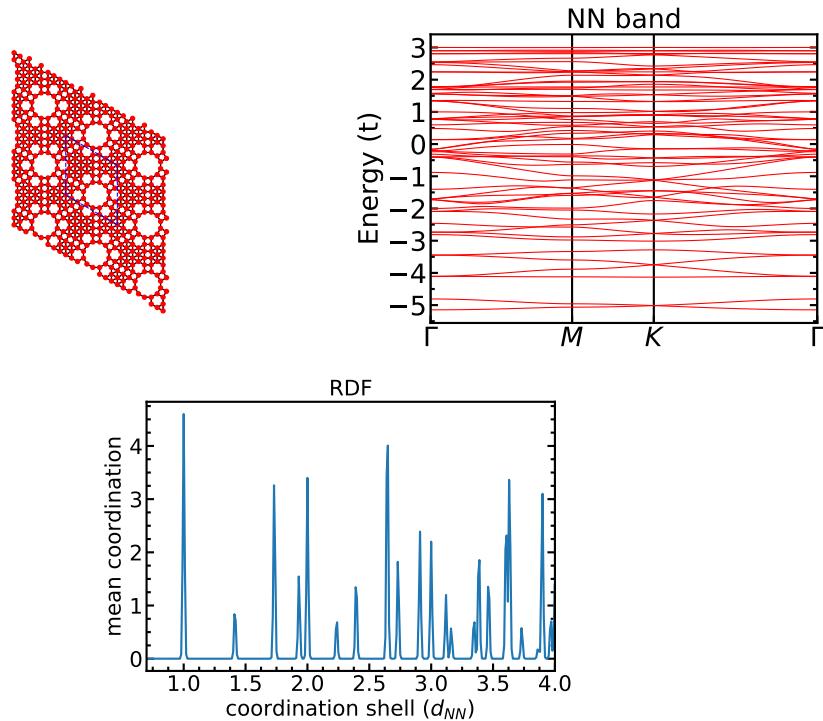


FIG. S85. t6085 lattice framework, nearest neighbors band structure and radial distribution function.

## t6086

Tiling reference number t6086 with space-group ' $Pm'$  (6) and 57 sites in the unit cell, with vertex type indicated in Tab. S86. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S86.

TABLE S86. Tiling t6086 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	24	0	12	0	0	6	0	12	0	0	0

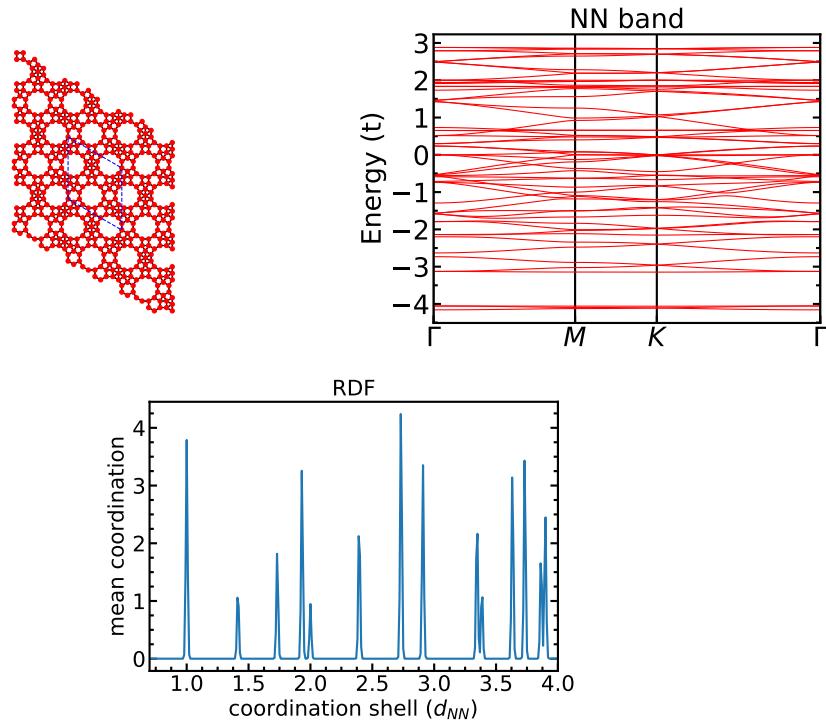


FIG. S86. t6086 lattice framework, nearest neighbors band structure and radial distribution function.

## t6087

Tiling reference number t6087 with space-group ' $Pm'$  (6) and 66 sites in the unit cell, with vertex type indicated in Tab. S87. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S87.

TABLE S87. Tiling t6087 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	54	0	0	0	0	0	0	0	0

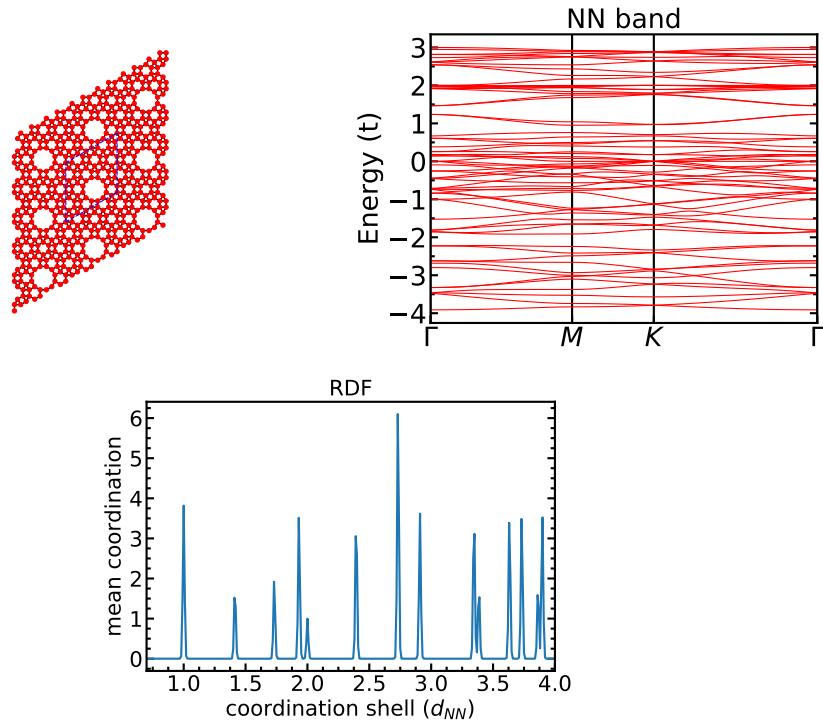


FIG. S87. t6087 lattice framework, nearest neighbors band structure and radial distribution function.

## t6088

Tiling reference number t6088 with space-group ' $Pm'$  (6) and 50 sites in the unit cell, with vertex type indicated in Tab. S88. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S88.

TABLE S88. Tiling t6088 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	12	0	24	0	0	12	0	0	0	0	0

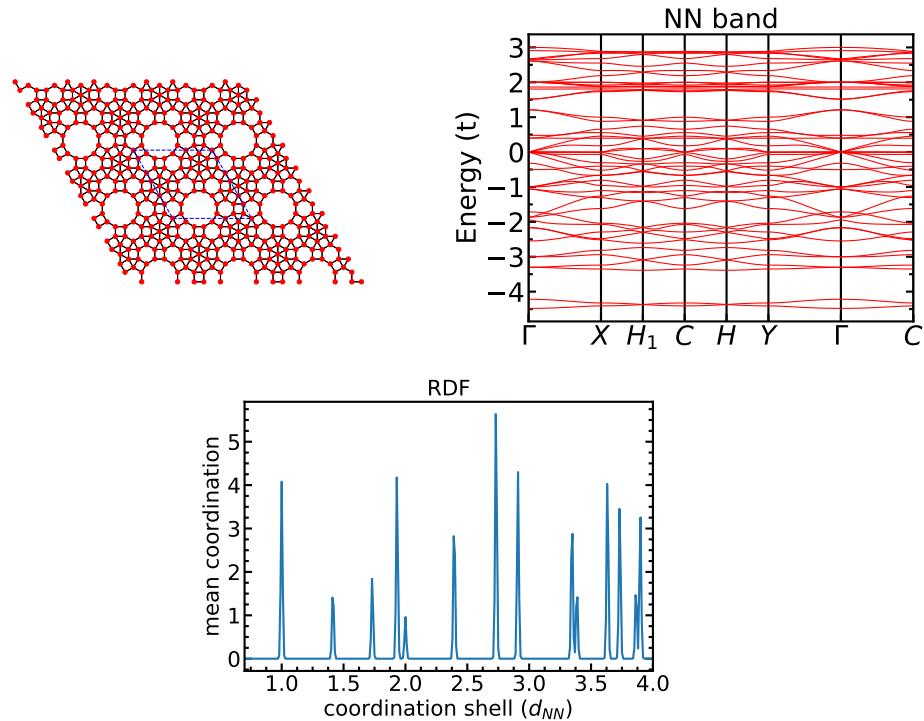


FIG. S88. t6088 lattice framework, nearest neighbors band structure and radial distribution function.

## t6089

Tiling reference number t6089 with space-group ' $Pm'$  (6) and 54 sites in the unit cell, with vertex type indicated in Tab. S89. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S89.

TABLE S89. Tiling t6089 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	24	0	0	18	0	0	0	0	0

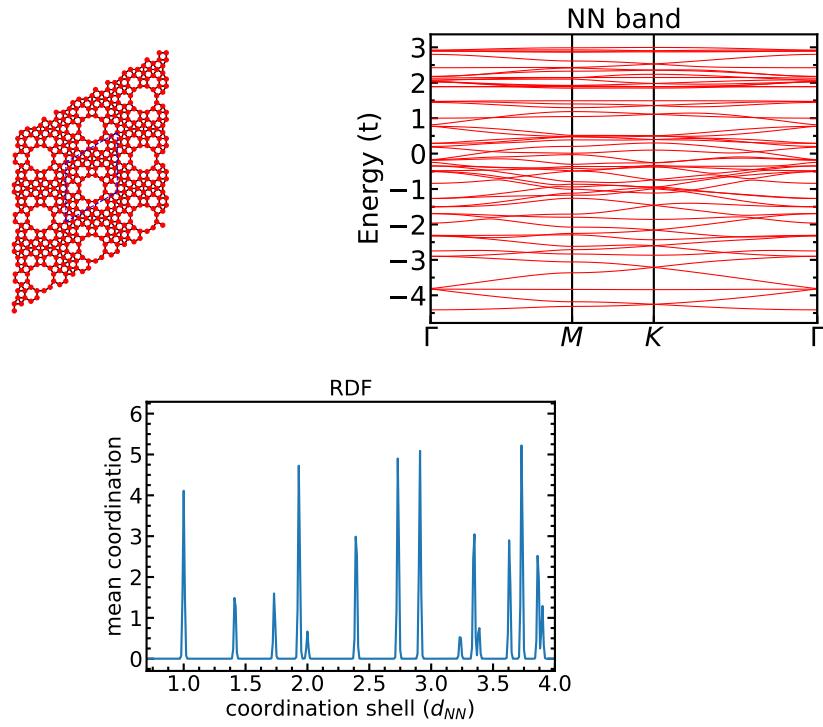


FIG. S89. t6089 lattice framework, nearest neighbors band structure and radial distribution function.

## t6090

Tiling reference number t6090 with space-group '*Amm2'* (38) and 24 sites in the unit cell, with vertex type indicated in Tab. S90. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S90.

TABLE S90. Tiling t6090 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	12	0	0	0	0	0	0	0	0

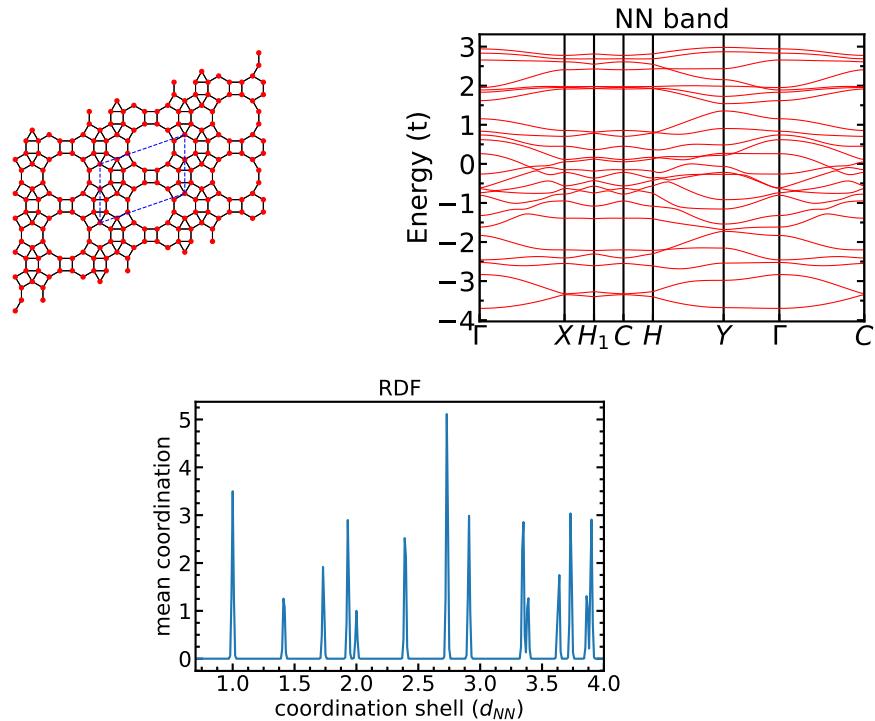


FIG. S90. t6090 lattice framework, nearest neighbors band structure and radial distribution function.

## t6091

Tiling reference number t6091 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S91. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S91.

TABLE S91. Tiling t6091 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	8	0	4	0	0	2	0	4	0	0	0

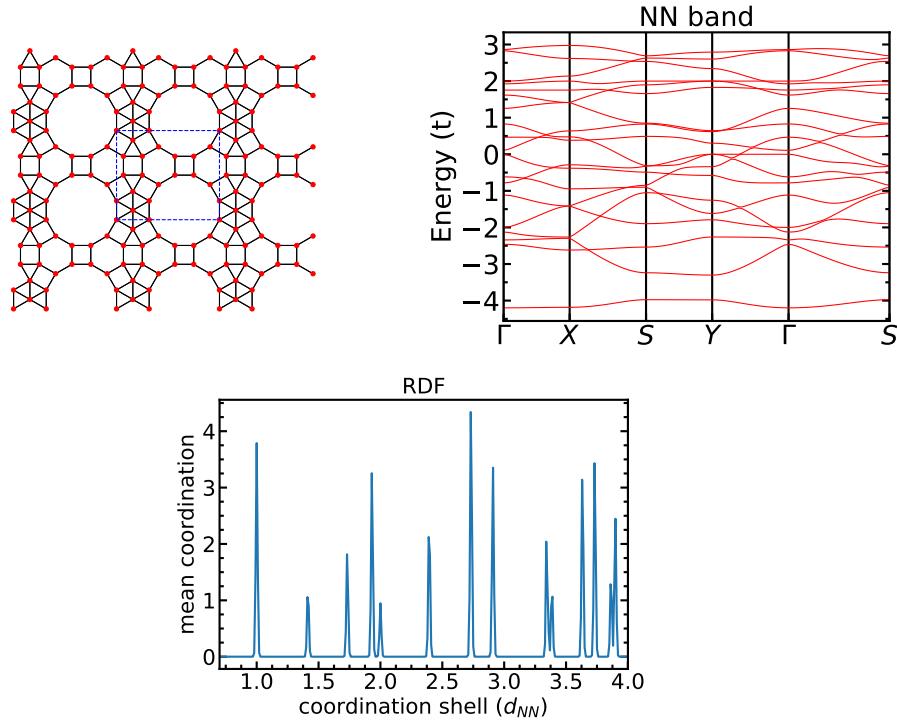


FIG. S91. t6091 lattice framework, nearest neighbors band structure and radial distribution function.

## t6092

Tiling reference number t6092 with space-group '*Amm2'* (38) and 55 sites in the unit cell, with vertex type indicated in Tab. S92. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S92.

TABLE S92. Tiling t6092 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	36	0	0	0	0	6	0	0	0	12	0

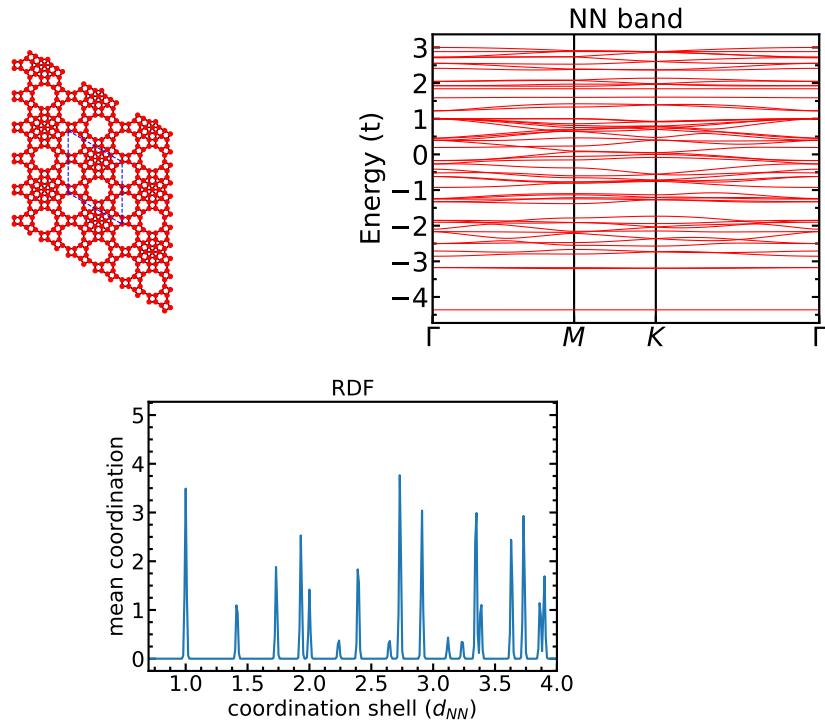


FIG. S92. t6092 lattice framework, nearest neighbors band structure and radial distribution function.

## t6093

Tiling reference number t6093 with space-group ' $Pm'$  (6) and 56 sites in the unit cell, with vertex type indicated in Tab. S93. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S93.

TABLE S93. Tiling t6093 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	24	0	9	0	0	0	0	12	0	9	0

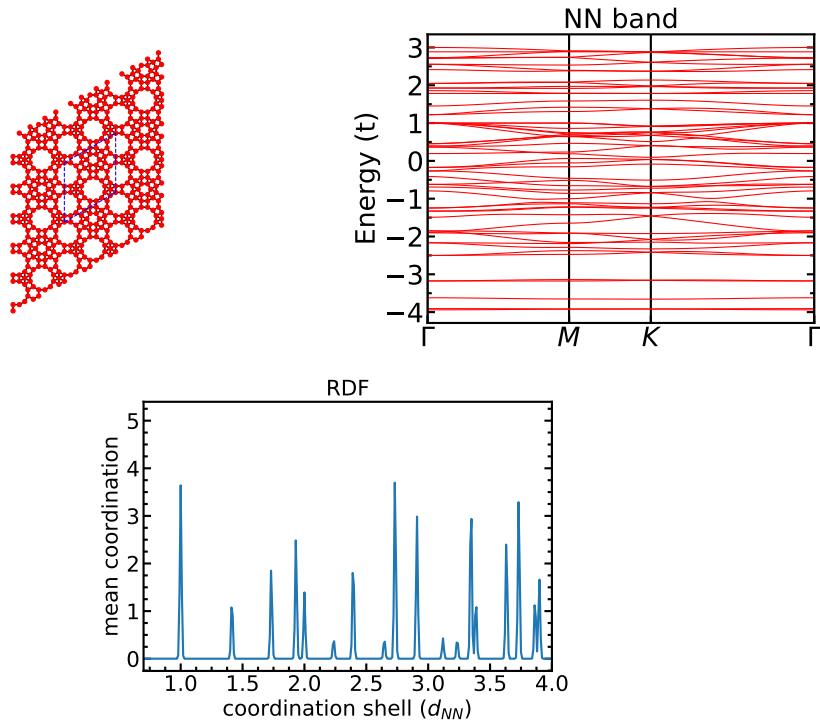


FIG. S93. t6093 lattice framework, nearest neighbors band structure and radial distribution function.

## t6094

Tiling reference number t6094 with space-group '*Amm2'* (38) and 55 sites in the unit cell, with vertex type indicated in Tab. S94. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S94.

TABLE S94. Tiling t6094 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	36	0	12	0	0	6	0	0	0	0	0

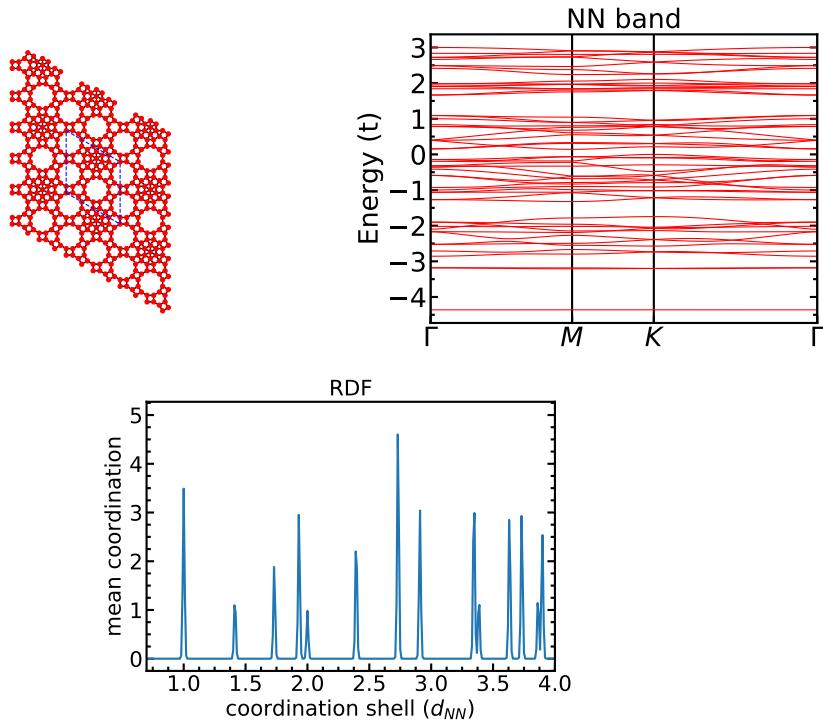


FIG. S94. t6094 lattice framework, nearest neighbors band structure and radial distribution function.

## t6095

Tiling reference number t6095 with space-group ' $Pm'$  (6) and 56 sites in the unit cell, with vertex type indicated in Tab. S95. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S95.

TABLE S95. Tiling t6095 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	24	0	18	0	0	0	0	12	0	0	0

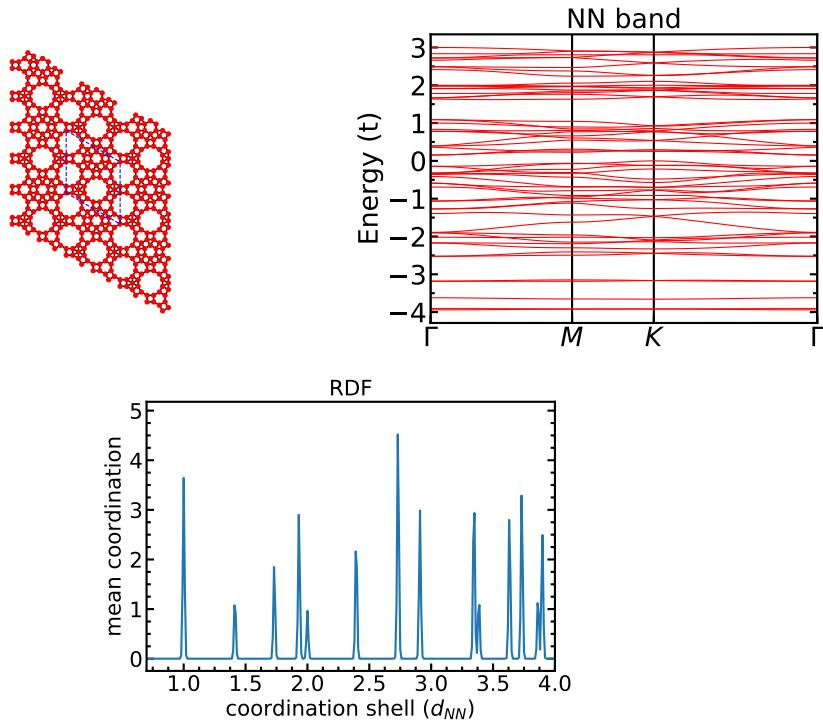


FIG. S95. t6095 lattice framework, nearest neighbors band structure and radial distribution function.

## t6096

Tiling reference number t6096 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S96. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S96.

TABLE S96. Tiling t6096 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	8	0	4	0	0	2	0	4	0	0	0

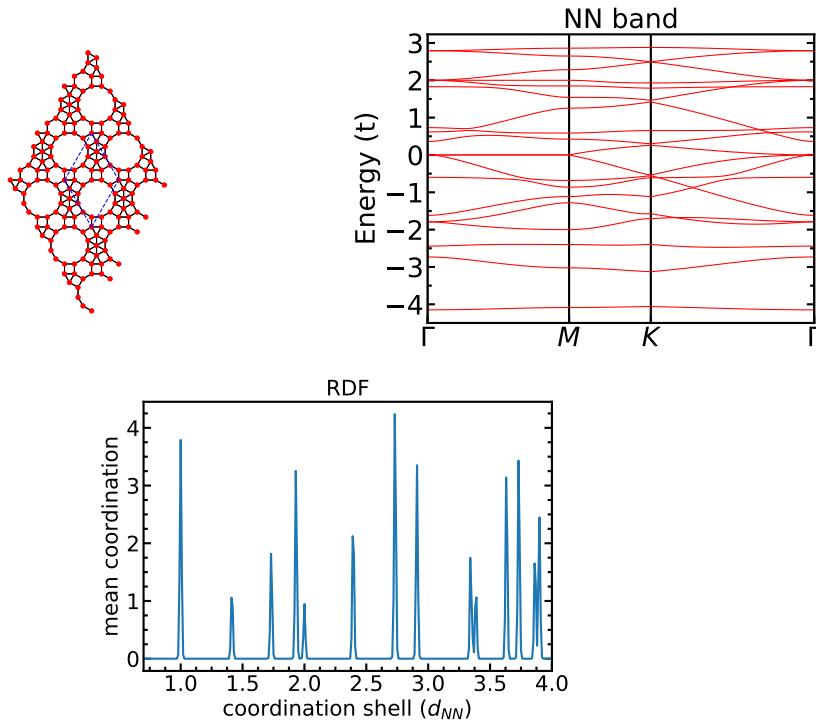


FIG. S96. t6096 lattice framework, nearest neighbors band structure and radial distribution function.

## t6097

Tiling reference number t6097 with space-group '*Amm2'* (38) and 60 sites in the unit cell, with vertex type indicated in Tab. S97. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S97.

TABLE S97. Tiling t6097 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	24	0	24	0	0	0	0	0	0	12	0

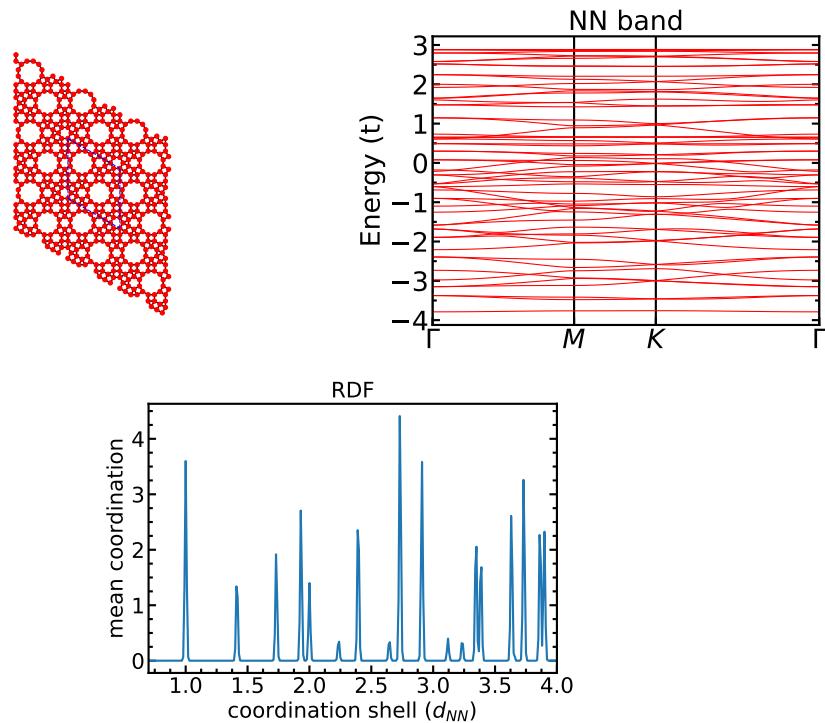


FIG. S97. t6097 lattice framework, nearest neighbors band structure and radial distribution function.

## t6098

Tiling reference number t6098 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S98. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S98.

TABLE S98. Tiling t6098 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	24	0	36	0	0	0	0	0	0	0	0

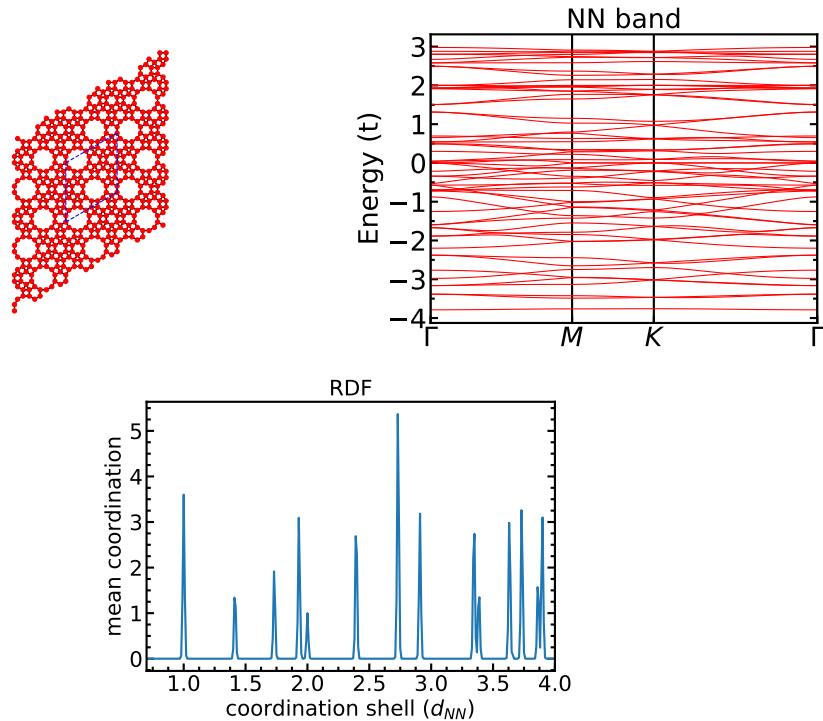


FIG. S98. t6098 lattice framework, nearest neighbors band structure and radial distribution function.

## t6099

Tiling reference number t6099 with space-group ' $Pm'$  (6) and 36 sites in the unit cell, with vertex type indicated in Tab. S99. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S99.

TABLE S99. Tiling t6099 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	24	0	0	0	0	0	0	0	0

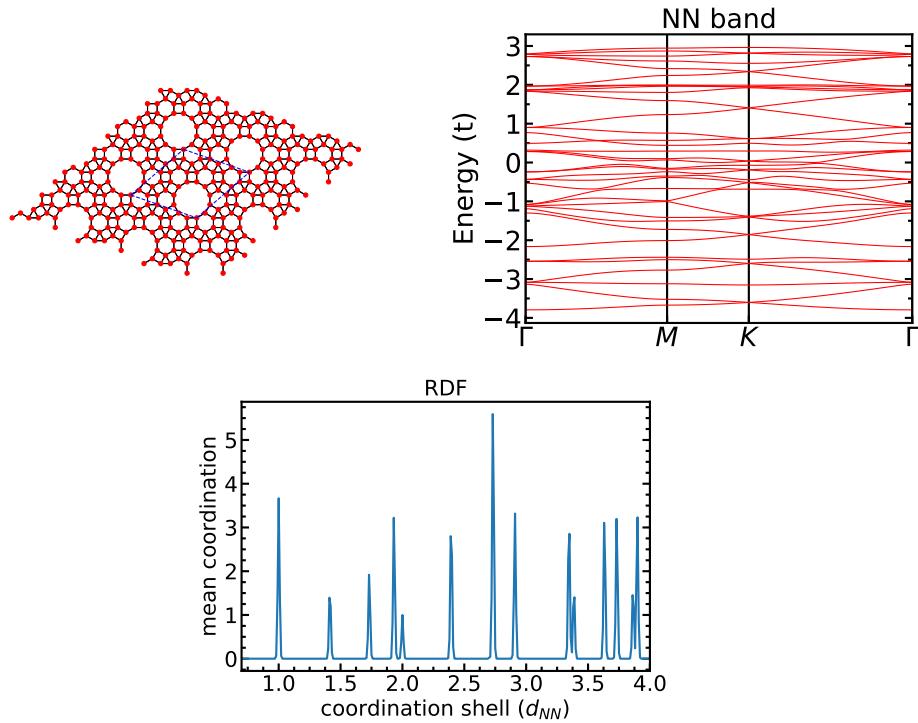


FIG. S99. t6099 lattice framework, nearest neighbors band structure and radial distribution function.

## t6100

Tiling reference number t6100 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S100. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S100.

TABLE S100. Tiling t6100 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	12	0	6	0	0	0	12	24	0	0	0

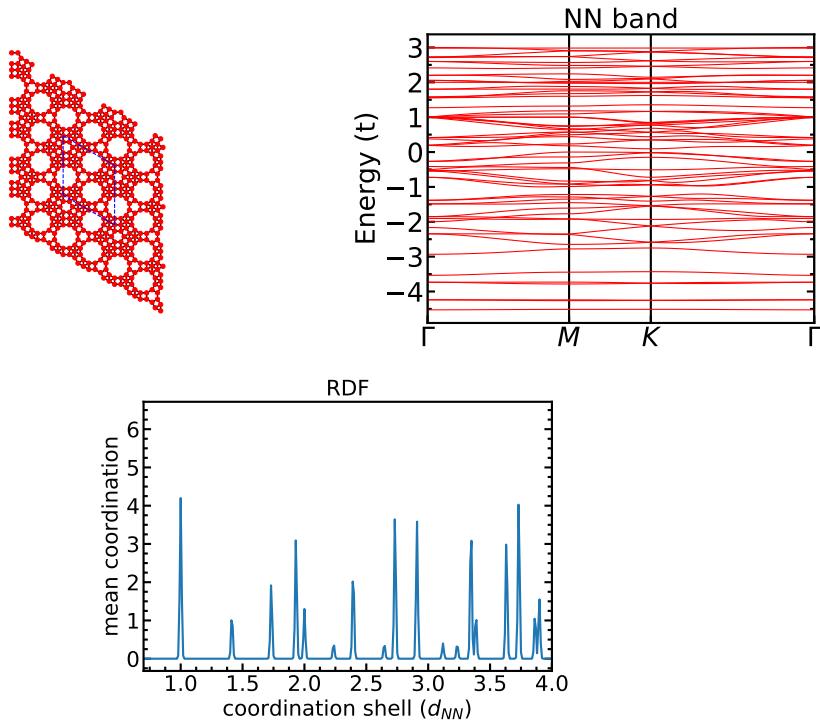


FIG. S100. t6100 lattice framework, nearest neighbors band structure and radial distribution function.

## t6101

Tiling reference number t6101 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S101. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S101.

TABLE S101. Tiling t6101 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	12	0	6	0	0	12	0	24	0	0	0

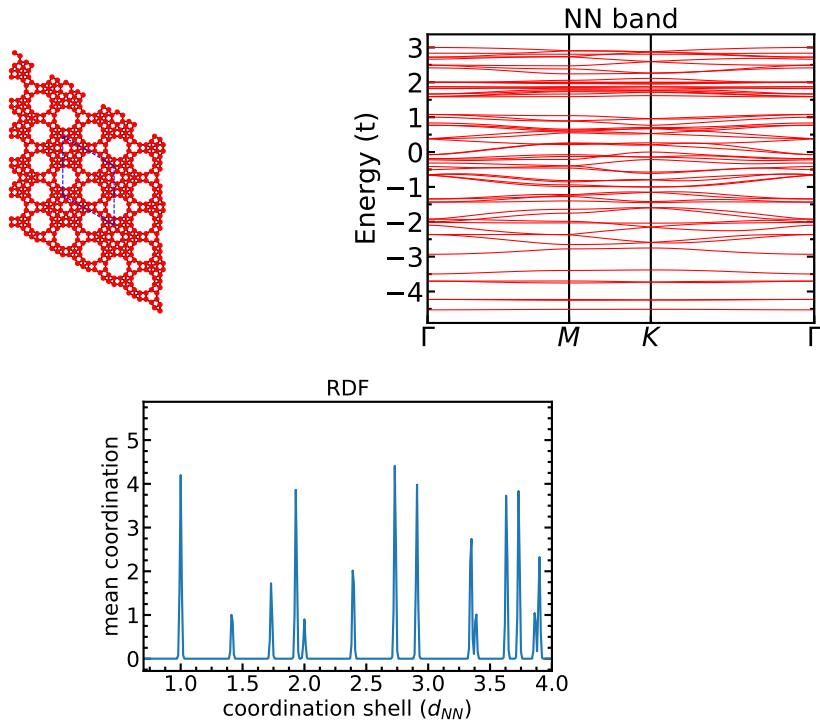


FIG. S101. t6101 lattice framework, nearest neighbors band structure and radial distribution function.

## t6102

Tiling reference number t6102 with space-group ' $Pm'$  (6) and 22 sites in the unit cell, with vertex type indicated in Tab. S102. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S102.

TABLE S102. Tiling t6102 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	4	0	0	0	4	0	2	8	0	4	0

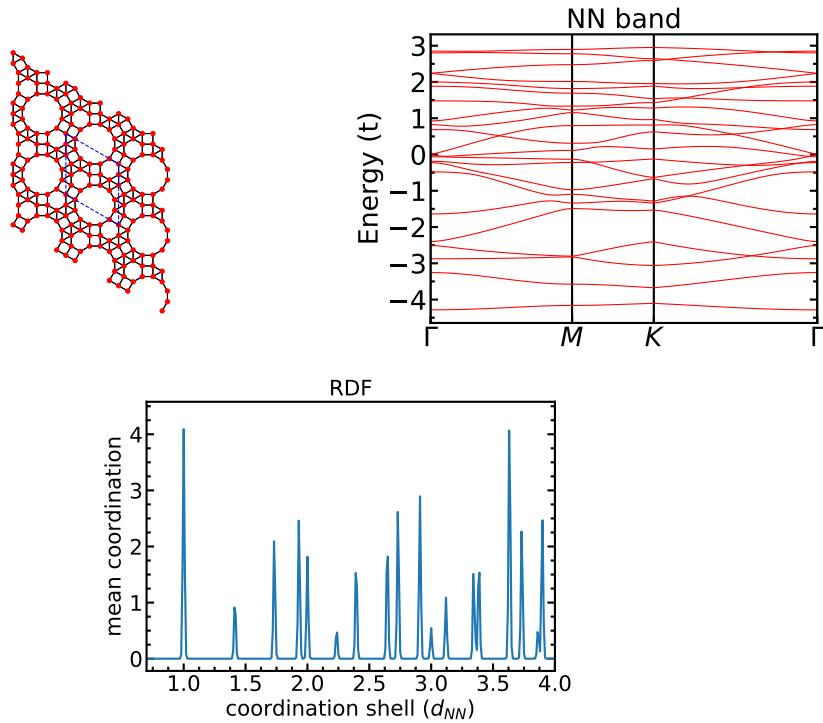


FIG. S102. t6102 lattice framework, nearest neighbors band structure and radial distribution function.

### t6103

Tiling reference number t6103 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S103. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S103.

TABLE S103. Tiling t6103 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	12	0	6	0	0	12	0	24	0	0	0

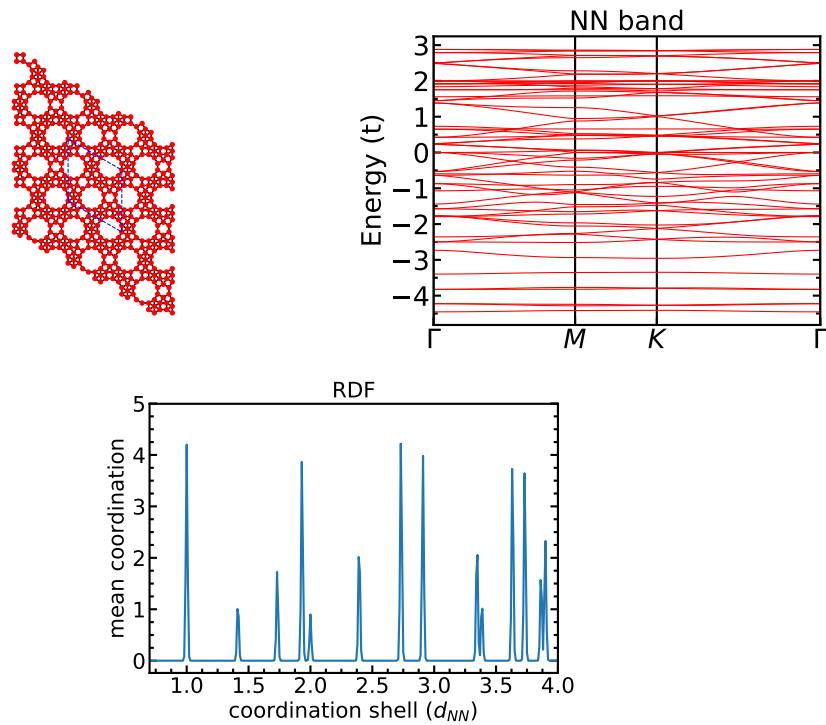


FIG. S103. t6103 lattice framework, nearest neighbors band structure and radial distribution function.

## t6104

Tiling reference number t6104 with space-group ' $Pm'$  (6) and 20 sites in the unit cell, with vertex type indicated in Tab. S104. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S104.

TABLE S104. Tiling t6104 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	4	0	2	0	0	4	0	8	0	0	0

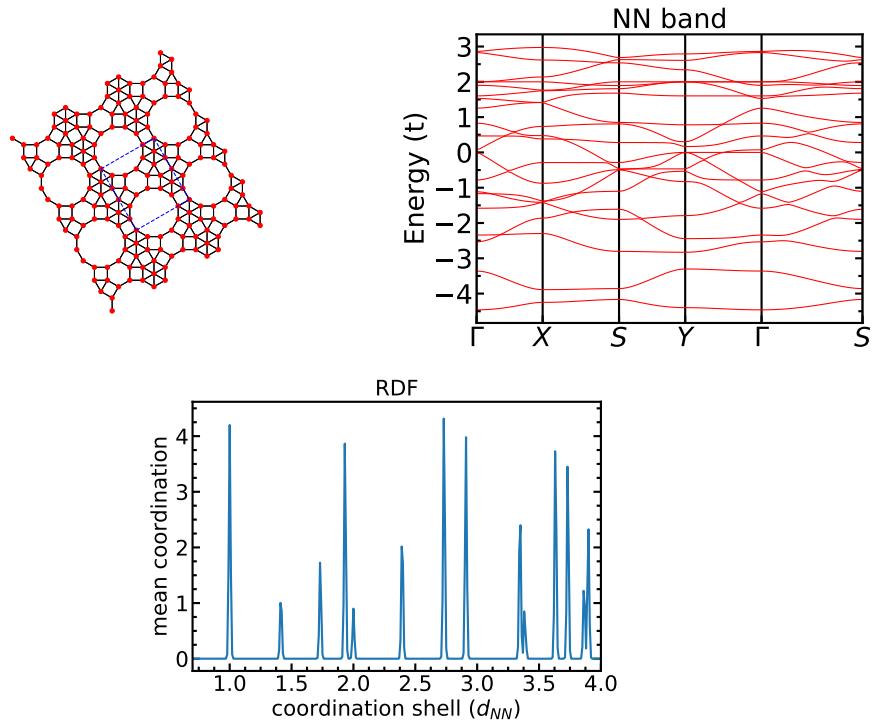


FIG. S104. t6104 lattice framework, nearest neighbors band structure and radial distribution function.

## t6105

Tiling reference number t6105 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S105. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S105.

TABLE S105. Tiling t6105 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	4	0	2	0	0	4	0	8	0	0	0

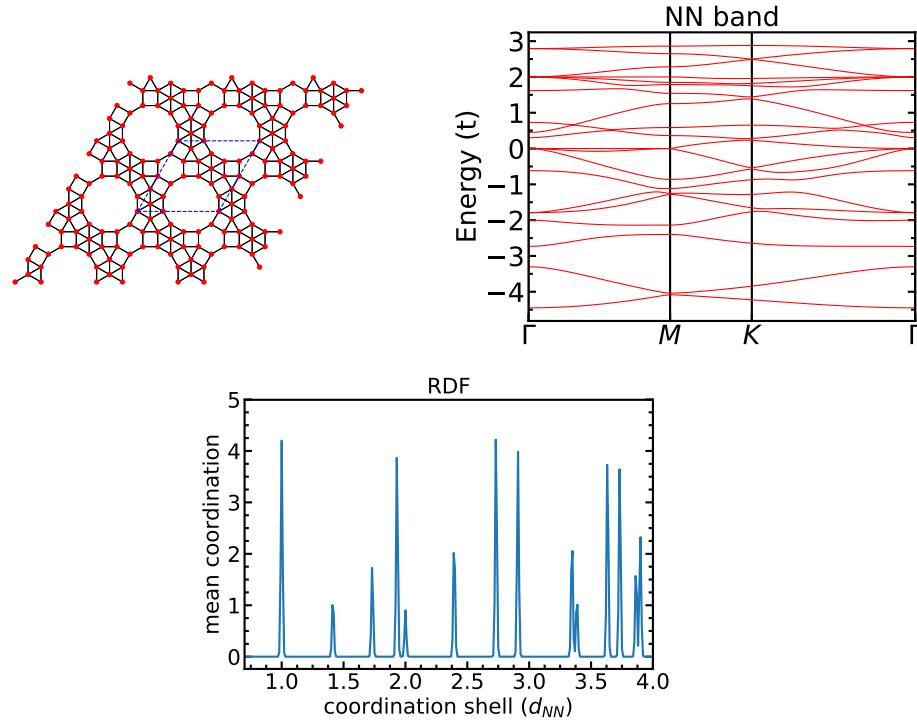


FIG. S105. t6105 lattice framework, nearest neighbors band structure and radial distribution function.

## t6106

Tiling reference number t6106 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S106. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S106.

TABLE S106. Tiling t6106 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	8	0	0	0	0	0	0	2	4	4	0	0

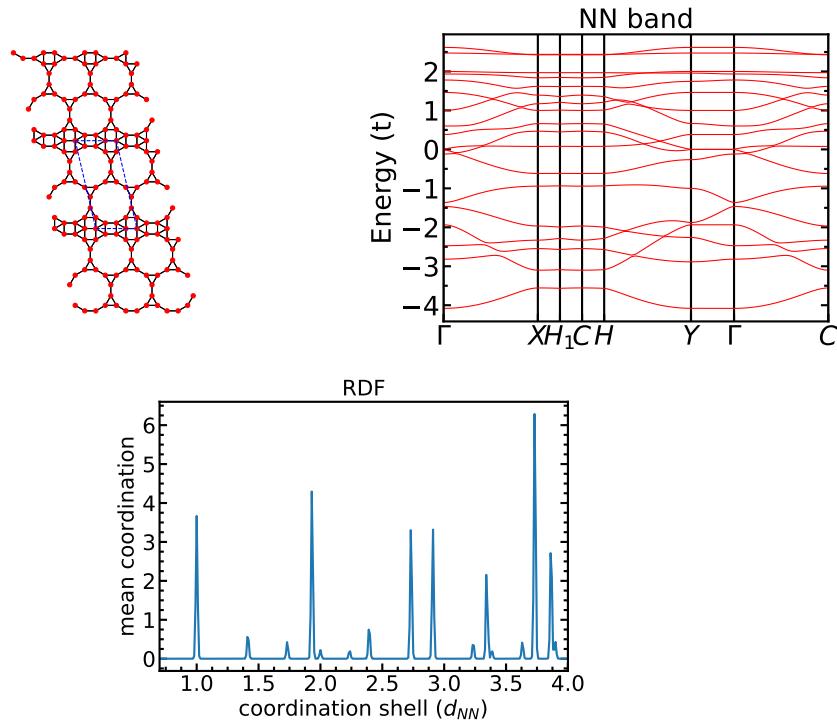


FIG. S106. t6106 lattice framework, nearest neighbors band structure and radial distribution function.

## t6107

Tiling reference number t6107 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S107. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S107.

TABLE S107. Tiling t6107 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	8	0	0	0	0	0	0	4	4	4	0	0

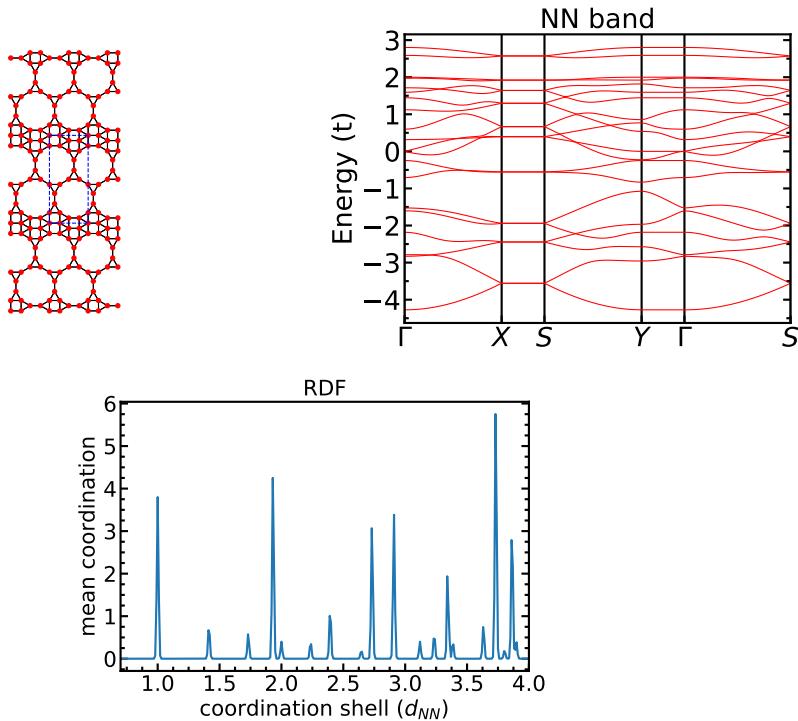


FIG. S107. t6107 lattice framework, nearest neighbors band structure and radial distribution function.

## t6108

Tiling reference number t6108 with space-group ' $Pm'$  (6) and 48 sites in the unit cell, with vertex type indicated in Tab. S108. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S108.

TABLE S108. Tiling t6108 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	36	0	0	0	0	0	0	0	0	12	0	0

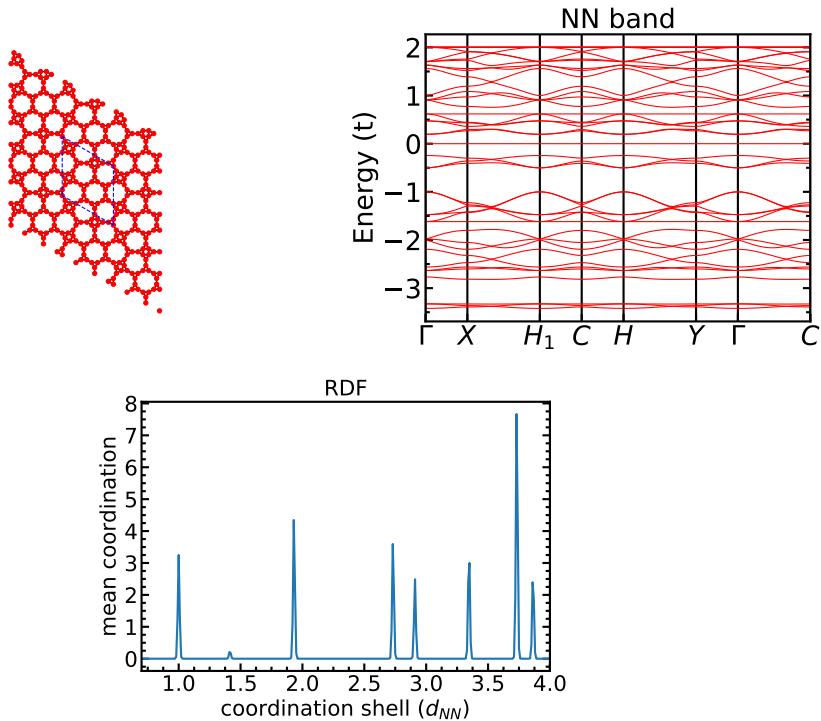


FIG. S108. t6108 lattice framework, nearest neighbors band structure and radial distribution function.

## t6109

Tiling reference number t6109 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S109. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S109.

TABLE S109. Tiling t6109 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	2	0	0	6	0	0	0	2	8	0	0	0

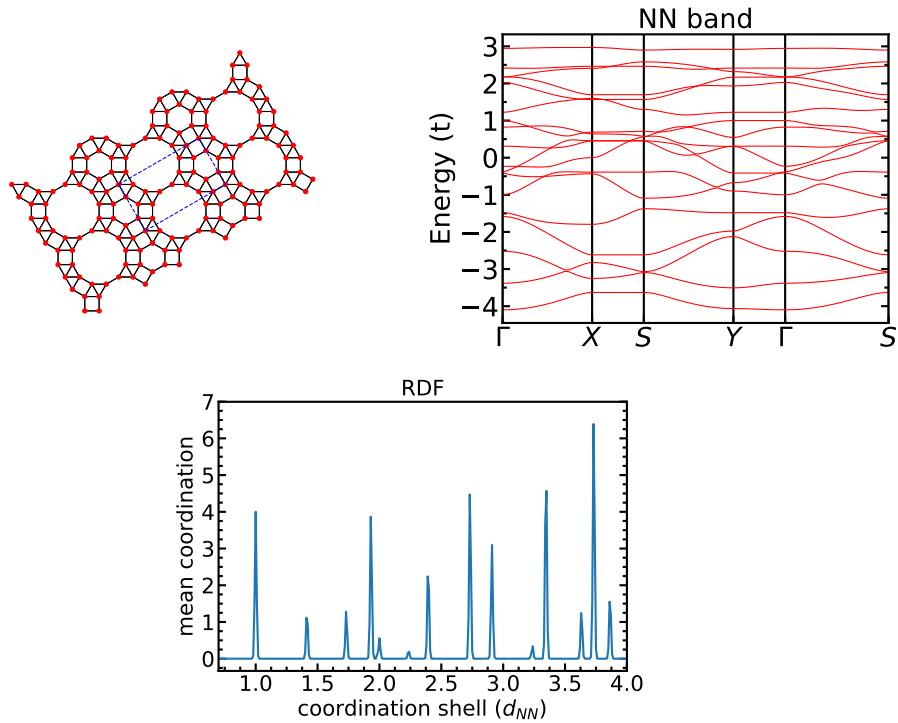


FIG. S109. t6109 lattice framework, nearest neighbors band structure and radial distribution function.

## t6110

Tiling reference number t6110 with space-group ' $P2/m$ ' (10) and 15 sites in the unit cell, with vertex type indicated in Tab. S110. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S110.

TABLE S110. Tiling t6110 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	2	0	0	0	0	0	4	0	8	0	0	0

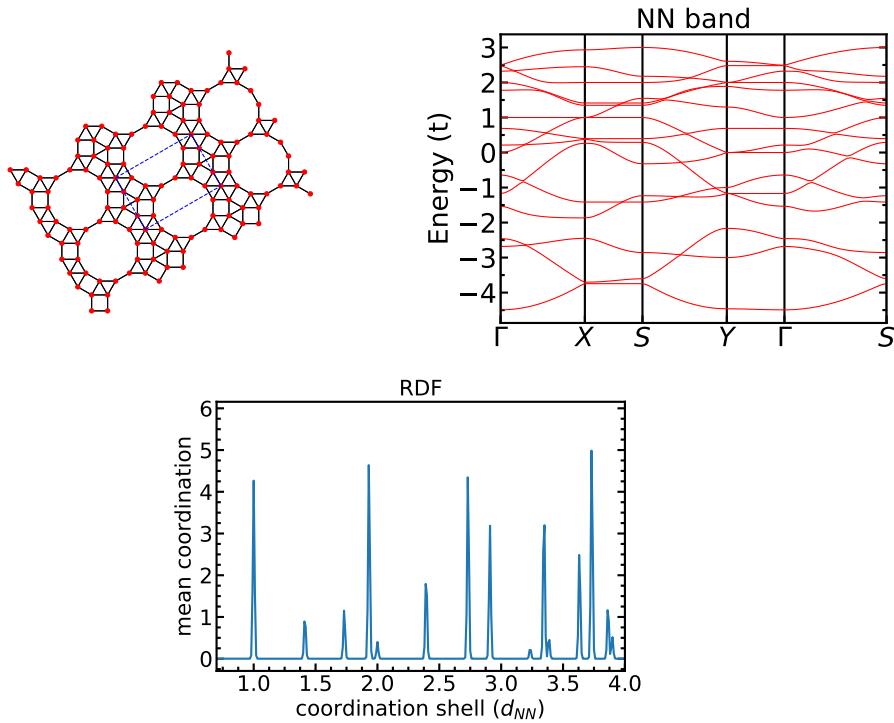


FIG. S110. t6110 lattice framework, nearest neighbors band structure and radial distribution function.

## t6111

Tiling reference number t6111 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S111. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S111.

TABLE S111. Tiling t6111 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	6	0	0	0	0	0	0	0	4	8	0	0

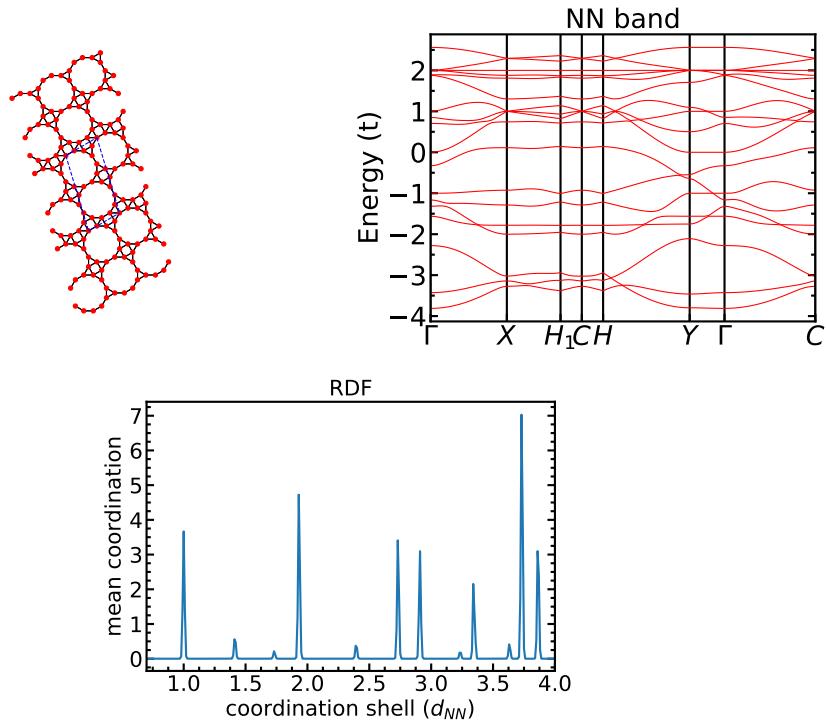


FIG. S111. t6111 lattice framework, nearest neighbors band structure and radial distribution function.

## t6112

Tiling reference number t6112 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S112. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S112.

TABLE S112. Tiling t6112 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	2	0	0	0	0	0	2	8	4	4	0	0

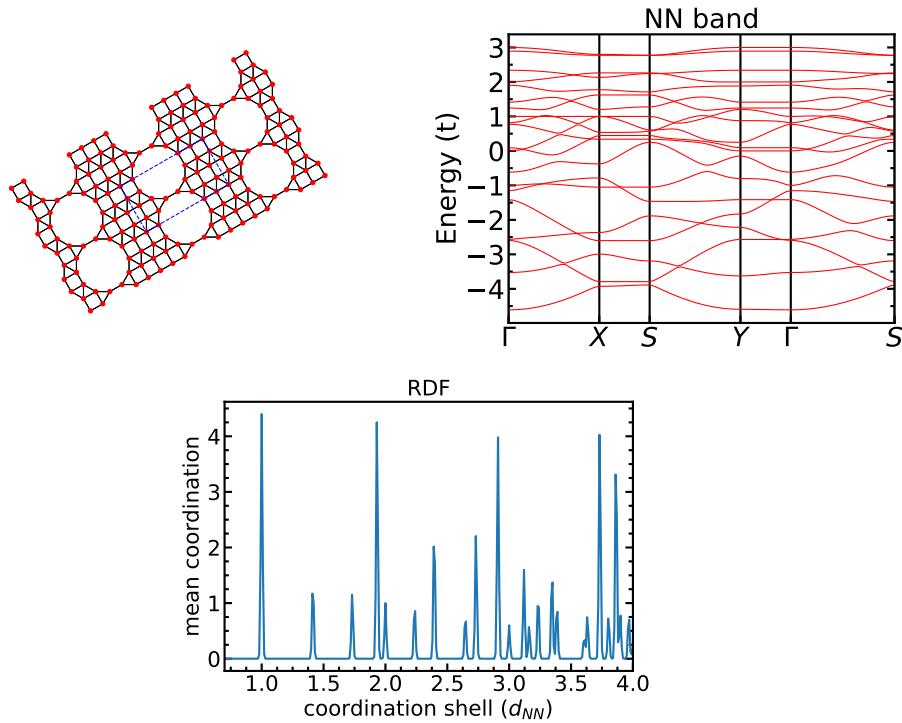


FIG. S112. t6112 lattice framework, nearest neighbors band structure and radial distribution function.

### t6113

Tiling reference number t6113 with space-group ' $Pm'$  (6) and 22 sites in the unit cell, with vertex type indicated in Tab. S113. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S113.

TABLE S113. Tiling t6113 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	2	0	0	0	0	0	0	12	4	4	0	0

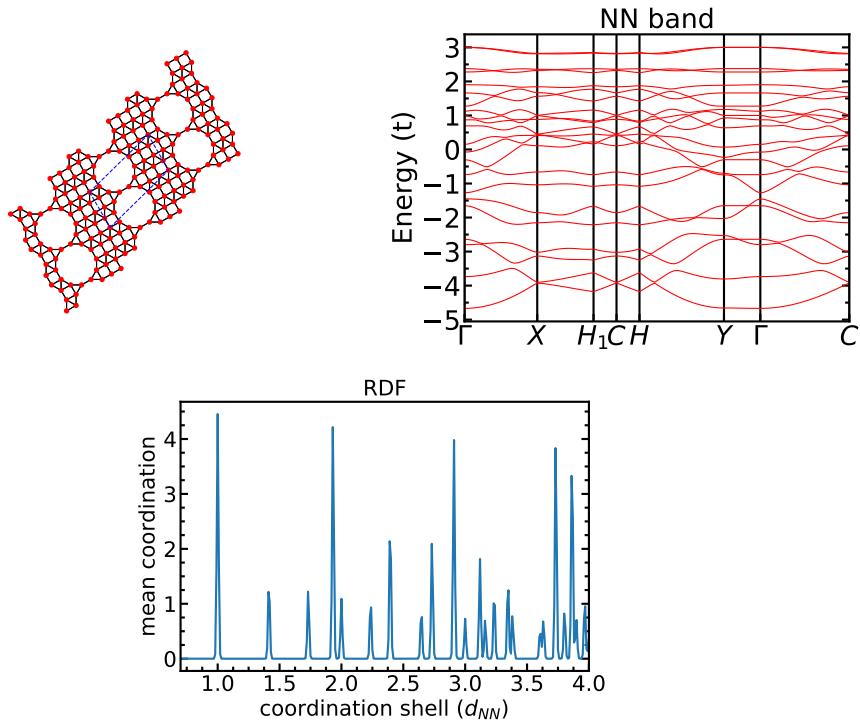


FIG. S113. t6113 lattice framework, nearest neighbors band structure and radial distribution function.

## t6114

Tiling reference number t6114 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S114. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S114.

TABLE S114. Tiling t6114 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	2	0	0	6	0	0	2	0	0	8	0	0

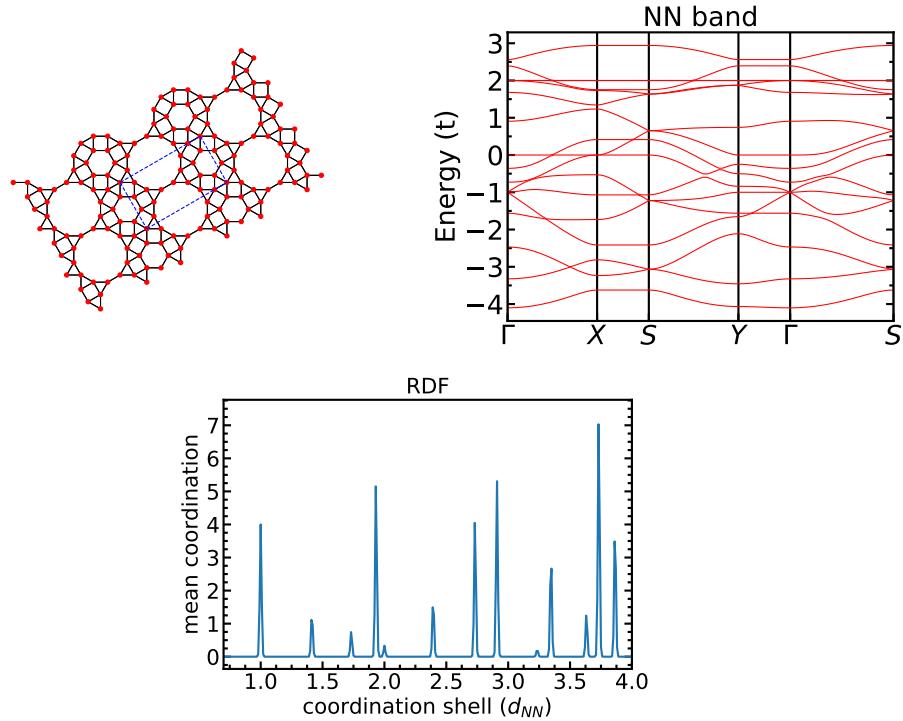


FIG. S114. t6114 lattice framework, nearest neighbors band structure and radial distribution function.

## t6115

Tiling reference number t6115 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S115. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S115.

TABLE S115. Tiling t6115 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	0	0	0	2	0	0	0	0

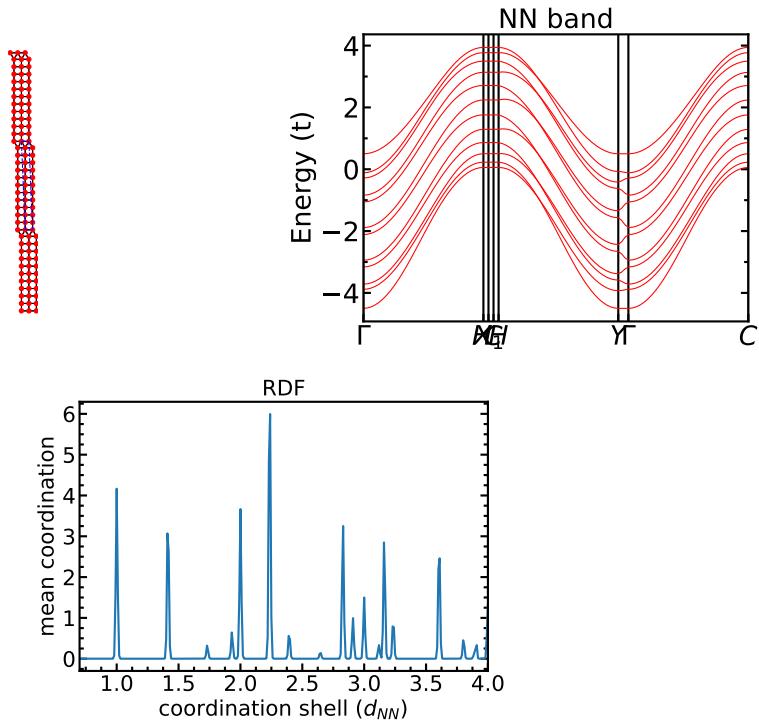


FIG. S115. t6115 lattice framework, nearest neighbors band structure and radial distribution function.

## t6116

Tiling reference number t6116 with space-group '*Amm2'* (38) and 21 sites in the unit cell, with vertex type indicated in Tab. S116. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S116.

TABLE S116. Tiling t6116 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	16	0	0	0	0	0	1	0	0	0	0	0	4	0

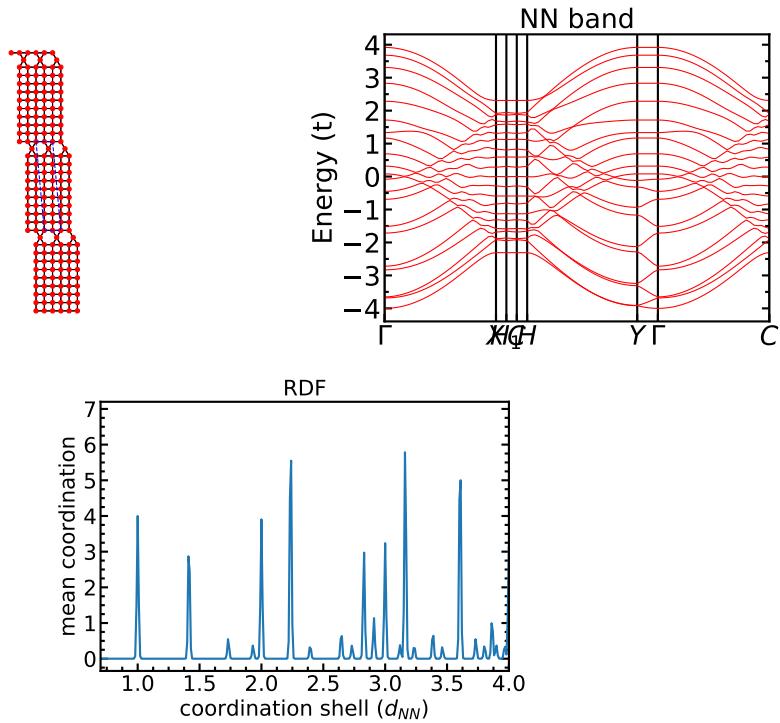


FIG. S116. t6116 lattice framework, nearest neighbors band structure and radial distribution function.

## t6117

Tiling reference number t6117 with space-group ' $Pmm2'$  (25) and 21 sites in the unit cell, with vertex type indicated in Tab. S117. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S117.

TABLE S117. Tiling t6117 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	16	0	0	0	0	0	0	0	0	0	0	0	4	0

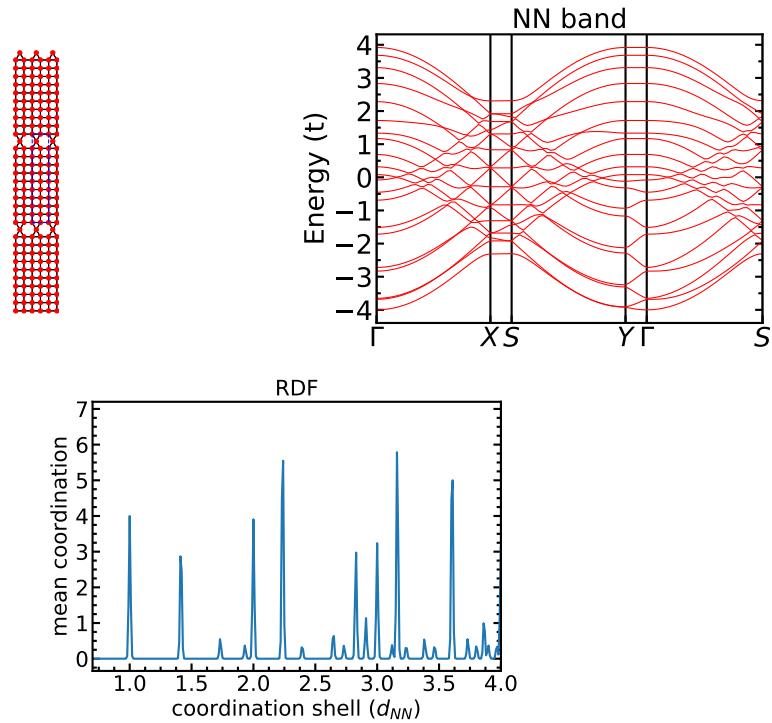


FIG. S117. t6117 lattice framework, nearest neighbors band structure and radial distribution function.

## t6118

Tiling reference number t6118 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S118. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S118.

TABLE S118. Tiling t6118 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	0	0	0	4	0	0	0	0

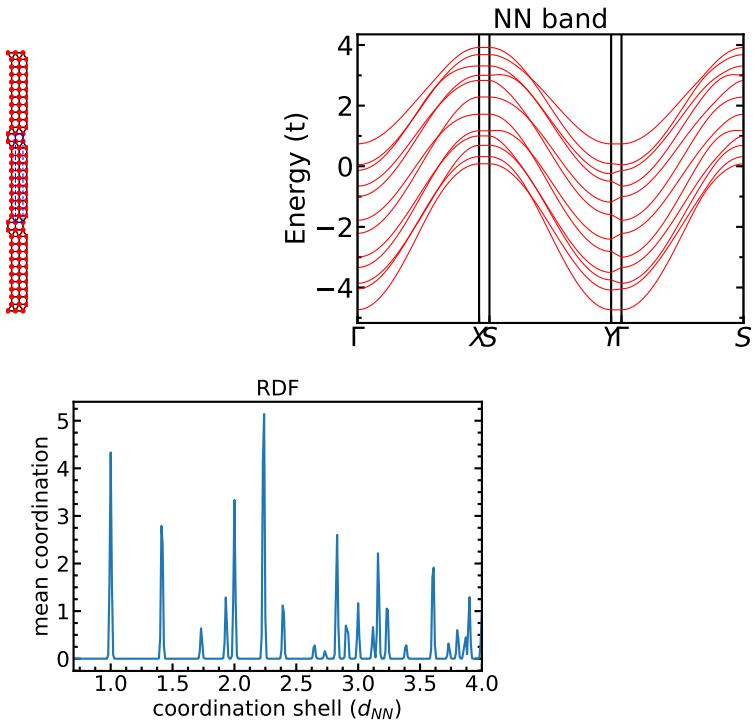


FIG. S118. t6118 lattice framework, nearest neighbors band structure and radial distribution function.

## t6119

Tiling reference number t6119 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S119. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S119.

TABLE S119. Tiling t6119 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	8	0	0	0	0	0	0	0	0	2	0	0	0	0

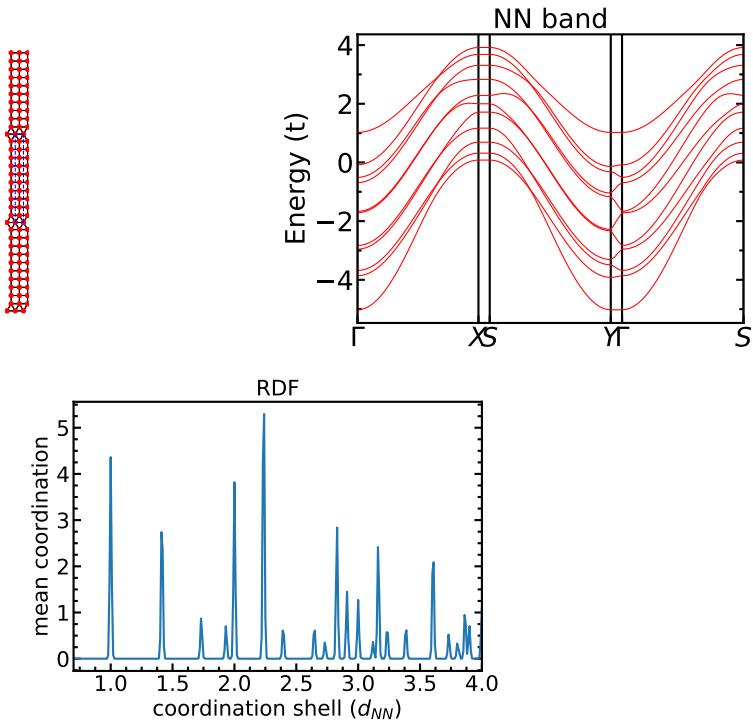


FIG. S119. t6119 lattice framework, nearest neighbors band structure and radial distribution function.

## t6120

Tiling reference number t6120 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S120. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S120.

TABLE S120. Tiling t6120 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	8	0	0	0	0	0	0	0	0	2	0	0	0	0

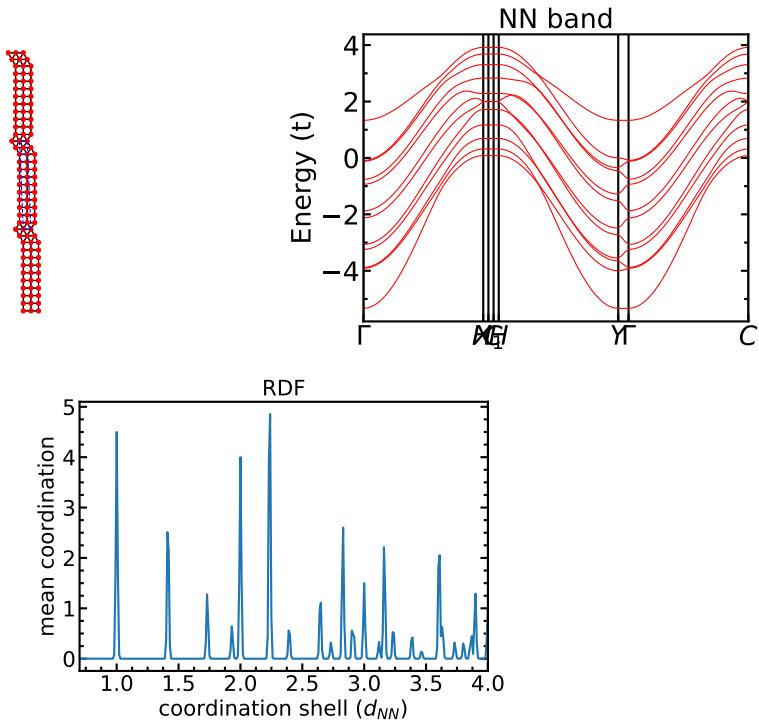


FIG. S120. t6120 lattice framework, nearest neighbors band structure and radial distribution function.

## t6121

Tiling reference number t6121 with space-group '*Amm2'* (38) and 22 sites in the unit cell, with vertex type indicated in Tab. S121. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S121.

TABLE S121. Tiling t6121 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

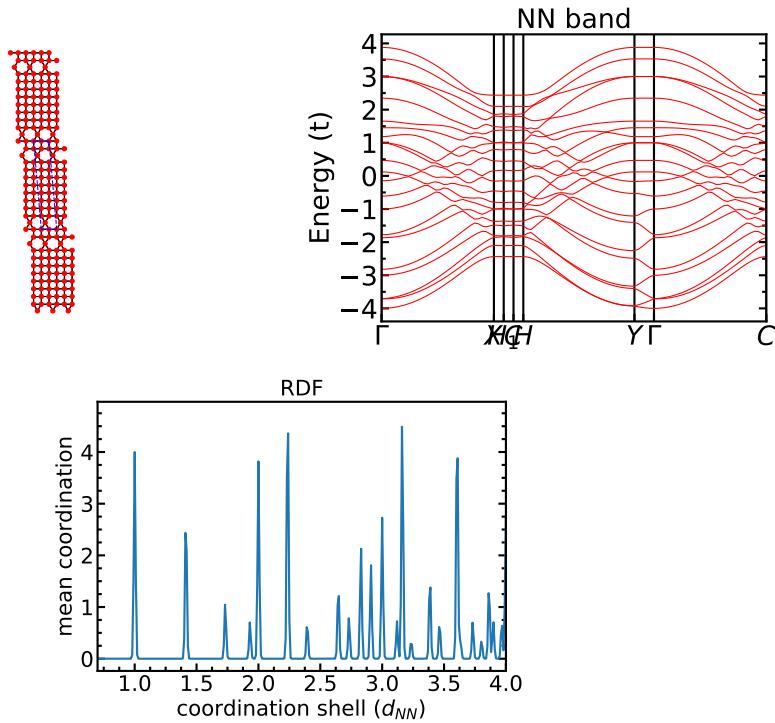


FIG. S121. t6121 lattice framework, nearest neighbors band structure and radial distribution function.

## t6122

Tiling reference number t6122 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S122. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S122.

TABLE S122. Tiling t6122 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

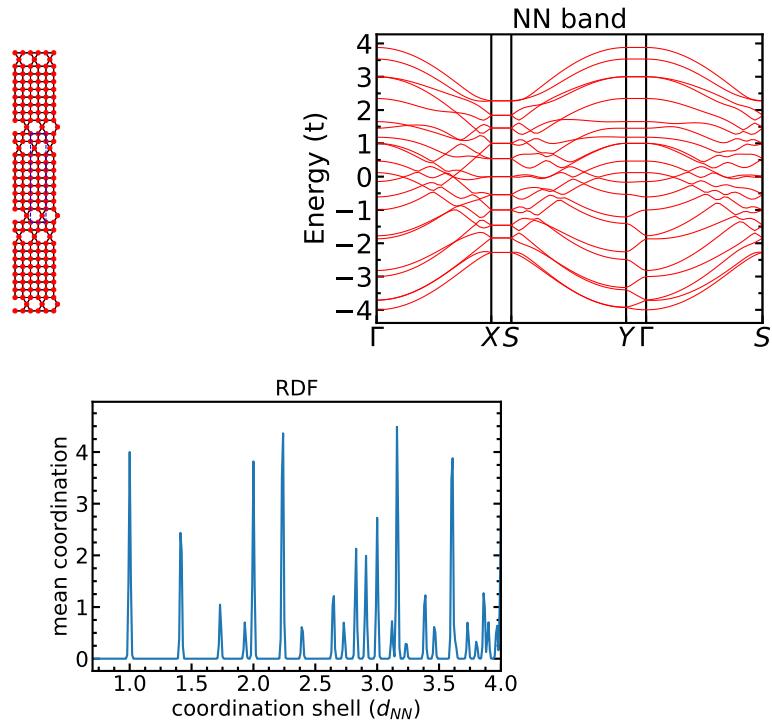


FIG. S122. t6122 lattice framework, nearest neighbors band structure and radial distribution function.

## t6123

Tiling reference number t6123 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S123. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S123.

TABLE S123. Tiling t6123 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	4	2

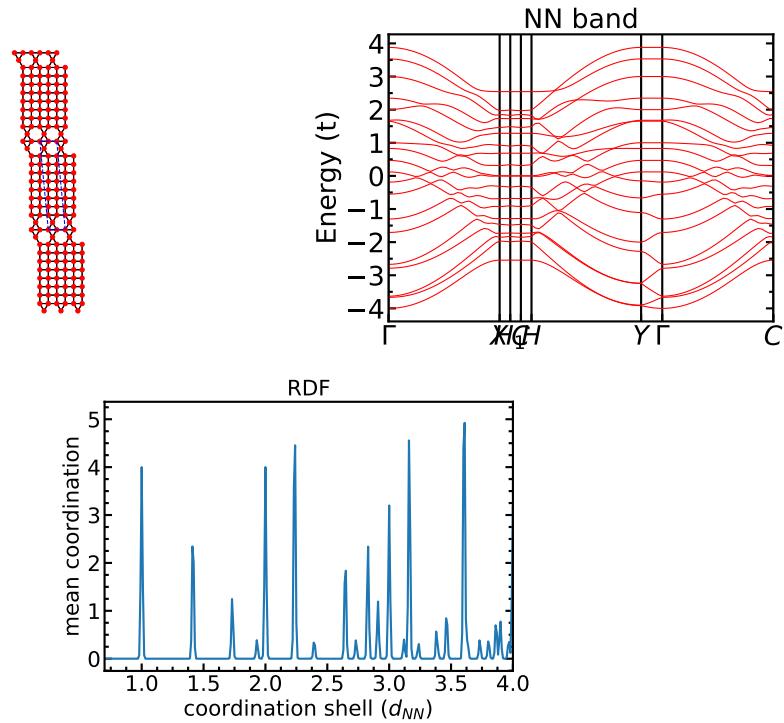


FIG. S123. t6123 lattice framework, nearest neighbors band structure and radial distribution function.

## t6124

Tiling reference number t6124 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S124. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S124.

TABLE S124. Tiling t6124 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	4	0	0	0	0	0	4	0

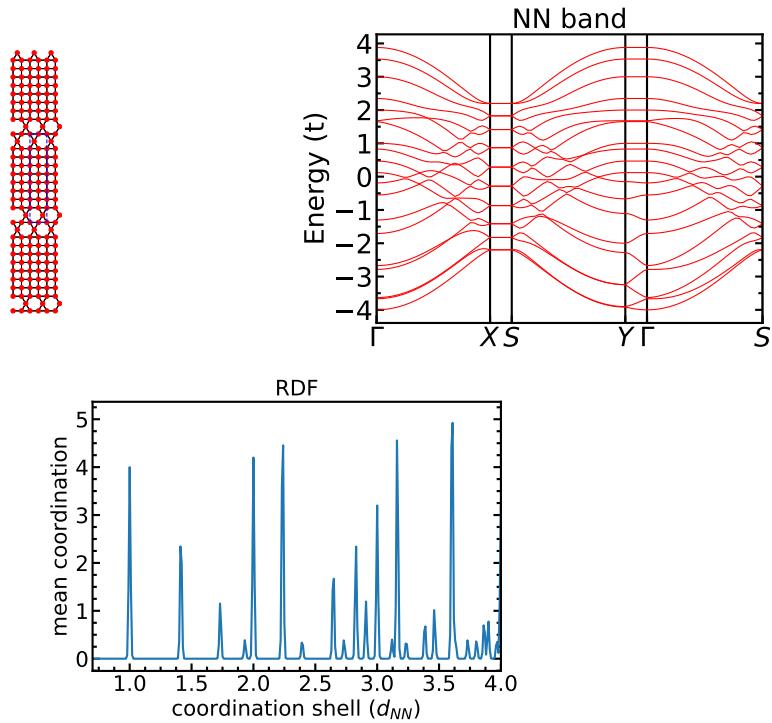


FIG. S124. t6124 lattice framework, nearest neighbors band structure and radial distribution function.

## t6125

Tiling reference number t6125 with space-group ' $Pmmm$ ' (47) and 22 sites in the unit cell, with vertex type indicated in Tab. S125. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S125.

TABLE S125. Tiling t6125 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

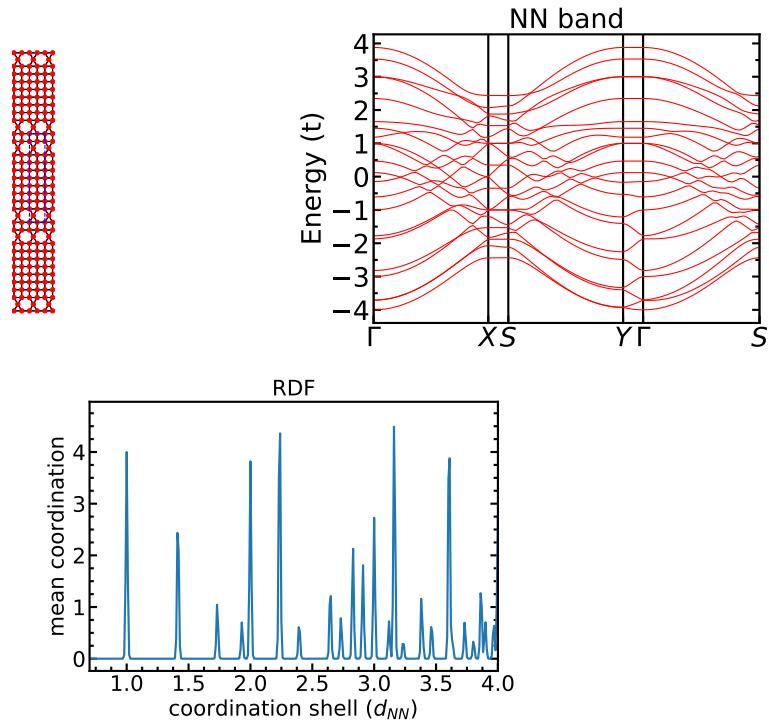


FIG. S125. t6125 lattice framework, nearest neighbors band structure and radial distribution function.

## t6126

Tiling reference number t6126 with space-group '*Amm2'* (38) and 22 sites in the unit cell, with vertex type indicated in Tab. S126. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S126.

TABLE S126. Tiling t6126 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

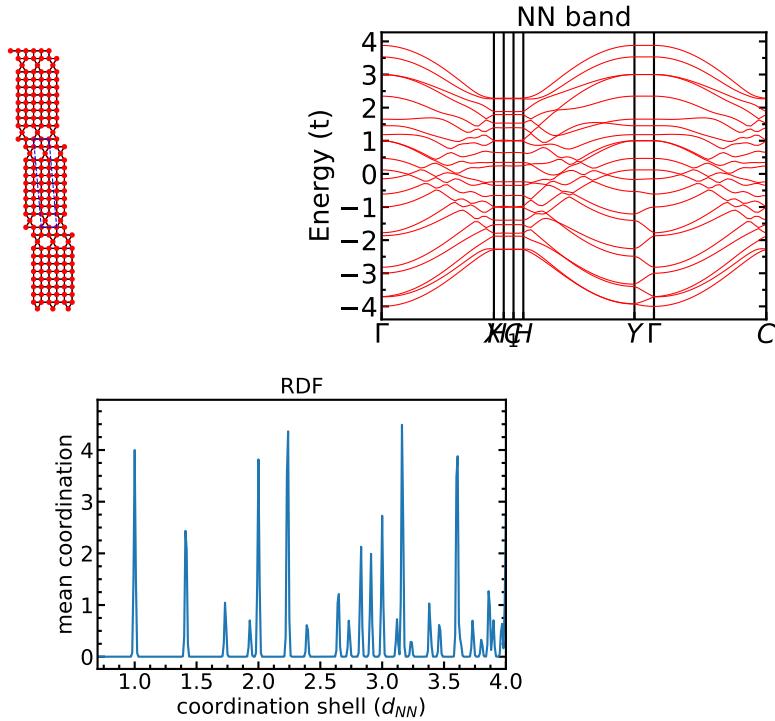


FIG. S126. t6126 lattice framework, nearest neighbors band structure and radial distribution function.

## t6127

Tiling reference number t6127 with space-group ' $Pmmm$ ' (47) and 20 sites in the unit cell, with vertex type indicated in Tab. S127. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S127.

TABLE S127. Tiling t6127 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	4	2

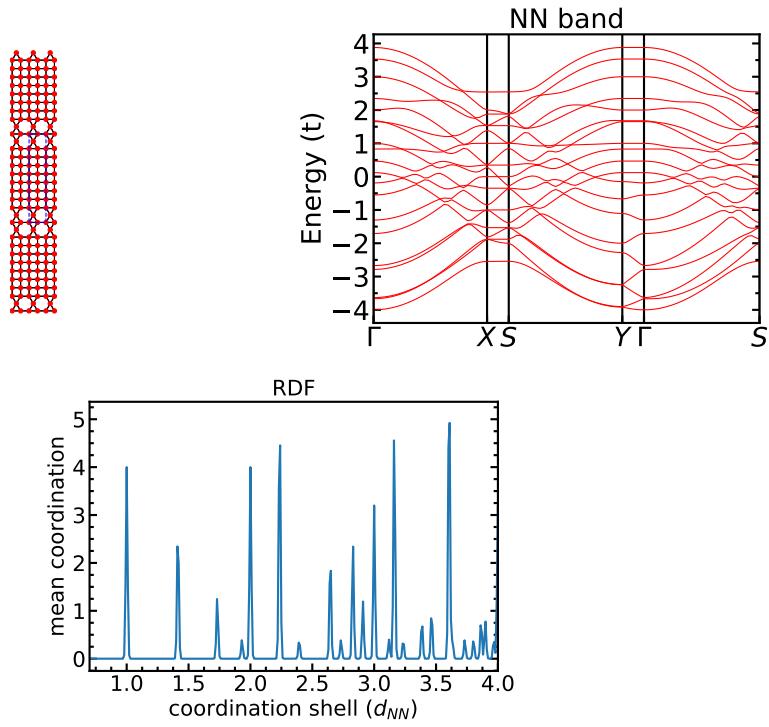


FIG. S127. t6127 lattice framework, nearest neighbors band structure and radial distribution function.

## t6128

Tiling reference number t6128 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S128. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S128.

TABLE S128. Tiling t6128 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	4	0	0	0	0	0	4	0

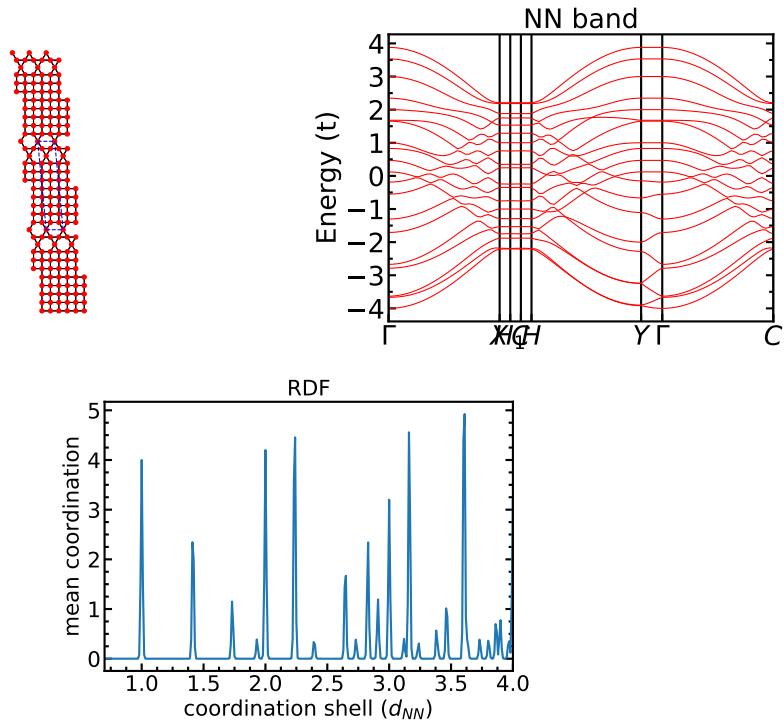


FIG. S128. t6128 lattice framework, nearest neighbors band structure and radial distribution function.

## t6129

Tiling reference number t6129 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S129. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S129.

TABLE S129. Tiling t6129 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	7	0	0	0	0	0	0	0	0	4	0	0	0	0

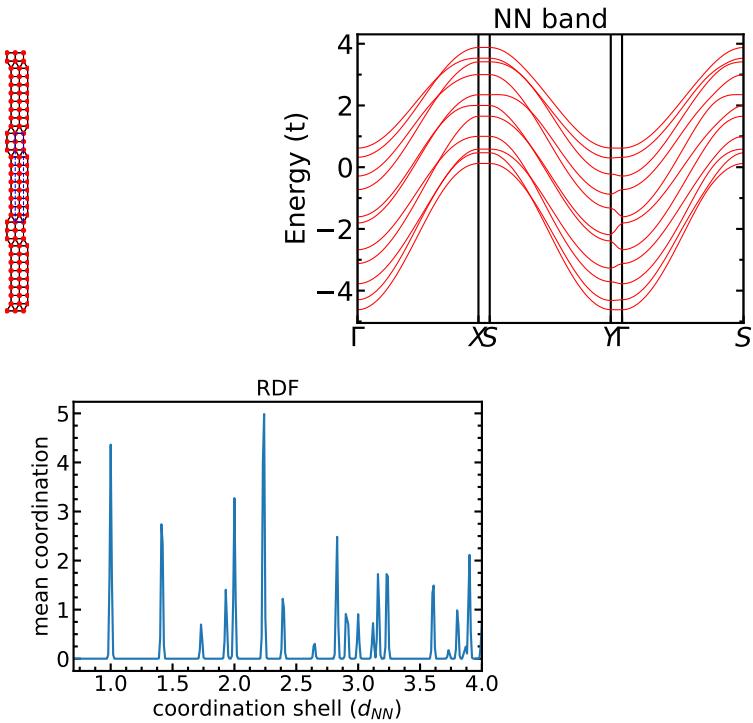


FIG. S129. t6129 lattice framework, nearest neighbors band structure and radial distribution function.

## t6130

Tiling reference number t6130 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S130. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S130.

TABLE S130. Tiling t6130 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	0	0	0	4	0	0	0	0

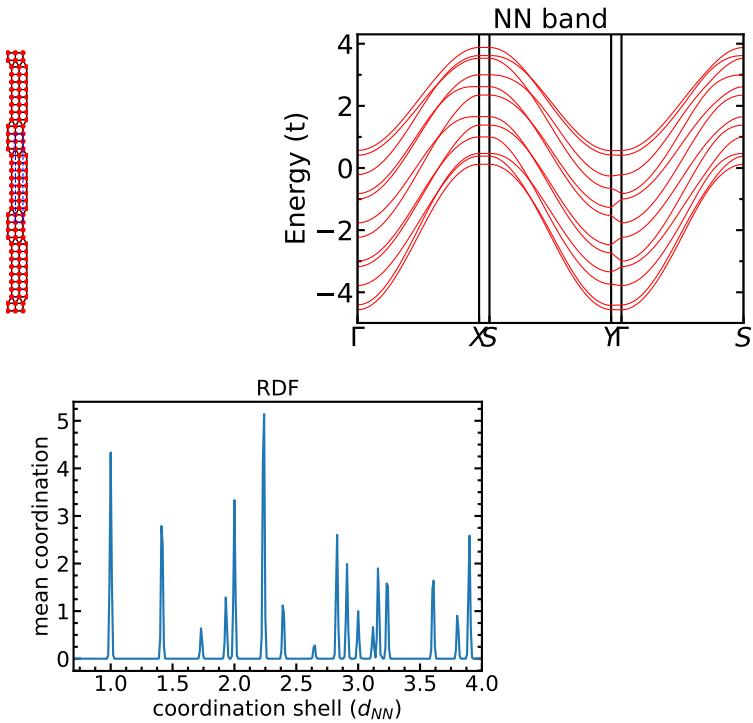


FIG. S130. t6130 lattice framework, nearest neighbors band structure and radial distribution function.

## t6131

Tiling reference number t6131 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S131. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S131.

TABLE S131. Tiling t6131 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	0	0	0	6	0	0	0	0

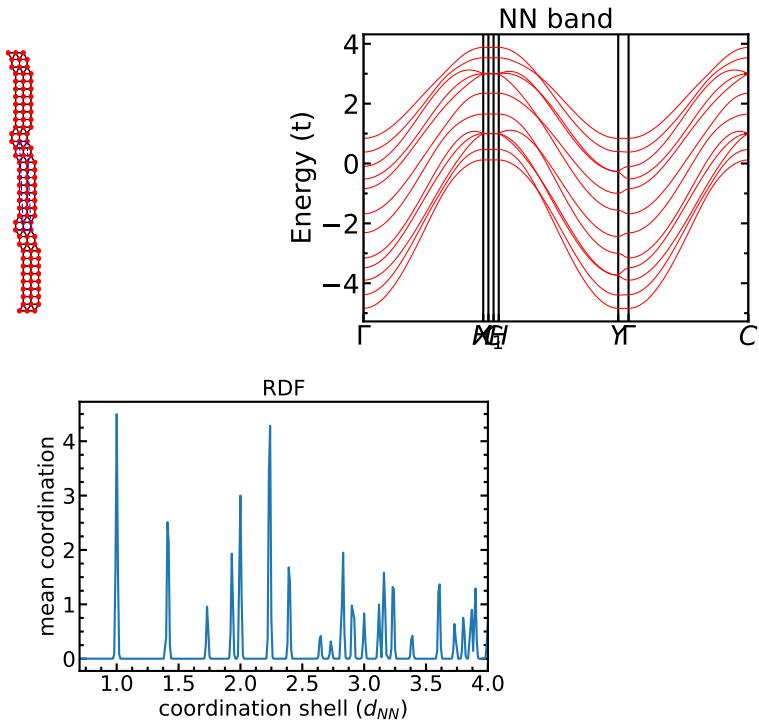


FIG. S131. t6131 lattice framework, nearest neighbors band structure and radial distribution function.

## t6132

Tiling reference number t6132 with space-group ' $Pmmm$ ' (47) and 12 sites in the unit cell, with vertex type indicated in Tab. S132. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S132.

TABLE S132. Tiling t6132 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	6	0	0	0	0	0	0	0	0	4	0	0	0	0

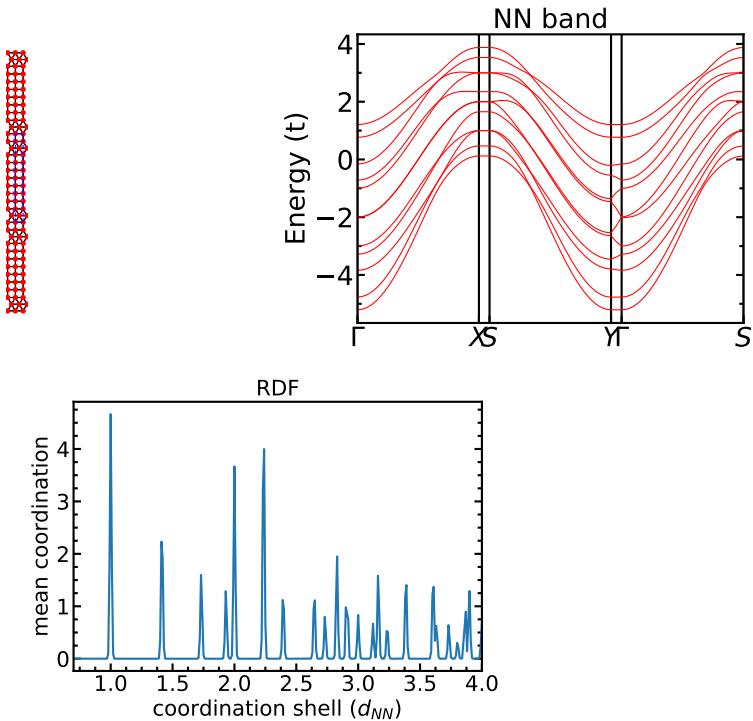


FIG. S132. t6132 lattice framework, nearest neighbors band structure and radial distribution function.

### t6133

Tiling reference number t6133 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S133. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S133.

TABLE S133. Tiling t6133 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	6	0	0	0	0	0	0	0	0	2	0	0	0	0

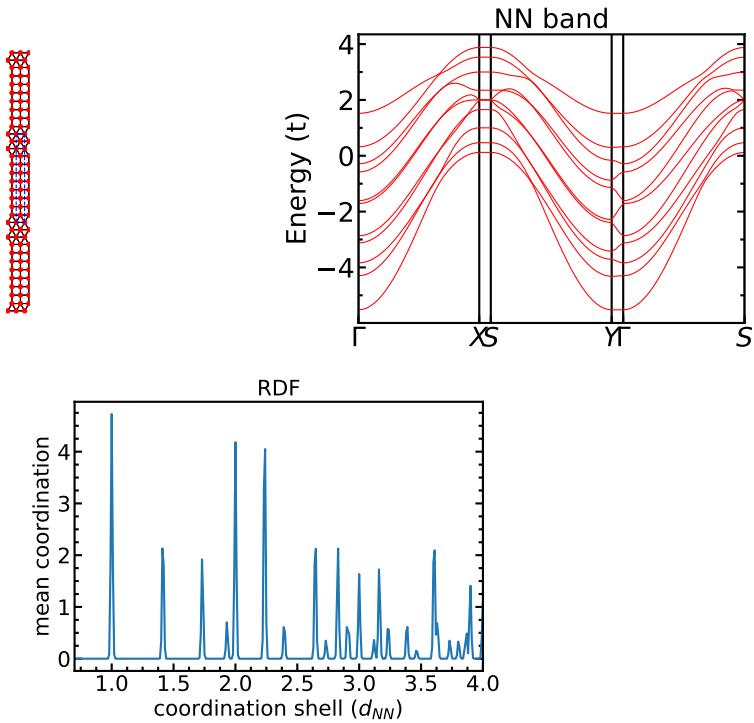


FIG. S133. t6133 lattice framework, nearest neighbors band structure and radial distribution function.

## t6134

Tiling reference number t6134 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S134. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S134.

TABLE S134. Tiling t6134 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	6	0	0	0	0	0	0	0	0	2	0	0	0	0

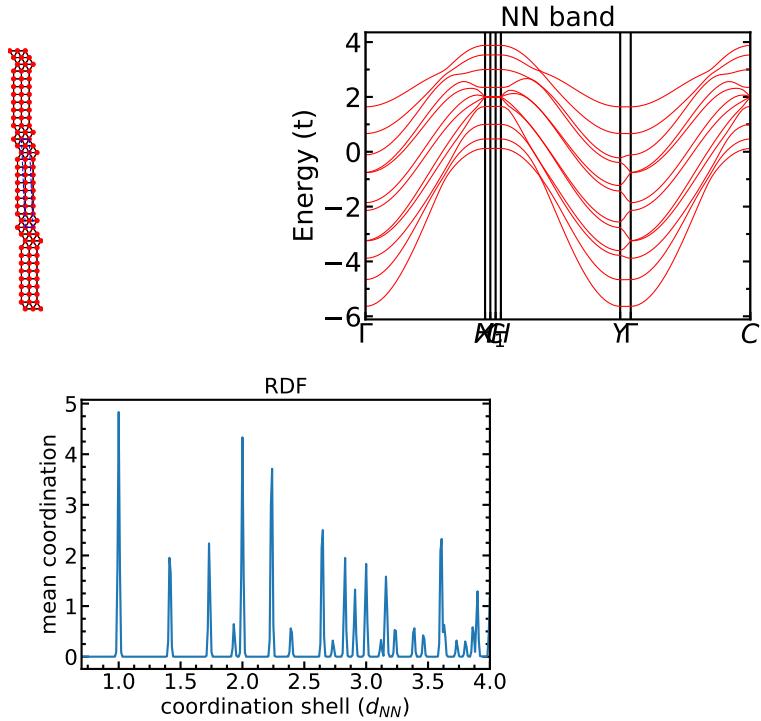


FIG. S134. t6134 lattice framework, nearest neighbors band structure and radial distribution function.

## t6135

Tiling reference number t6135 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S135. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S135.

TABLE S135. Tiling t6135 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

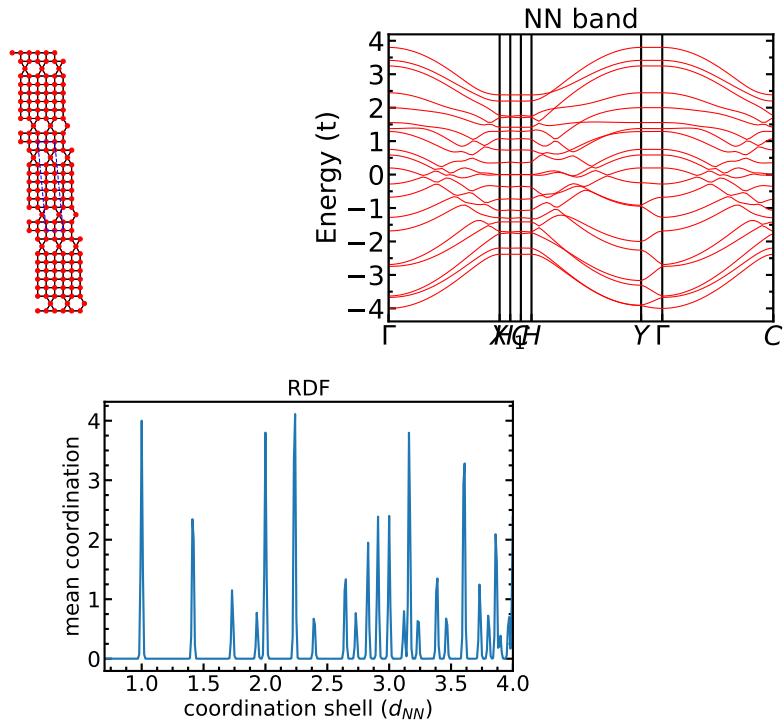


FIG. S135. t6135 lattice framework, nearest neighbors band structure and radial distribution function.

## t6136

Tiling reference number t6136 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S136. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S136.

TABLE S136. Tiling t6136 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

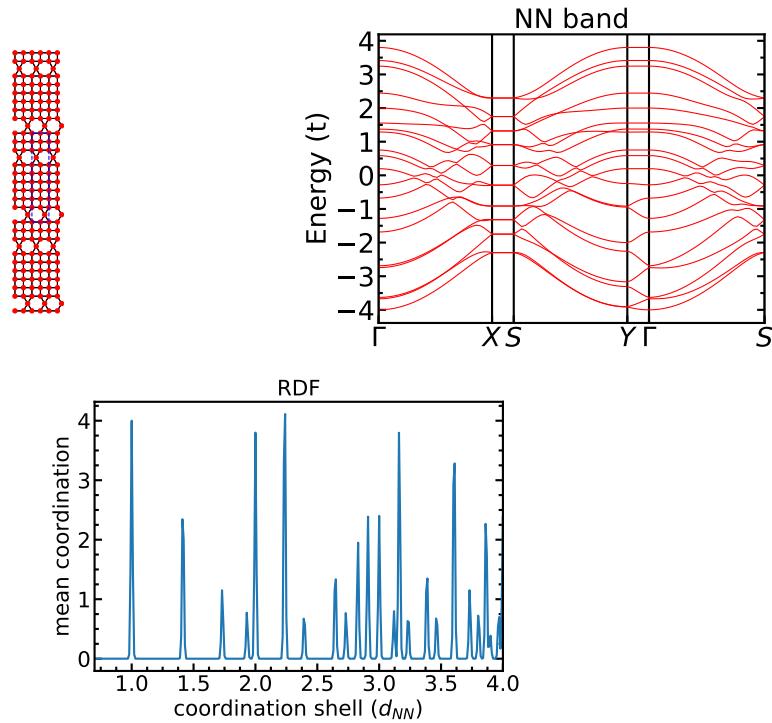


FIG. S136. t6136 lattice framework, nearest neighbors band structure and radial distribution function.

## t6137

Tiling reference number t6137 with space-group '*Amm2'* (38) and 22 sites in the unit cell, with vertex type indicated in Tab. S137. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S137.

TABLE S137. Tiling t6137 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

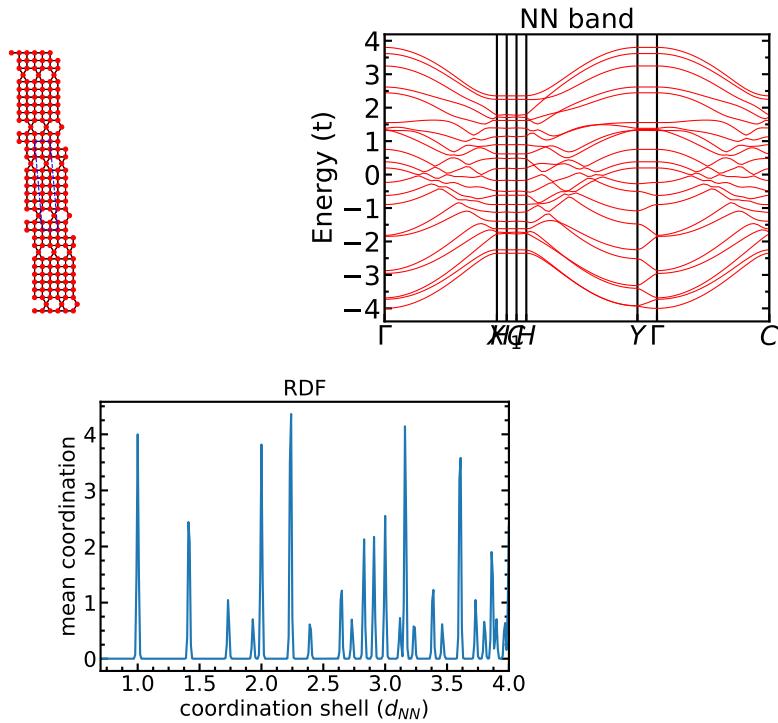


FIG. S137. t6137 lattice framework, nearest neighbors band structure and radial distribution function.

## t6138

Tiling reference number t6138 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S138. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S138.

TABLE S138. Tiling t6138 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

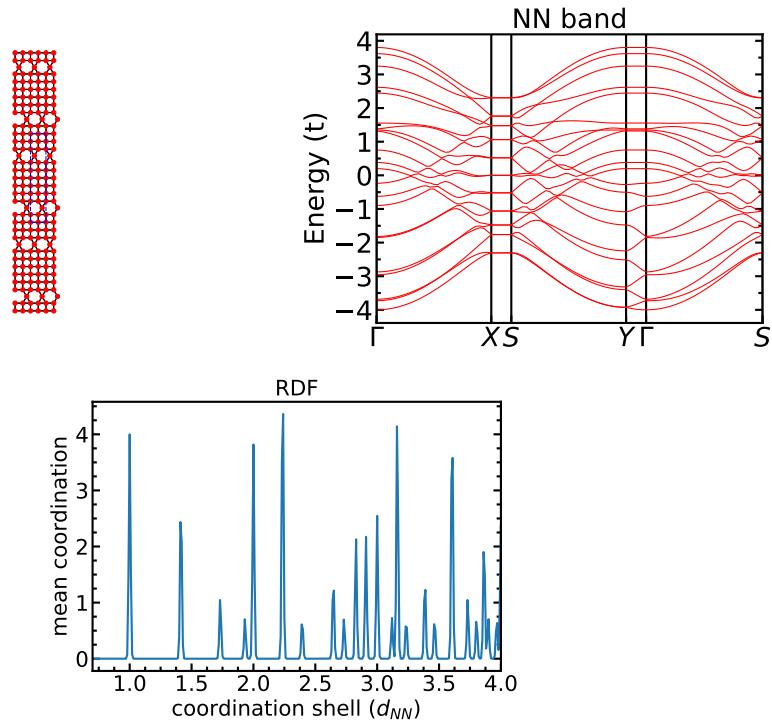


FIG. S138. t6138 lattice framework, nearest neighbors band structure and radial distribution function.

## t6139

Tiling reference number t6139 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S139. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S139.

TABLE S139. Tiling t6139 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	2	0	0	0	0	0	4	4

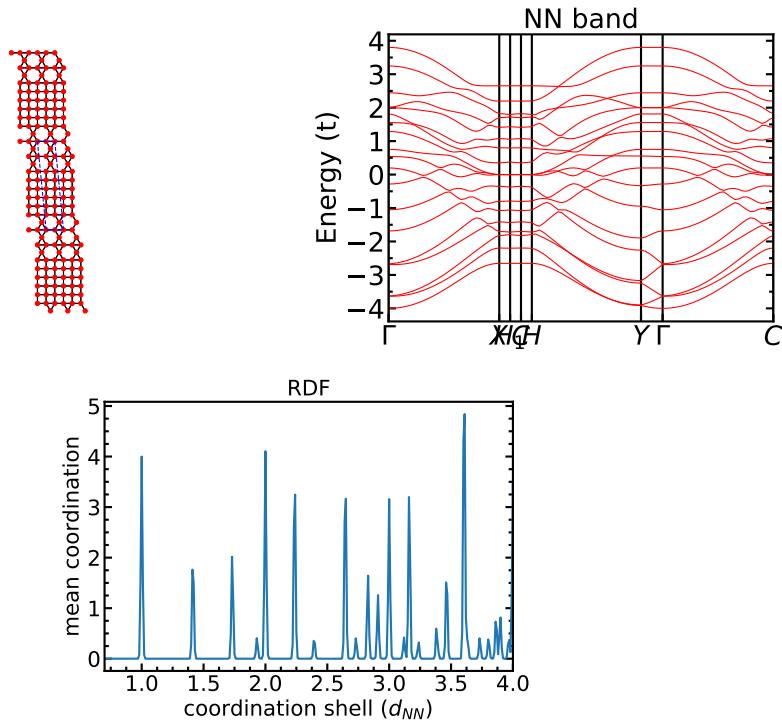


FIG. S139. t6139 lattice framework, nearest neighbors band structure and radial distribution function.

## t6140

Tiling reference number t6140 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S140. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S140.

TABLE S140. Tiling t6140 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	4	0	0	0	0	0	4	2

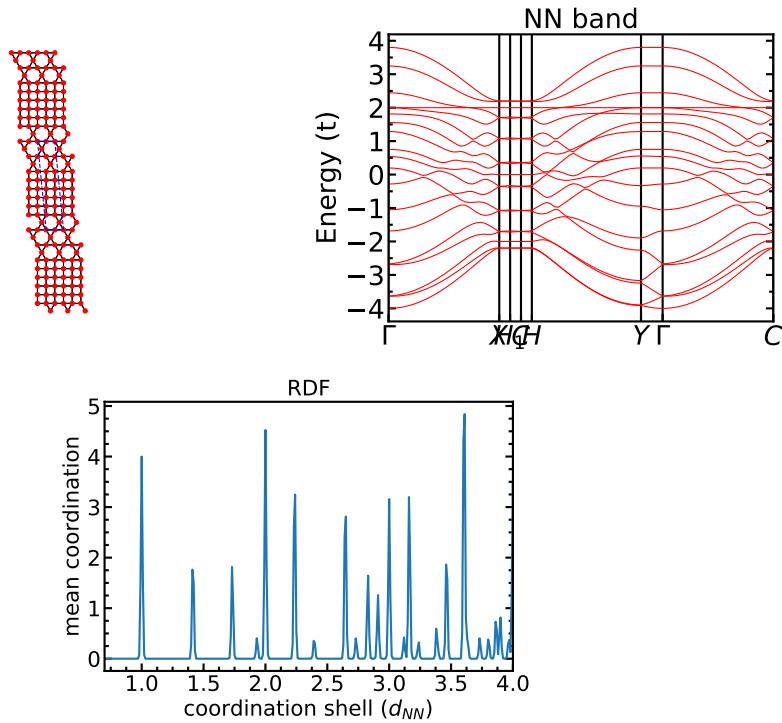


FIG. S140. t6140 lattice framework, nearest neighbors band structure and radial distribution function.

## t6141

Tiling reference number t6141 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S141. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S141.

TABLE S141. Tiling t6141 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	8	0	0	0	0	0	2	4	0	0	0	0	4	0

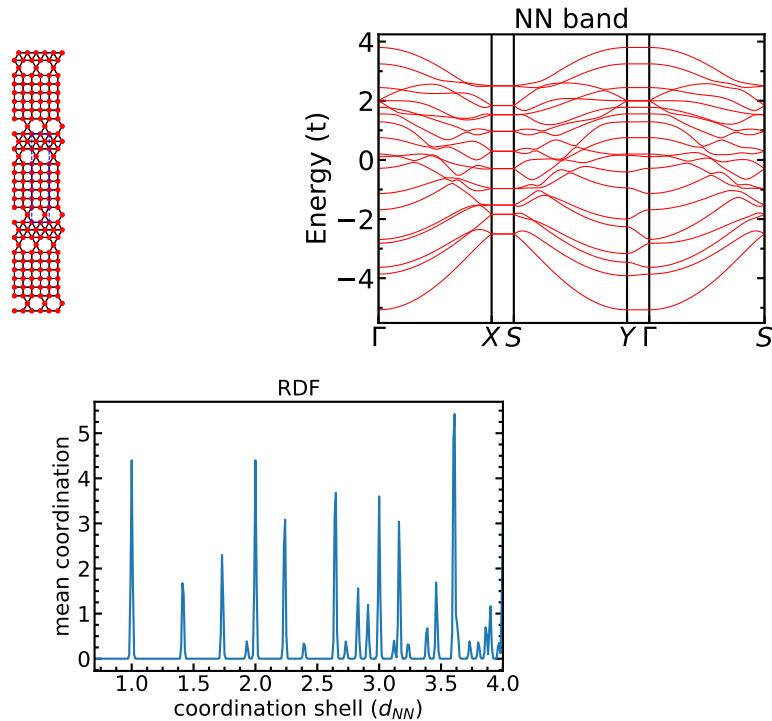


FIG. S141. t6141 lattice framework, nearest neighbors band structure and radial distribution function.

## t6142

Tiling reference number t6142 with space-group ' $Pmmm$ ' (47) and 20 sites in the unit cell, with vertex type indicated in Tab. S142. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S142.

TABLE S142. Tiling t6142 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

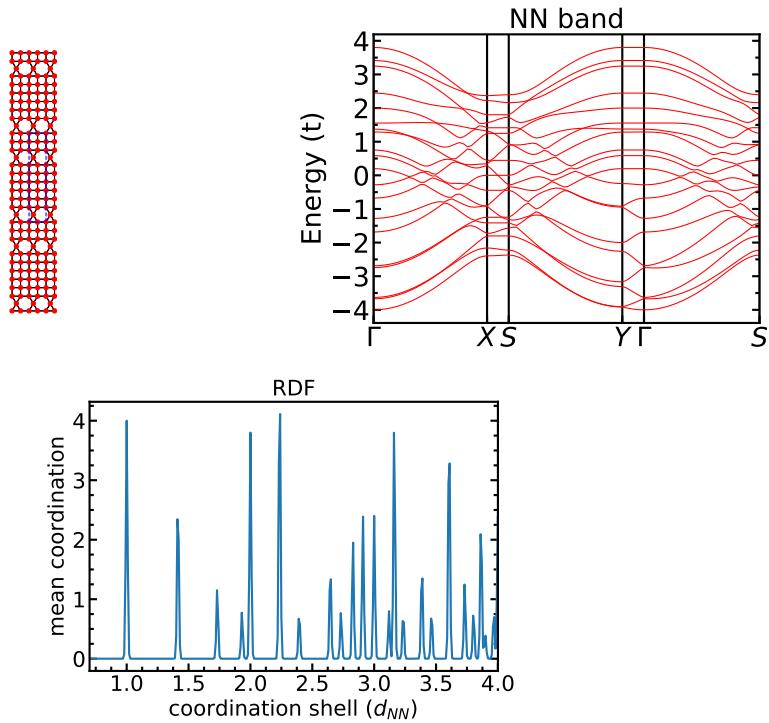


FIG. S142. t6142 lattice framework, nearest neighbors band structure and radial distribution function.

### t6143

Tiling reference number t6143 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S143. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S143.

TABLE S143. Tiling t6143 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

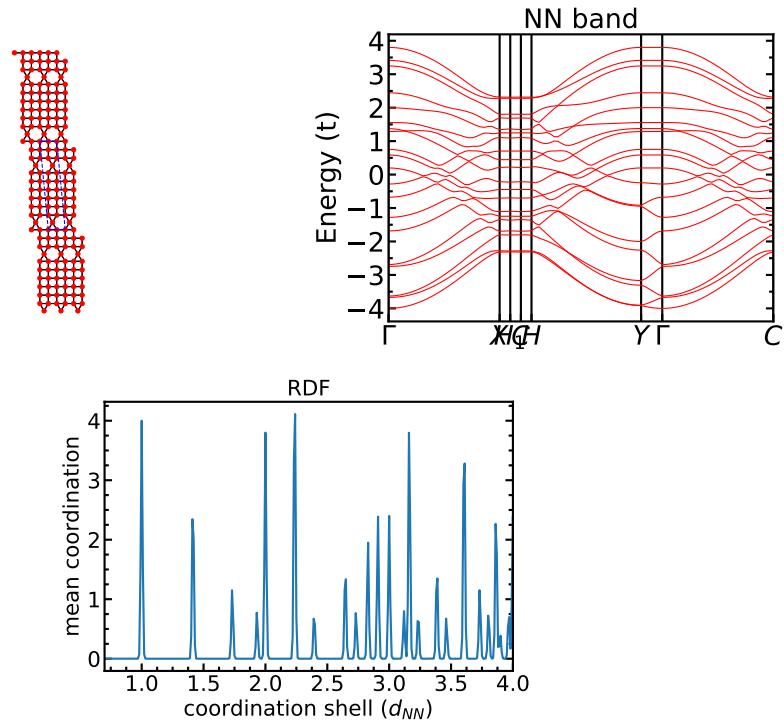


FIG. S143. t6143 lattice framework, nearest neighbors band structure and radial distribution function.

## t6144

Tiling reference number t6144 with space-group ' $Pmm2'$  (25) and 22 sites in the unit cell, with vertex type indicated in Tab. S144. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S144.

TABLE S144. Tiling t6144 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

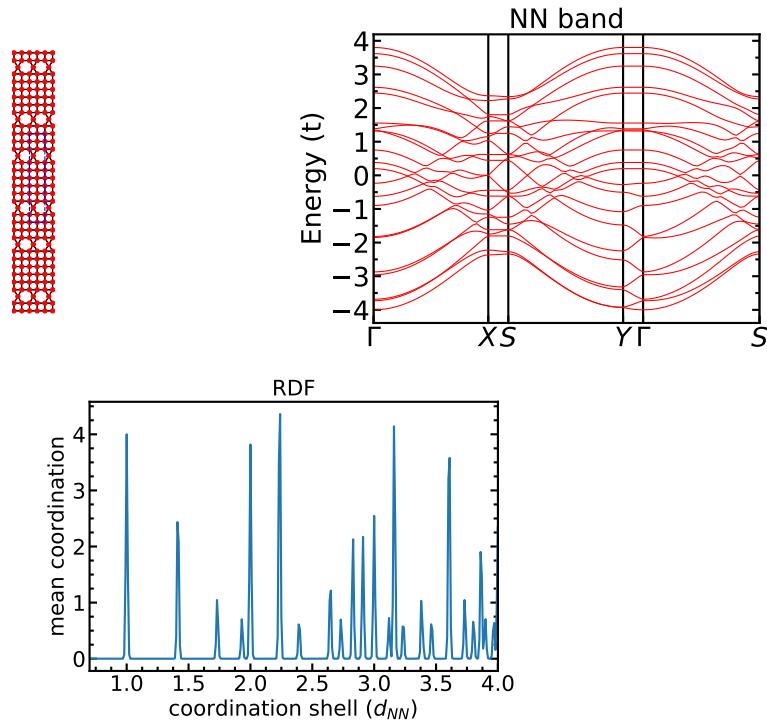


FIG. S144. t6144 lattice framework, nearest neighbors band structure and radial distribution function.

## t6145

Tiling reference number t6145 with space-group '*Amm2'* (38) and 22 sites in the unit cell, with vertex type indicated in Tab. S145. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S145.

TABLE S145. Tiling t6145 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	2	0	0	0	0	0	8	0

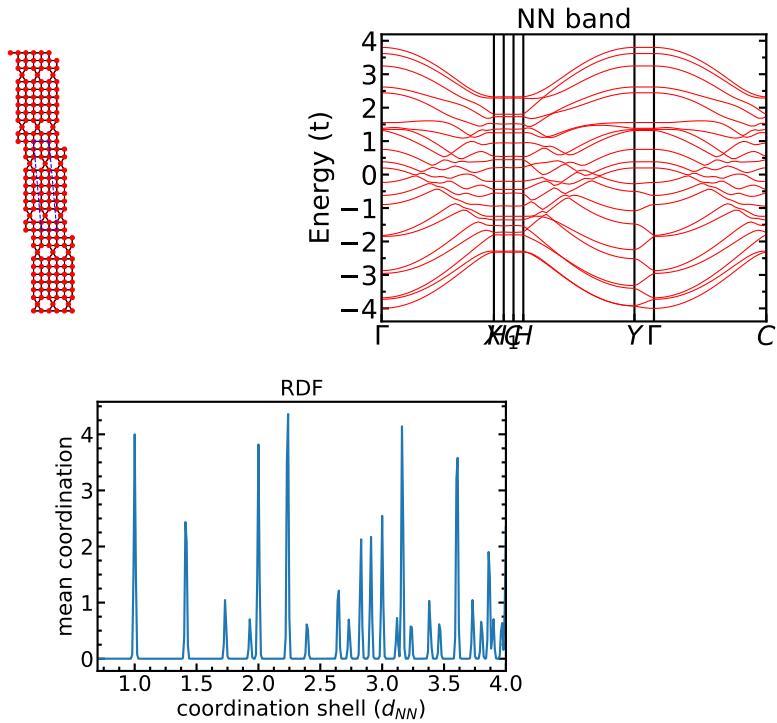


FIG. S145. t6145 lattice framework, nearest neighbors band structure and radial distribution function.

## t6146

Tiling reference number t6146 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S146. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S146.

TABLE S146. Tiling t6146 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	2	0	0	0	0	0	4	4

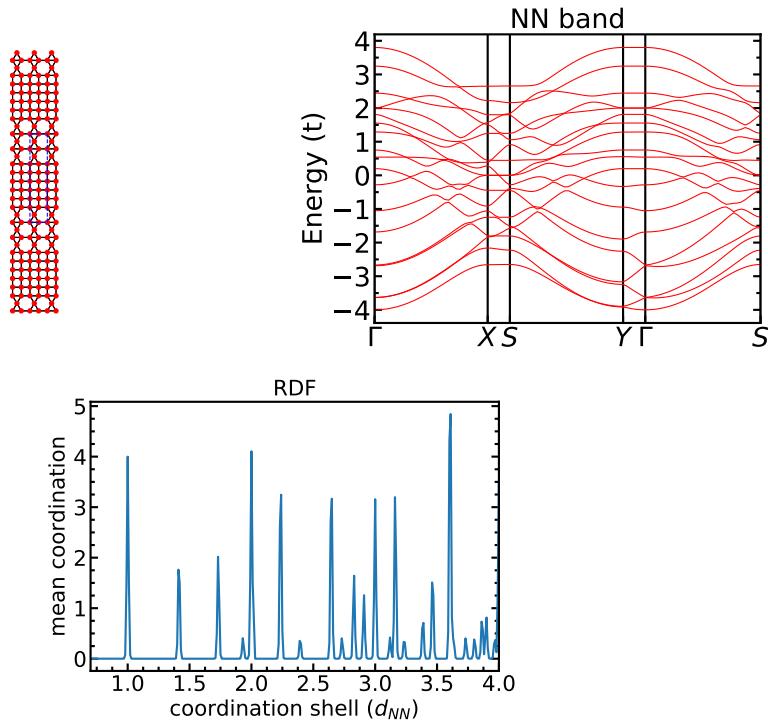


FIG. S146. t6146 lattice framework, nearest neighbors band structure and radial distribution function.

## t6147

Tiling reference number t6147 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S147. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S147.

TABLE S147. Tiling t6147 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	4	0	0	0	0	0	4	2

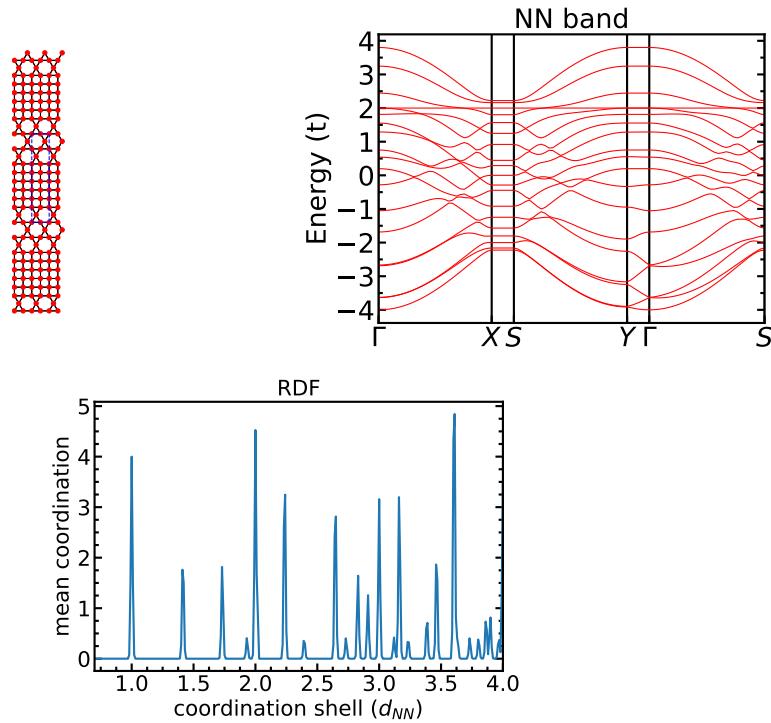


FIG. S147. t6147 lattice framework, nearest neighbors band structure and radial distribution function.

## t6148

Tiling reference number t6148 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S148. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S148.

TABLE S148. Tiling t6148 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	8	0	0	0	0	0	2	4	0	0	0	0	4	0

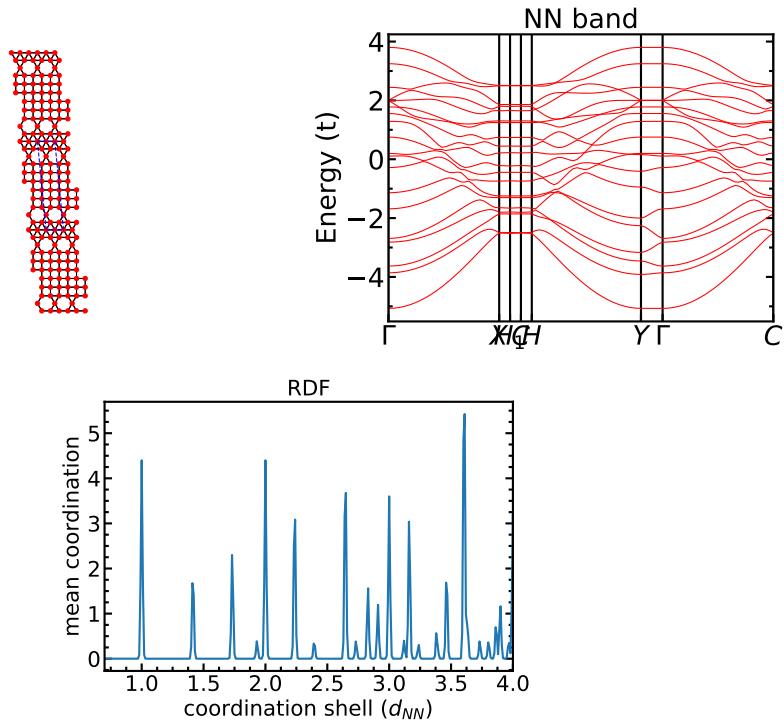


FIG. S148. t6148 lattice framework, nearest neighbors band structure and radial distribution function.

## t6149

Tiling reference number t6149 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S149. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S149.

TABLE S149. Tiling t6149 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	7	0	0	0	0	0	0	0	0	4	0	0	0	0

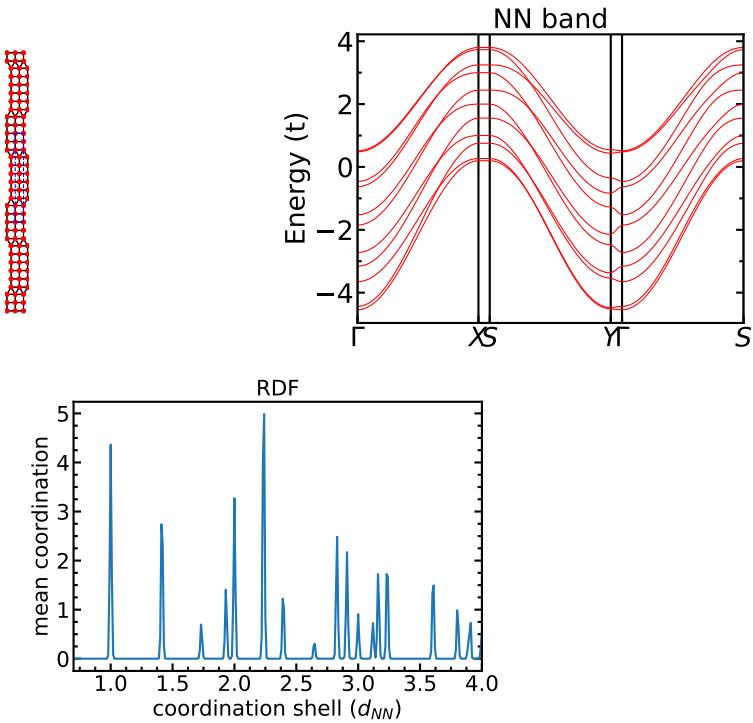


FIG. S149. t6149 lattice framework, nearest neighbors band structure and radial distribution function.

## t6150

Tiling reference number t6150 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S150. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S150.

TABLE S150. Tiling t6150 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	0	0	0	6	0	0	0	0

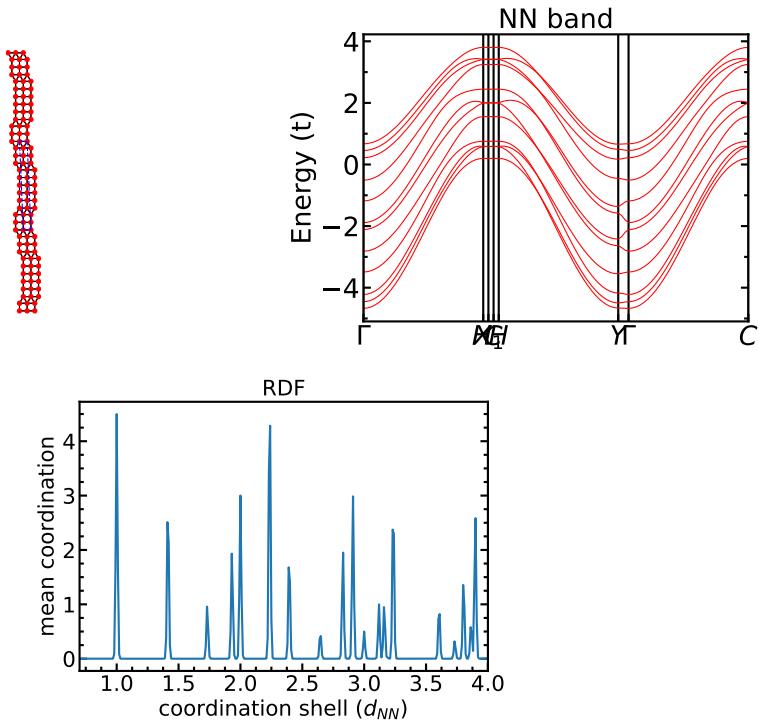


FIG. S150. t6150 lattice framework, nearest neighbors band structure and radial distribution function.

## t6151

Tiling reference number t6151 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S151. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S151.

TABLE S151. Tiling t6151 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	0	0	0	8	0	0	0	0

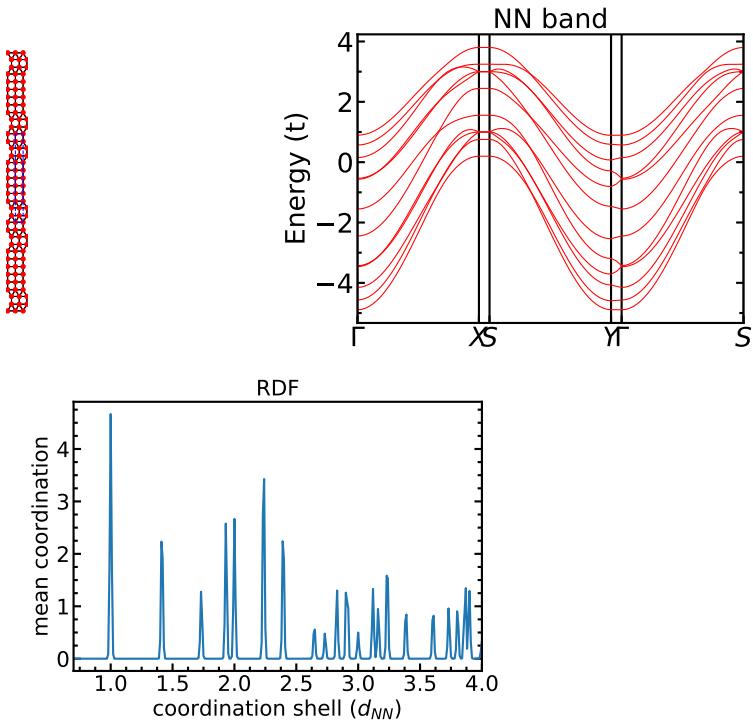


FIG. S151. t6151 lattice framework, nearest neighbors band structure and radial distribution function.

## t6152

Tiling reference number t6152 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S152. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S152.

TABLE S152. Tiling t6152 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	4	0	0	0	0	0	0	0	0	6	0	0	0	0

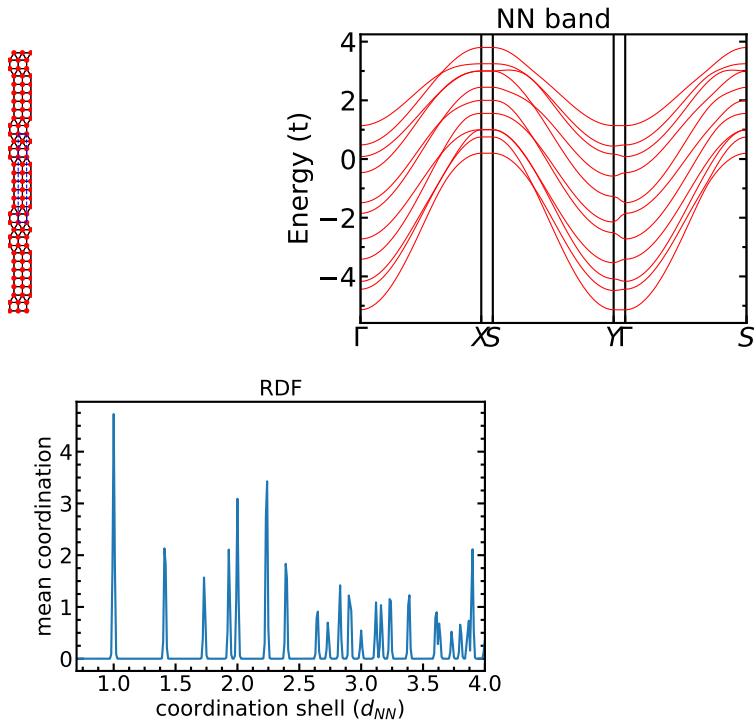


FIG. S152. t6152 lattice framework, nearest neighbors band structure and radial distribution function.

### t6153

Tiling reference number t6153 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S153. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S153.

TABLE S153. Tiling t6153 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	0	0	6	0	0	0	0

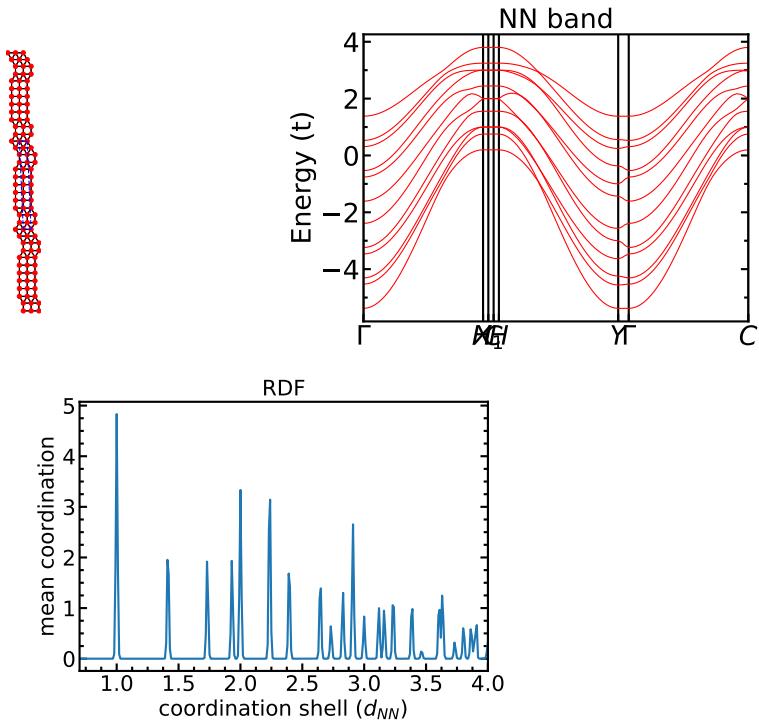


FIG. S153. t6153 lattice framework, nearest neighbors band structure and radial distribution function.

## t6154

Tiling reference number t6154 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S154. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S154.

TABLE S154. Tiling t6154 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	5	0	0	0	0	0	0	0	0	4	0	0	0	0

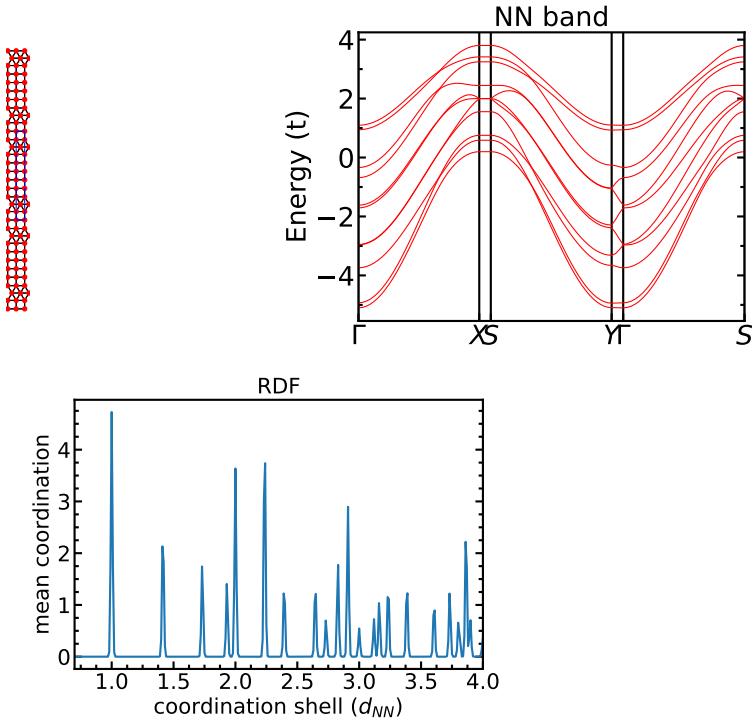


FIG. S154. t6154 lattice framework, nearest neighbors band structure and radial distribution function.

## t6155

Tiling reference number t6155 with space-group ' $Pmmm$ ' (47) and 12 sites in the unit cell, with vertex type indicated in Tab. S155. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S155.

TABLE S155. Tiling t6155 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	6	0	0	0	0	0	0	0	0	4	0	0	0	0

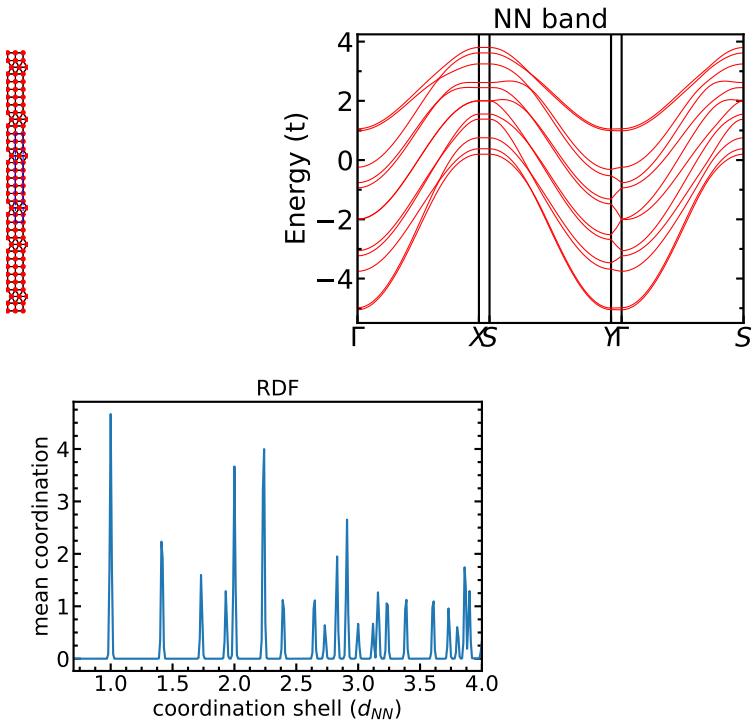


FIG. S155. t6155 lattice framework, nearest neighbors band structure and radial distribution function.

## t6156

Tiling reference number t6156 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S156. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S156.

TABLE S156. Tiling t6156 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	0	0	6	0	0	0	0

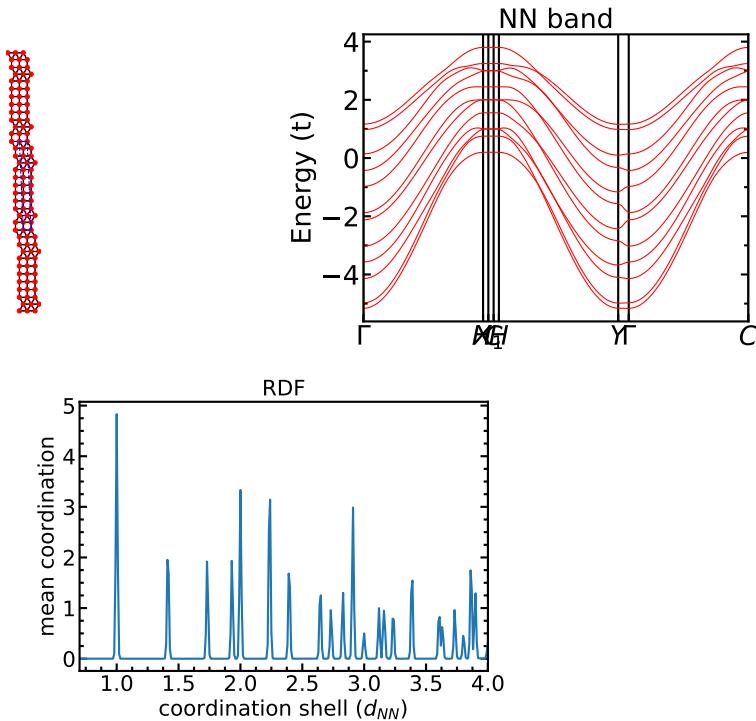


FIG. S156. t6156 lattice framework, nearest neighbors band structure and radial distribution function.

## t6157

Tiling reference number t6157 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S157. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S157.

TABLE S157. Tiling t6157 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	4	0	0	0	0	0	0	0	0	4	0	0	0	0

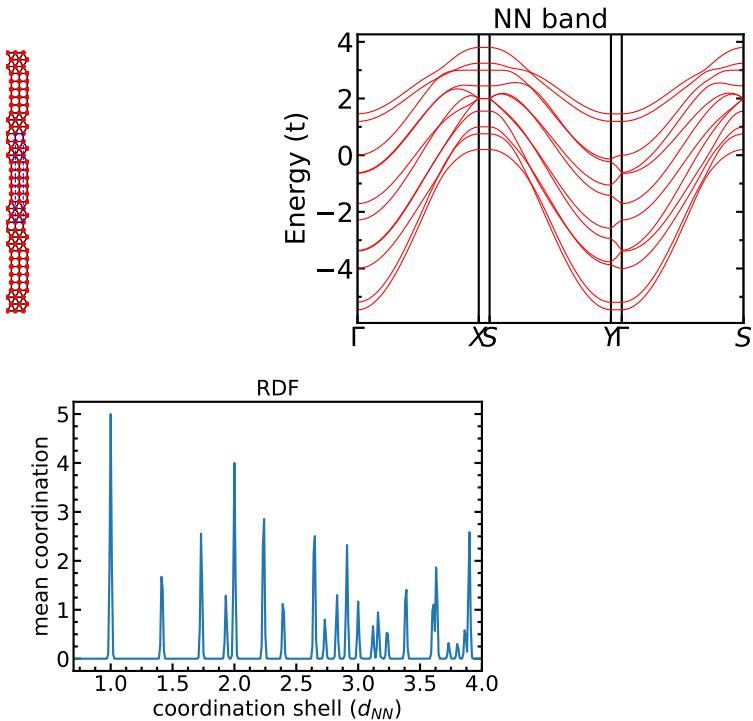


FIG. S157. t6157 lattice framework, nearest neighbors band structure and radial distribution function.

## t6158

Tiling reference number t6158 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S158. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S158.

TABLE S158. Tiling t6158 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	4	0	0	0	0	0	0	0	0	2	0	0	0	0

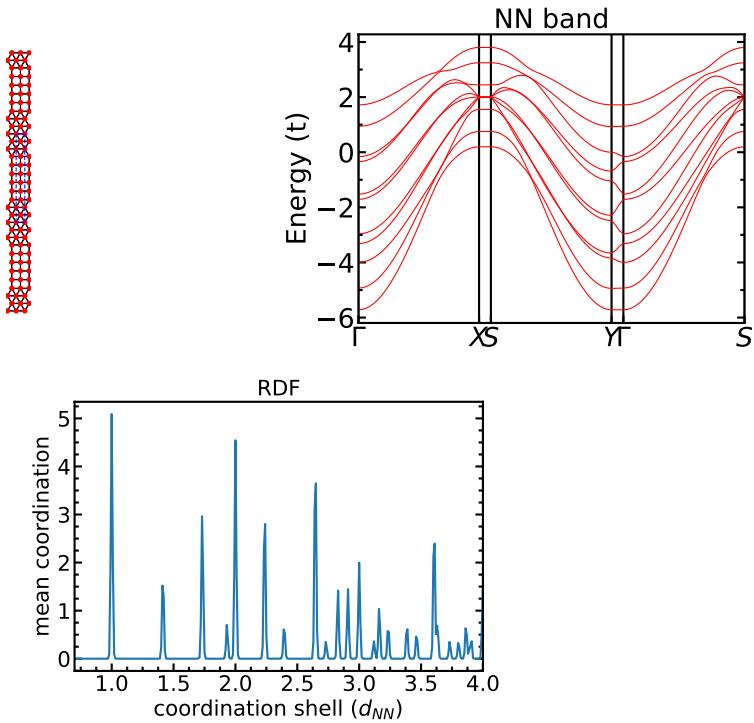


FIG. S158. t6158 lattice framework, nearest neighbors band structure and radial distribution function.

## t6159

Tiling reference number t6159 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S159. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S159.

TABLE S159. Tiling t6159 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	4	0	0	0	0	0	0	0	0	2	0	0	0	0

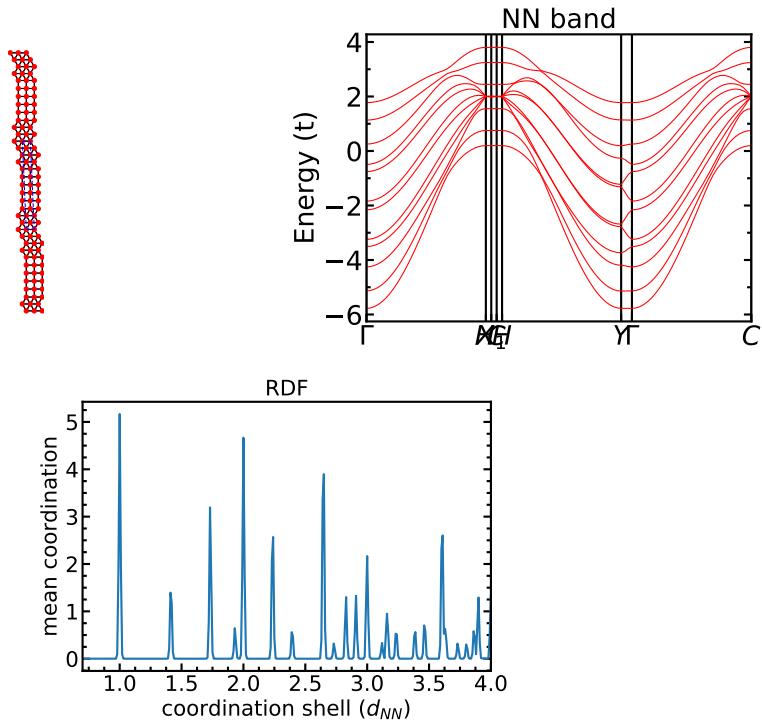


FIG. S159. t6159 lattice framework, nearest neighbors band structure and radial distribution function.

## t6160

Tiling reference number t6160 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S160. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S160.

TABLE S160. Tiling t6160 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

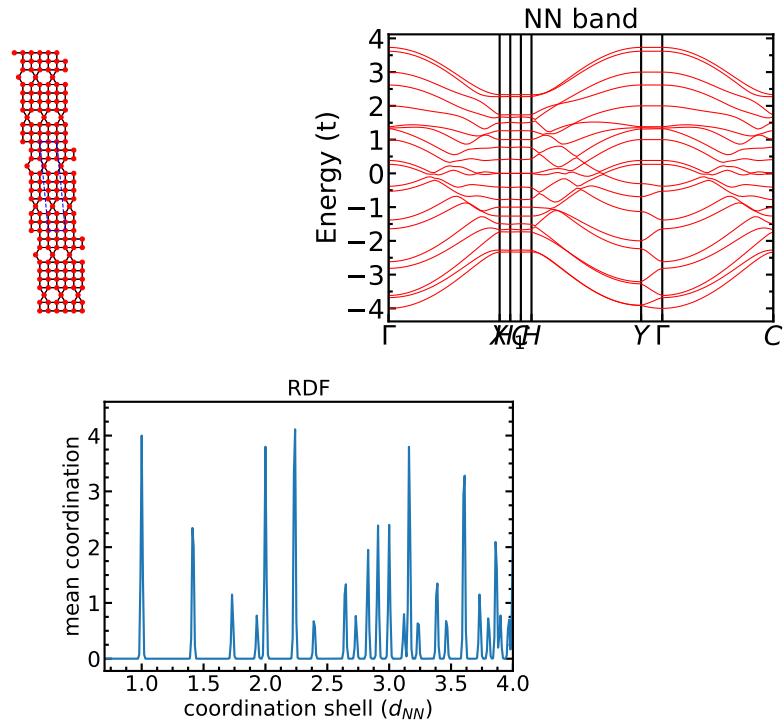


FIG. S160. t6160 lattice framework, nearest neighbors band structure and radial distribution function.

## t6161

Tiling reference number t6161 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S161. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S161.

TABLE S161. Tiling t6161 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

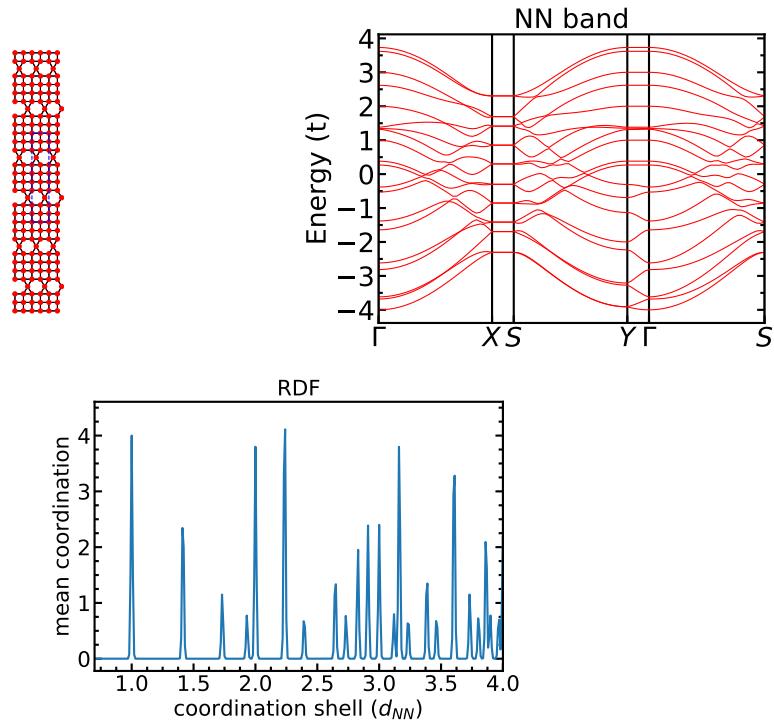


FIG. S161. t6161 lattice framework, nearest neighbors band structure and radial distribution function.

## t6162

Tiling reference number t6162 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S162. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S162.

TABLE S162. Tiling t6162 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	3	0	0	0	0	0	12	0

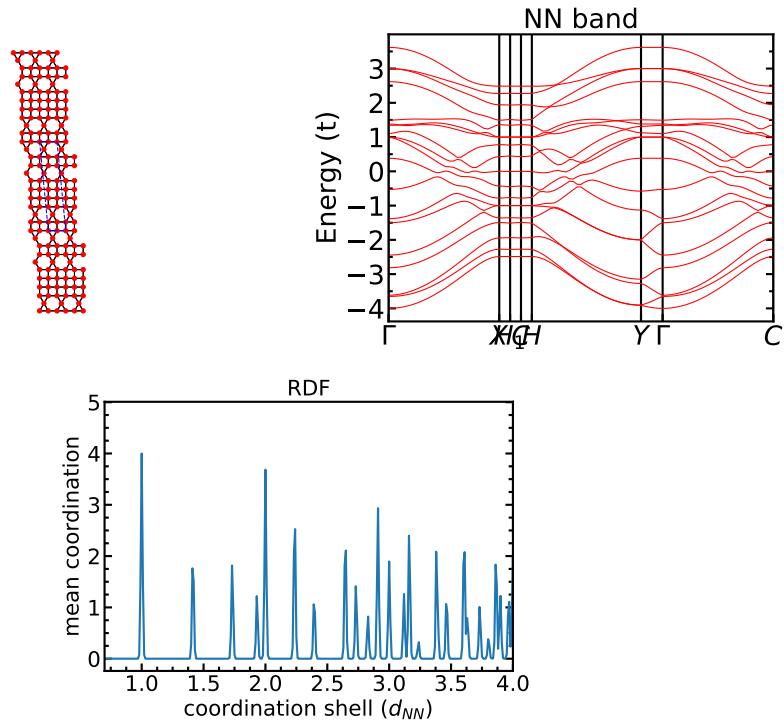


FIG. S162. t6162 lattice framework, nearest neighbors band structure and radial distribution function.

## t6163

Tiling reference number t6163 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S163. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S163.

TABLE S163. Tiling t6163 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	0	0	0	0	0	12	0

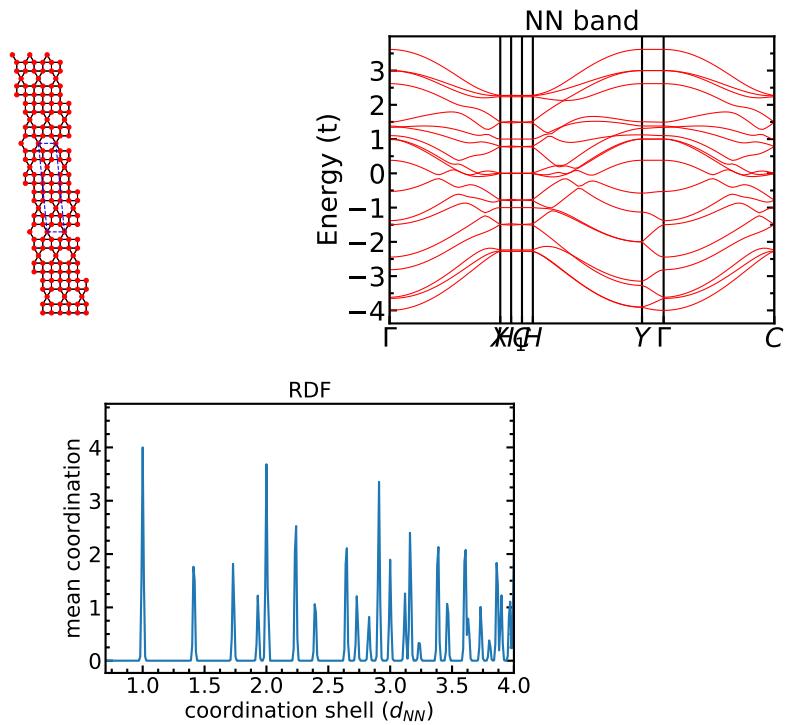


FIG. S163. t6163 lattice framework, nearest neighbors band structure and radial distribution function.

## t6164

Tiling reference number t6164 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S164. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S164.

TABLE S164. Tiling t6164 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	2	0	0	4	0	0	8	0

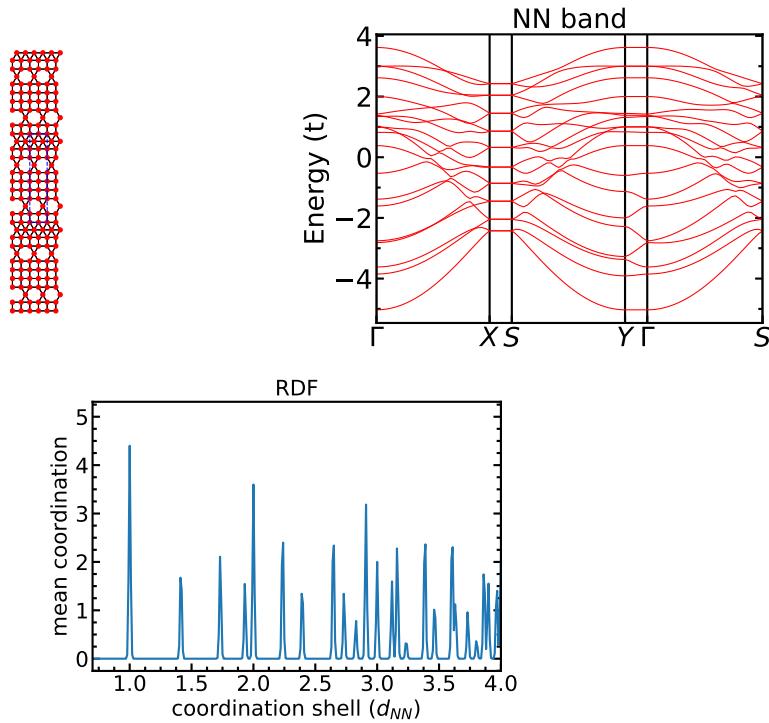


FIG. S164. t6164 lattice framework, nearest neighbors band structure and radial distribution function.

## t6165

Tiling reference number t6165 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S165. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S165.

TABLE S165. Tiling t6165 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	4	0	0	0	0	0	8	4

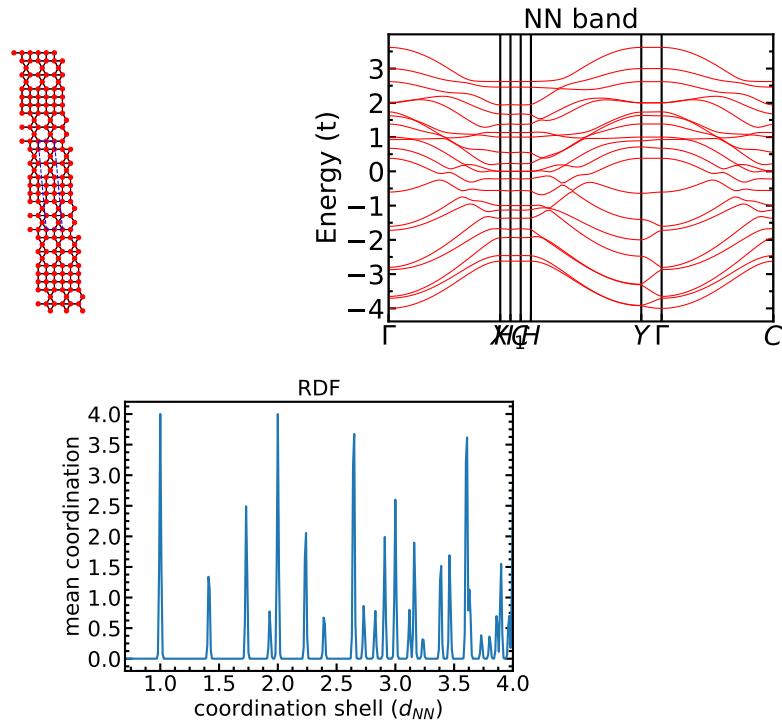


FIG. S165. t6165 lattice framework, nearest neighbors band structure and radial distribution function.

## t6166

Tiling reference number t6166 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S166. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S166.

TABLE S166. Tiling t6166 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	4	0	0	0	0	0	8	4

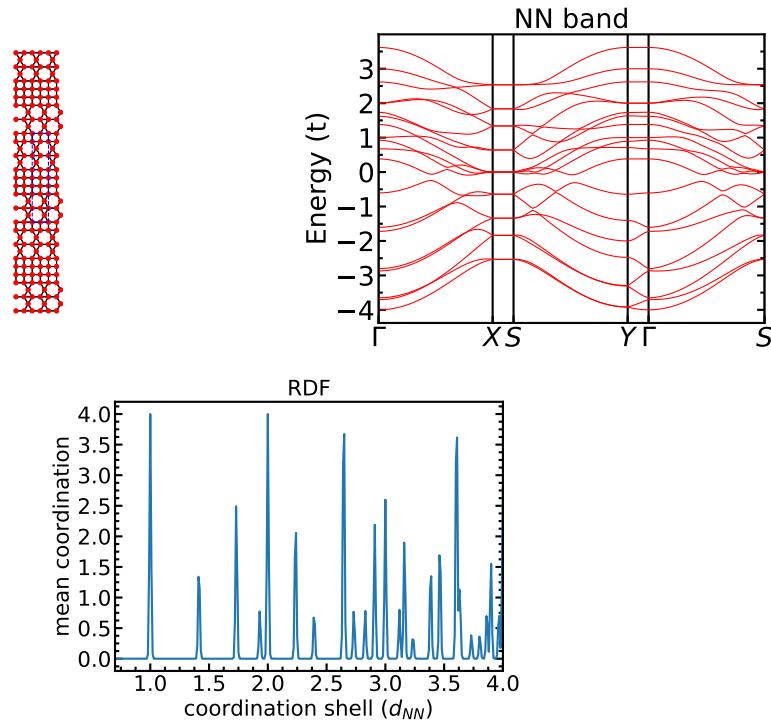


FIG. S166. t6166 lattice framework, nearest neighbors band structure and radial distribution function.

## t6167

Tiling reference number t6167 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S167. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S167.

TABLE S167. Tiling t6167 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	4	0	0	0	0	0	4	6

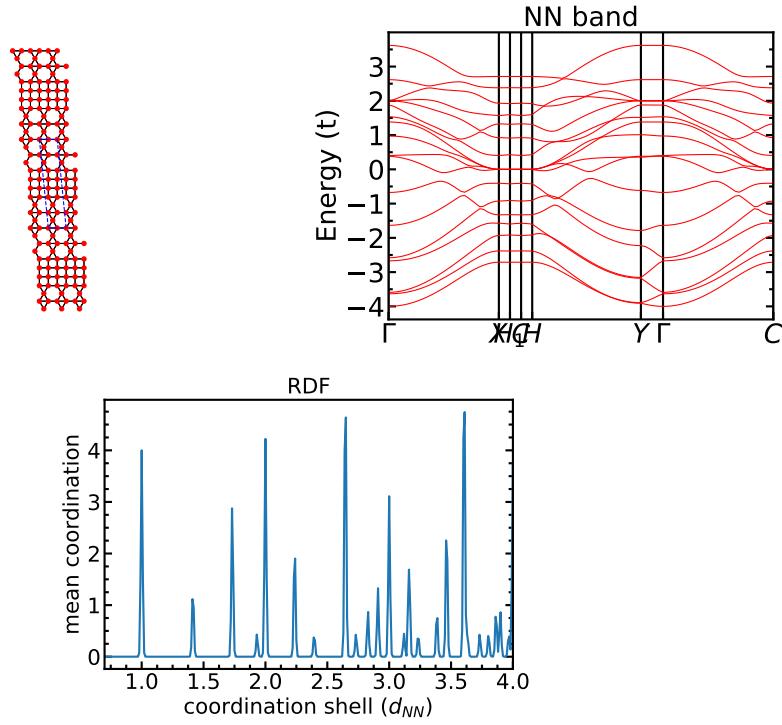


FIG. S167. t6167 lattice framework, nearest neighbors band structure and radial distribution function.

## t6168

Tiling reference number t6168 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S168. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S168.

TABLE S168. Tiling t6168 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	6	0	0	0	0	0	4	4

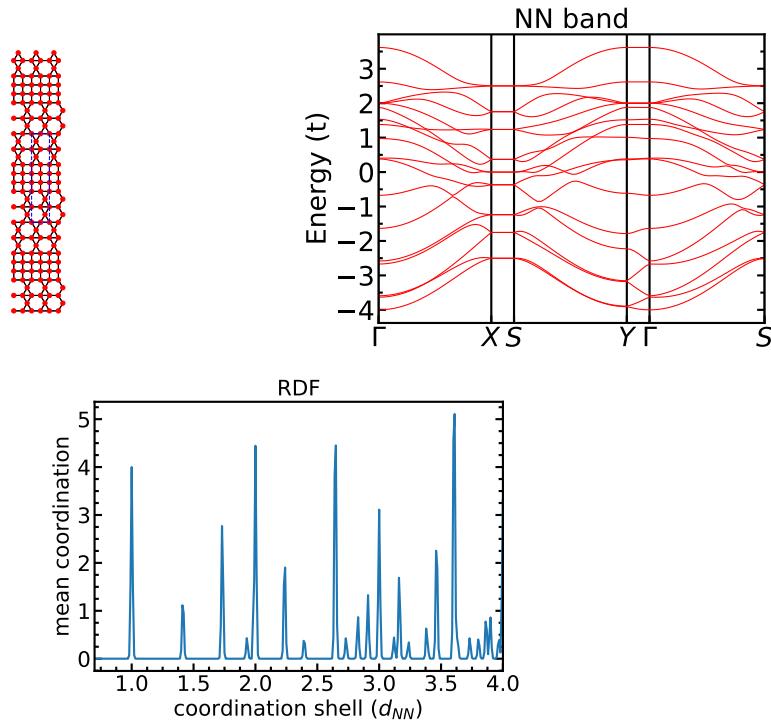


FIG. S168. t6168 lattice framework, nearest neighbors band structure and radial distribution function.

## t6169

Tiling reference number t6169 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S169. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S169.

TABLE S169. Tiling t6169 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	6	0	0	0	0	0	8	2

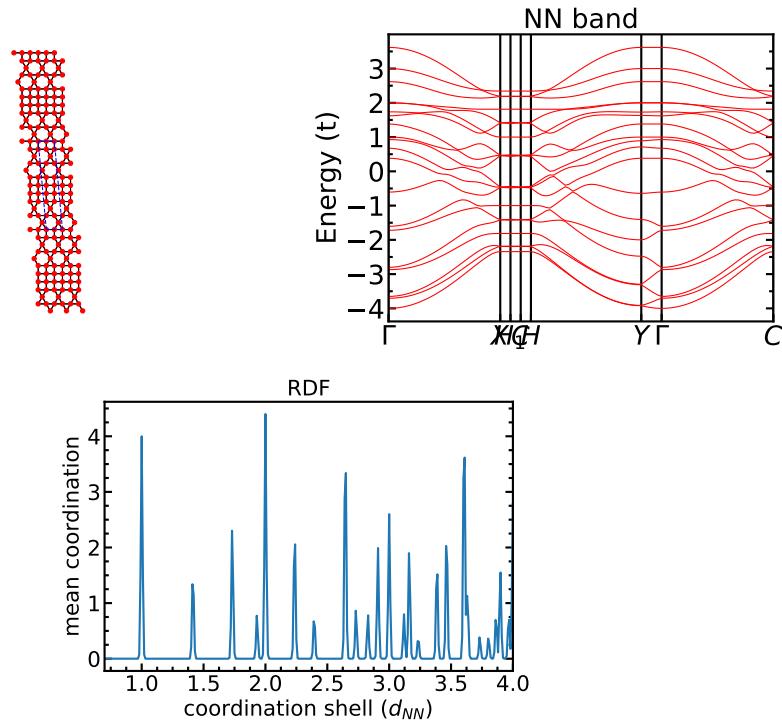


FIG. S169. t6169 lattice framework, nearest neighbors band structure and radial distribution function.

## t6170

Tiling reference number t6170 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S170. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S170.

TABLE S170. Tiling t6170 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	8	0	0	0	0	0	8	0

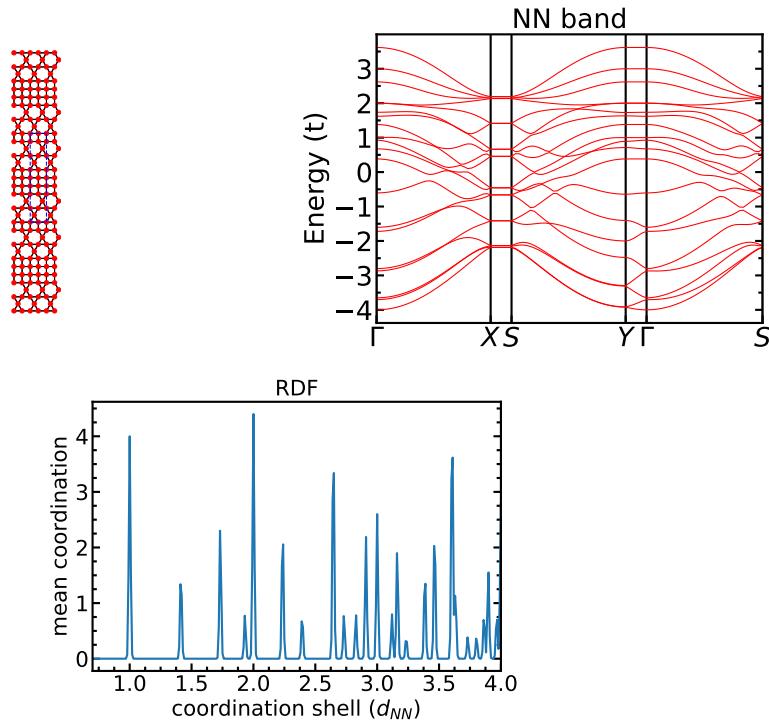


FIG. S170. t6170 lattice framework, nearest neighbors band structure and radial distribution function.

## t6171

Tiling reference number t6171 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S171. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S171.

TABLE S171. Tiling t6171 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	8	0	0	0	0	0	4	2

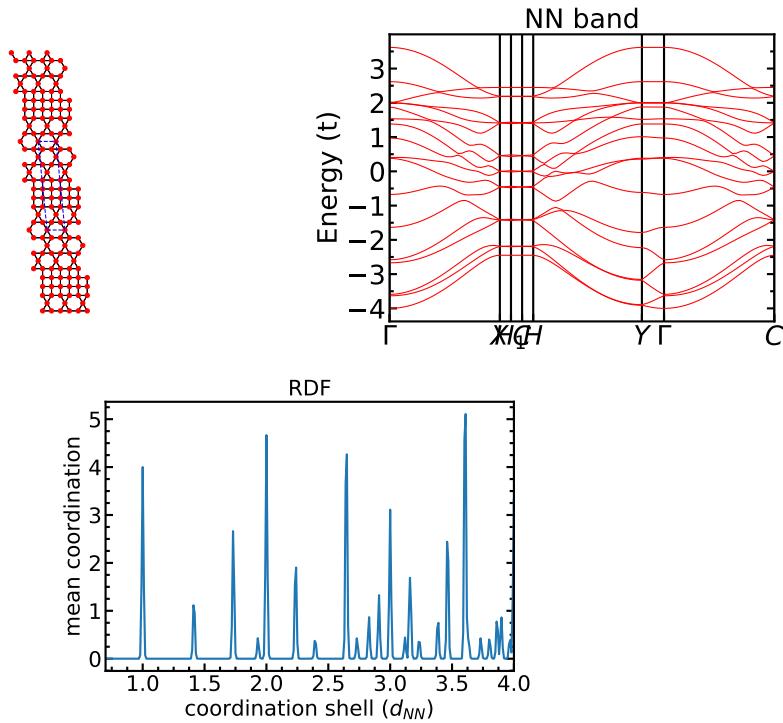


FIG. S171. t6171 lattice framework, nearest neighbors band structure and radial distribution function.

## t6172

Tiling reference number t6172 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S172. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S172.

TABLE S172. Tiling t6172 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	10	0	0	0	0	0	4	0

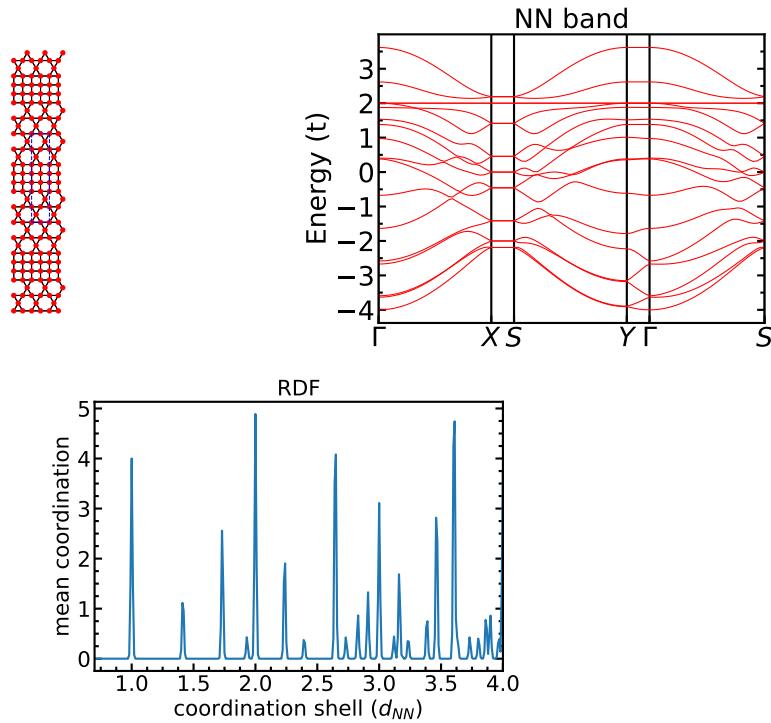


FIG. S172. t6172 lattice framework, nearest neighbors band structure and radial distribution function.

### t6173

Tiling reference number t6173 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S173. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S173.

TABLE S173. Tiling t6173 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	4	0	4	0	0	4	0

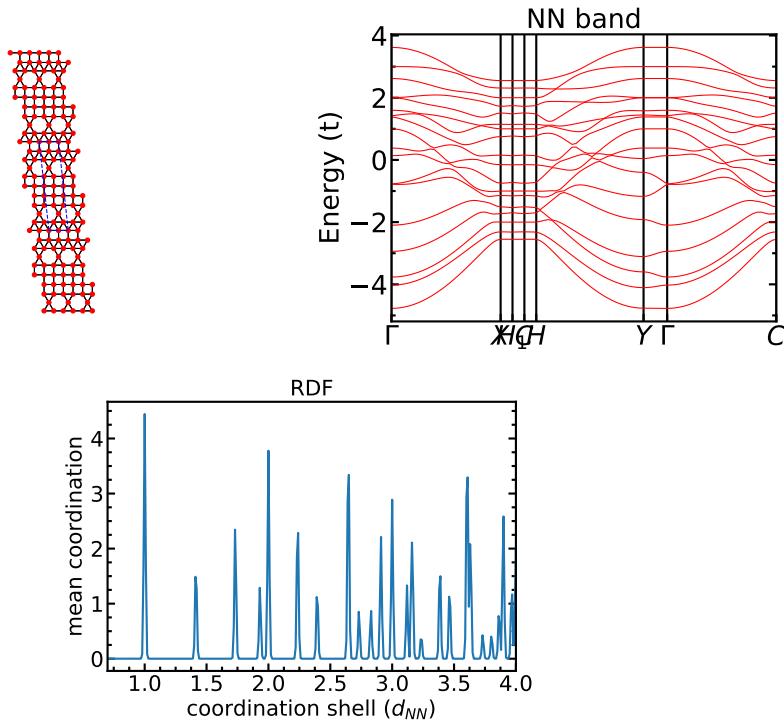


FIG. S173. t6173 lattice framework, nearest neighbors band structure and radial distribution function.

## t6174

Tiling reference number t6174 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S174. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S174.

TABLE S174. Tiling t6174 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	4	0	4	0	0	4	0

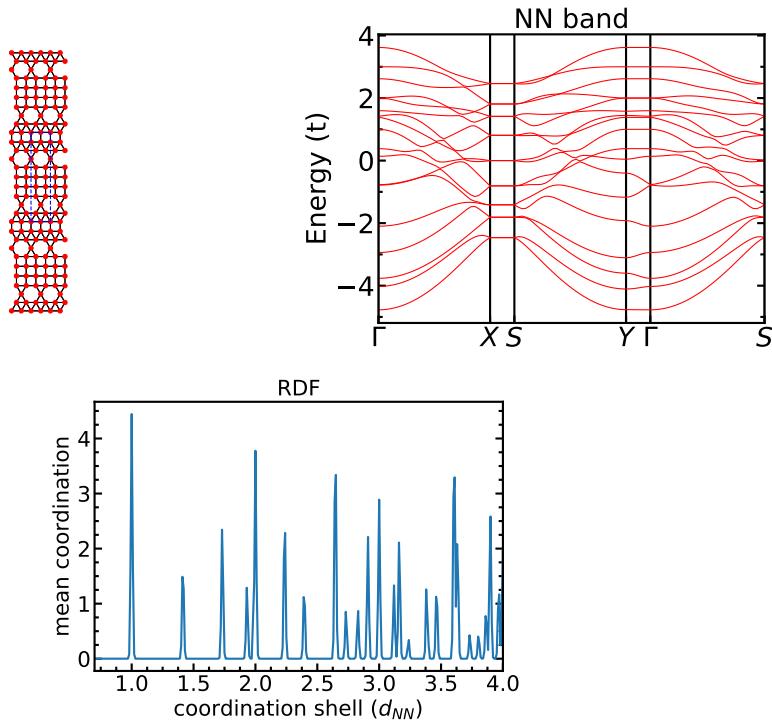


FIG. S174. t6174 lattice framework, nearest neighbors band structure and radial distribution function.

## t6175

Tiling reference number t6175 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S175. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S175.

TABLE S175. Tiling t6175 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	2	4	0	0	0	0	4	0

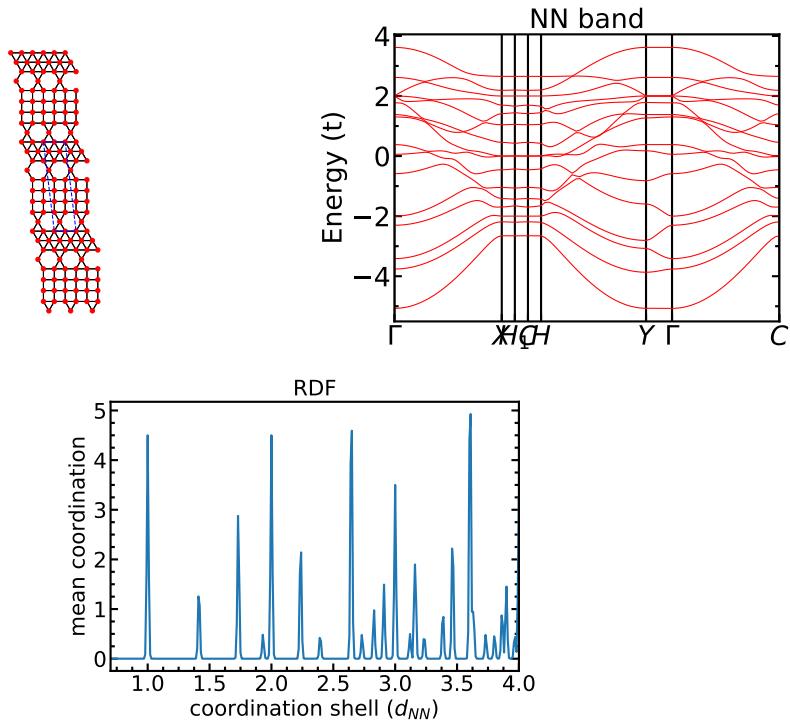


FIG. S175. t6175 lattice framework, nearest neighbors band structure and radial distribution function.

## t6176

Tiling reference number t6176 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S176. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S176.

TABLE S176. Tiling t6176 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

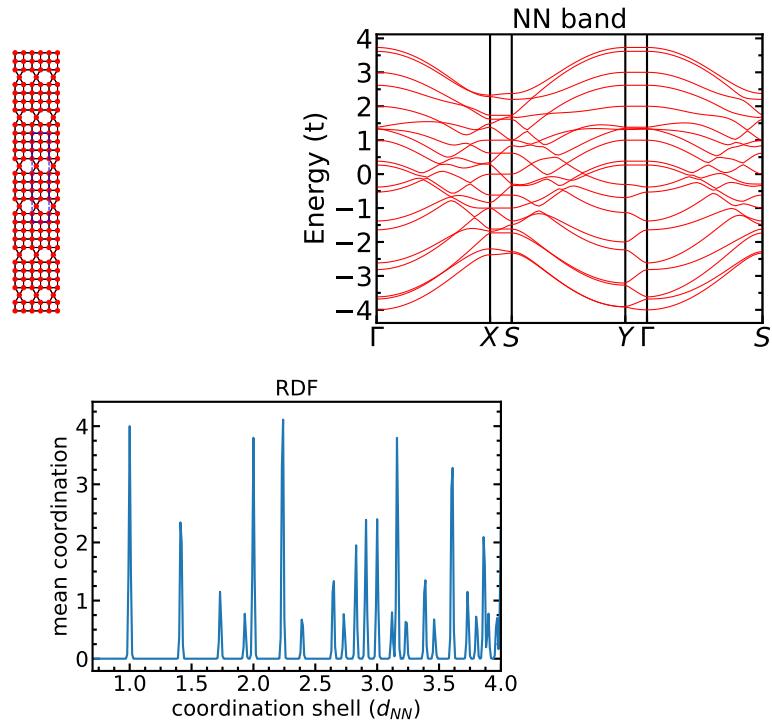


FIG. S176. t6176 lattice framework, nearest neighbors band structure and radial distribution function.

**t6177**

Tiling reference number t6177 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S177. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S177.

TABLE S177. Tiling t6177 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

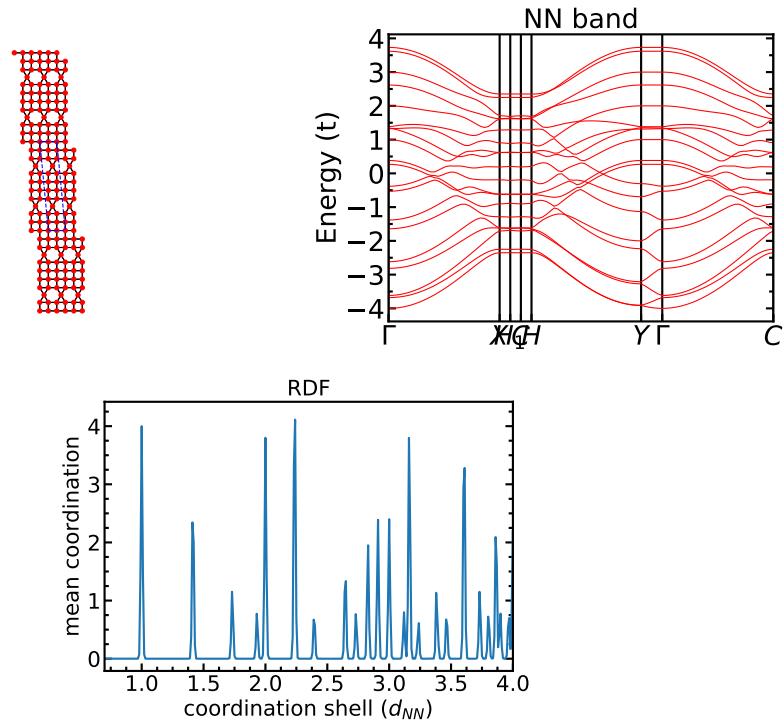


FIG. S177. t6177 lattice framework, nearest neighbors band structure and radial distribution function.

## t6178

Tiling reference number t6178 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S178. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S178.

TABLE S178. Tiling t6178 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	0	0	0	0	0	12	0

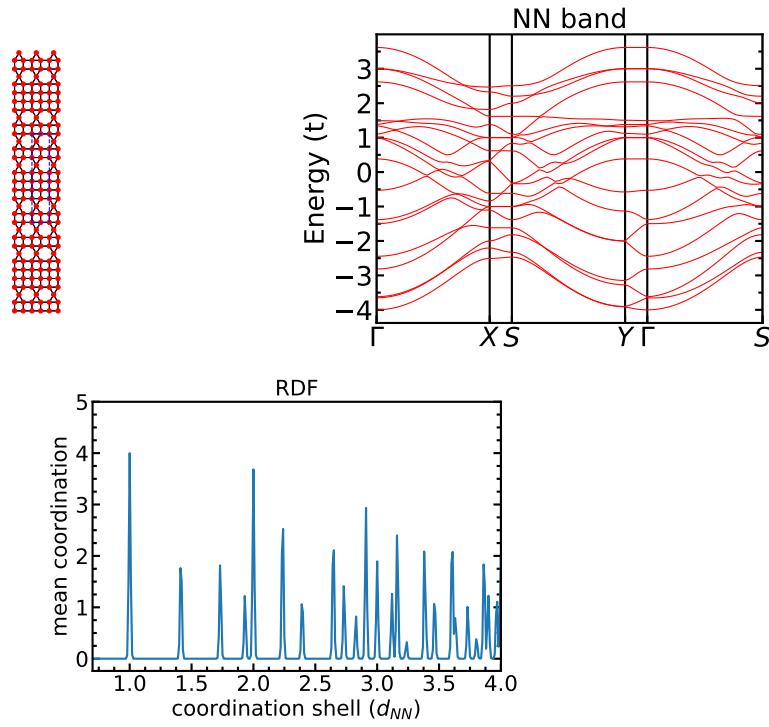


FIG. S178. t6178 lattice framework, nearest neighbors band structure and radial distribution function.

## t6179

Tiling reference number t6179 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S179. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S179.

TABLE S179. Tiling t6179 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	0	0	0	0	0	12	0

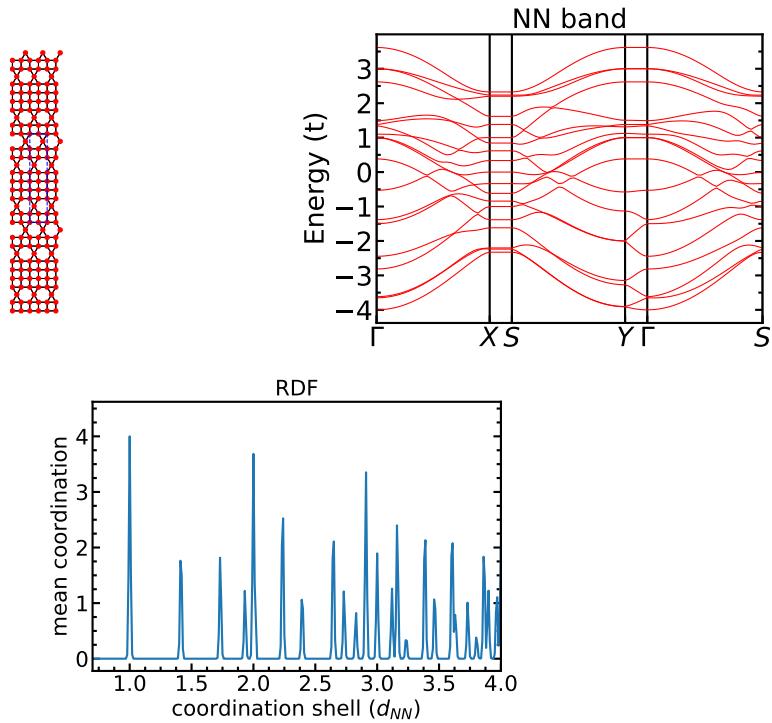


FIG. S179. t6179 lattice framework, nearest neighbors band structure and radial distribution function.

## t6180

Tiling reference number t6180 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S180. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S180.

TABLE S180. Tiling t6180 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	2	0	0	4	0	0	8	0

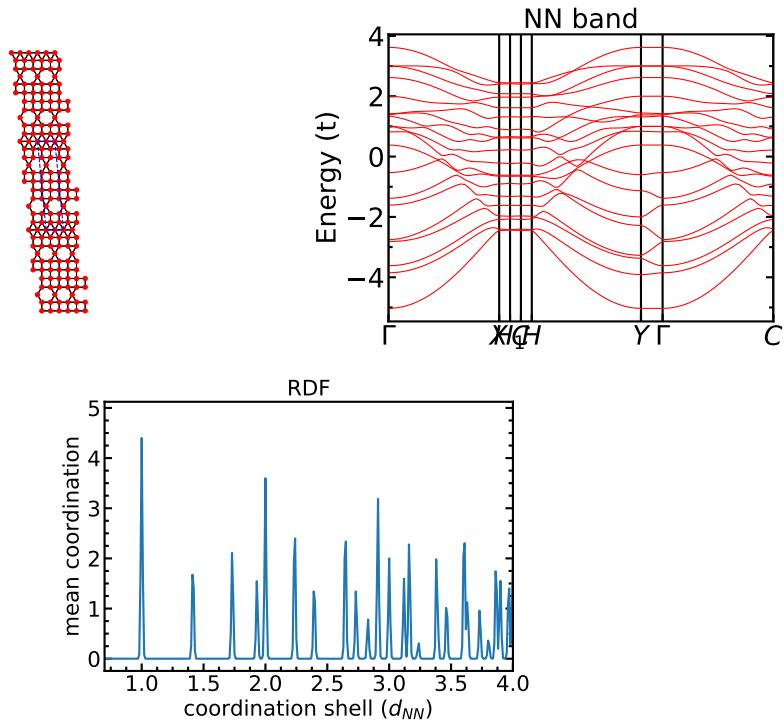


FIG. S180. t6180 lattice framework, nearest neighbors band structure and radial distribution function.

## t6181

Tiling reference number t6181 with space-group ' $Pmmm$ ' (47) and 20 sites in the unit cell, with vertex type indicated in Tab. S181. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S181.

TABLE S181. Tiling t6181 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	4	0	0	0	0	0	8	4

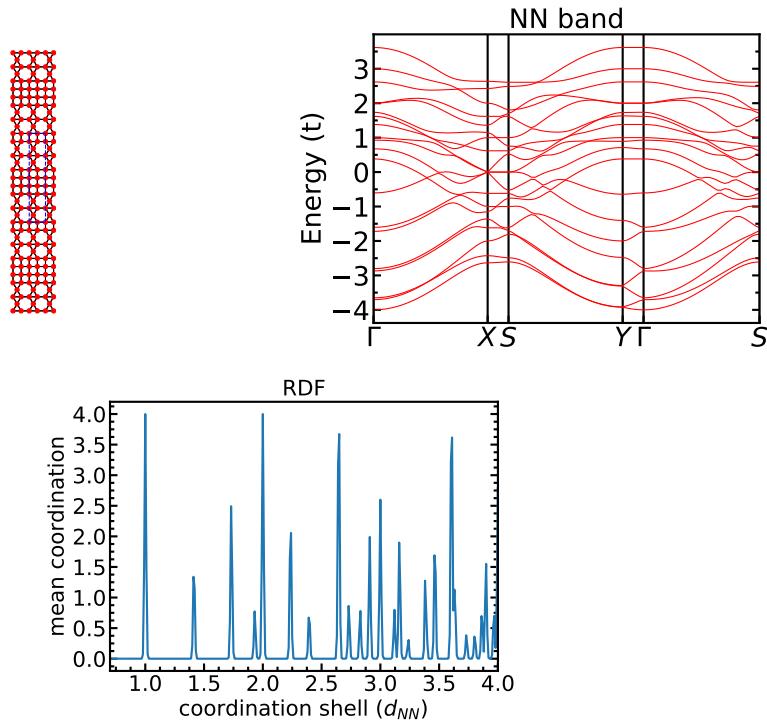


FIG. S181. t6181 lattice framework, nearest neighbors band structure and radial distribution function.

## t6182

Tiling reference number t6182 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S182. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S182.

TABLE S182. Tiling t6182 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	4	0	0	0	0	0	8	4

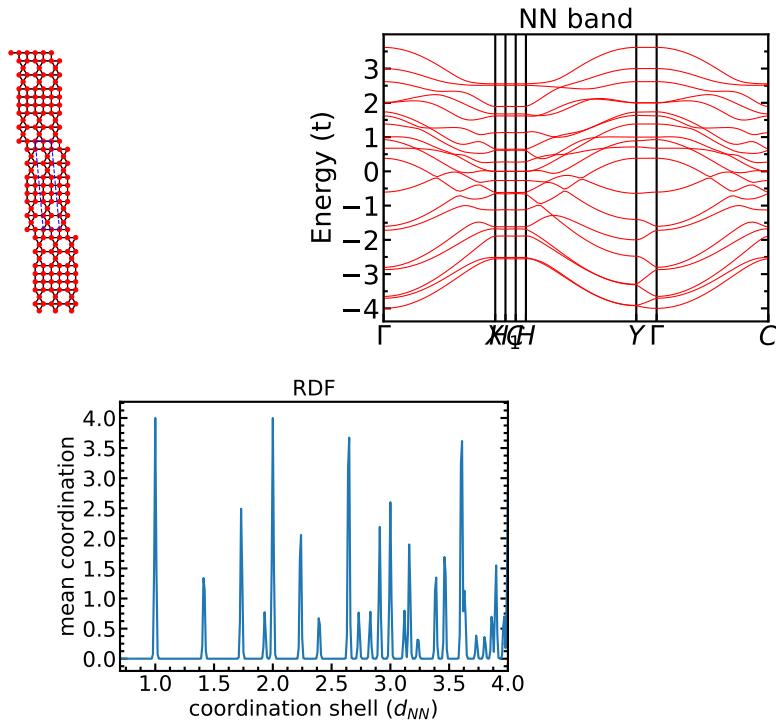


FIG. S182. t6182 lattice framework, nearest neighbors band structure and radial distribution function.

### t6183

Tiling reference number t6183 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S183. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S183.

TABLE S183. Tiling t6183 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	4	0	0	0	0	0	4	6

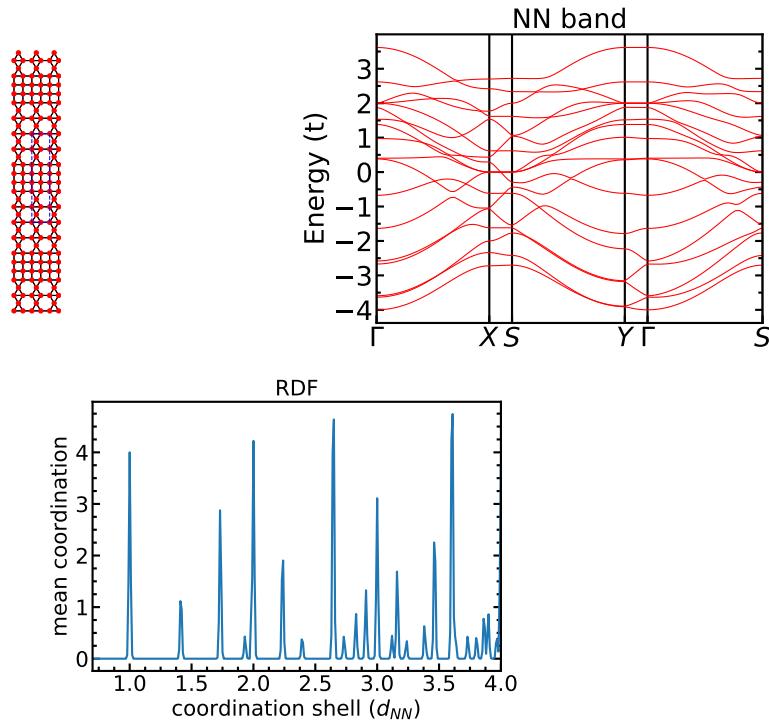


FIG. S183. t6183 lattice framework, nearest neighbors band structure and radial distribution function.

## t6184

Tiling reference number t6184 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S184. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S184.

TABLE S184. Tiling t6184 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	6	0	0	0	0	0	4	4

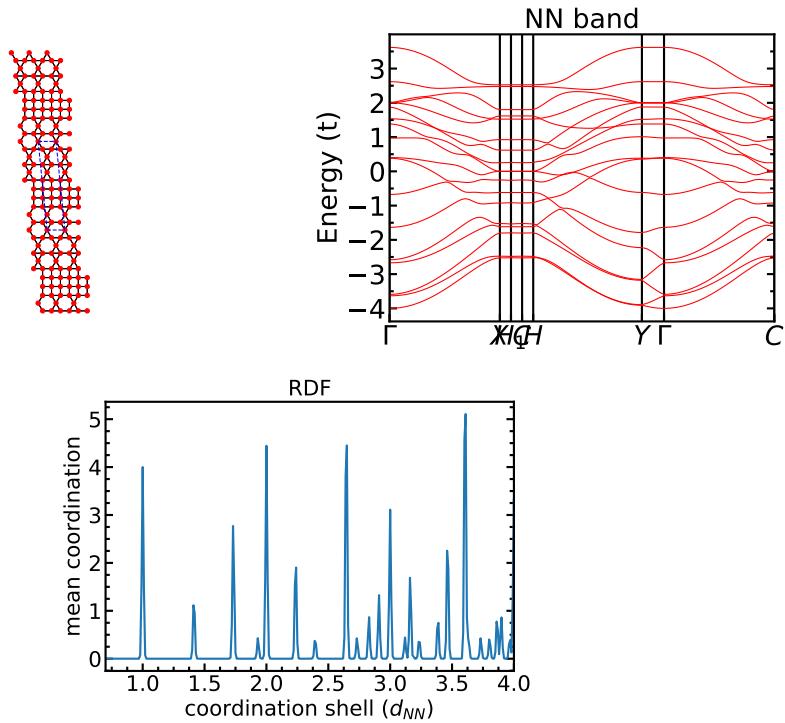


FIG. S184. t6184 lattice framework, nearest neighbors band structure and radial distribution function.

## t6185

Tiling reference number t6185 with space-group ' $Pmmm$ ' (47) and 20 sites in the unit cell, with vertex type indicated in Tab. S185. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S185.

TABLE S185. Tiling t6185 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	8	0	0	0	0	0	8	0

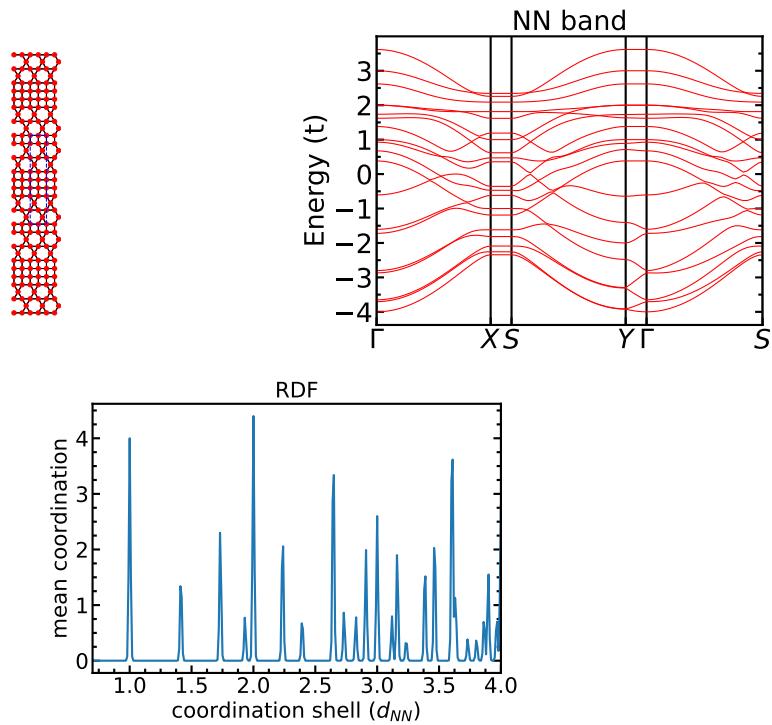


FIG. S185. t6185 lattice framework, nearest neighbors band structure and radial distribution function.

## t6186

Tiling reference number t6186 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S186. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S186.

TABLE S186. Tiling t6186 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	6	0	0	0	0	0	8	2

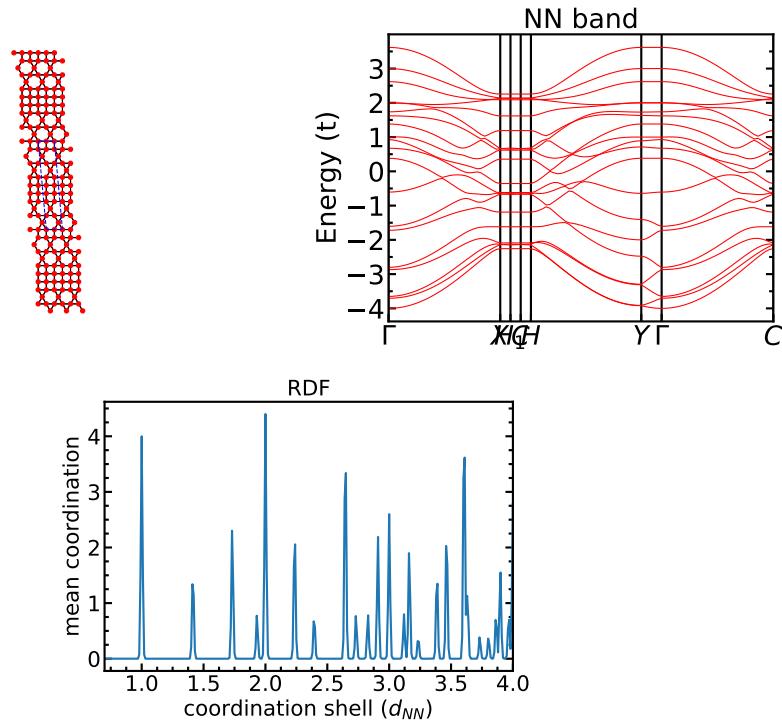


FIG. S186. t6186 lattice framework, nearest neighbors band structure and radial distribution function.

## t6187

Tiling reference number t6187 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S187. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S187.

TABLE S187. Tiling t6187 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	8	0	0	0	0	0	4	2

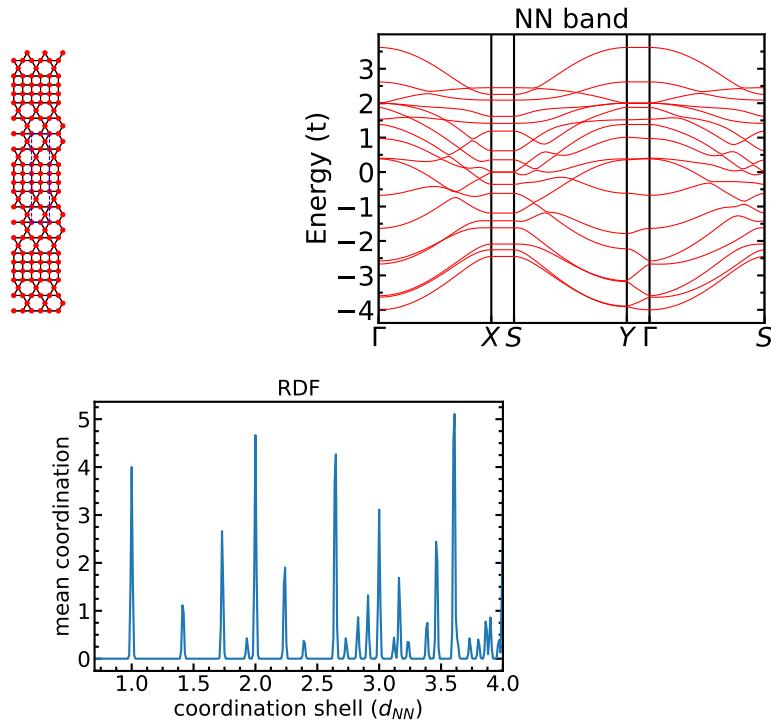


FIG. S187. t6187 lattice framework, nearest neighbors band structure and radial distribution function.

## t6188

Tiling reference number t6188 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S188. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S188.

TABLE S188. Tiling t6188 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	10	0	0	0	0	0	4	0

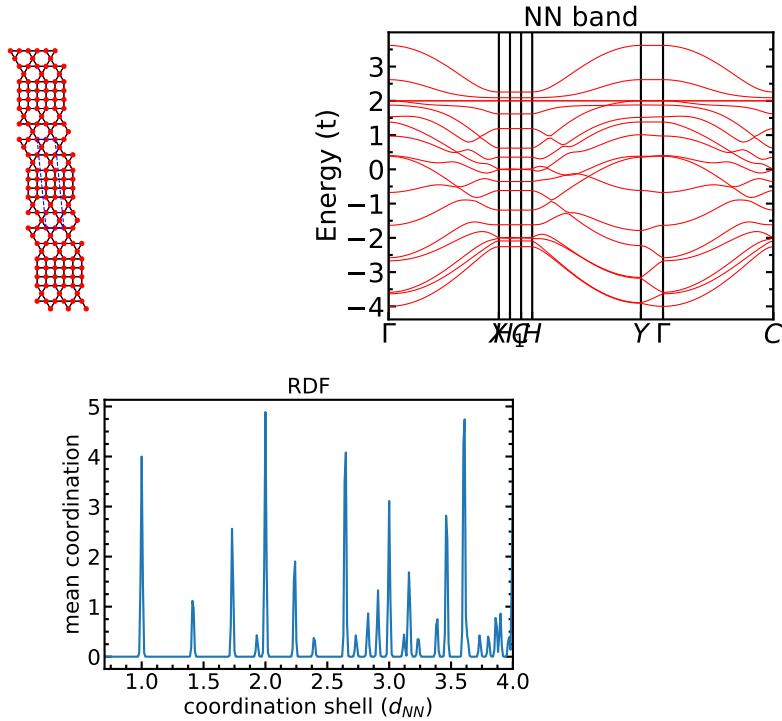


FIG. S188. t6188 lattice framework, nearest neighbors band structure and radial distribution function.

## t6189

Tiling reference number t6189 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S189. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S189.

TABLE S189. Tiling t6189 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	4	0	4	0	0	4	0

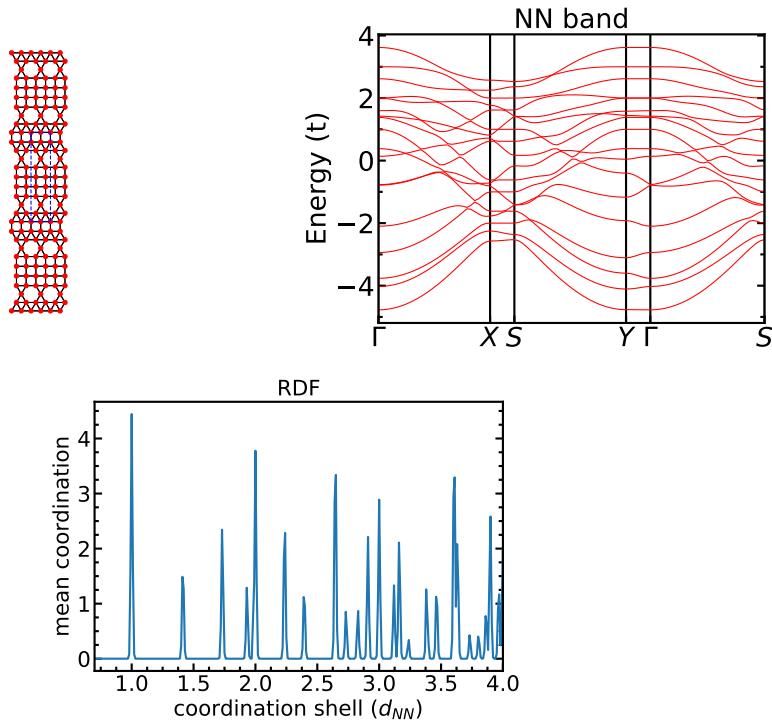


FIG. S189. t6189 lattice framework, nearest neighbors band structure and radial distribution function.

## t6190

Tiling reference number t6190 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S190. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S190.

TABLE S190. Tiling t6190 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	4	0	4	0	0	4	0

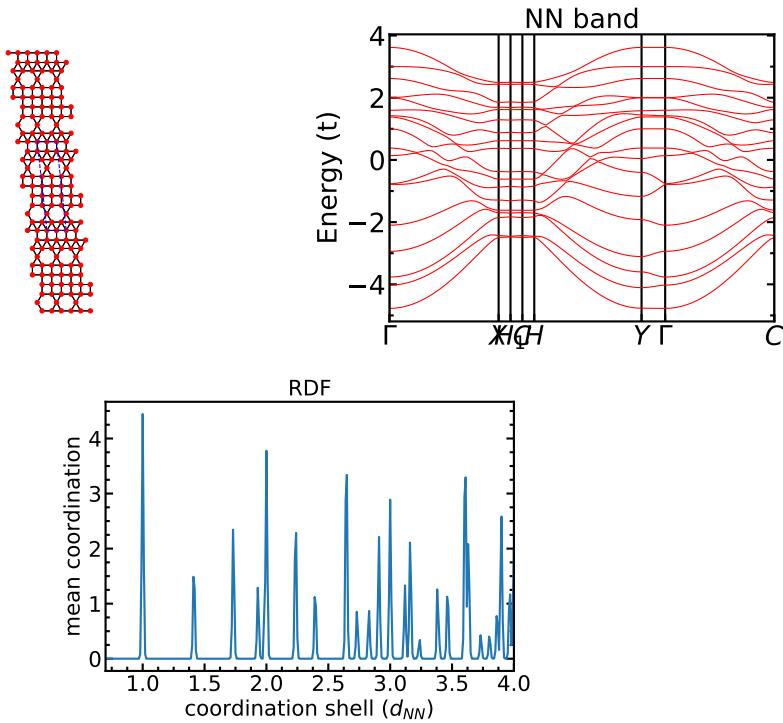


FIG. S190. t6190 lattice framework, nearest neighbors band structure and radial distribution function.

## t6191

Tiling reference number t6191 with space-group ' $Pmmm$ ' (47) and 16 sites in the unit cell, with vertex type indicated in Tab. S191. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S191.

TABLE S191. Tiling t6191 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	2	4	0	0	0	0	4	0

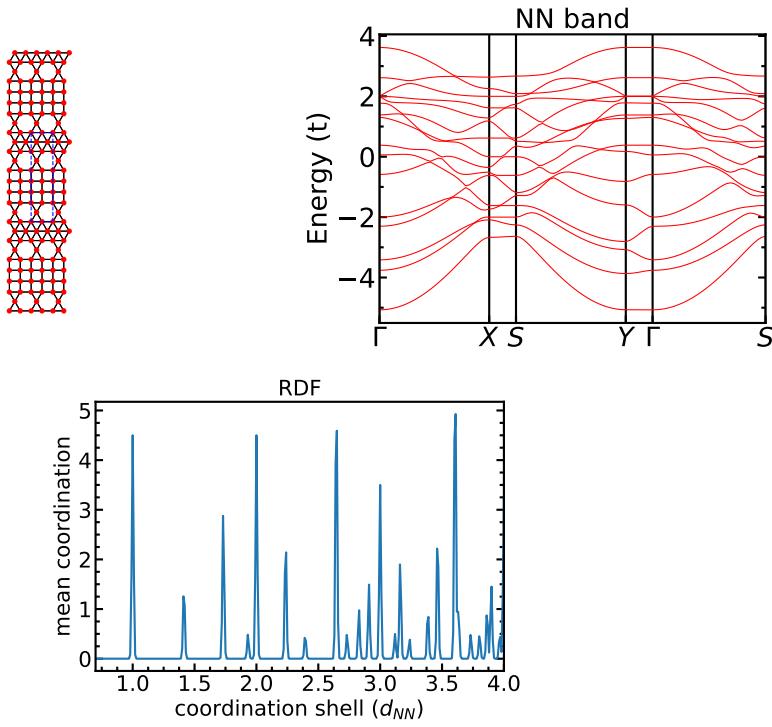


FIG. S191. t6191 lattice framework, nearest neighbors band structure and radial distribution function.

## t6192

Tiling reference number t6192 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S192. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S192.

TABLE S192. Tiling t6192 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	7	0	0	0	0	0	0	0	0	4	0	0	0	0

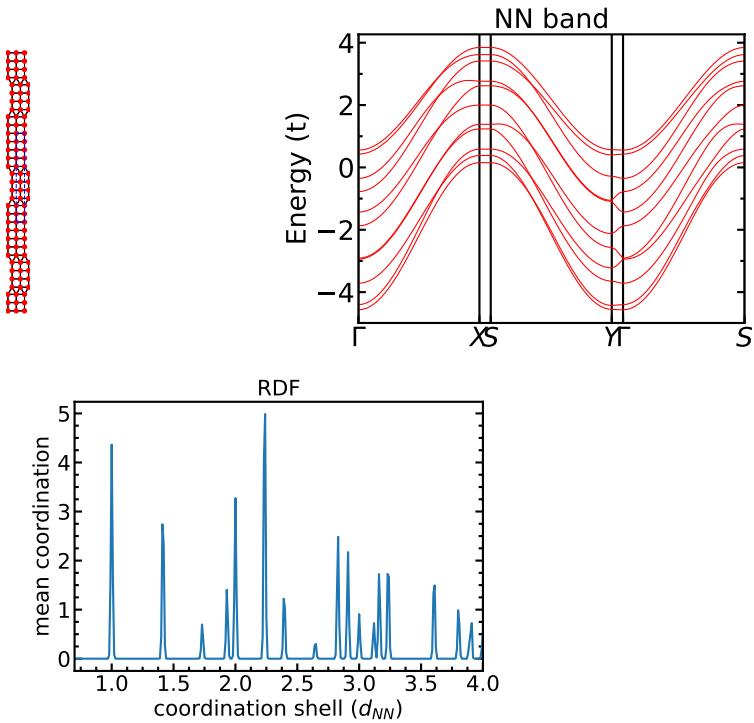


FIG. S192. t6192 lattice framework, nearest neighbors band structure and radial distribution function.

### t6193

Tiling reference number t6193 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S193. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S193.

TABLE S193. Tiling t6193 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	0	0	0	8	0	0	0	0

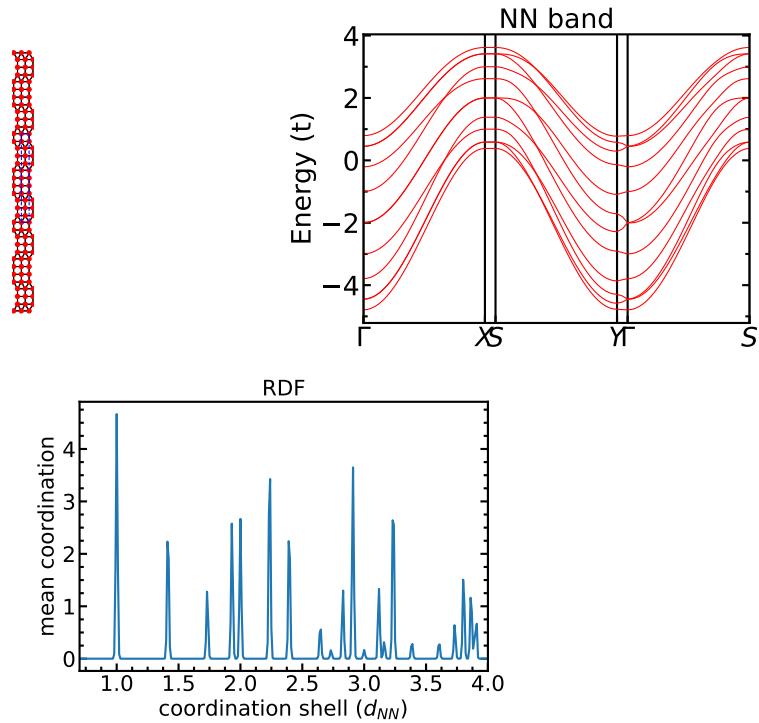


FIG. S193. t6193 lattice framework, nearest neighbors band structure and radial distribution function.

## t6194

Tiling reference number t6194 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S194. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S194.

TABLE S194. Tiling t6194 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	4	0	0	0	0	0	0	0	0	6	0	0	0	0

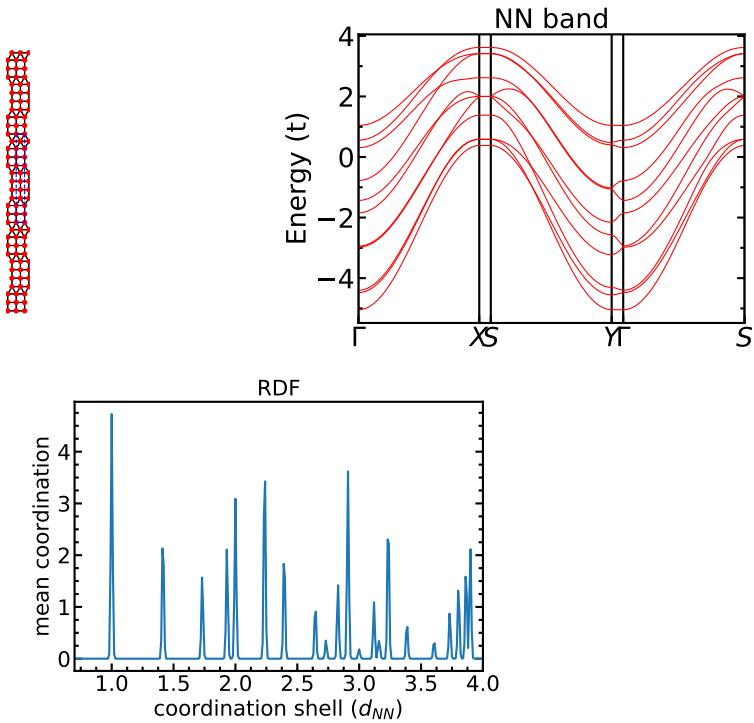


FIG. S194. t6194 lattice framework, nearest neighbors band structure and radial distribution function.

## t6195

Tiling reference number t6195 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S195. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S195.

TABLE S195. Tiling t6195 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	0	0	6	0	0	0	0

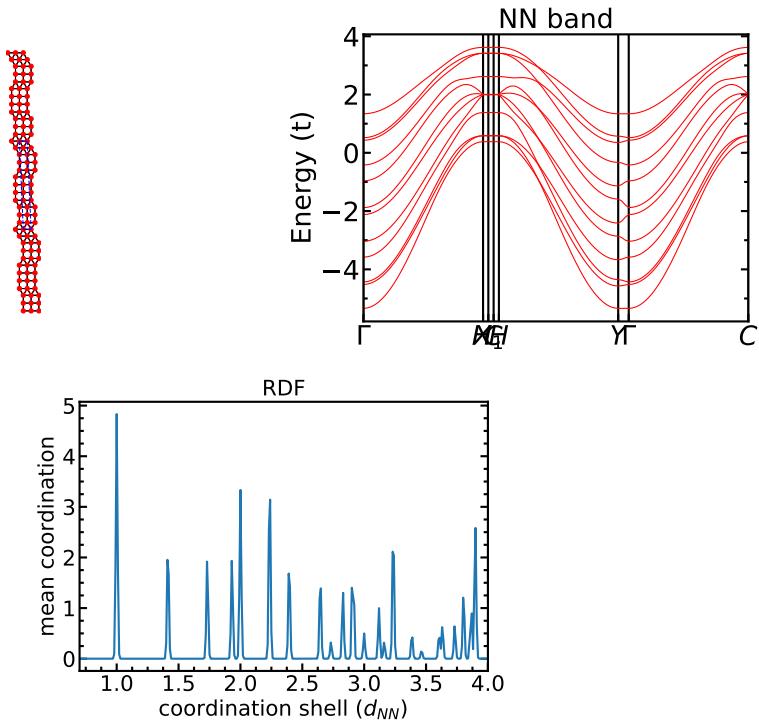


FIG. S195. t6195 lattice framework, nearest neighbors band structure and radial distribution function.

## t6196

Tiling reference number t6196 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S196. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S196.

TABLE S196. Tiling t6196 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	3	0	0	0	0	0	0	0	0	8	0	0	0	0

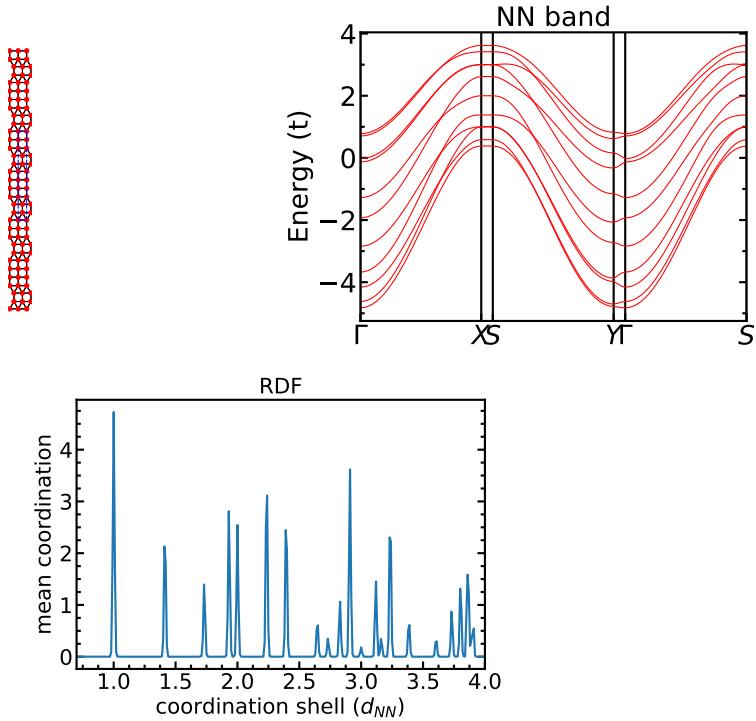


FIG. S196. t6196 lattice framework, nearest neighbors band structure and radial distribution function.

## t6197

Tiling reference number t6197 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S197. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S197.

TABLE S197. Tiling t6197 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	0	0	0	10	0	0	0	0

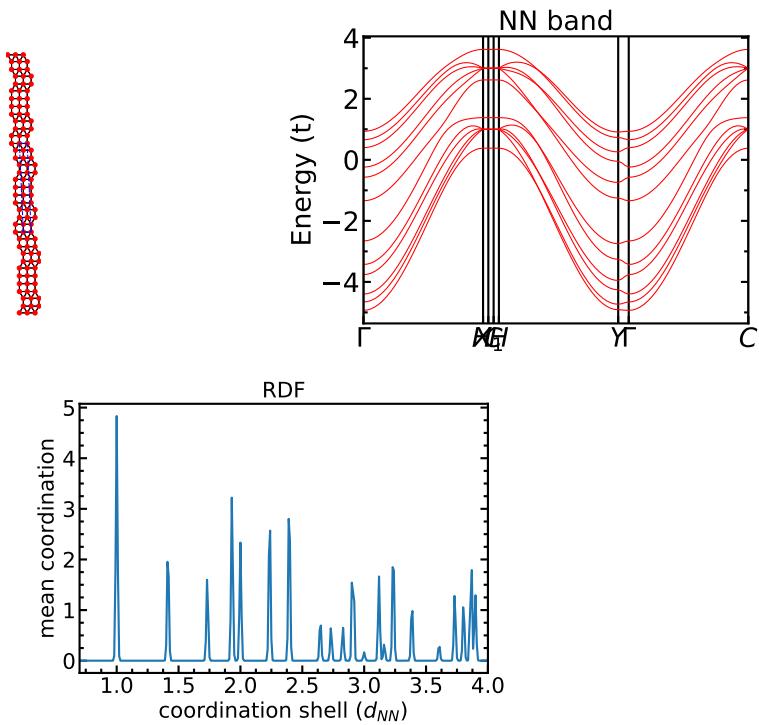


FIG. S197. t6197 lattice framework, nearest neighbors band structure and radial distribution function.

## t6198

Tiling reference number t6198 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S198. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S198.

TABLE S198. Tiling t6198 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	0	0	0	8	0	0	0	0

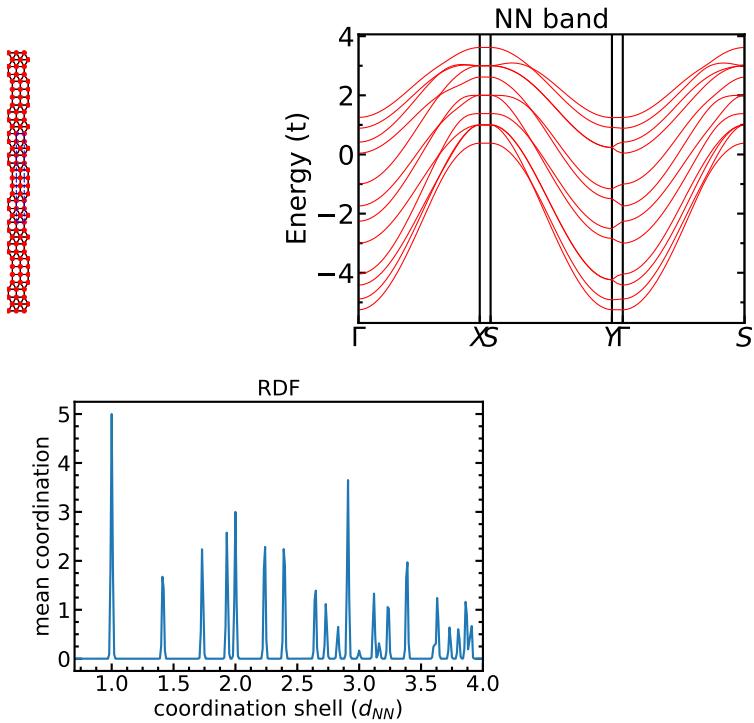


FIG. S198. t6198 lattice framework, nearest neighbors band structure and radial distribution function.

## t6199

Tiling reference number t6199 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S199. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S199.

TABLE S199. Tiling t6199 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	2	0	0	0	0	0	0	0	0	6	0	0	0	0

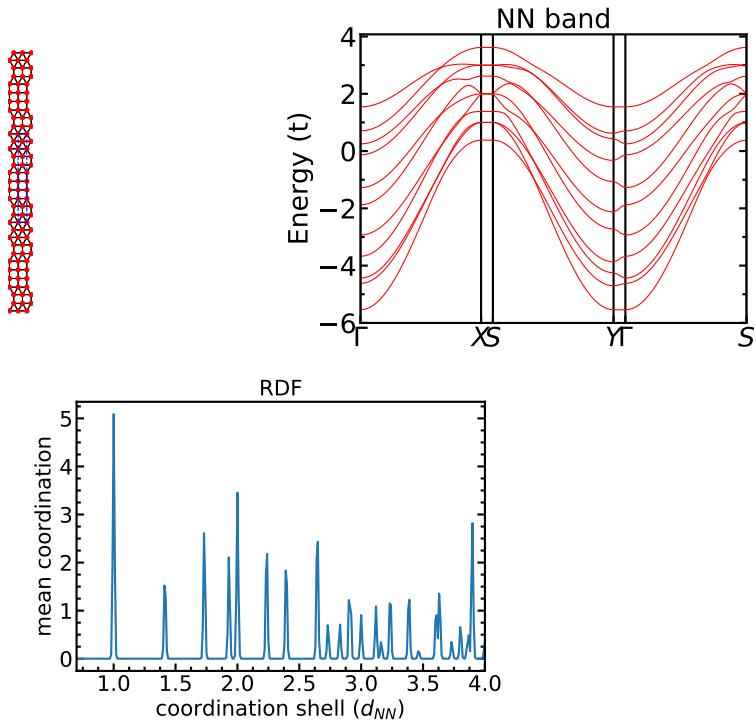


FIG. S199. t6199 lattice framework, nearest neighbors band structure and radial distribution function.

## t6200

Tiling reference number t6200 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S200. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S200.

TABLE S200. Tiling t6200 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	0	0	0	6	0	0	0	0

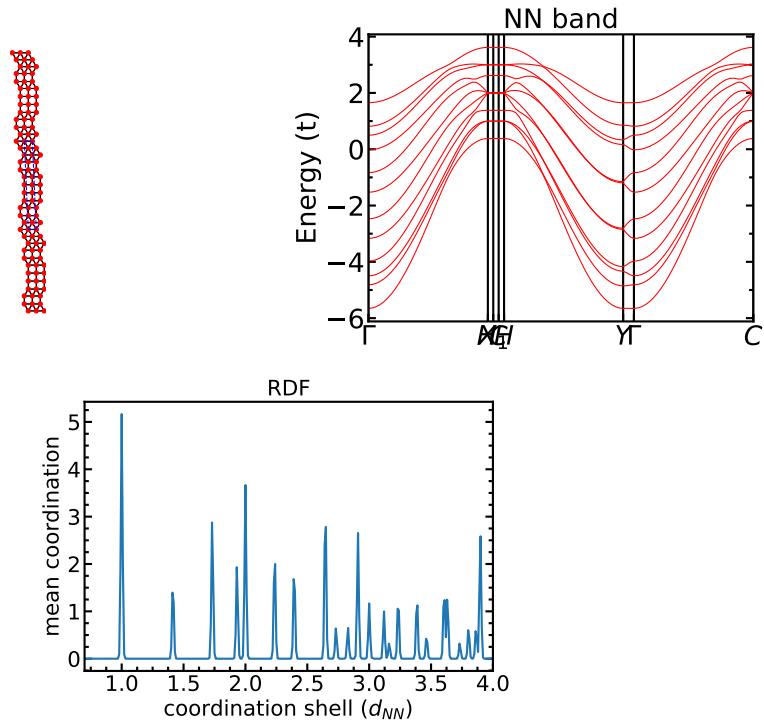


FIG. S200. t6200 lattice framework, nearest neighbors band structure and radial distribution function.

## t6201

Tiling reference number t6201 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S201. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S201.

TABLE S201. Tiling t6201 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	5	0	0	0	0	0	0	0	0	4	0	0	0	0

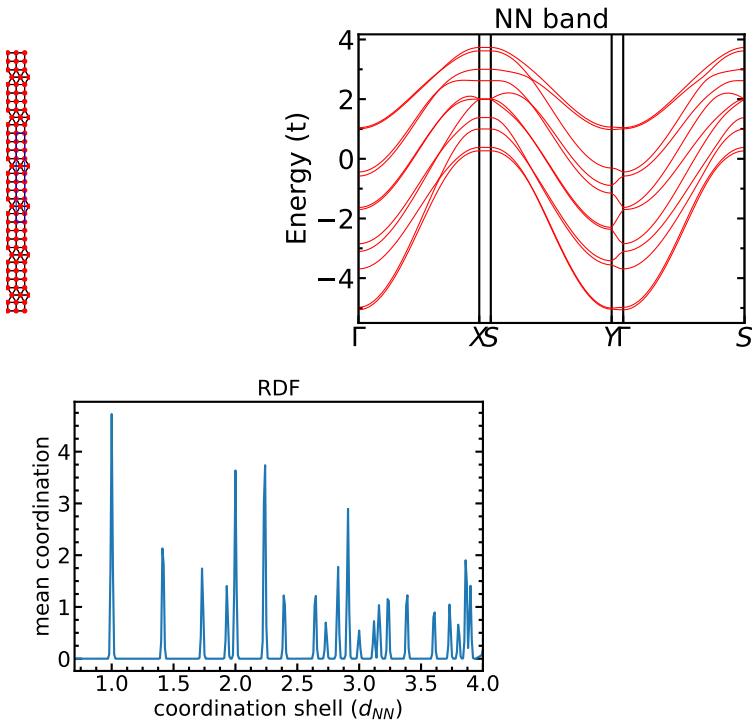


FIG. S201. t6201 lattice framework, nearest neighbors band structure and radial distribution function.

## t6202

Tiling reference number t6202 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S202. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S202.

TABLE S202. Tiling t6202 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	0	0	6	0	0	0	0

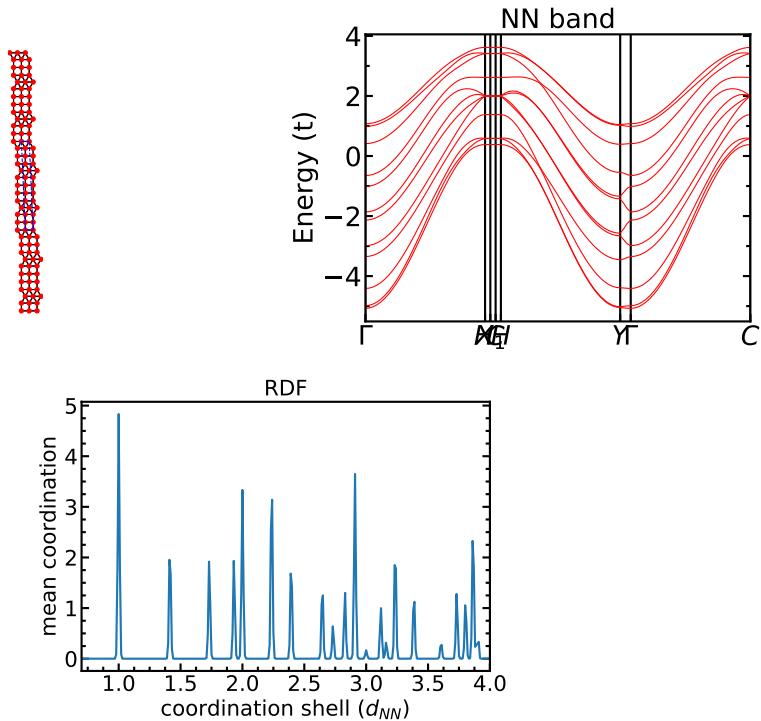


FIG. S202. t6202 lattice framework, nearest neighbors band structure and radial distribution function.

## t6203

Tiling reference number t6203 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S203. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S203.

TABLE S203. Tiling t6203 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	0	0	0	8	0	0	0	0

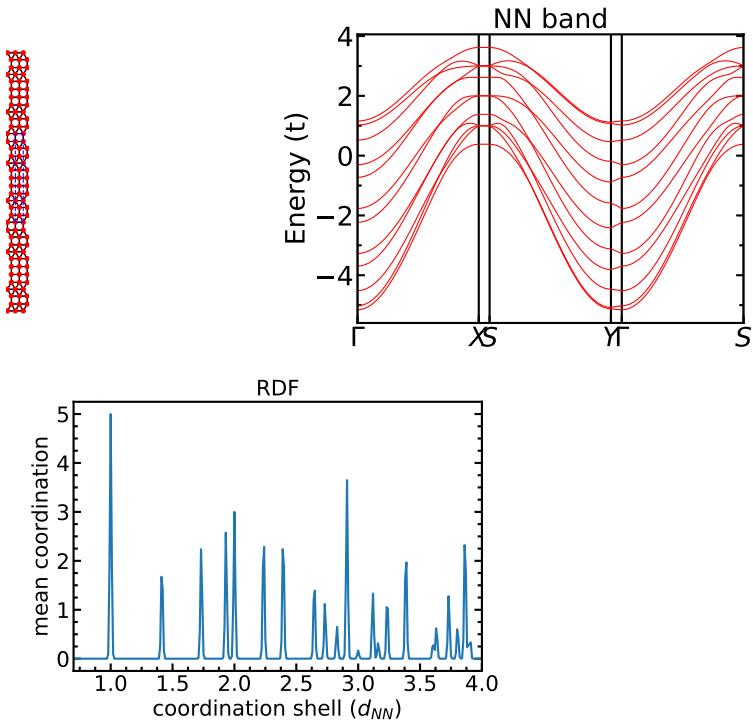


FIG. S203. t6203 lattice framework, nearest neighbors band structure and radial distribution function.

## t6204

Tiling reference number t6204 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S204. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S204.

TABLE S204. Tiling t6204 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	2	0	0	0	0	0	0	0	0	6	0	0	0	0

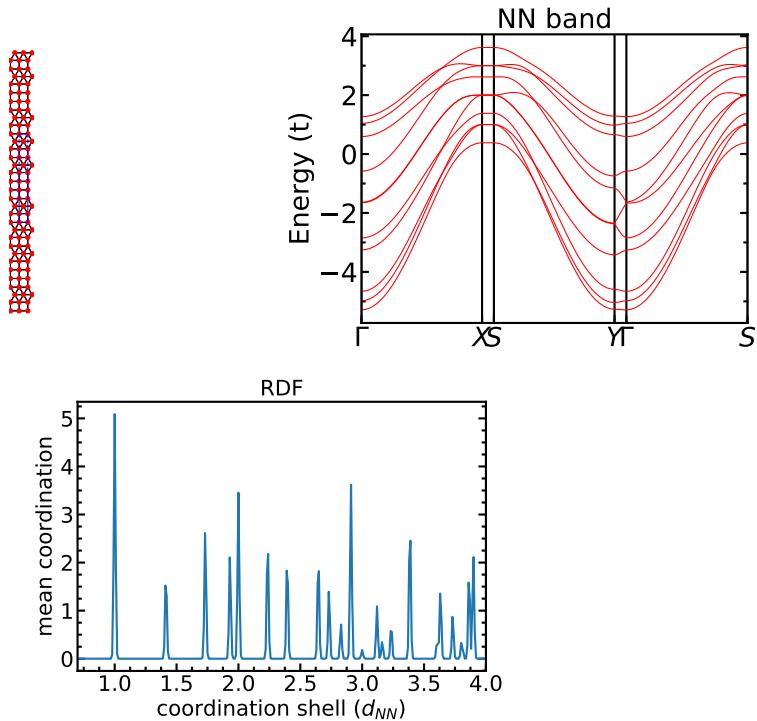


FIG. S204. t6204 lattice framework, nearest neighbors band structure and radial distribution function.

## t6205

Tiling reference number t6205 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S205. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S205.

TABLE S205. Tiling t6205 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	0	0	0	6	0	0	0	0

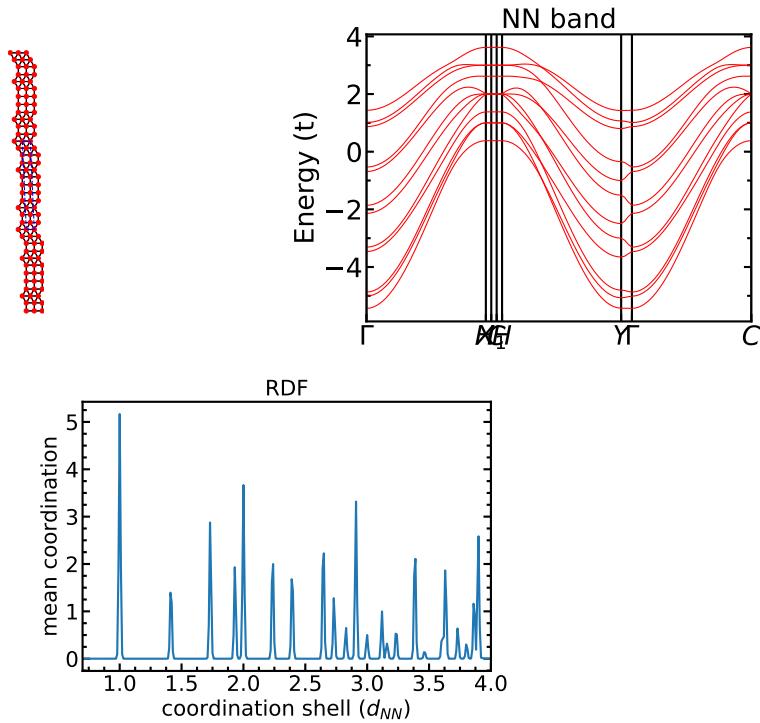


FIG. S205. t6205 lattice framework, nearest neighbors band structure and radial distribution function.

## t6206

Tiling reference number t6206 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S206. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S206.

TABLE S206. Tiling t6206 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	3	0	0	0	0	0	0	0	0	4	0	0	0	0

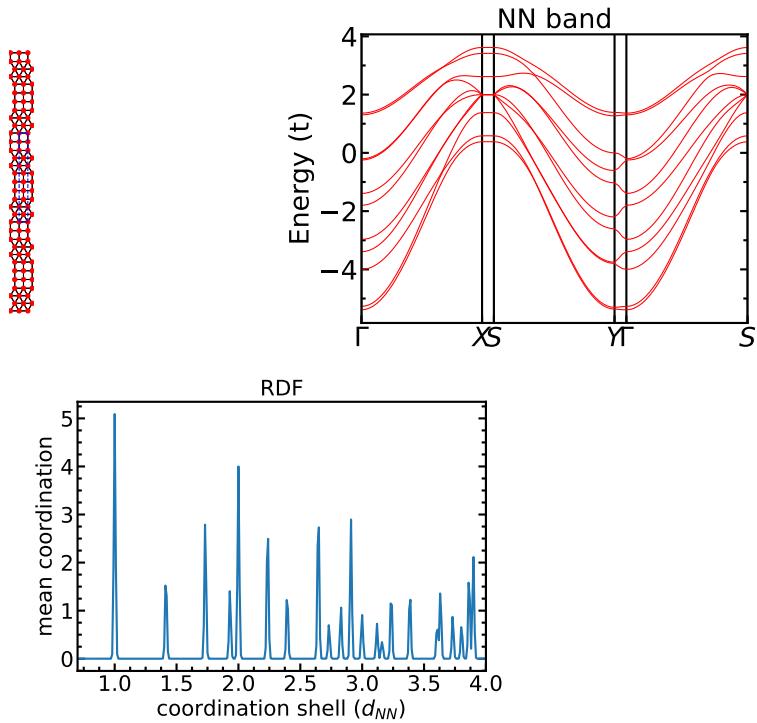


FIG. S206. t6206 lattice framework, nearest neighbors band structure and radial distribution function.

## t6207

Tiling reference number t6207 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S207. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S207.

TABLE S207. Tiling t6207 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	0	0	0	6	0	0	0	0

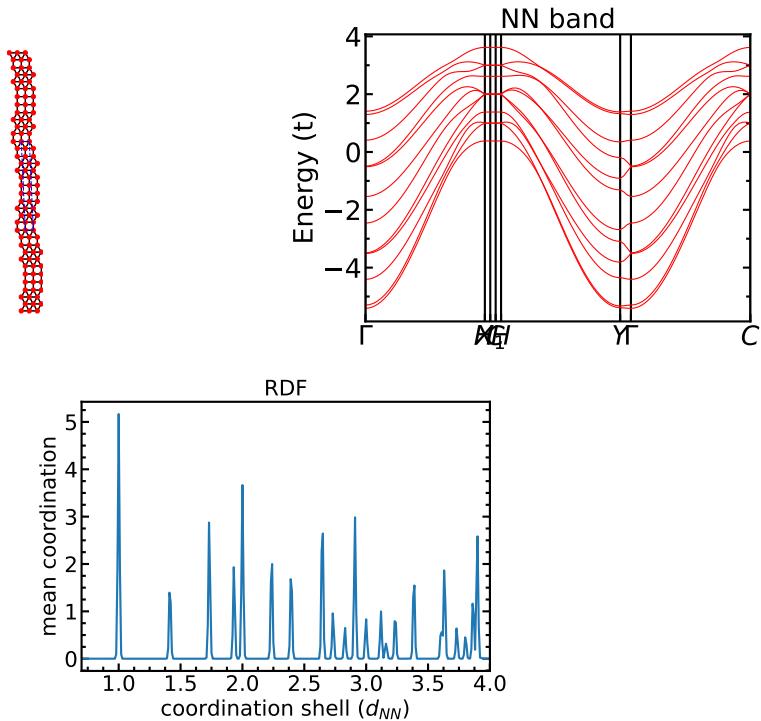


FIG. S207. t6207 lattice framework, nearest neighbors band structure and radial distribution function.

## t6208

Tiling reference number t6208 with space-group ' $Pmmm$ ' (47) and 12 sites in the unit cell, with vertex type indicated in Tab. S208. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S208.

TABLE S208. Tiling t6208 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	2	0	0	0	0	0	0	0	0	4	0	0	0	0

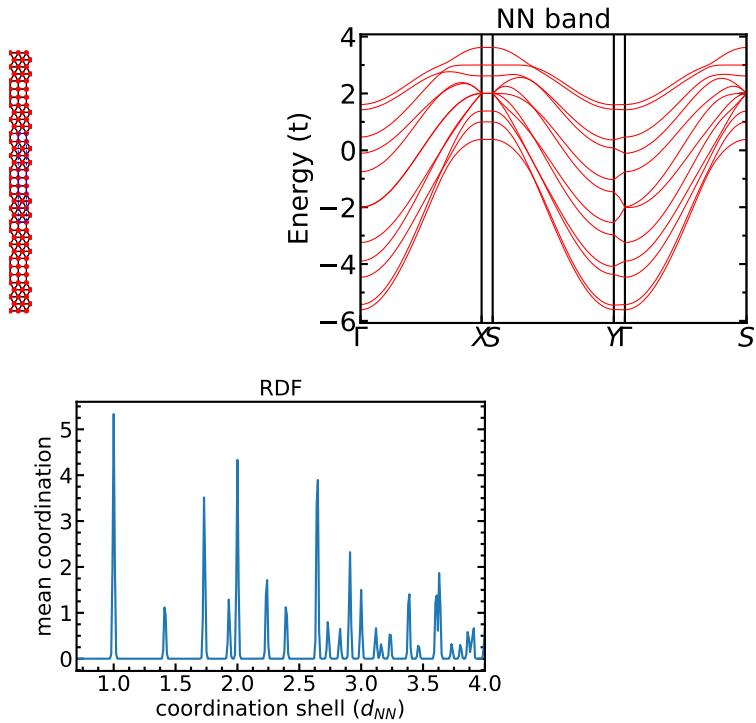


FIG. S208. t6208 lattice framework, nearest neighbors band structure and radial distribution function.

## t6209

Tiling reference number t6209 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S209. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S209.

TABLE S209. Tiling t6209 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	2	0	0	0	0	0	0	0	0	2	0	0	0	0

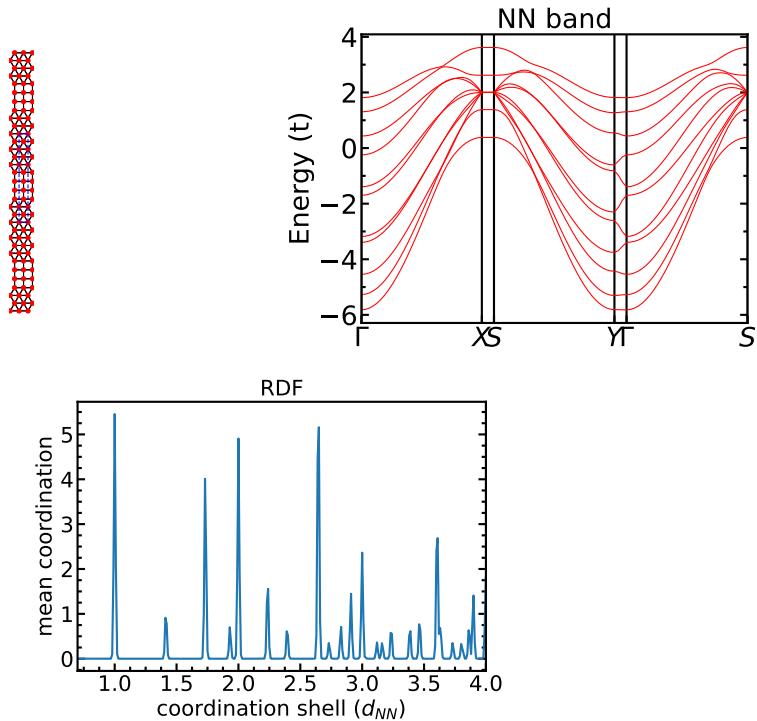


FIG. S209. t6209 lattice framework, nearest neighbors band structure and radial distribution function.

## t6210

Tiling reference number t6210 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S210. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S210.

TABLE S210. Tiling t6210 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	2	0	0	0	0	0	0	0	0	2	0	0	0	0

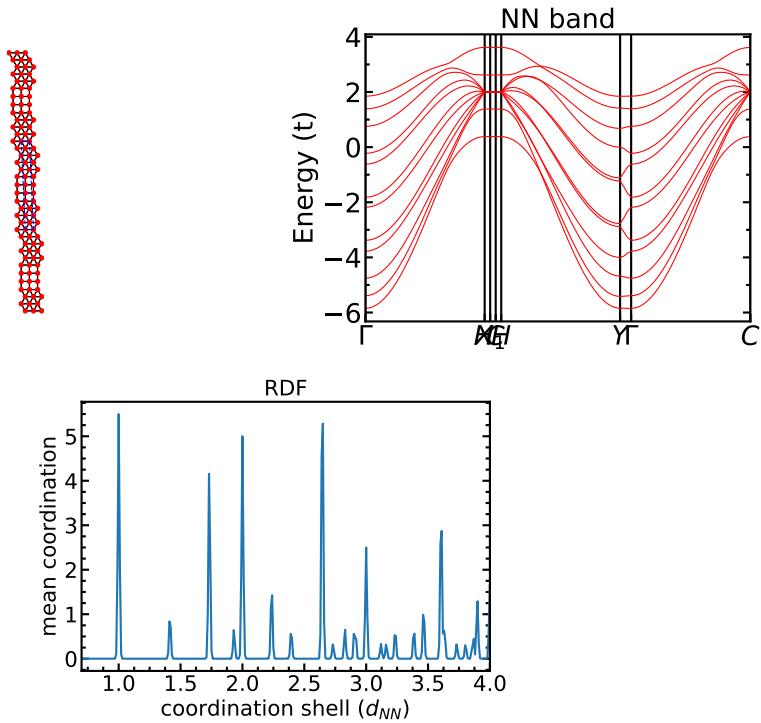


FIG. S210. t6210 lattice framework, nearest neighbors band structure and radial distribution function.

## t6211

Tiling reference number t6211 with space-group ' $Cmmm$ ' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S211. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S211.

TABLE S211. Tiling t6211 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	4	0	0	0	0	0	1	4	0	4	0	0	0	0

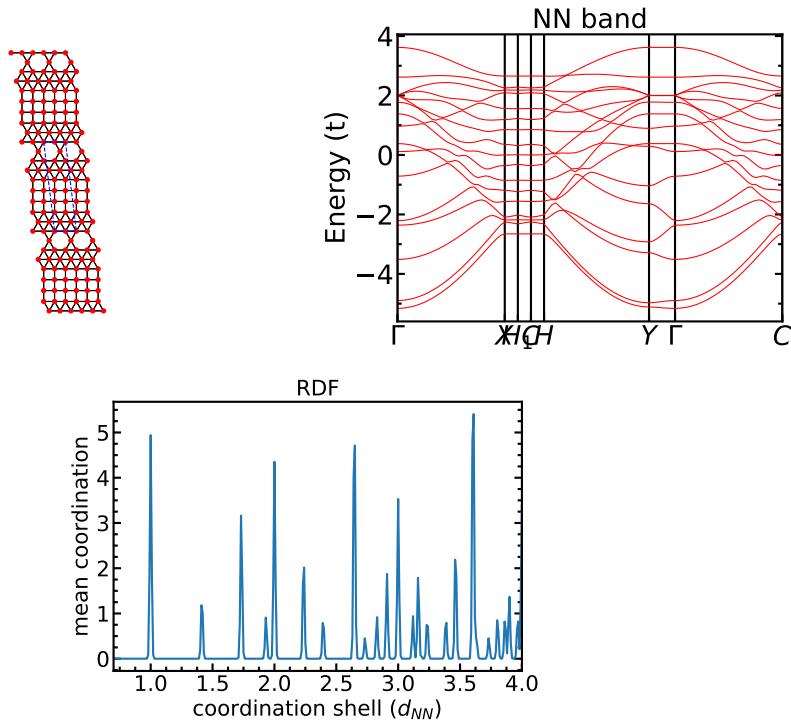


FIG. S211. t6211 lattice framework, nearest neighbors band structure and radial distribution function.

## t6212

Tiling reference number t6212 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S212. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S212.

TABLE S212. Tiling t6212 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	4	0	0	0	0	0	1	4	0	4	0	0	0	0

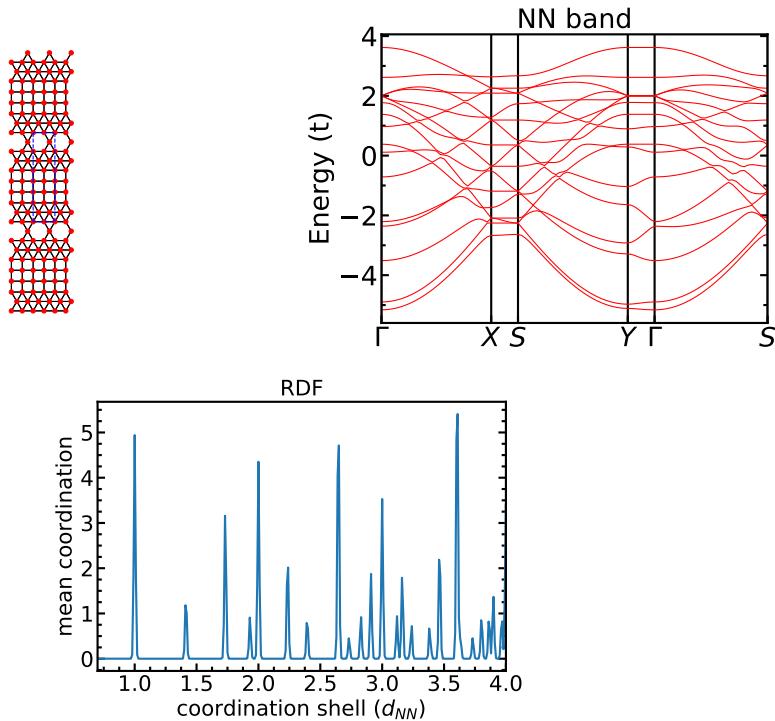


FIG. S212. t6212 lattice framework, nearest neighbors band structure and radial distribution function.

## t6213

Tiling reference number t6213 with space-group ' $Pmmm$ ' (47) and 19 sites in the unit cell, with vertex type indicated in Tab. S213. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S213.

TABLE S213. Tiling t6213 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	8	0	0	0	0	0	0	2	0	4	0	0	4	0

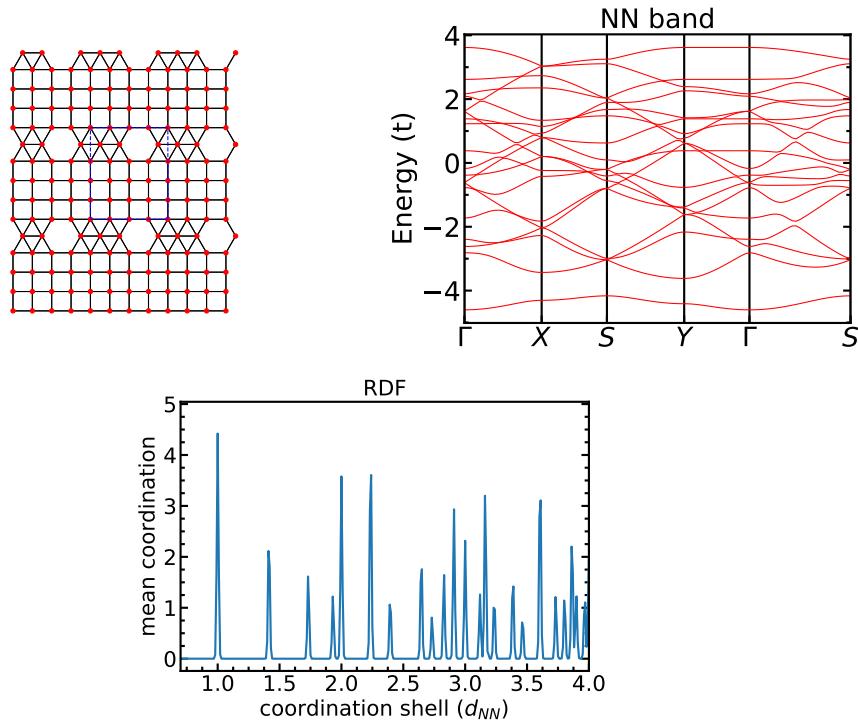


FIG. S213. t6213 lattice framework, nearest neighbors band structure and radial distribution function.

## t6214

Tiling reference number t6214 with space-group '*Amm2'* (38) and 54 sites in the unit cell, with vertex type indicated in Tab. S214. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S214.

TABLE S214. Tiling t6214 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	6	12	0	0	0	0	0	24	0

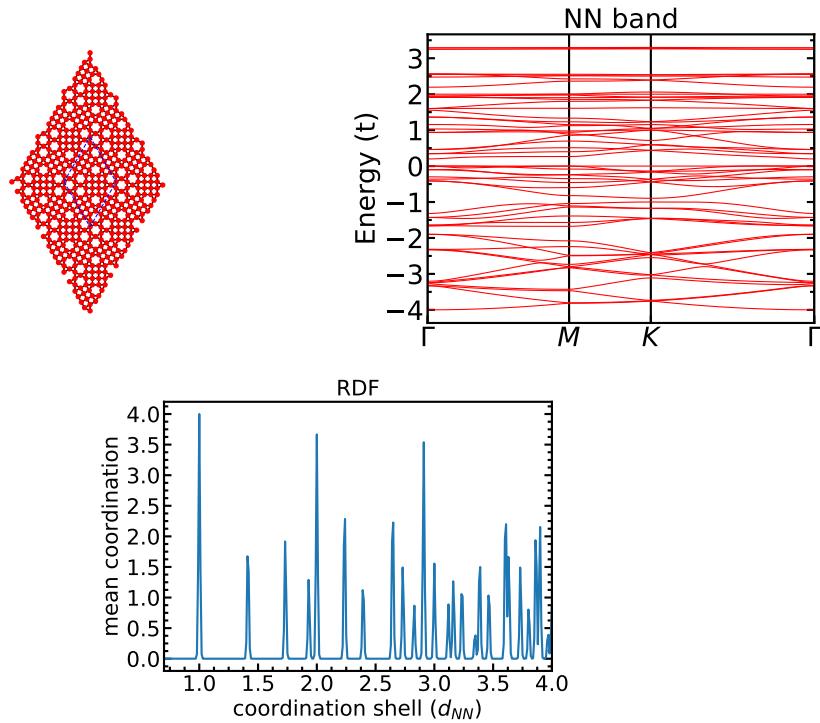


FIG. S214. t6214 lattice framework, nearest neighbors band structure and radial distribution function.

## t6215

Tiling reference number t6215 with space-group '*Amm2'* (38) and 36 sites in the unit cell, with vertex type indicated in Tab. S215. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S215.

TABLE S215. Tiling t6215 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	8	0	0	0	0	0	0	0	4	16	0	0	0	0

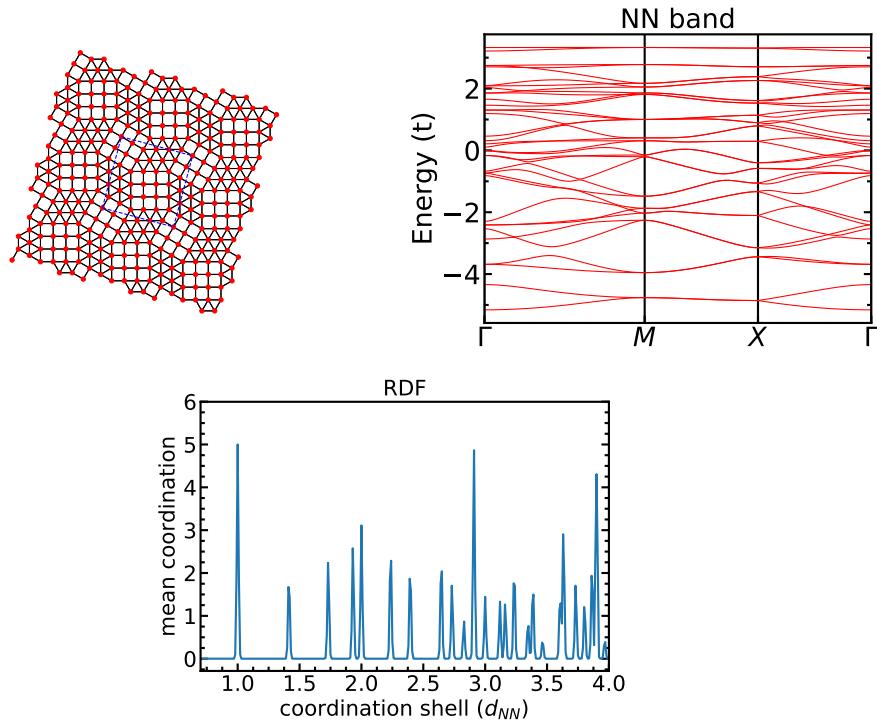


FIG. S215. t6215 lattice framework, nearest neighbors band structure and radial distribution function.

## t6216

Tiling reference number t6216 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S216. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S216.

TABLE S216. Tiling t6216 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	9	0	0	0	0	0	0	0	0	2	0	0	0	0

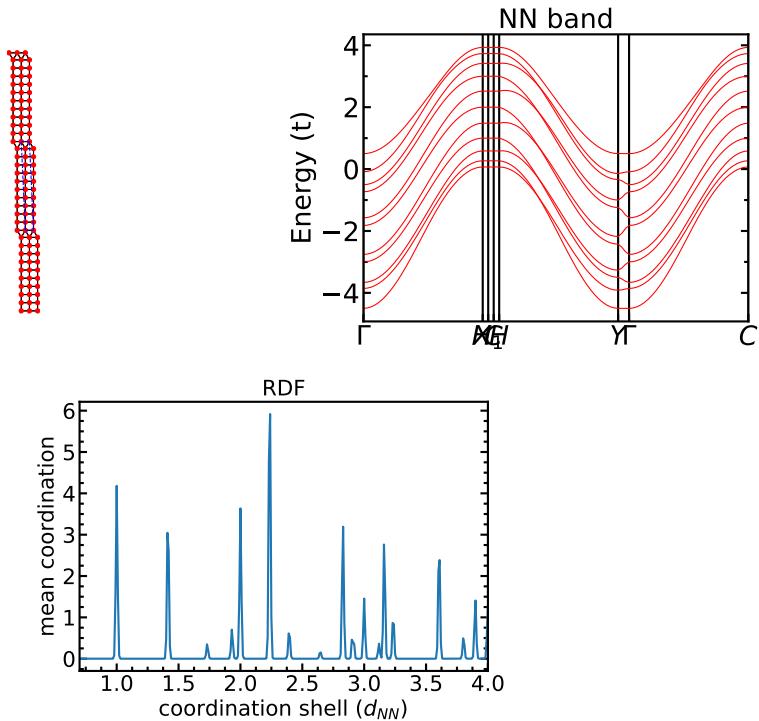


FIG. S216. t6216 lattice framework, nearest neighbors band structure and radial distribution function.

## t6217

Tiling reference number t6217 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S217. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S217.

TABLE S217. Tiling t6217 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	14	0	0	0	0	0	1	0	0	0	0	0	4	0

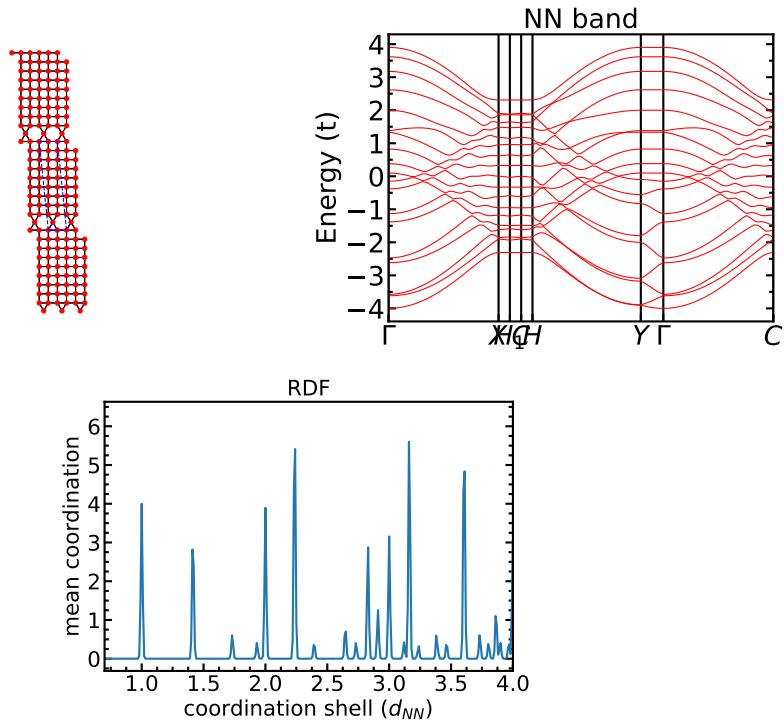


FIG. S217. t6217 lattice framework, nearest neighbors band structure and radial distribution function.

## t6218

Tiling reference number t6218 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S218. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S218.

TABLE S218. Tiling t6218 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	14	0	0	0	0	0	1	0	0	0	0	0	4	0

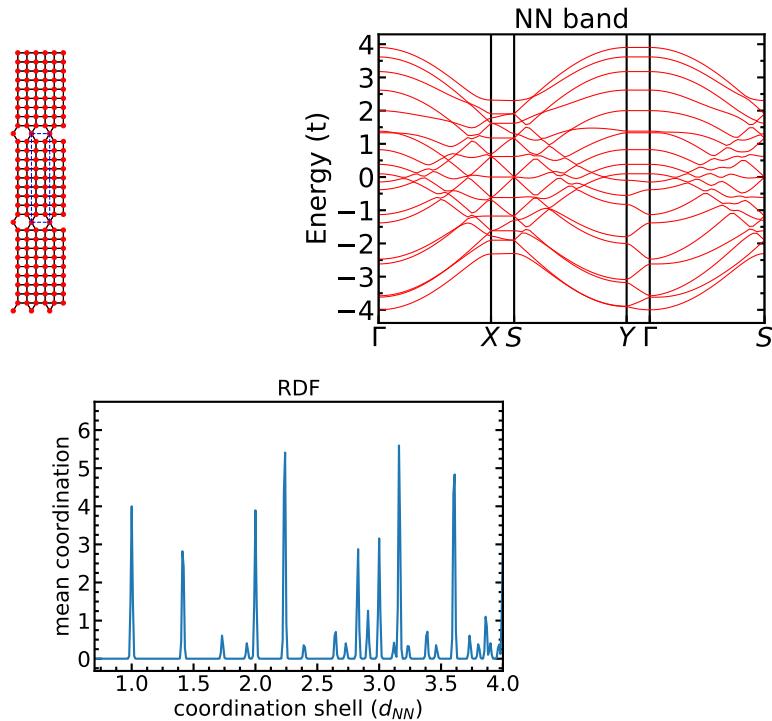


FIG. S218. t6218 lattice framework, nearest neighbors band structure and radial distribution function.

## t6219

Tiling reference number t6219 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S219. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S219.

TABLE S219. Tiling t6219 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	7	0	0	0	0	0	0	0	0	4	0	0	0	0

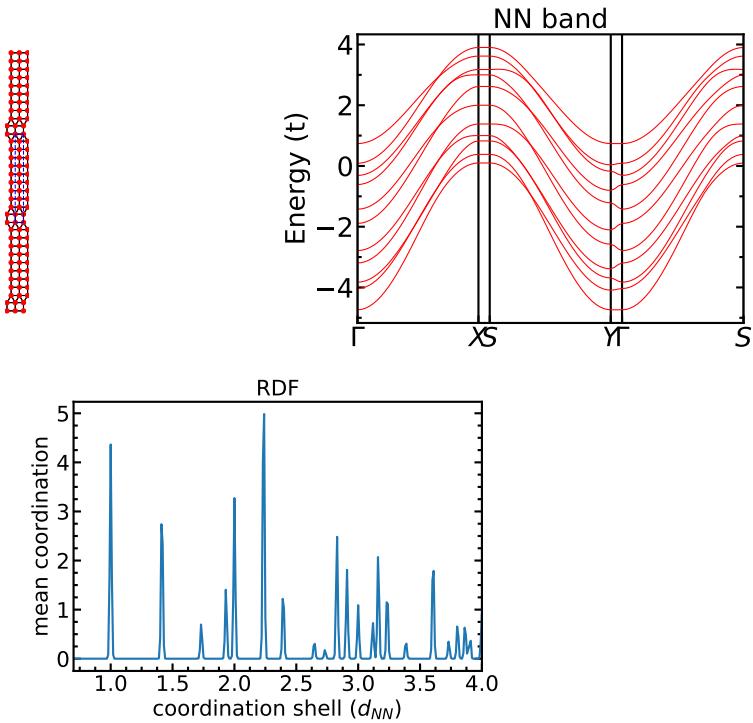


FIG. S219. t6219 lattice framework, nearest neighbors band structure and radial distribution function.

## t6220

Tiling reference number t6220 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S220. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S220.

TABLE S220. Tiling t6220 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	7	0	0	0	0	0	0	0	0	2	0	0	0	0

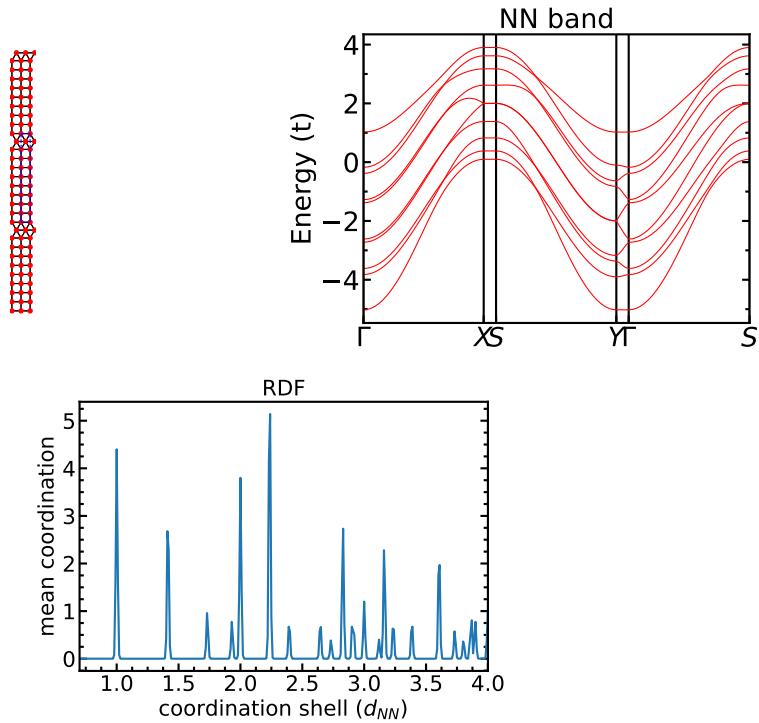


FIG. S220. t6220 lattice framework, nearest neighbors band structure and radial distribution function.

## t6221

Tiling reference number t6221 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S221. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S221.

TABLE S221. Tiling t6221 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	7	0	0	0	0	0	0	0	0	2	0	0	0	0

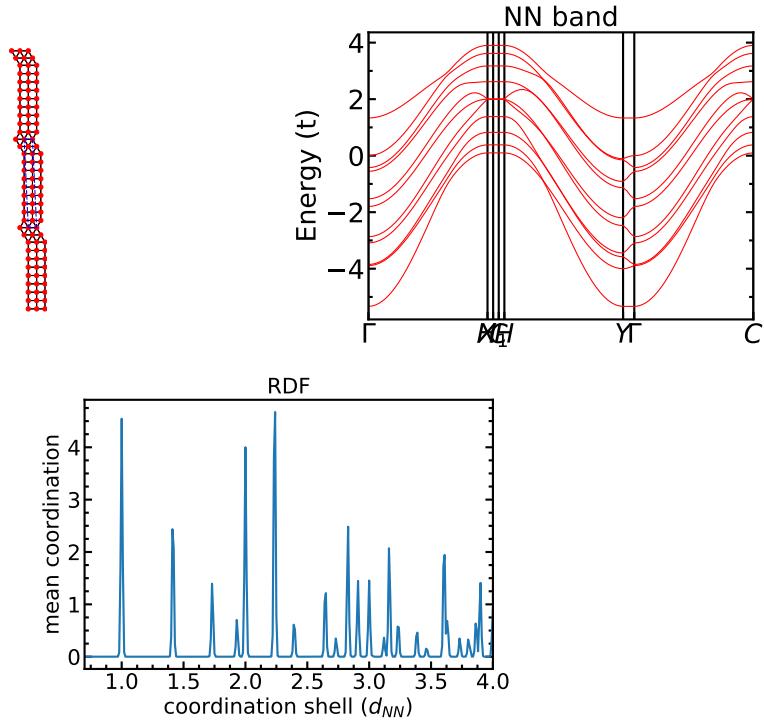


FIG. S221. t6221 lattice framework, nearest neighbors band structure and radial distribution function.

## t6222

Tiling reference number t6222 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S222. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S222.

TABLE S222. Tiling t6222 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

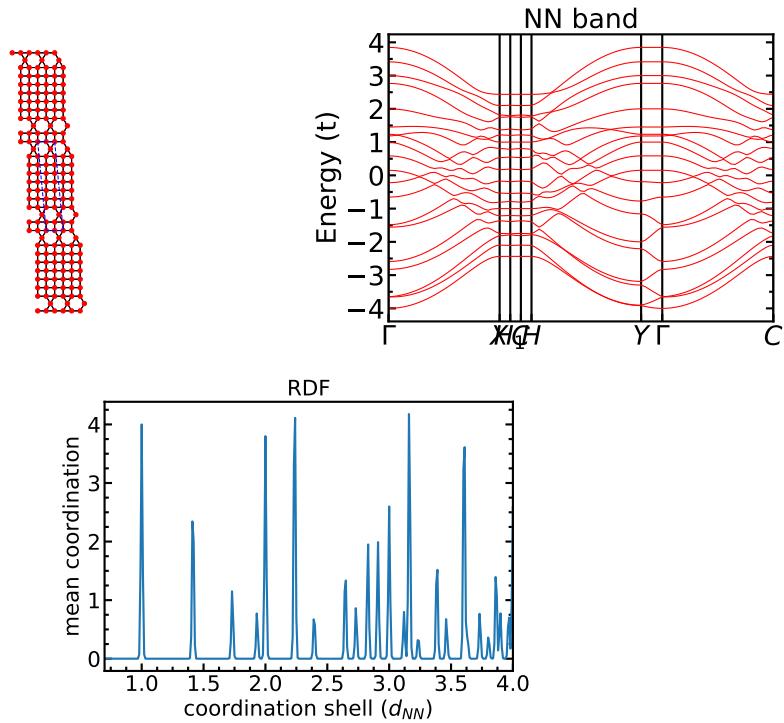


FIG. S222. t6222 lattice framework, nearest neighbors band structure and radial distribution function.

## t6223

Tiling reference number t6223 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S223. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S223.

TABLE S223. Tiling t6223 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

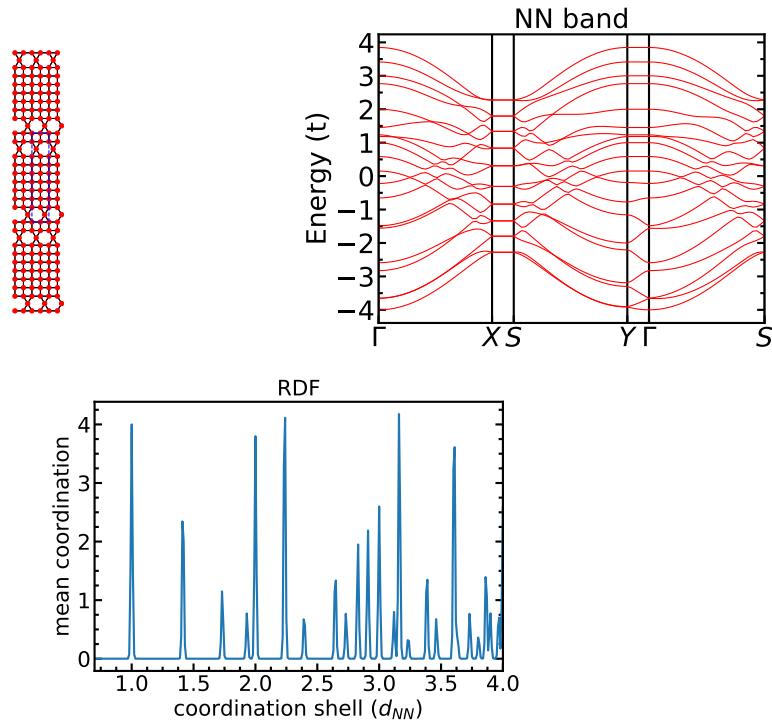


FIG. S223. t6223 lattice framework, nearest neighbors band structure and radial distribution function.

## t6224

Tiling reference number t6224 with space-group ' $Cmmm$ ' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S224. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S224.

TABLE S224. Tiling t6224 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	4	2

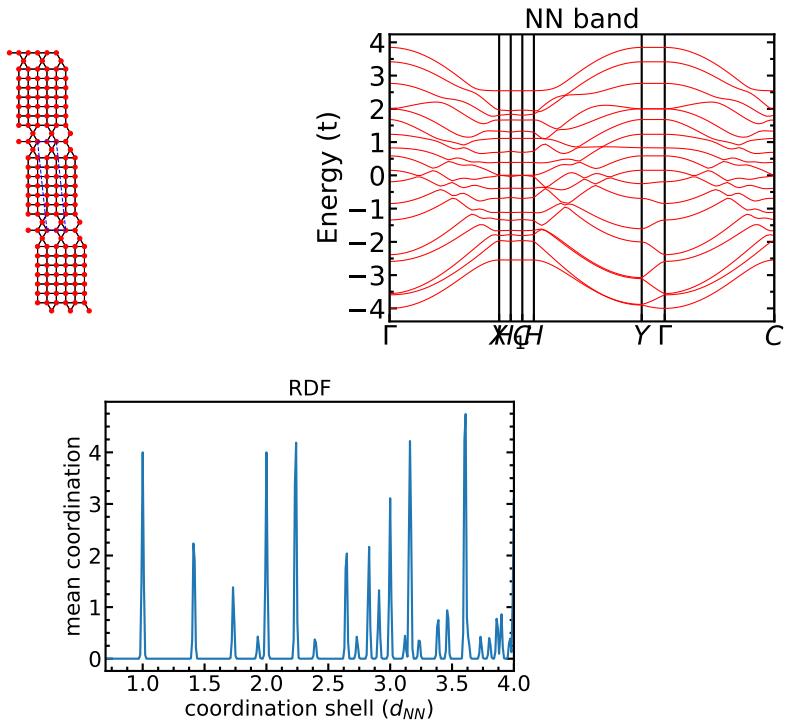


FIG. S224. t6224 lattice framework, nearest neighbors band structure and radial distribution function.

## t6225

Tiling reference number t6225 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S225. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S225.

TABLE S225. Tiling t6225 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	4	0	0	0	0	0	4	0

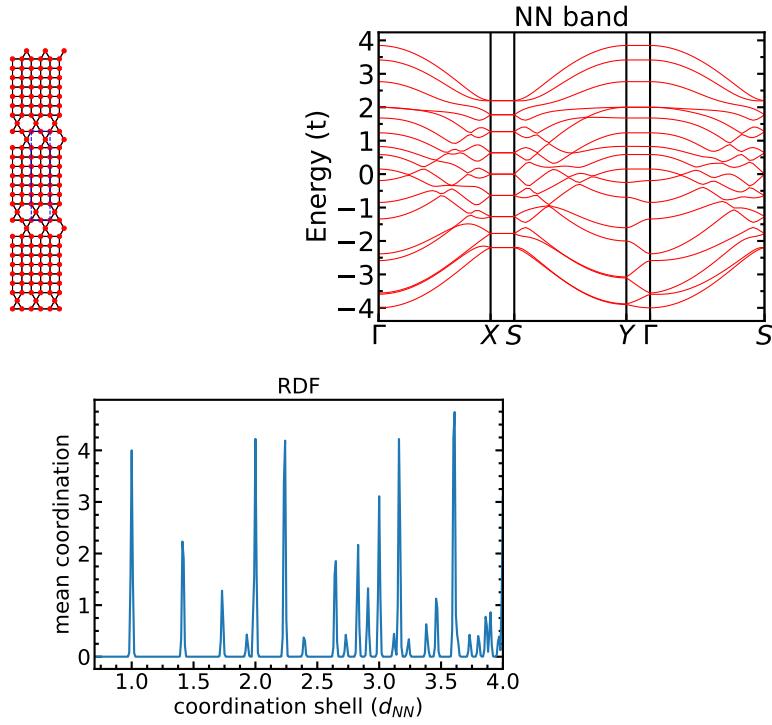


FIG. S225. t6225 lattice framework, nearest neighbors band structure and radial distribution function.

## t6226

Tiling reference number t6226 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S226. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S226.

TABLE S226. Tiling t6226 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

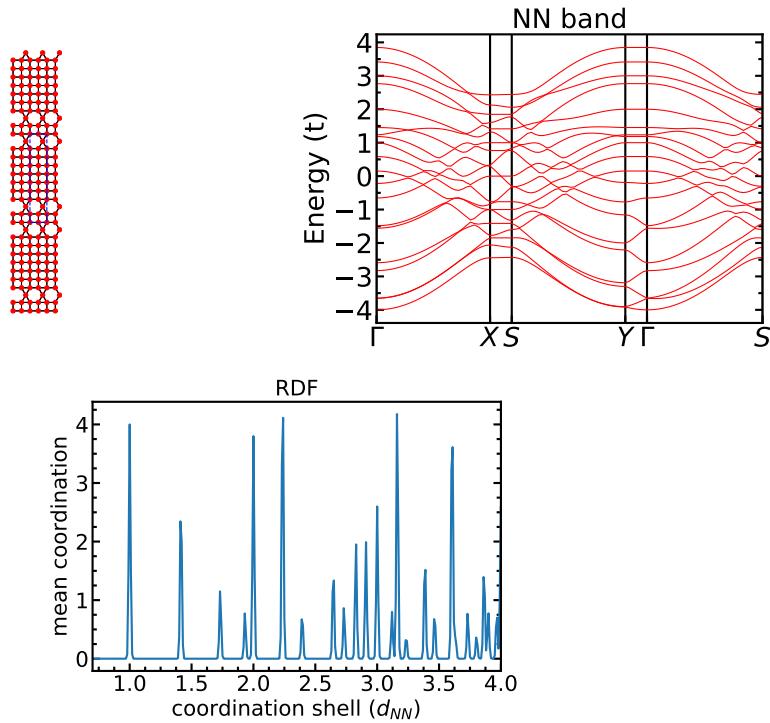


FIG. S226. t6226 lattice framework, nearest neighbors band structure and radial distribution function.

## t6227

Tiling reference number t6227 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S227. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S227.

TABLE S227. Tiling t6227 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	8	0

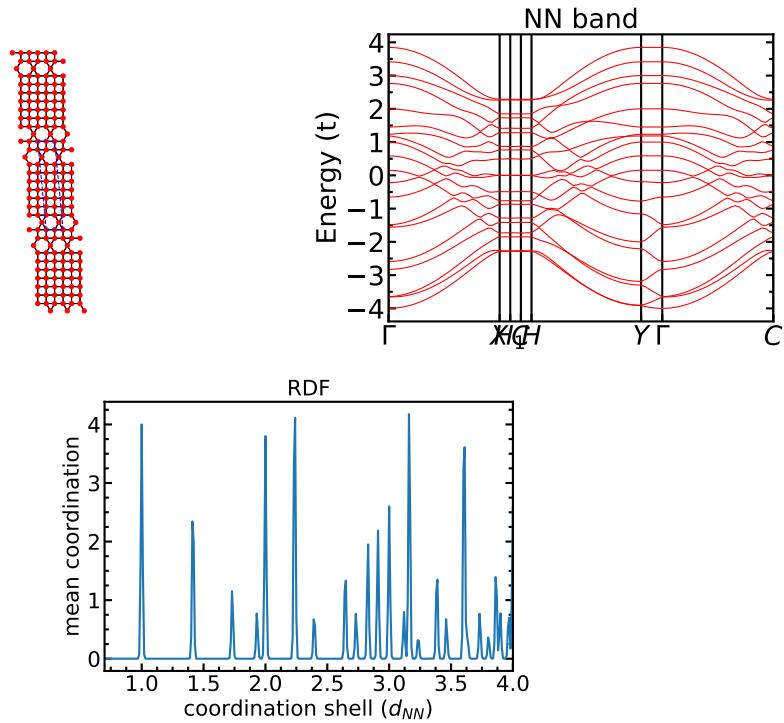


FIG. S227. t6227 lattice framework, nearest neighbors band structure and radial distribution function.

## t6228

Tiling reference number t6228 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S228. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S228.

TABLE S228. Tiling t6228 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	2	0	0	0	0	0	4	2

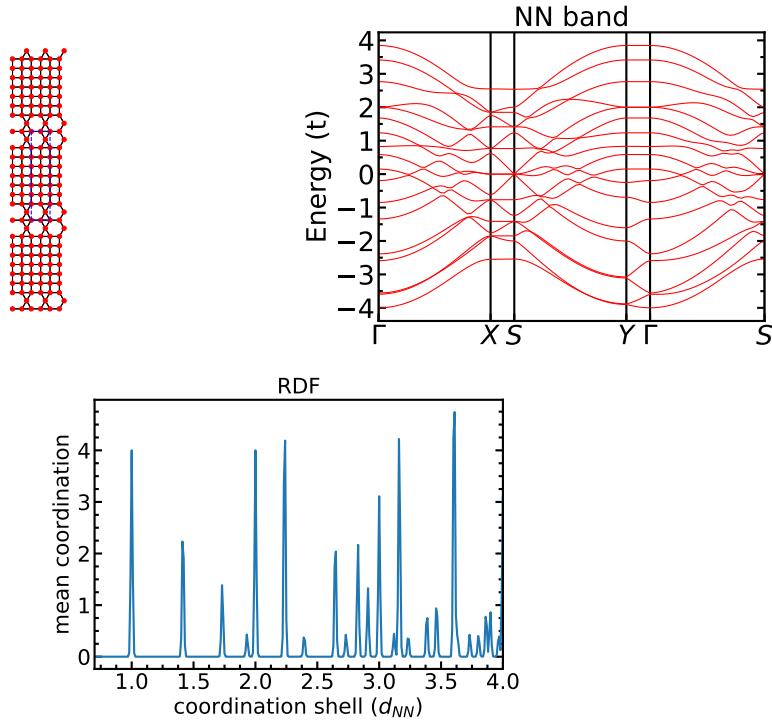


FIG. S228. t6228 lattice framework, nearest neighbors band structure and radial distribution function.

## t6229

Tiling reference number t6229 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S229. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S229.

TABLE S229. Tiling t6229 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	10	0	0	0	0	0	4	0	0	0	0	0	4	0

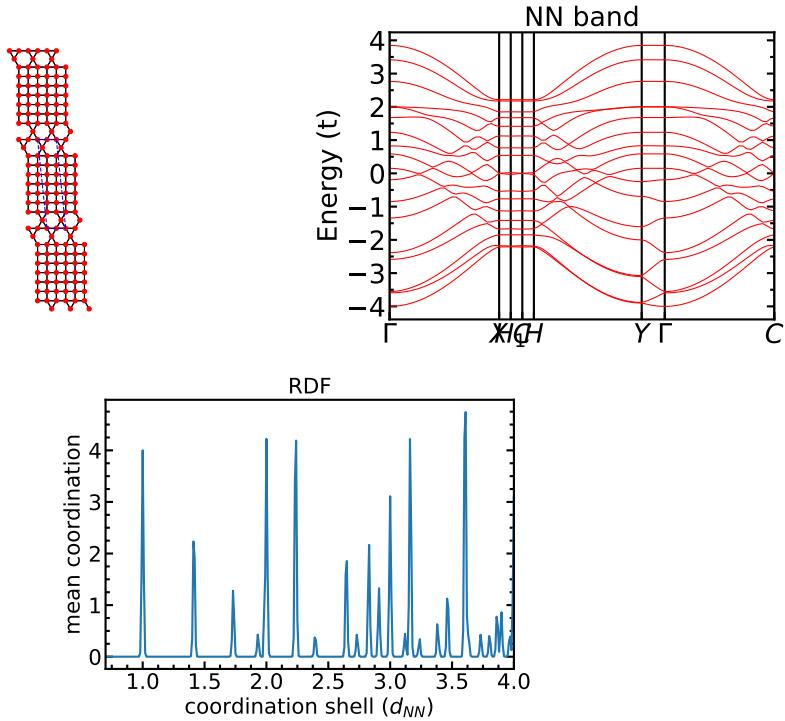


FIG. S229. t6229 lattice framework, nearest neighbors band structure and radial distribution function.

## t6230

Tiling reference number t6230 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S230. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S230.

TABLE S230. Tiling t6230 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	0	0	0	4	0	0	0	0

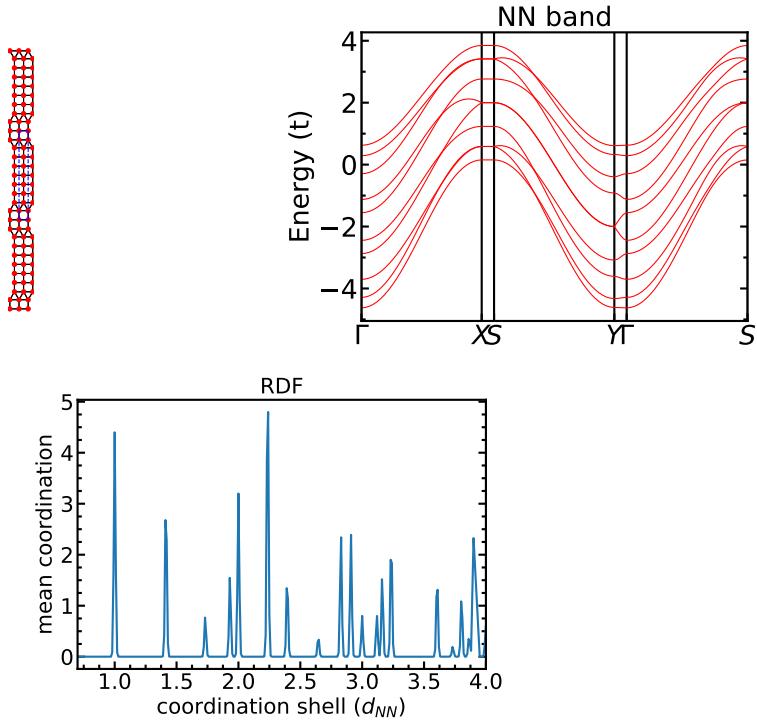


FIG. S230. t6230 lattice framework, nearest neighbors band structure and radial distribution function.

## t6231

Tiling reference number t6231 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S231. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S231.

TABLE S231. Tiling t6231 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	5	0	0	0	0	0	0	0	0	6	0	0	0	0

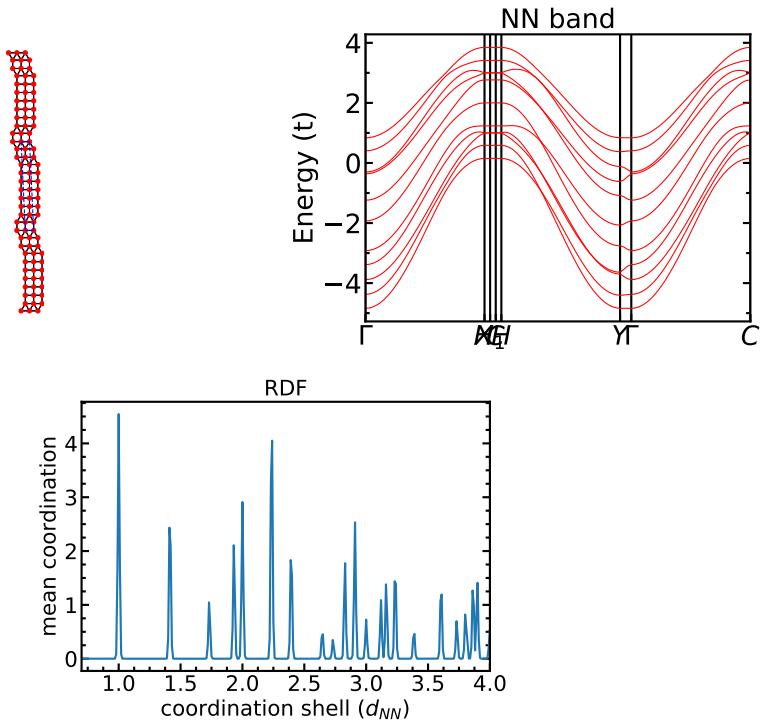


FIG. S231. t6231 lattice framework, nearest neighbors band structure and radial distribution function.

## t6232

Tiling reference number t6232 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S232. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S232.

TABLE S232. Tiling t6232 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	5	0	0	0	0	0	0	0	0	4	0	0	0	0

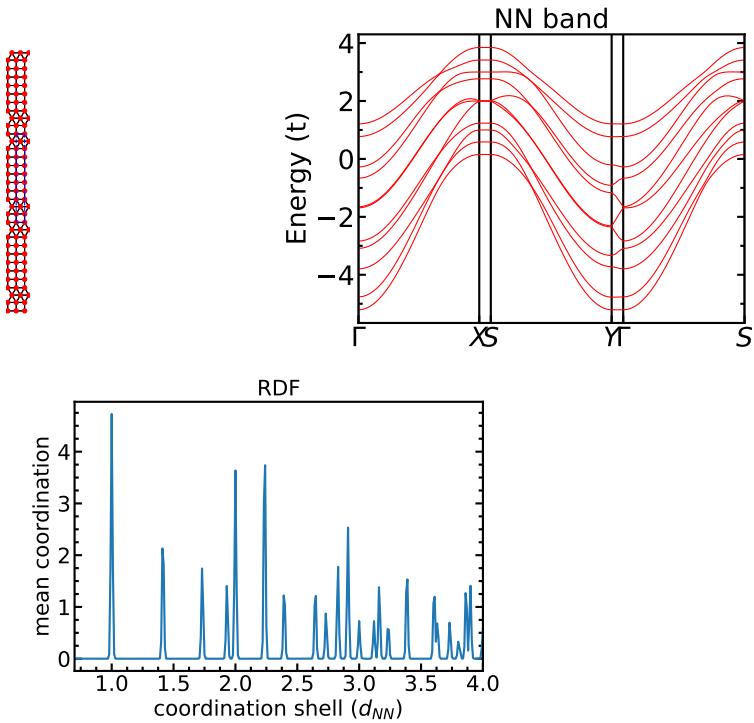


FIG. S232. t6232 lattice framework, nearest neighbors band structure and radial distribution function.

## t6233

Tiling reference number t6233 with space-group ' $Pmmm$ ' (47) and 10 sites in the unit cell, with vertex type indicated in Tab. S233. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S233.

TABLE S233. Tiling t6233 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	5	0	0	0	0	0	0	0	0	2	0	0	0	0

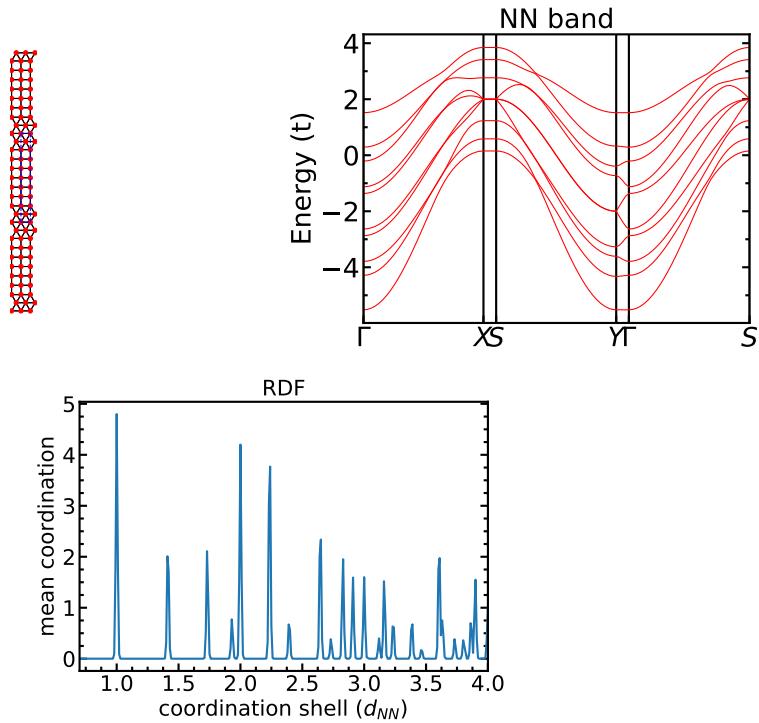


FIG. S233. t6233 lattice framework, nearest neighbors band structure and radial distribution function.

## t6234

Tiling reference number t6234 with space-group '*Cmmm*' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S234. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S234.

TABLE S234. Tiling t6234 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	5	0	0	0	0	0	0	0	0	2	0	0	0	0

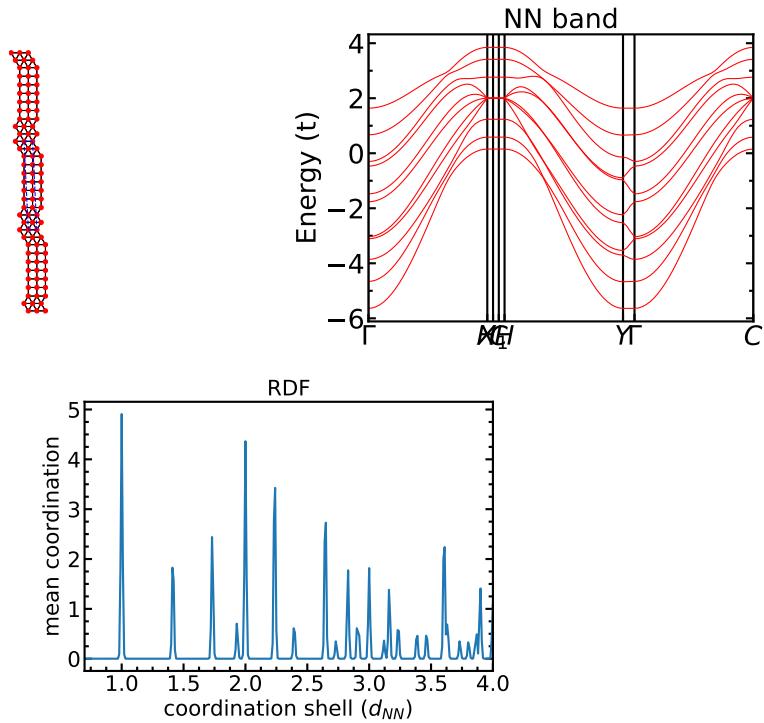


FIG. S234. t6234 lattice framework, nearest neighbors band structure and radial distribution function.

## t6235

Tiling reference number t6235 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S235. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S235.

TABLE S235. Tiling t6235 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	2	0	0	0	0	0	8	0

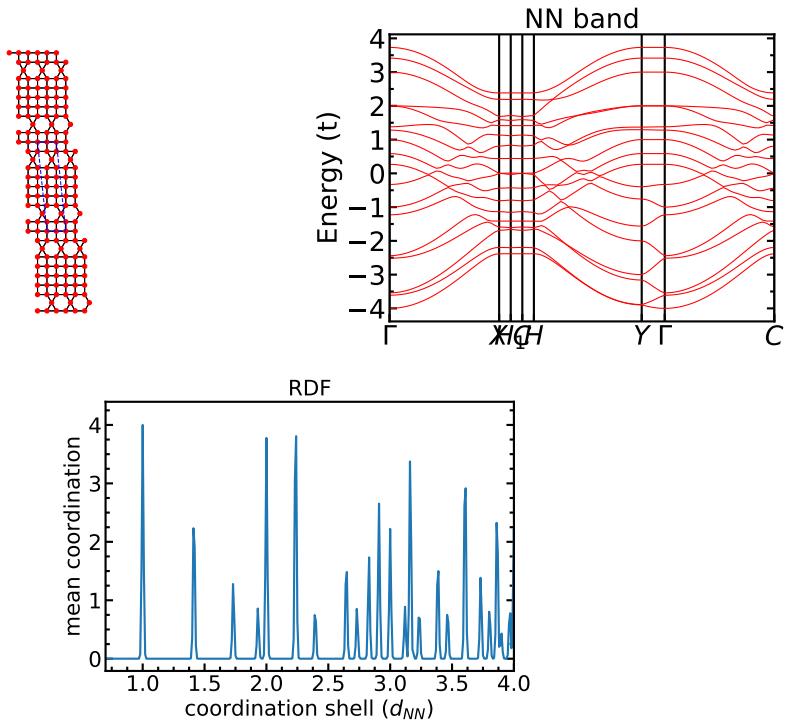


FIG. S235. t6235 lattice framework, nearest neighbors band structure and radial distribution function.

## t6236

Tiling reference number t6236 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S236. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S236.

TABLE S236. Tiling t6236 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	2	0	0	0	0	0	8	0

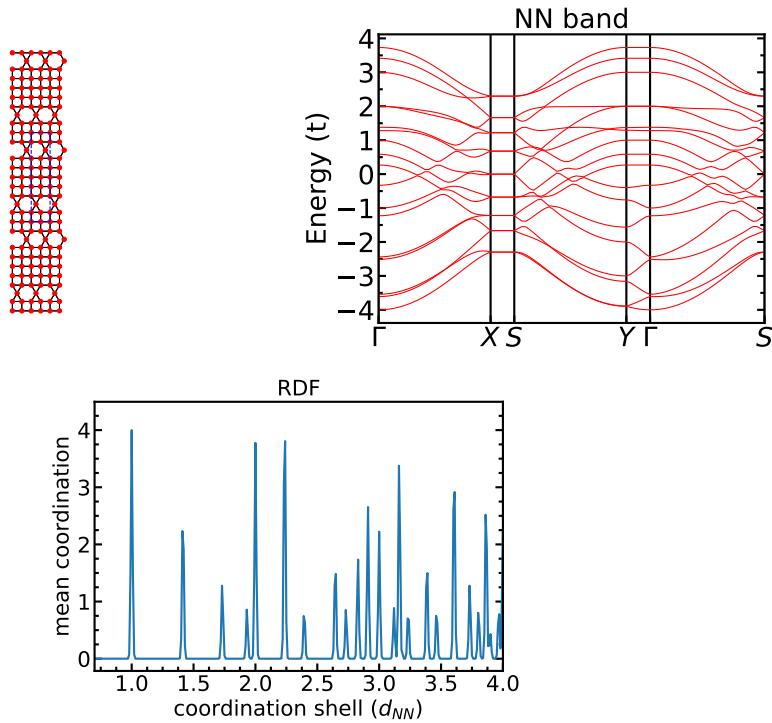


FIG. S236. t6236 lattice framework, nearest neighbors band structure and radial distribution function.

## t6237

Tiling reference number t6237 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S237. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S237.

TABLE S237. Tiling t6237 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	3	0	0	0	0	0	4	4

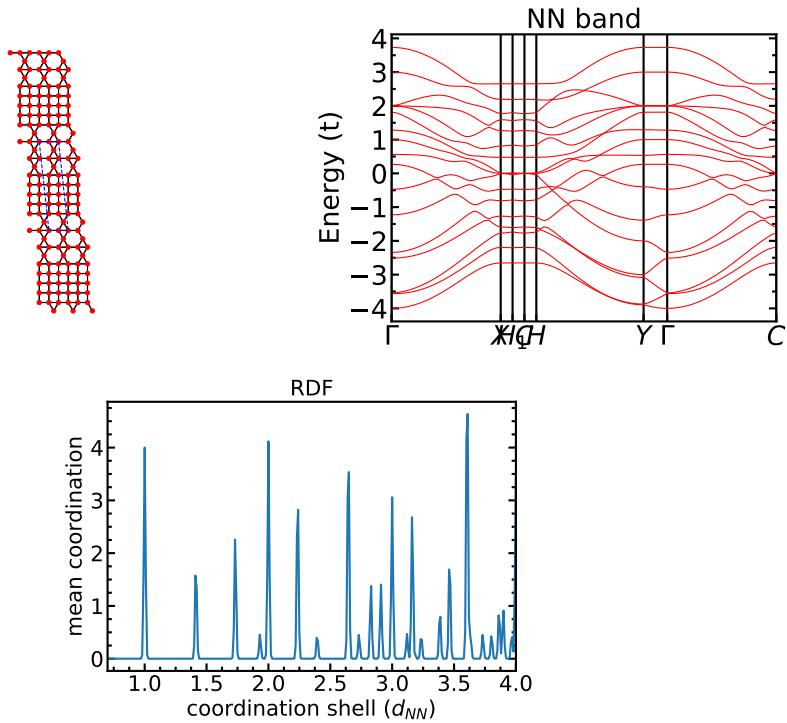


FIG. S237. t6237 lattice framework, nearest neighbors band structure and radial distribution function.

## t6238

Tiling reference number t6238 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S238. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S238.

TABLE S238. Tiling t6238 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	7	0	0	0	0	0	4	0

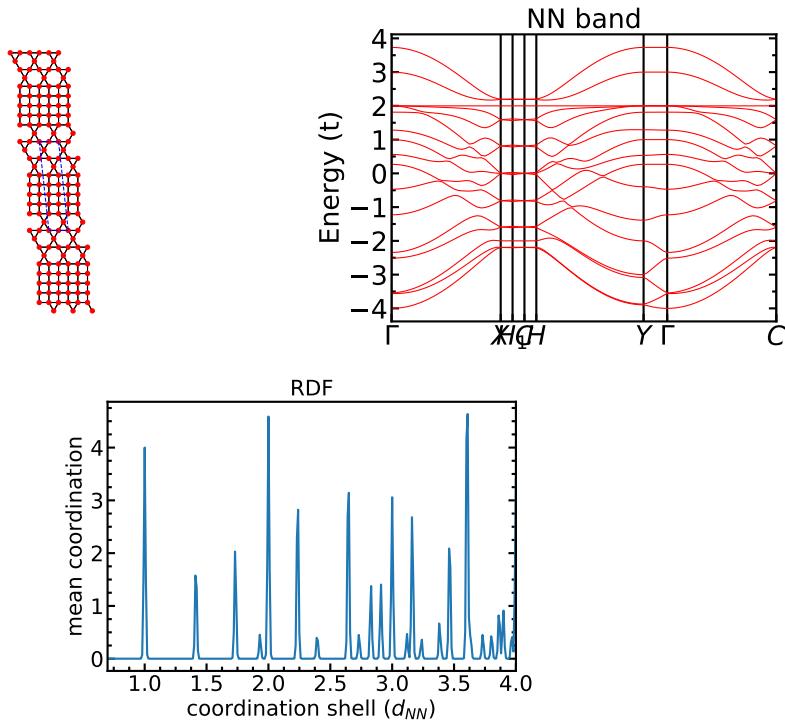


FIG. S238. t6238 lattice framework, nearest neighbors band structure and radial distribution function.

## t6239

Tiling reference number t6239 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S239. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S239.

TABLE S239. Tiling t6239 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	6	0	0	0	0	0	2	4	0	0	0	0	4	0

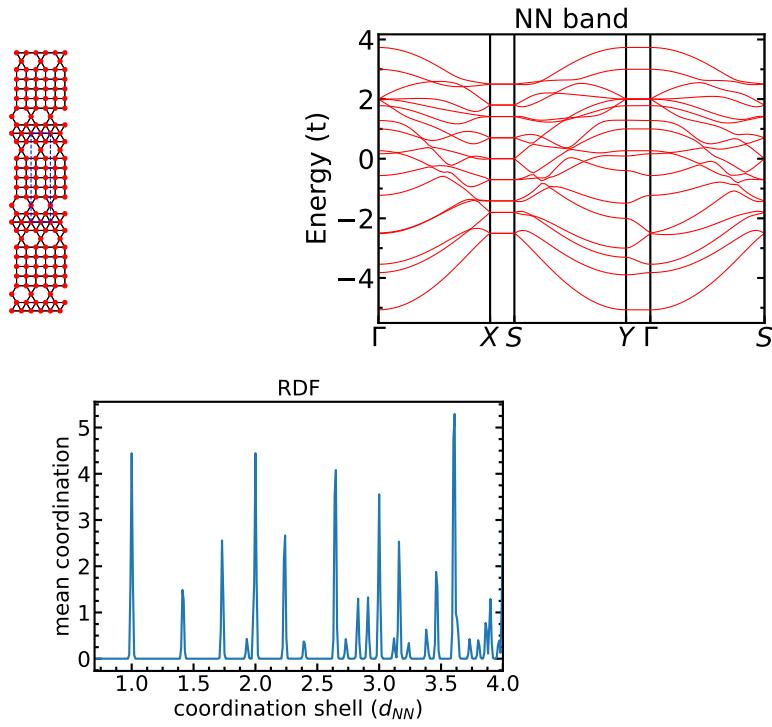


FIG. S239. t6239 lattice framework, nearest neighbors band structure and radial distribution function.

## t6240

Tiling reference number t6240 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S240. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S240.

TABLE S240. Tiling t6240 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	2	0	0	0	0	0	8	0

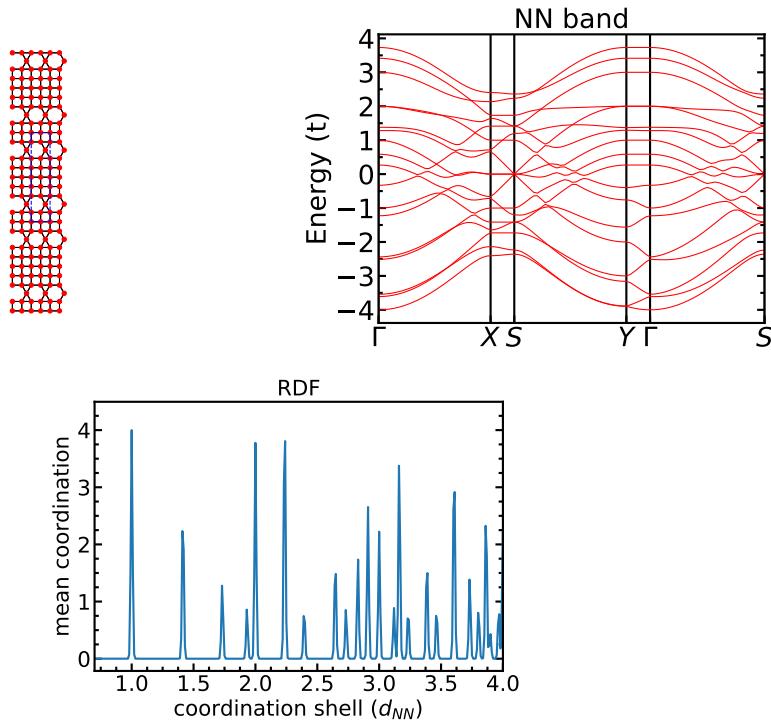


FIG. S240. t6240 lattice framework, nearest neighbors band structure and radial distribution function.

## t6241

Tiling reference number t6241 with space-group ' $Cmmm$ ' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S241. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S241.

TABLE S241. Tiling t6241 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	8	0	0	0	0	0	2	0	0	0	0	0	8	0

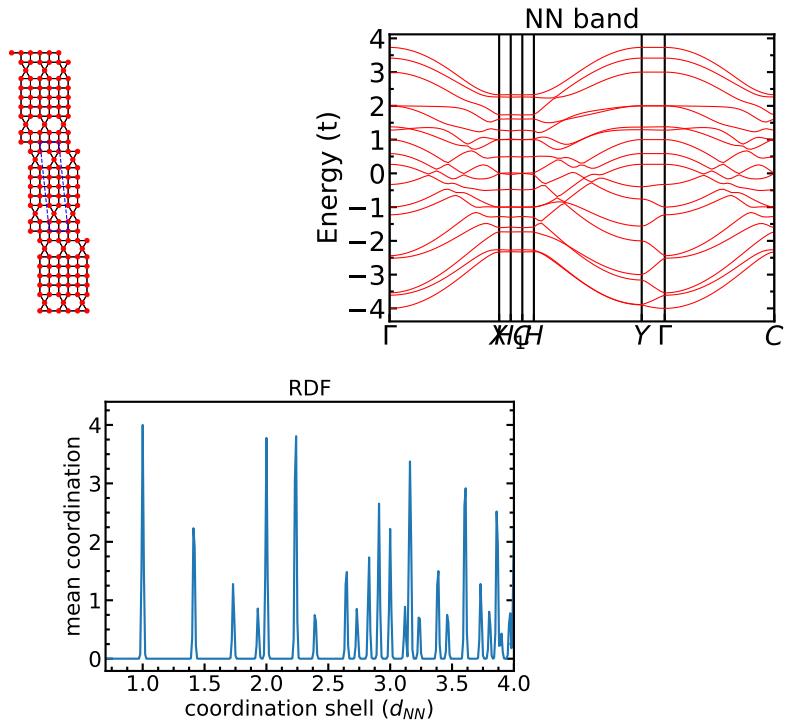


FIG. S241. t6241 lattice framework, nearest neighbors band structure and radial distribution function.

## t6242

Tiling reference number t6242 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S242. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S242.

TABLE S242. Tiling t6242 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	3	0	0	0	0	0	4	4

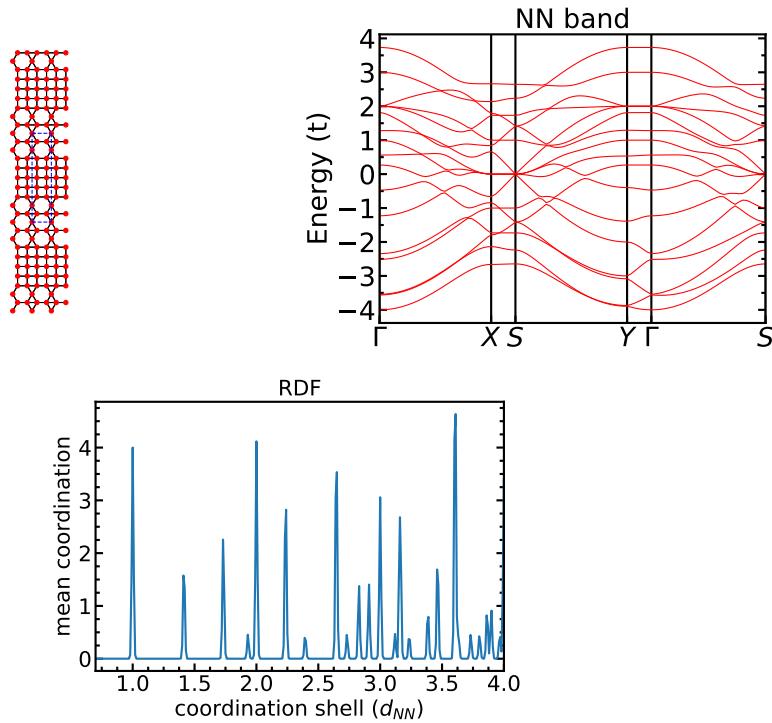


FIG. S242. t6242 lattice framework, nearest neighbors band structure and radial distribution function.

## t6243

Tiling reference number t6243 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S243. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S243.

TABLE S243. Tiling t6243 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	7	0	0	0	0	0	4	0

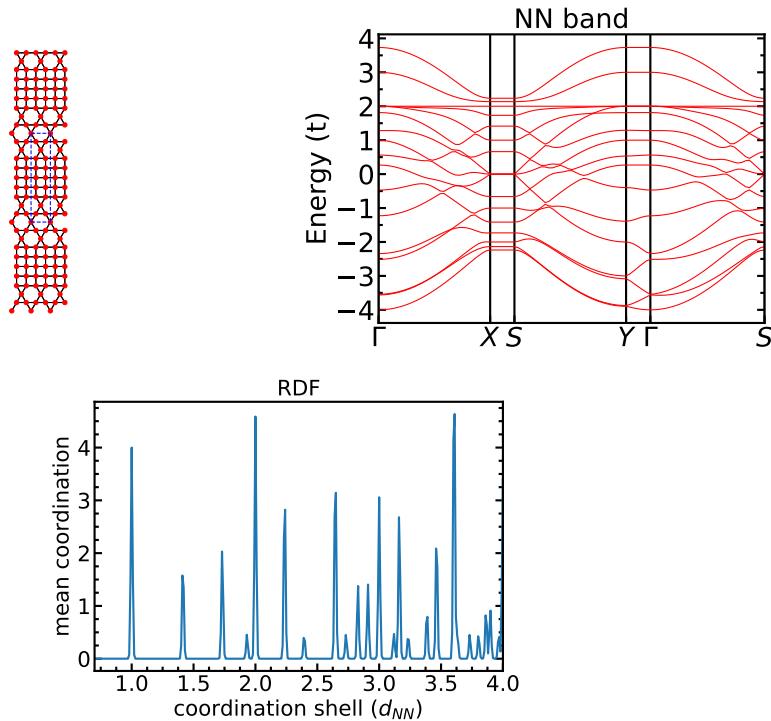


FIG. S243. t6243 lattice framework, nearest neighbors band structure and radial distribution function.

## t6244

Tiling reference number t6244 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S244. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S244.

TABLE S244. Tiling t6244 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	6	0	0	0	0	0	2	4	0	0	0	0	4	0

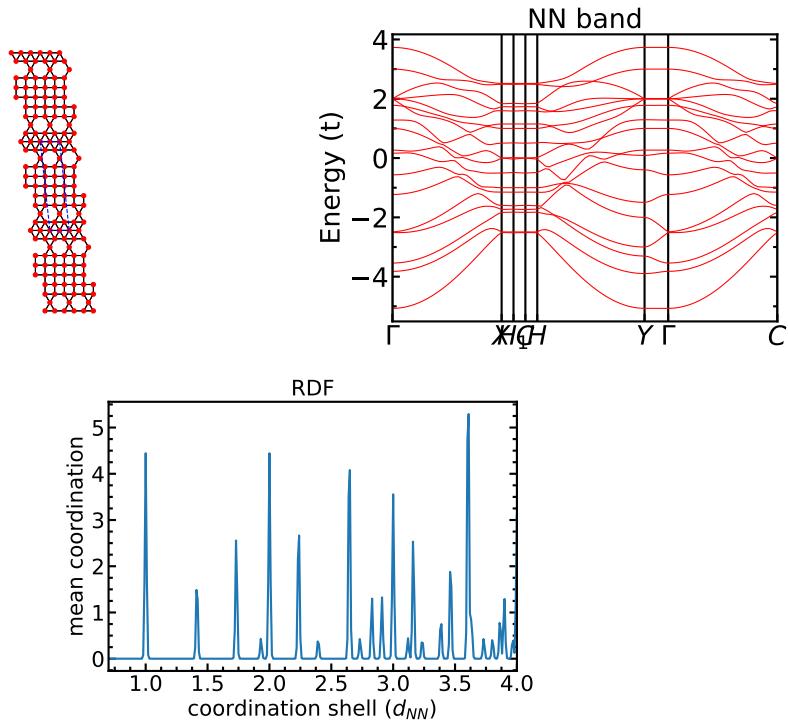


FIG. S244. t6244 lattice framework, nearest neighbors band structure and radial distribution function.

## t6245

Tiling reference number t6245 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S245. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S245.

TABLE S245. Tiling t6245 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	5	0	0	0	0	0	0	0	0	6	0	0	0	0

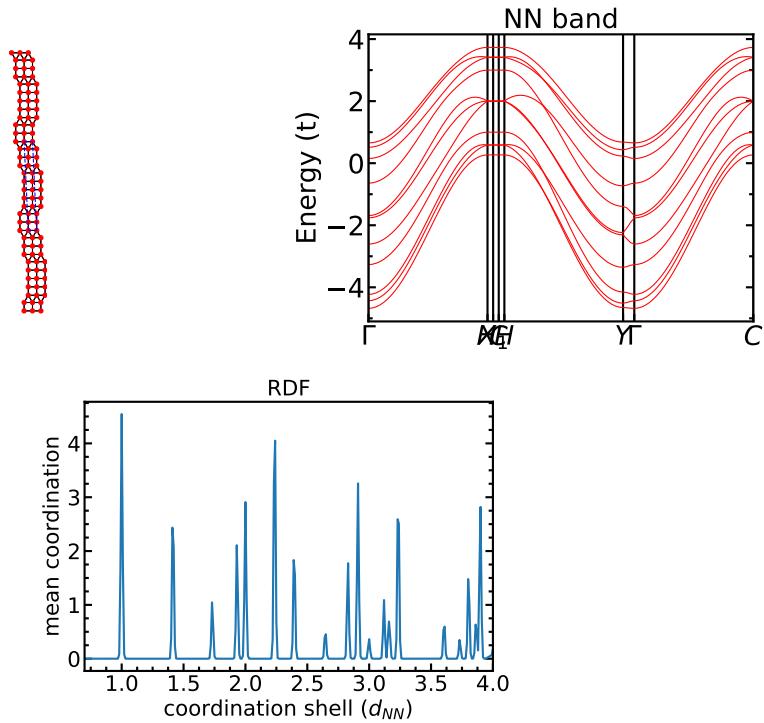


FIG. S245. t6245 lattice framework, nearest neighbors band structure and radial distribution function.

## t6246

Tiling reference number t6246 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S246. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S246.

TABLE S246. Tiling t6246 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	3	0	0	0	0	0	0	0	0	8	0	0	0	0

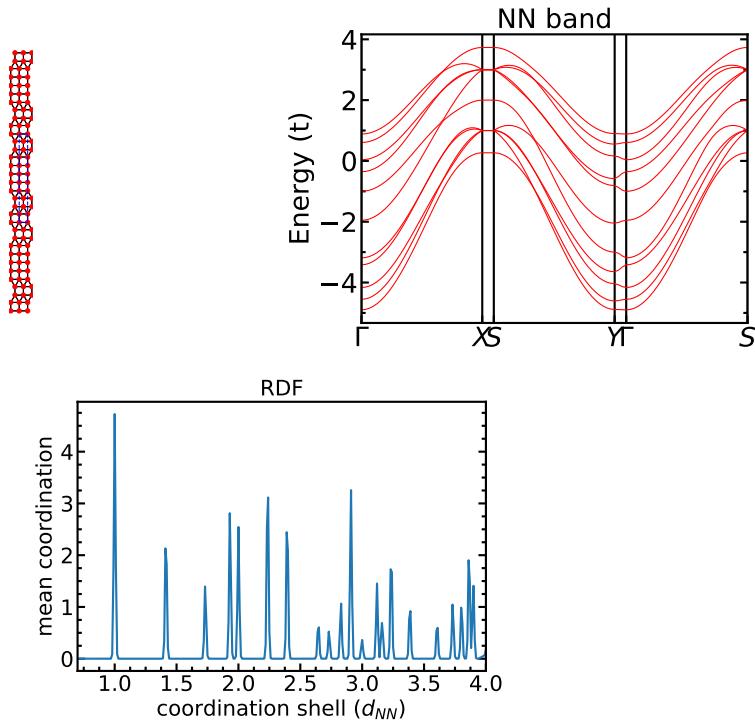


FIG. S246. t6246 lattice framework, nearest neighbors band structure and radial distribution function.

## t6247

Tiling reference number t6247 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S247. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S247.

TABLE S247. Tiling t6247 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	3	0	0	0	0	0	0	0	0	6	0	0	0	0

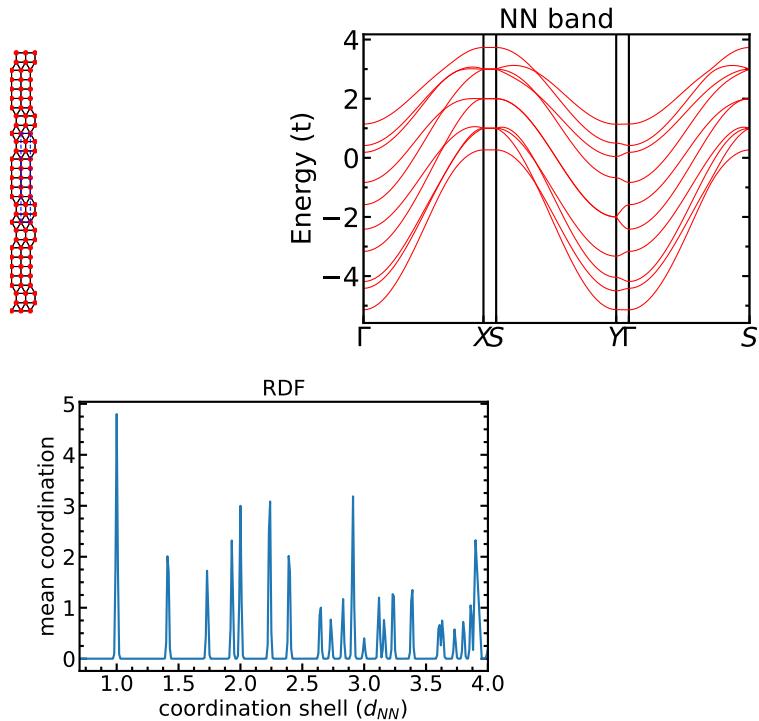


FIG. S247. t6247 lattice framework, nearest neighbors band structure and radial distribution function.

## t6248

Tiling reference number t6248 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S248. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S248.

TABLE S248. Tiling t6248 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	3	0	0	0	0	0	0	0	0	6	0	0	0	0

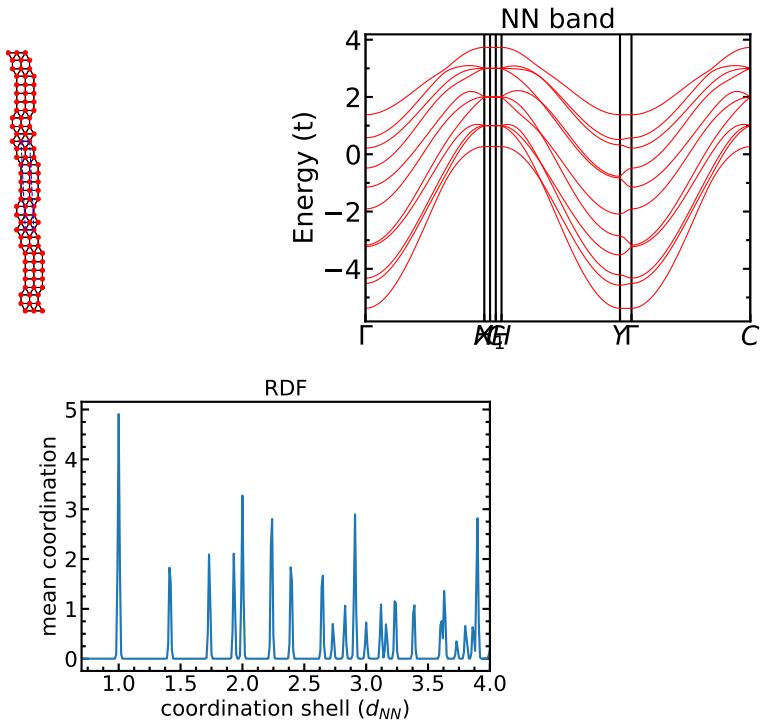


FIG. S248. t6248 lattice framework, nearest neighbors band structure and radial distribution function.

## t6249

Tiling reference number t6249 with space-group ' $Pmmm$ ' (47) and 10 sites in the unit cell, with vertex type indicated in Tab. S249. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S249.

TABLE S249. Tiling t6249 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	0	0	4	0	0	0	0

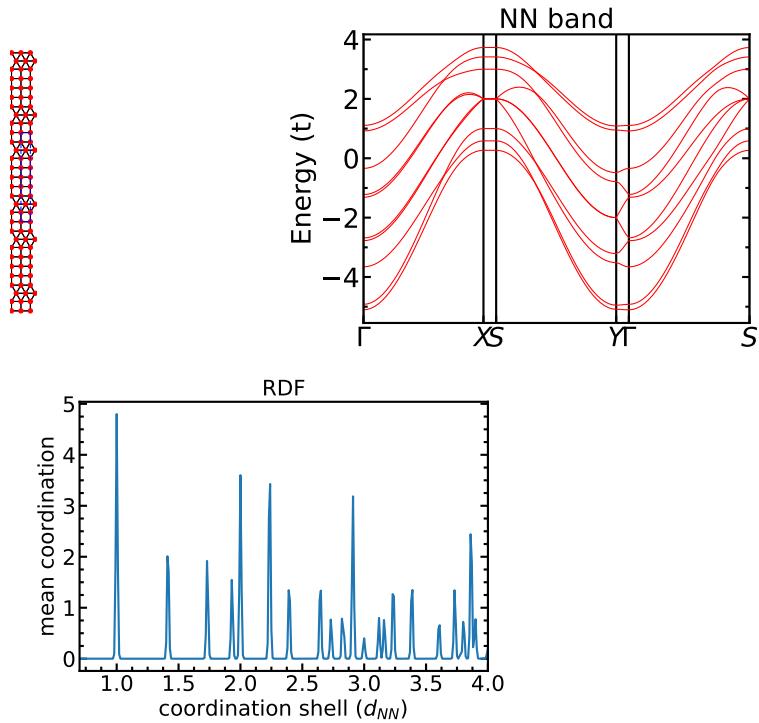


FIG. S249. t6249 lattice framework, nearest neighbors band structure and radial distribution function.

## t6250

Tiling reference number t6250 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S250. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S250.

TABLE S250. Tiling t6250 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	3	0	0	0	0	0	0	0	0	6	0	0	0	0

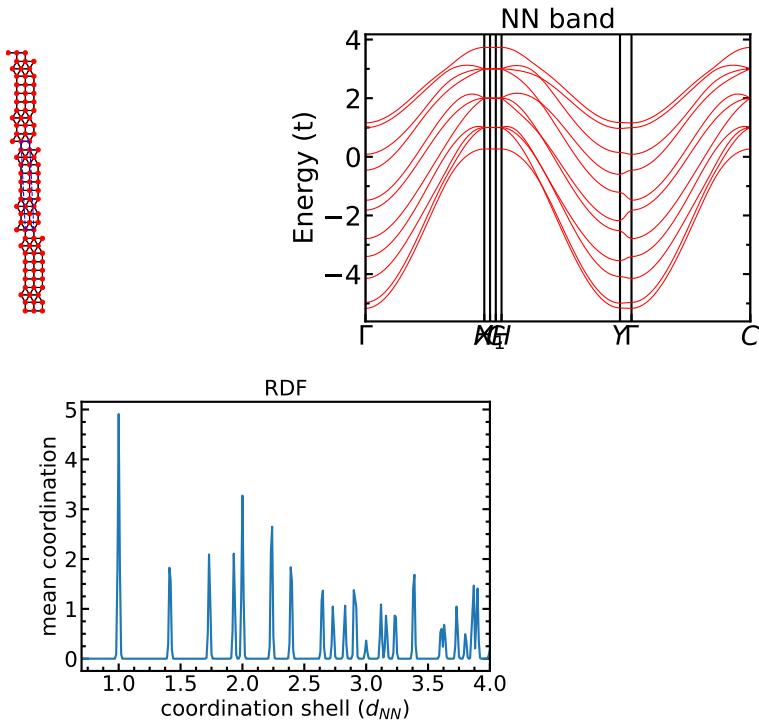


FIG. S250. t6250 lattice framework, nearest neighbors band structure and radial distribution function.

## t6251

Tiling reference number t6251 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S251. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S251.

TABLE S251. Tiling t6251 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	3	0	0	0	0	0	0	0	0	4	0	0	0	0

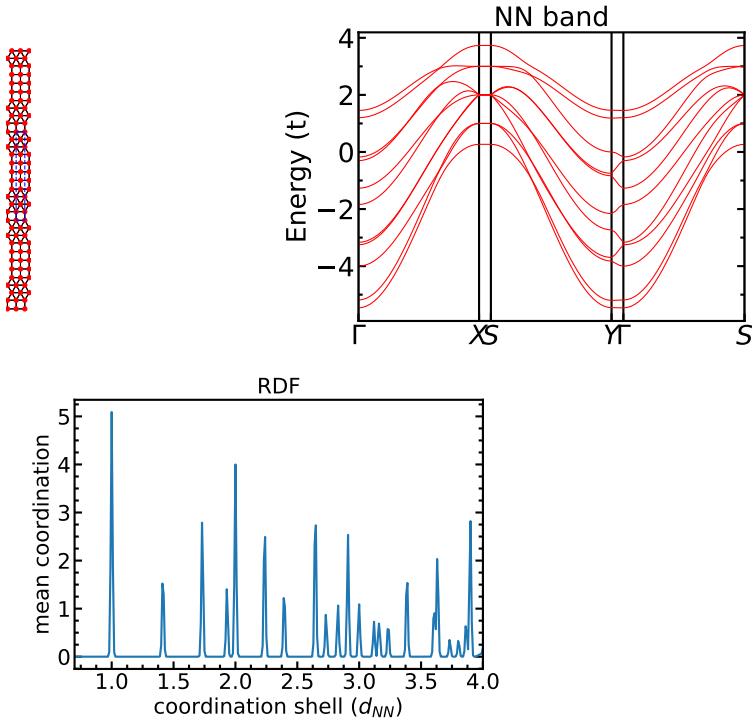


FIG. S251. t6251 lattice framework, nearest neighbors band structure and radial distribution function.

## t6252

Tiling reference number t6252 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S252. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S252.

TABLE S252. Tiling t6252 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	3	0	0	0	0	0	0	0	0	2	0	0	0	0

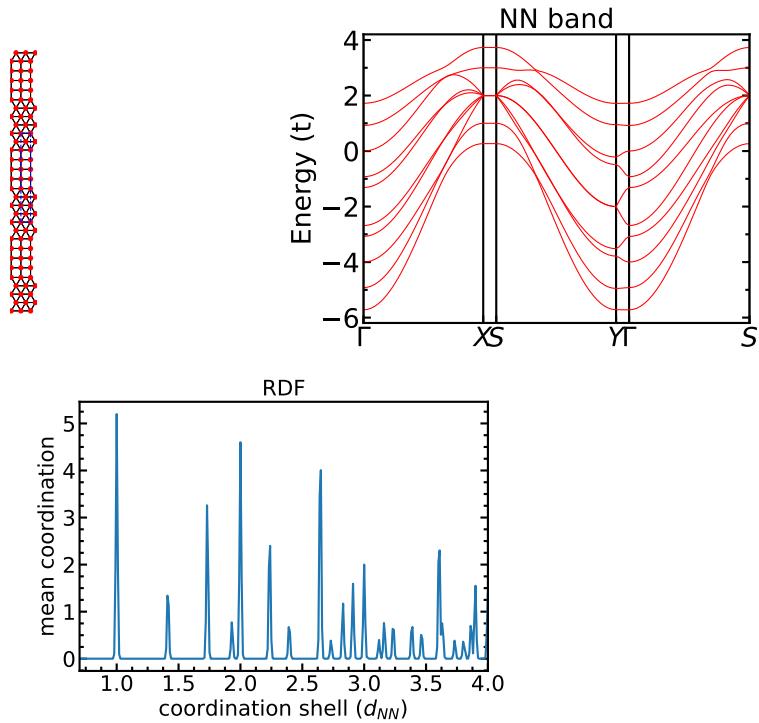


FIG. S252. t6252 lattice framework, nearest neighbors band structure and radial distribution function.

### t6253

Tiling reference number t6253 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S253. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S253.

TABLE S253. Tiling t6253 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	3	0	0	0	0	0	0	0	0	2	0	0	0	0

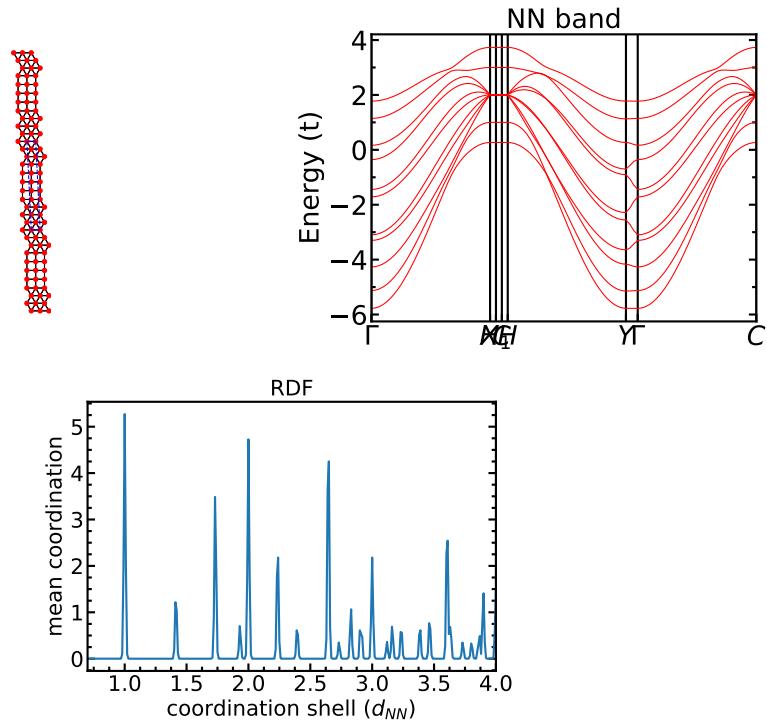


FIG. S253. t6253 lattice framework, nearest neighbors band structure and radial distribution function.

## t6254

Tiling reference number t6254 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S254. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S254.

TABLE S254. Tiling t6254 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	0	0	0	0	6	0	0	0	0

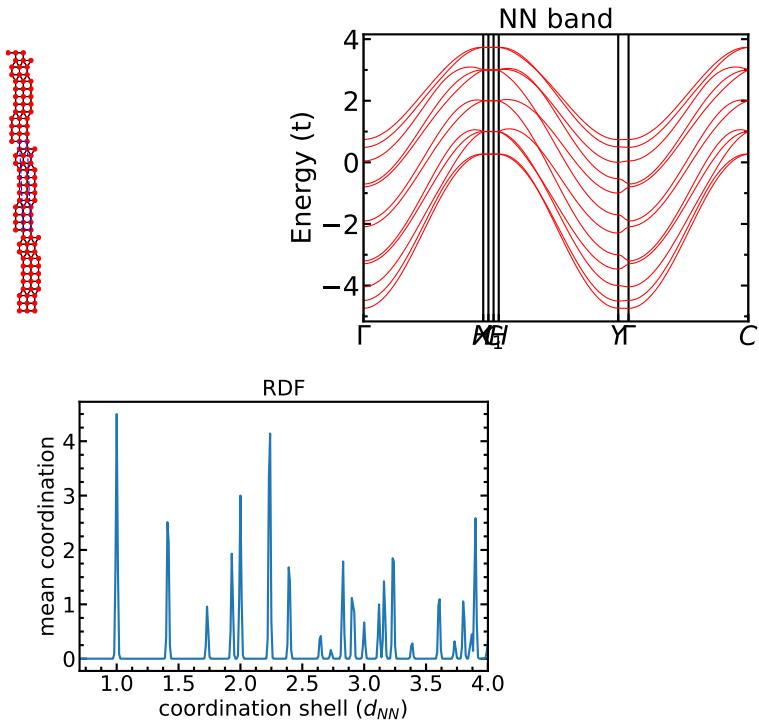


FIG. S254. t6254 lattice framework, nearest neighbors band structure and radial distribution function.

## t6255

Tiling reference number t6255 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S255. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S255.

TABLE S255. Tiling t6255 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	6	0	0	0	0	0	0	0	0	4	0	0	0	0

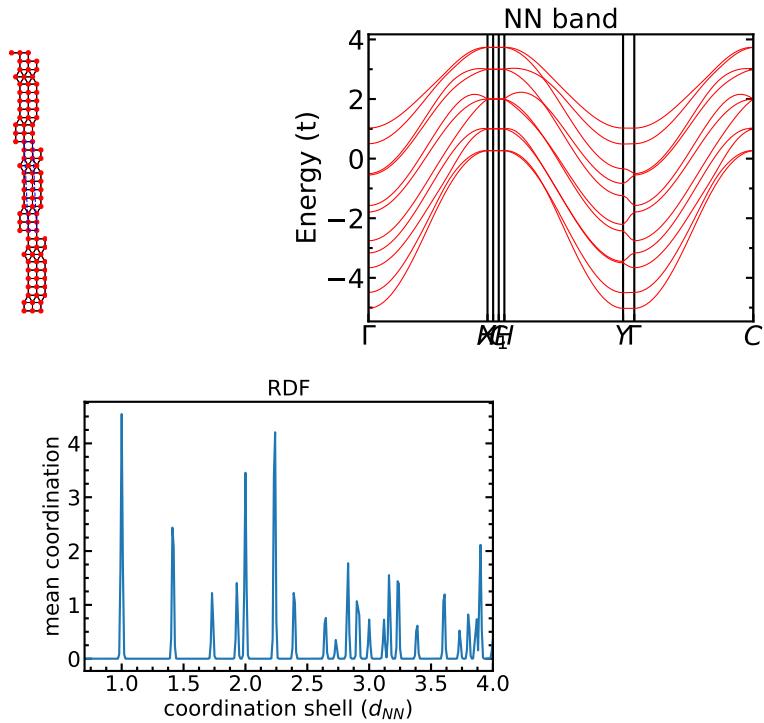


FIG. S255. t6255 lattice framework, nearest neighbors band structure and radial distribution function.

## t6256

Tiling reference number t6256 with space-group '*Pmma*' (51) and 12 sites in the unit cell, with vertex type indicated in Tab. S256. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S256.

TABLE S256. Tiling t6256 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	6	0	0	0	0	0	0	0	0	4	0	0	0	0

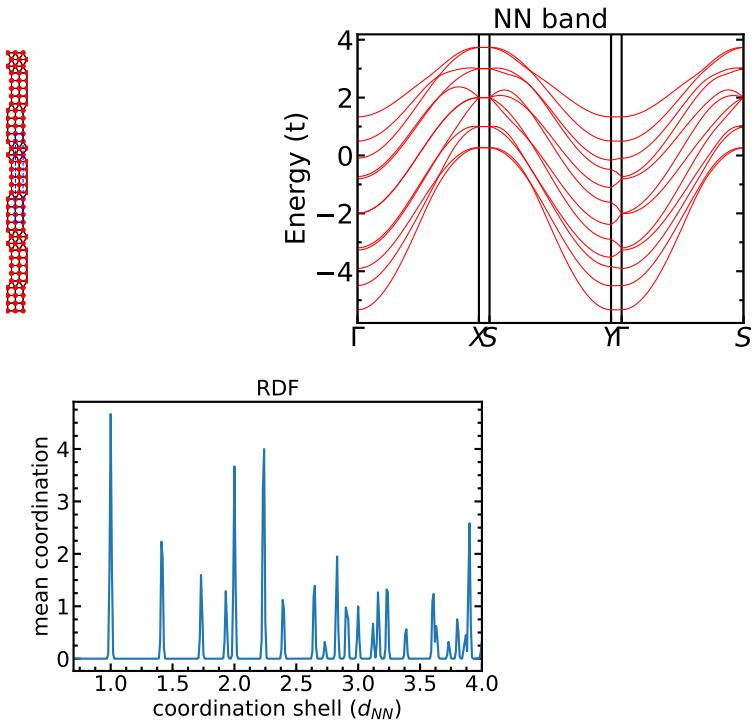


FIG. S256. t6256 lattice framework, nearest neighbors band structure and radial distribution function.

## t6257

Tiling reference number t6257 with space-group '*Cmmm*' (65) and 19 sites in the unit cell, with vertex type indicated in Tab. S257. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S257.

TABLE S257. Tiling t6257 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	8	0	0	0	0	0	1	0	0	4	0	0	4	0

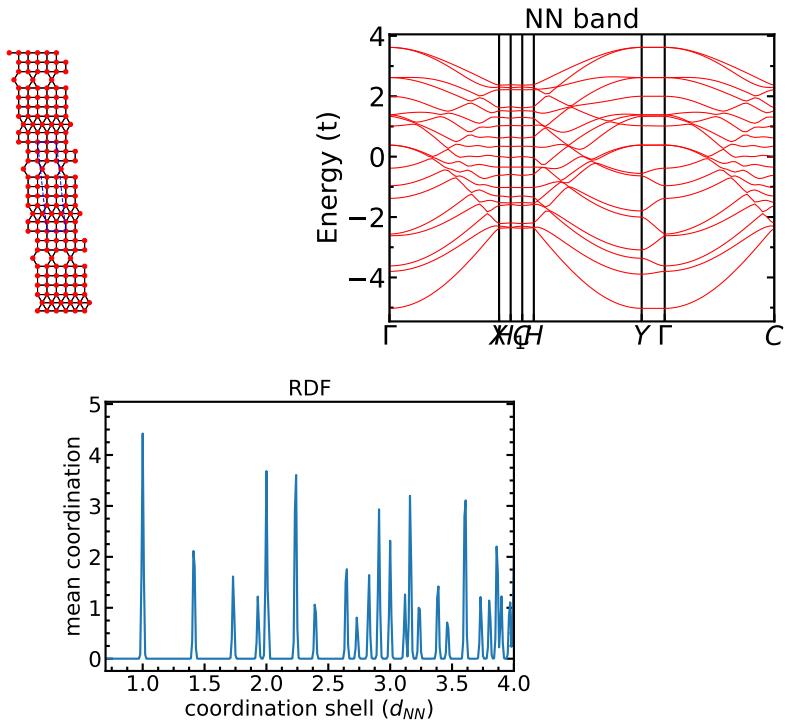


FIG. S257. t6257 lattice framework, nearest neighbors band structure and radial distribution function.

## t6258

Tiling reference number t6258 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S258. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S258.

TABLE S258. Tiling t6258 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	5	0	0	0	0	0	0	0	0	6	0	0	0	0

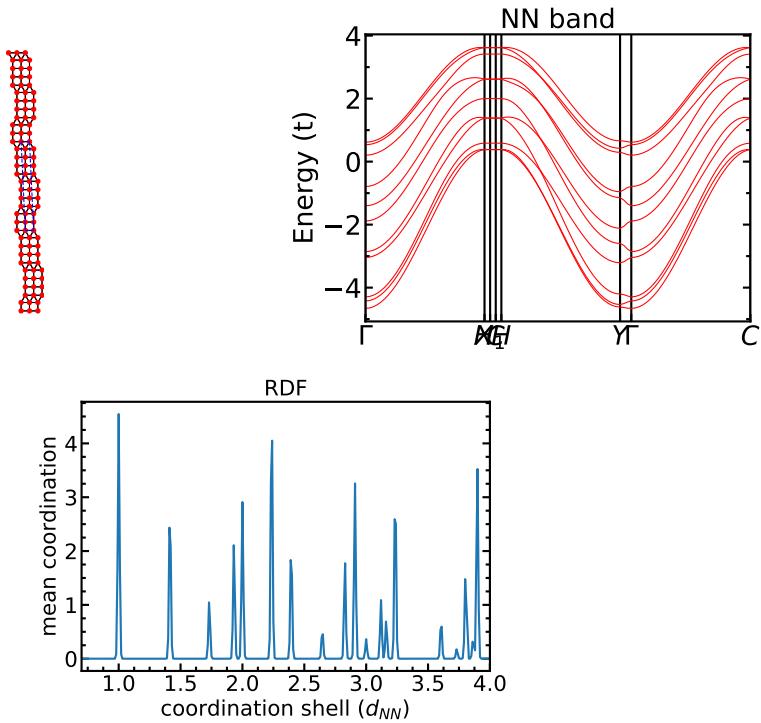


FIG. S258. t6258 lattice framework, nearest neighbors band structure and radial distribution function.

## t6259

Tiling reference number t6259 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S259. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S259.

TABLE S259. Tiling t6259 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	0	0	0	8	0	0	0	0

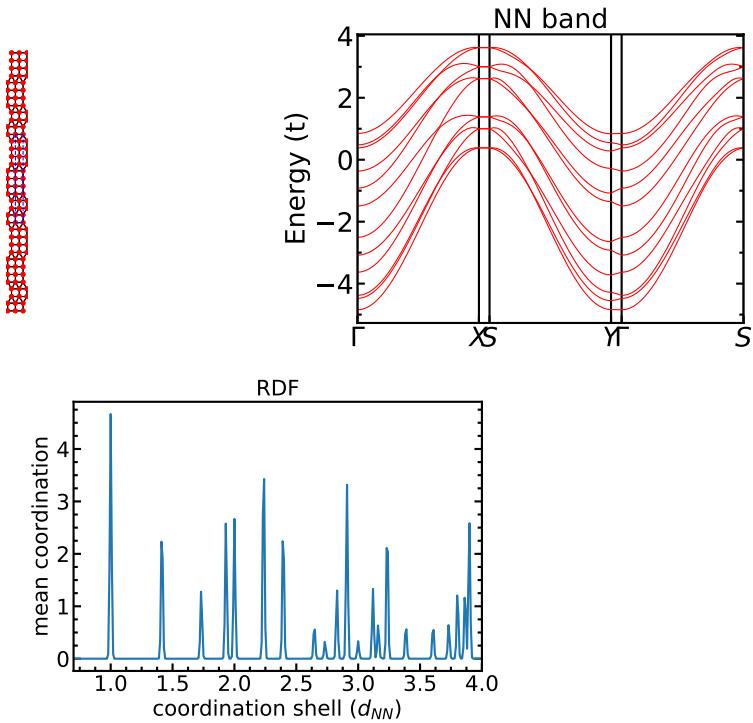


FIG. S259. t6259 lattice framework, nearest neighbors band structure and radial distribution function.

## t6260

Tiling reference number t6260 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S260. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S260.

TABLE S260. Tiling t6260 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	0	0	6	0	0	0	0

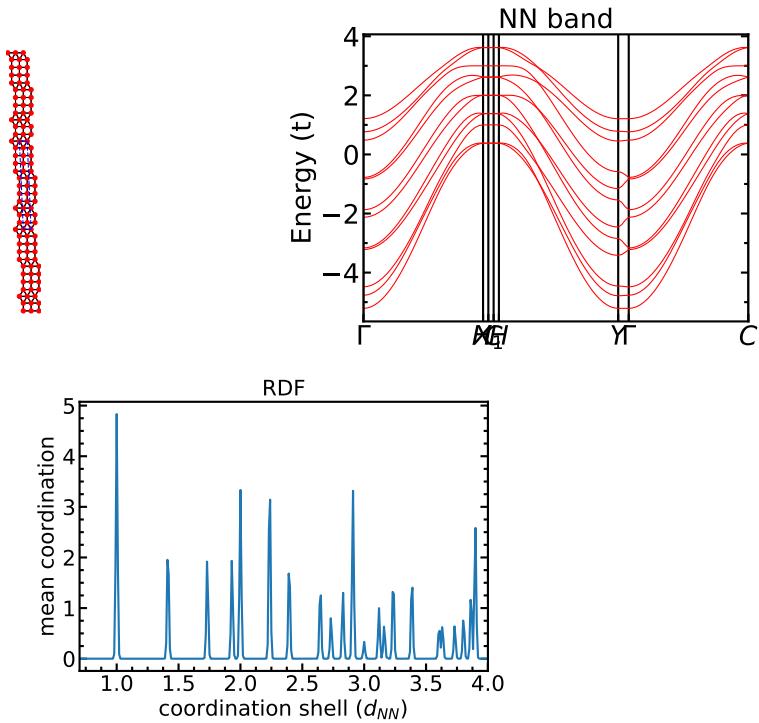


FIG. S260. t6260 lattice framework, nearest neighbors band structure and radial distribution function.

## t6261

Tiling reference number t6261 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S261. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S261.

TABLE S261. Tiling t6261 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	4	0	0	0	0	0	0	0	0	4	0	0	0	0

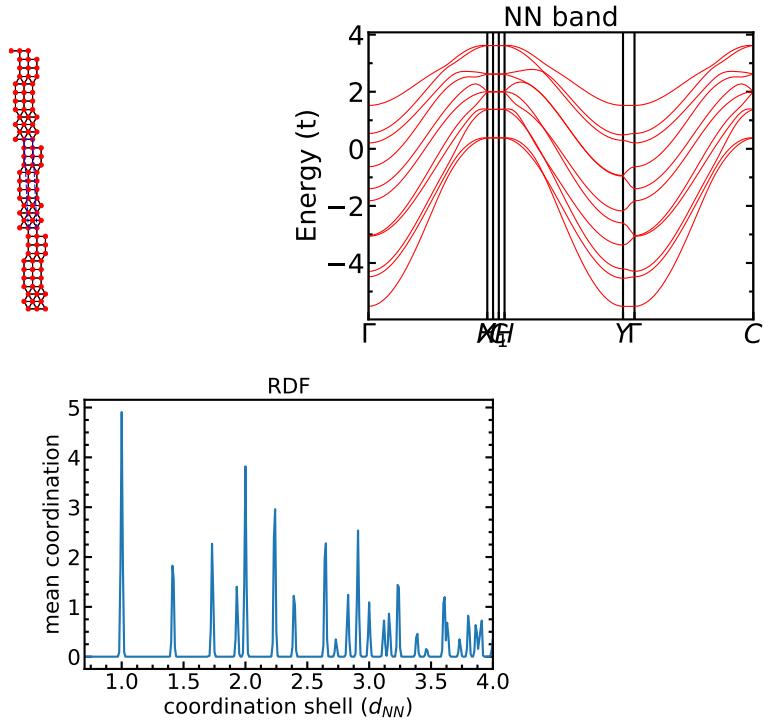


FIG. S261. t6261 lattice framework, nearest neighbors band structure and radial distribution function.

## t6262

Tiling reference number t6262 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S262. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S262.

TABLE S262. Tiling t6262 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	4	0	0	0	0	0	0	0	0	4	0	0	0	0

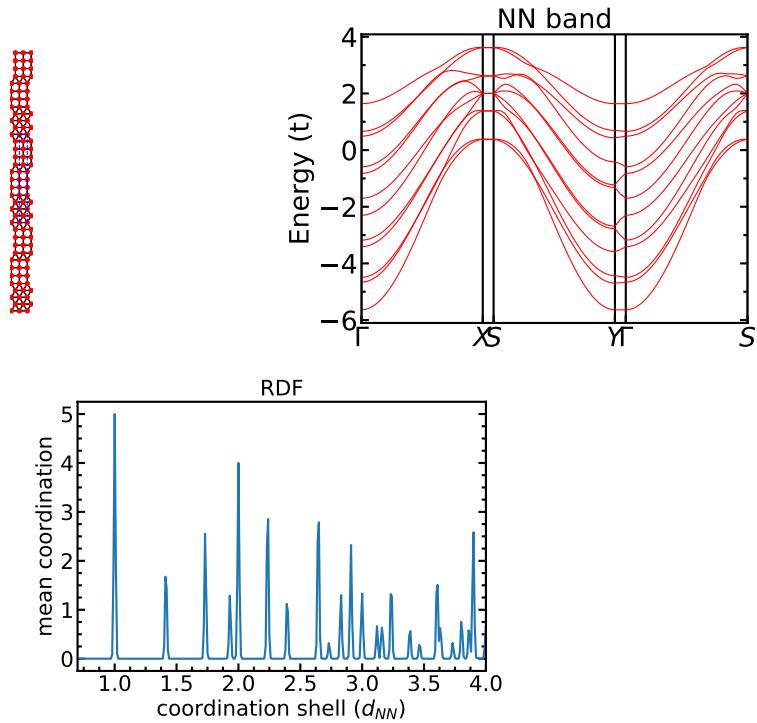


FIG. S262. t6262 lattice framework, nearest neighbors band structure and radial distribution function.

## t6263

Tiling reference number t6263 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S263. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S263.

TABLE S263. Tiling t6263 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	4	0	0	0	0	0	0	0	0	6	0	0	0	0

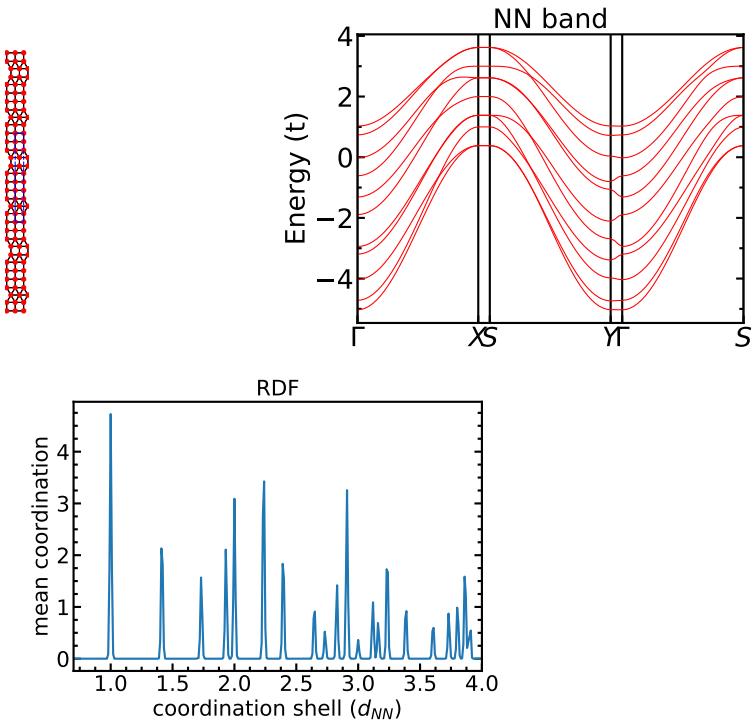


FIG. S263. t6263 lattice framework, nearest neighbors band structure and radial distribution function.

## t6264

Tiling reference number t6264 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S264. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S264.

TABLE S264. Tiling t6264 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	0	0	6	0	0	0	0

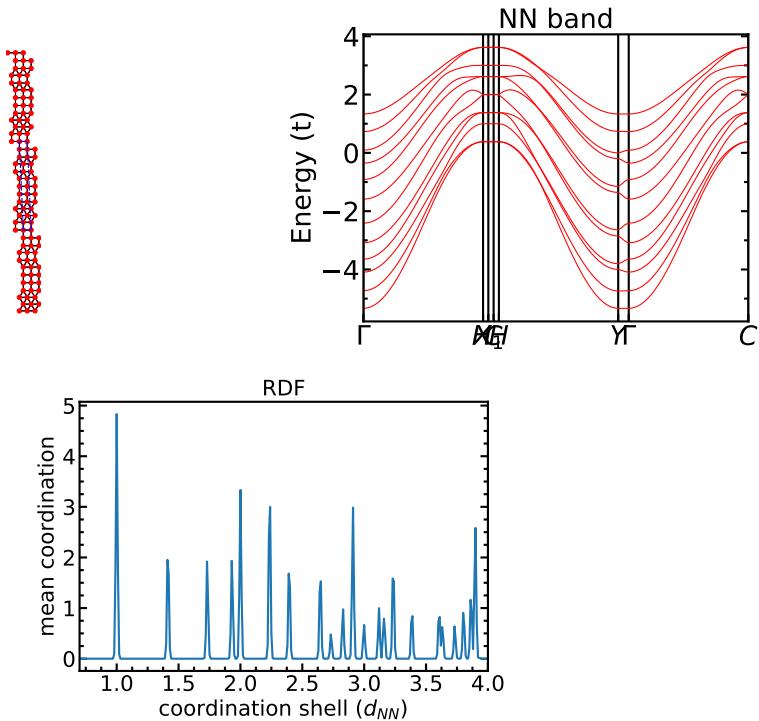


FIG. S264. t6264 lattice framework, nearest neighbors band structure and radial distribution function.

## t6265

Tiling reference number t6265 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S265. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S265.

TABLE S265. Tiling t6265 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	4	0	0	0	0	0	0	0	0	4	0	0	0	0

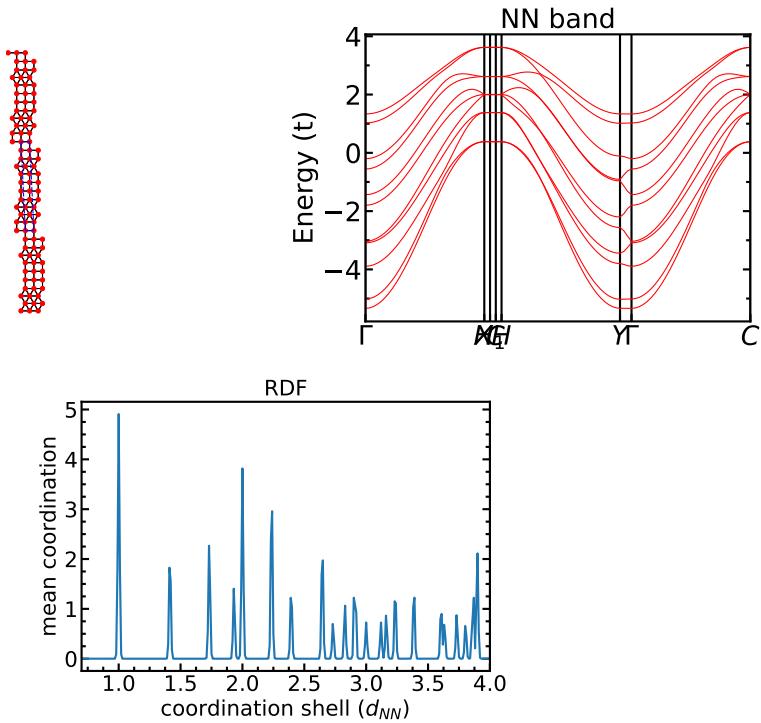


FIG. S265. t6265 lattice framework, nearest neighbors band structure and radial distribution function.

## t6266

Tiling reference number t6266 with space-group '*Cmmm*' (65) and 19 sites in the unit cell, with vertex type indicated in Tab. S266. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S266.

TABLE S266. Tiling t6266 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	8	0	0	0	0	0	0	2	0	4	0	0	4	0

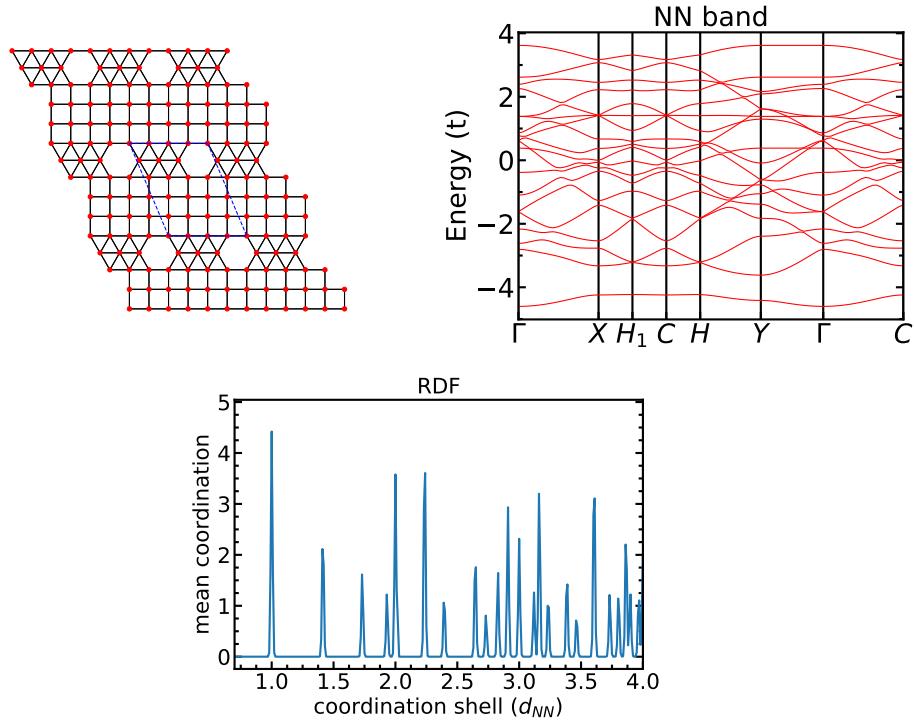


FIG. S266. t6266 lattice framework, nearest neighbors band structure and radial distribution function.

## t6267

Tiling reference number t6267 with space-group ' $Pmmm$ ' (47) and 13 sites in the unit cell, with vertex type indicated in Tab. S267. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S267.

TABLE S267. Tiling t6267 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	1	4	0	4	0	0	0	0

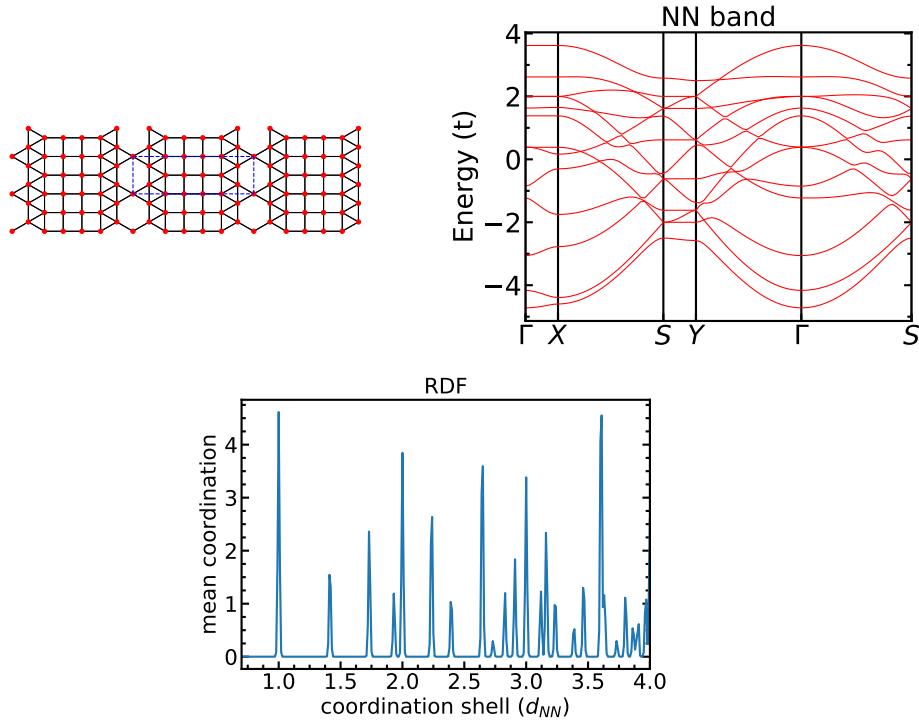


FIG. S267. t6267 lattice framework, nearest neighbors band structure and radial distribution function.

## t6268

Tiling reference number t6268 with space-group ' $Pm'$  (6) and 40 sites in the unit cell, with vertex type indicated in Tab. S268. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S268.

TABLE S268. Tiling t6268 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	0	0	8	20	0	0	0	0

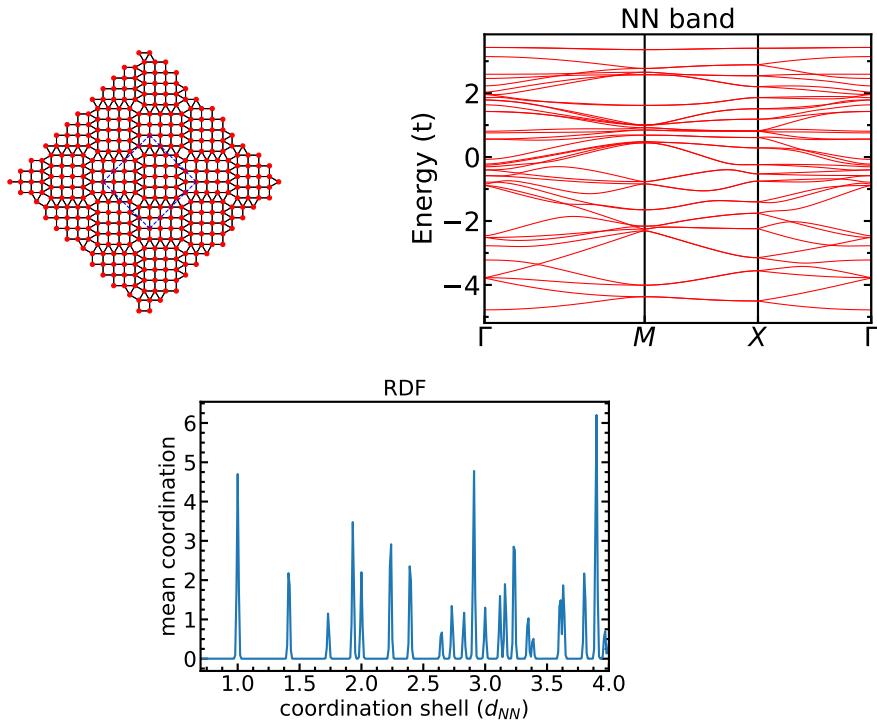


FIG. S268. t6268 lattice framework, nearest neighbors band structure and radial distribution function.

## t6269

Tiling reference number t6269 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S269. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S269.

TABLE S269. Tiling t6269 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	3	0	0	0	0	0	12	0

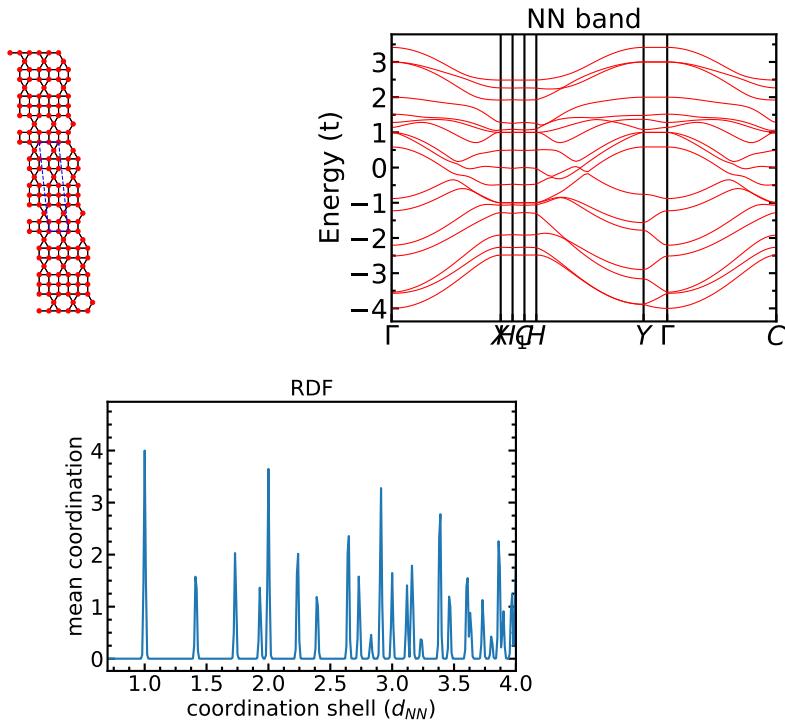


FIG. S269. t6269 lattice framework, nearest neighbors band structure and radial distribution function.

## t6270

Tiling reference number t6270 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S270. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S270.

TABLE S270. Tiling t6270 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	3	0	0	0	0	0	12	0

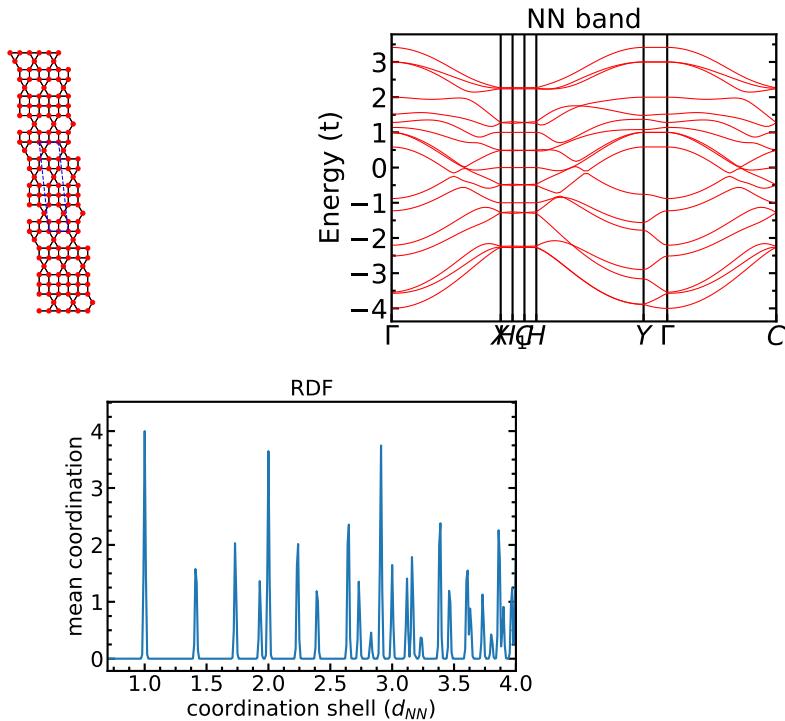


FIG. S270. t6270 lattice framework, nearest neighbors band structure and radial distribution function.

## t6271

Tiling reference number t6271 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S271. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S271.

TABLE S271. Tiling t6271 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	2	0	0	4	0	0	8	0

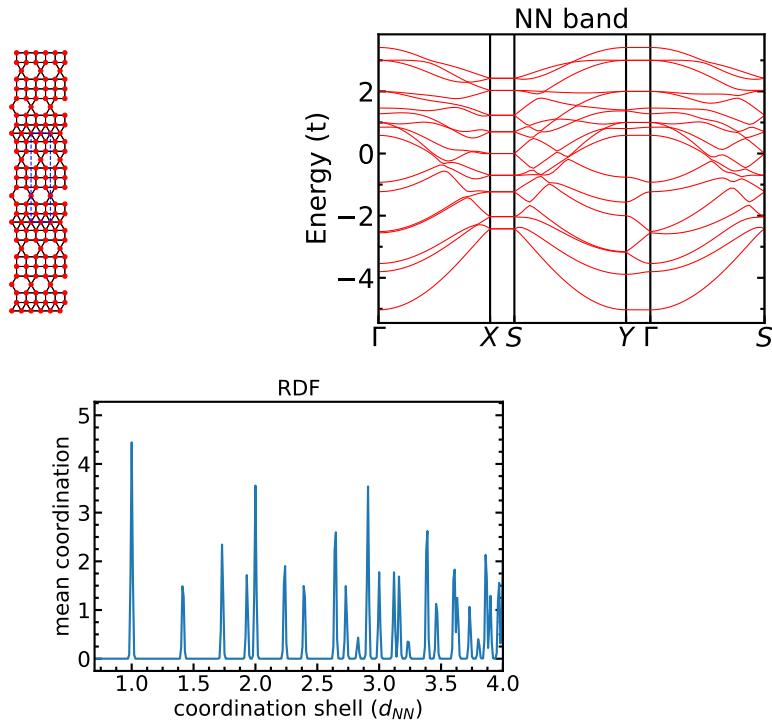


FIG. S271. t6271 lattice framework, nearest neighbors band structure and radial distribution function.

## t6272

Tiling reference number t6272 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S272. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S272.

TABLE S272. Tiling t6272 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	4	0	0	0	0	0	8	4

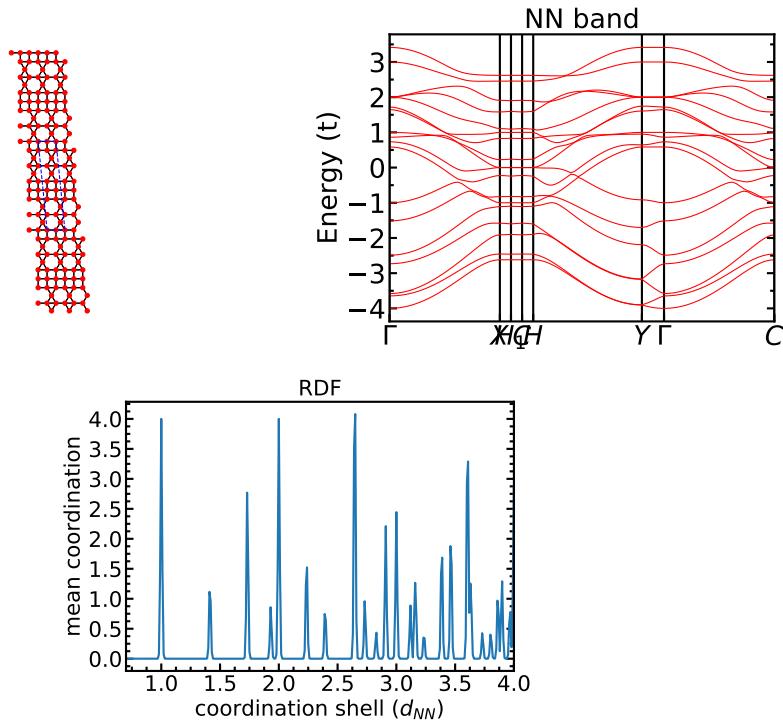


FIG. S272. t6272 lattice framework, nearest neighbors band structure and radial distribution function.

## t6273

Tiling reference number t6273 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S273. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S273.

TABLE S273. Tiling t6273 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	4	0	0	0	0	0	8	4

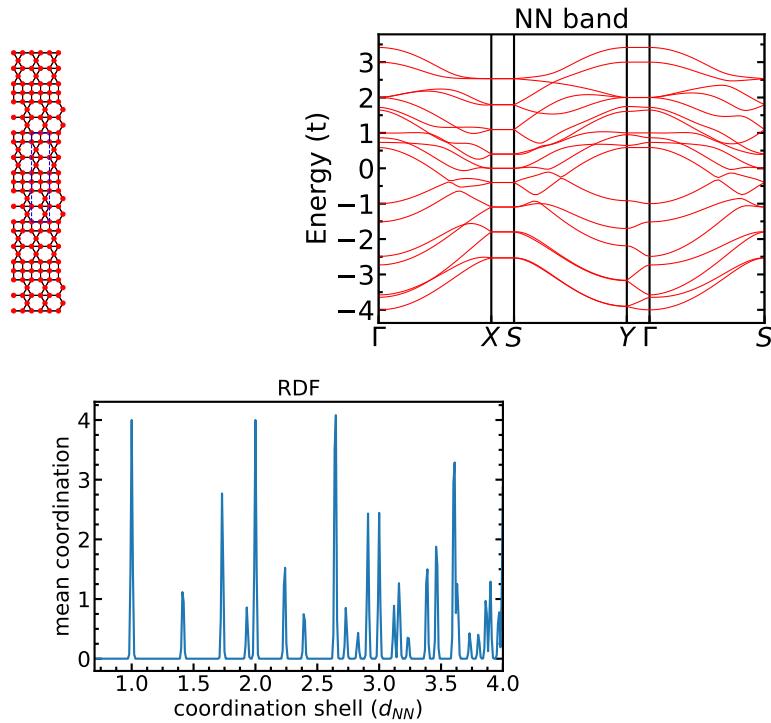


FIG. S273. t6273 lattice framework, nearest neighbors band structure and radial distribution function.

## t6274

Tiling reference number t6274 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S274. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S274.

TABLE S274. Tiling t6274 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	4	0	0	0	0	0	4	6

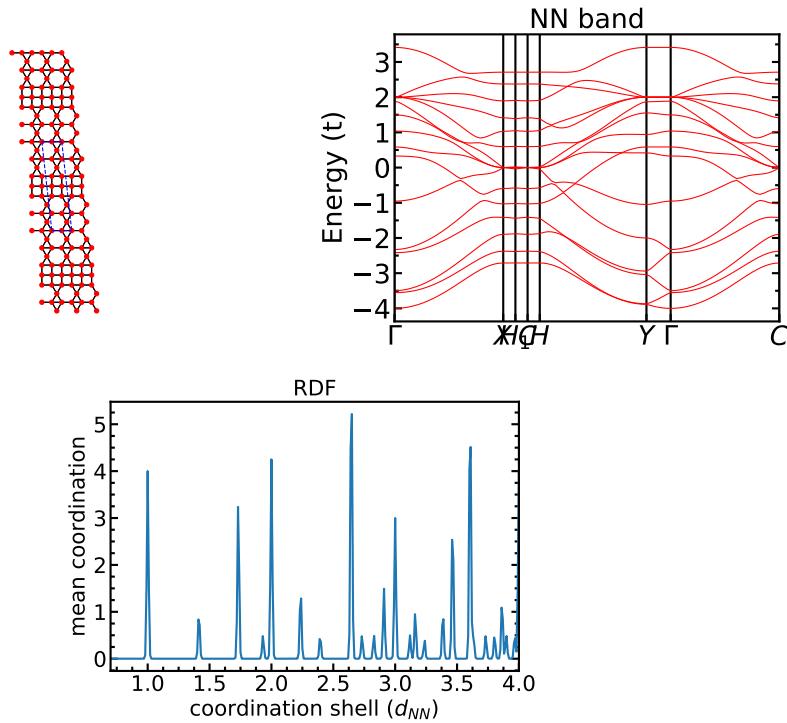


FIG. S274. t6274 lattice framework, nearest neighbors band structure and radial distribution function.

## t6275

Tiling reference number t6275 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S275. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S275.

TABLE S275. Tiling t6275 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	6	0	0	0	0	0	4	4

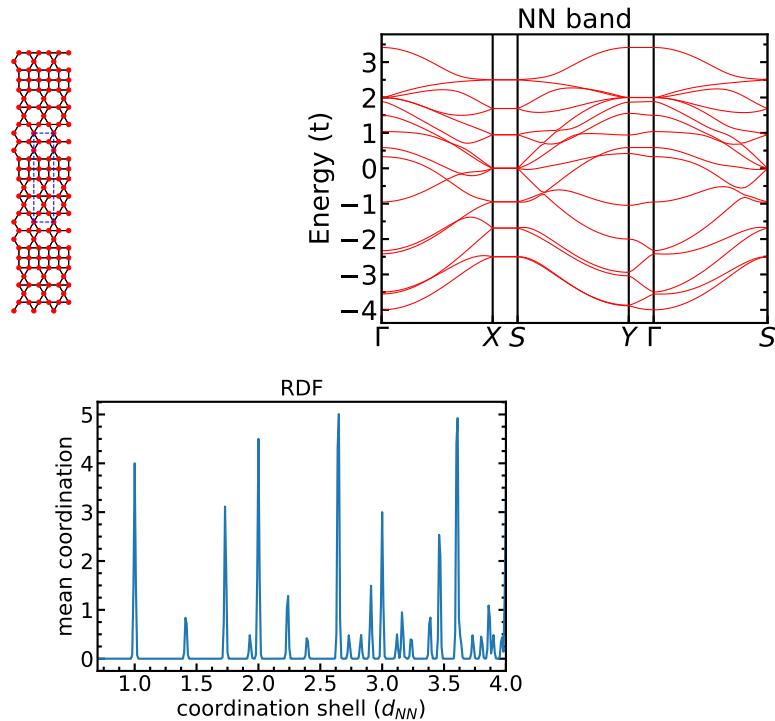


FIG. S275. t6275 lattice framework, nearest neighbors band structure and radial distribution function.

## t6276

Tiling reference number t6276 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S276. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S276.

TABLE S276. Tiling t6276 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	8	0	0	0	0	0	8	0

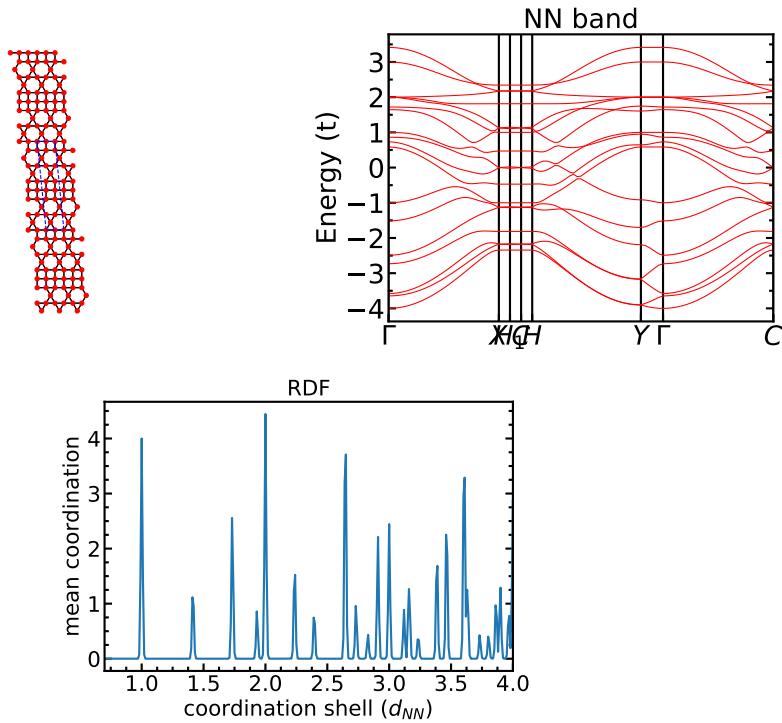


FIG. S276. t6276 lattice framework, nearest neighbors band structure and radial distribution function.

**t6277**

Tiling reference number t6277 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S277. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S277.

TABLE S277. Tiling t6277 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	8	0	0	0	0	0	8	0

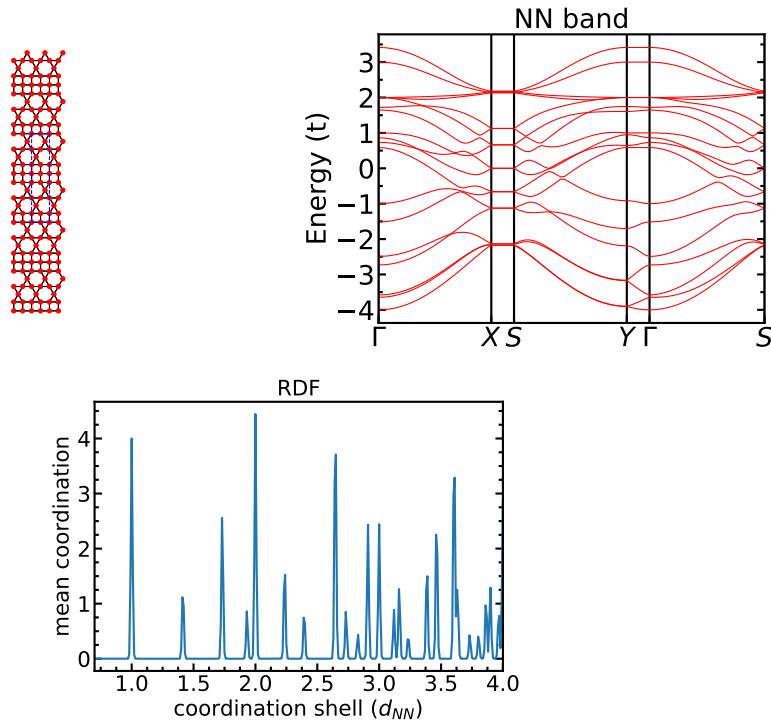


FIG. S277. t6277 lattice framework, nearest neighbors band structure and radial distribution function.

## t6278

Tiling reference number t6278 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S278. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S278.

TABLE S278. Tiling t6278 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	8	0	0	0	0	0	4	2

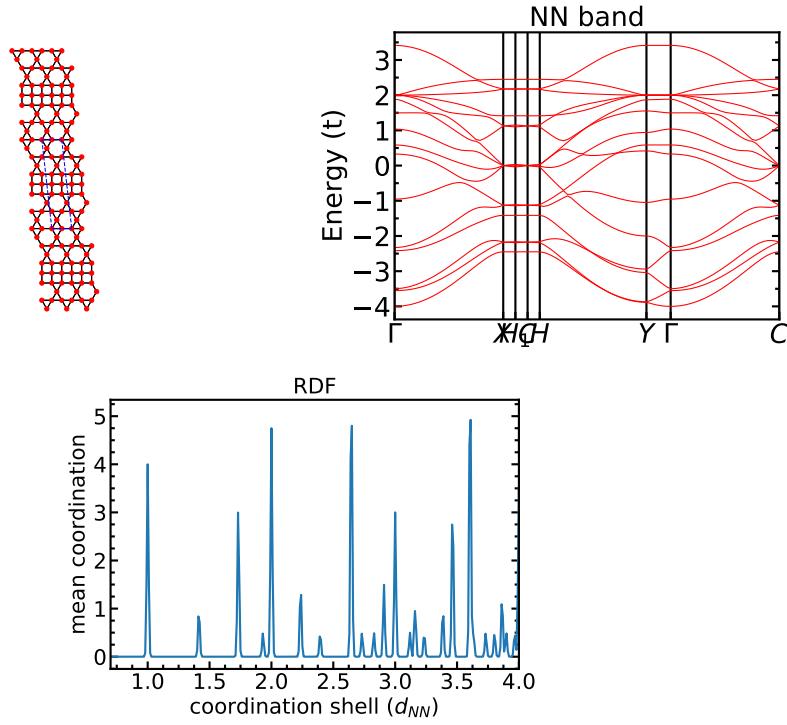


FIG. S278. t6278 lattice framework, nearest neighbors band structure and radial distribution function.

## t6279

Tiling reference number t6279 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S279. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S279.

TABLE S279. Tiling t6279 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	10	0	0	0	0	0	4	0

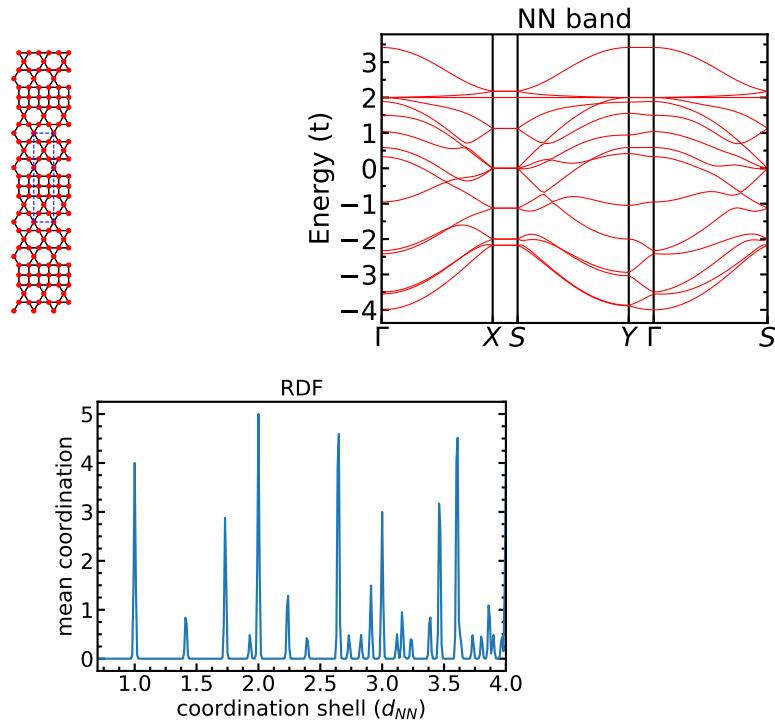


FIG. S279. t6279 lattice framework, nearest neighbors band structure and radial distribution function.

## t6280

Tiling reference number t6280 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S280. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S280.

TABLE S280. Tiling t6280 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	4	0	0	4	0

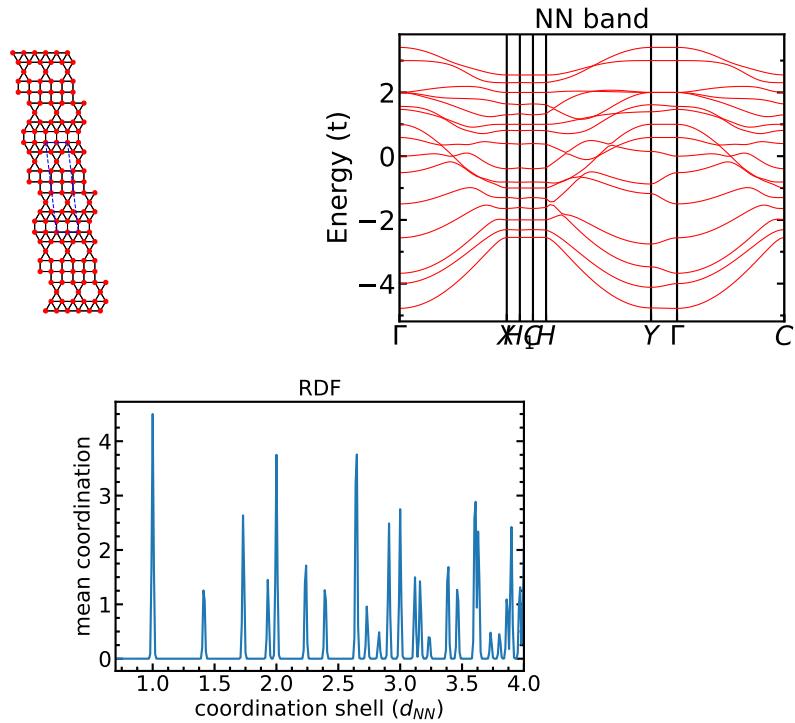


FIG. S280. t6280 lattice framework, nearest neighbors band structure and radial distribution function.

## t6281

Tiling reference number t6281 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S281. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S281.

TABLE S281. Tiling t6281 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	4	0	0	4	0

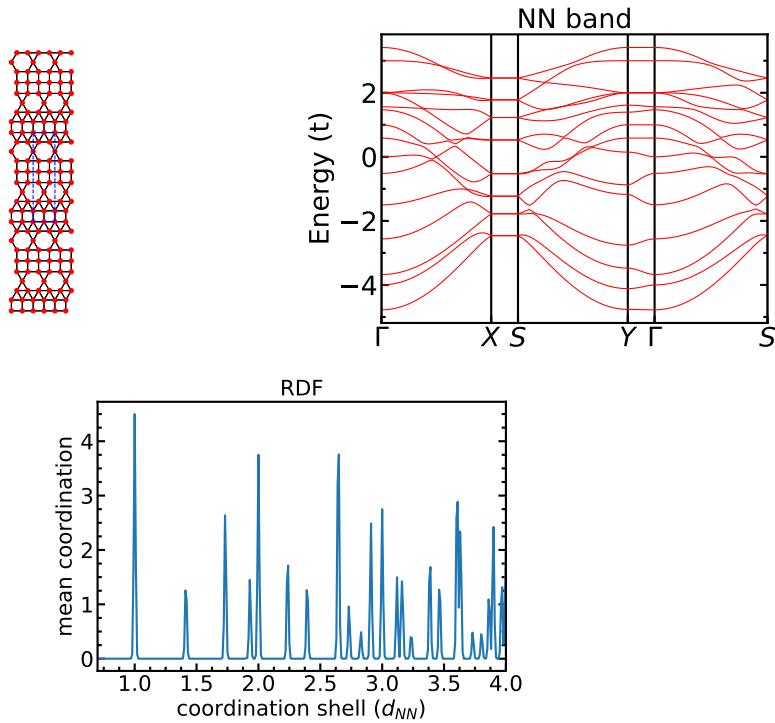


FIG. S281. t6281 lattice framework, nearest neighbors band structure and radial distribution function.

## t6282

Tiling reference number t6282 with space-group '*Cmmm*' (65) and 14 sites in the unit cell, with vertex type indicated in Tab. S282. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S282.

TABLE S282. Tiling t6282 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	2	4	0	0	0	0	4	0

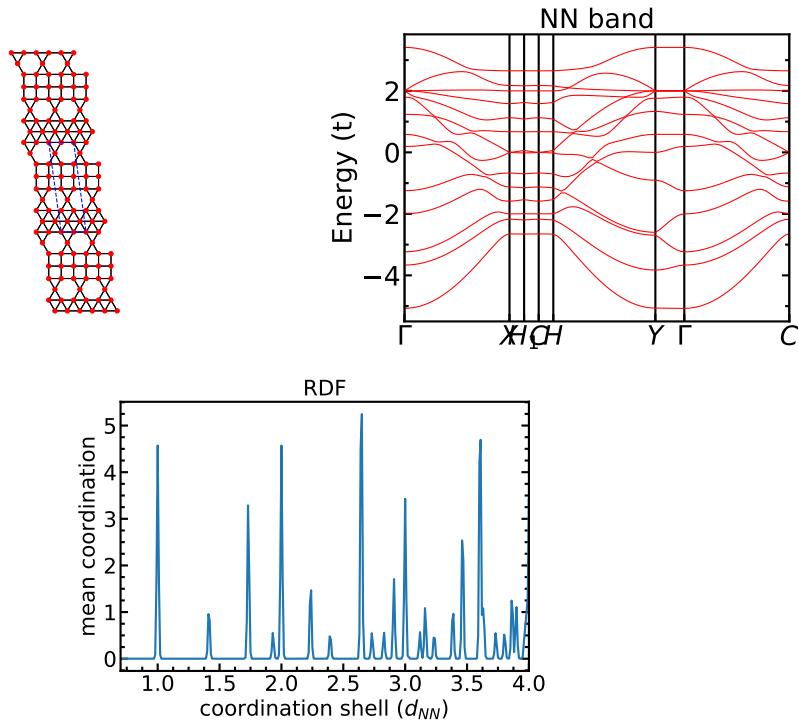


FIG. S282. t6282 lattice framework, nearest neighbors band structure and radial distribution function.

### t6283

Tiling reference number t6283 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S283. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S283.

TABLE S283. Tiling t6283 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	3	0	0	0	0	0	12	0

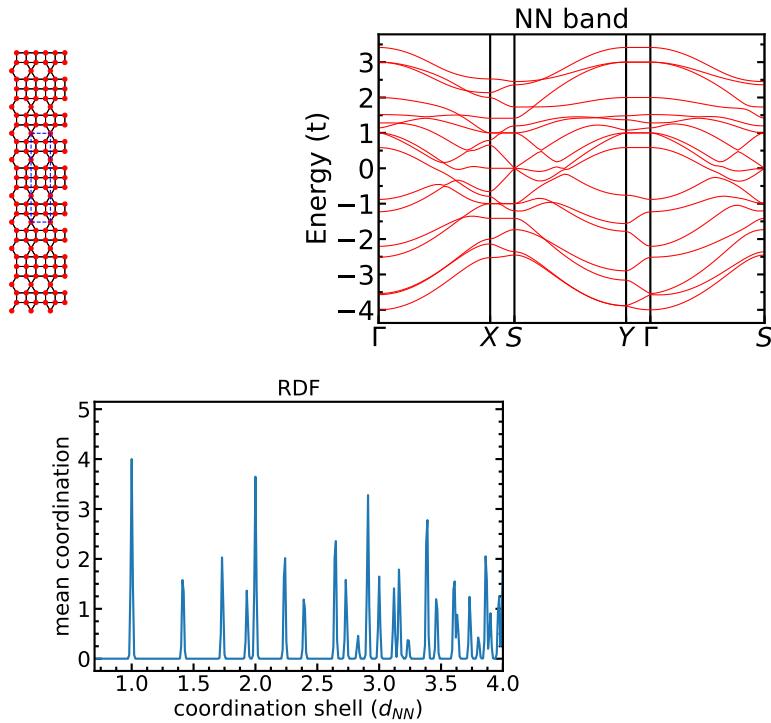


FIG. S283. t6283 lattice framework, nearest neighbors band structure and radial distribution function.

## t6284

Tiling reference number t6284 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S284. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S284.

TABLE S284. Tiling t6284 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	3	0	0	0	0	0	12	0

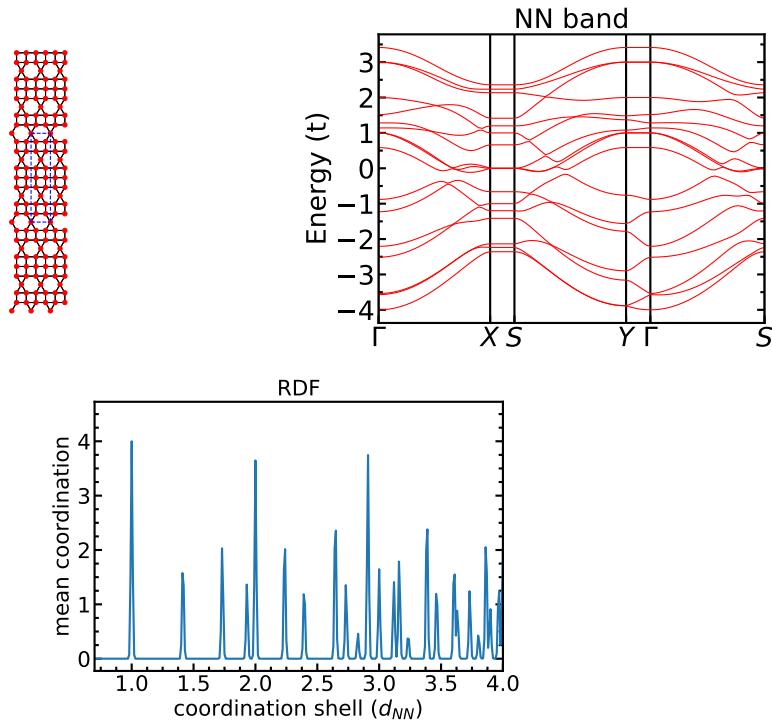


FIG. S284. t6284 lattice framework, nearest neighbors band structure and radial distribution function.

## t6285

Tiling reference number t6285 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S285. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S285.

TABLE S285. Tiling t6285 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	2	0	0	4	0	0	8	0

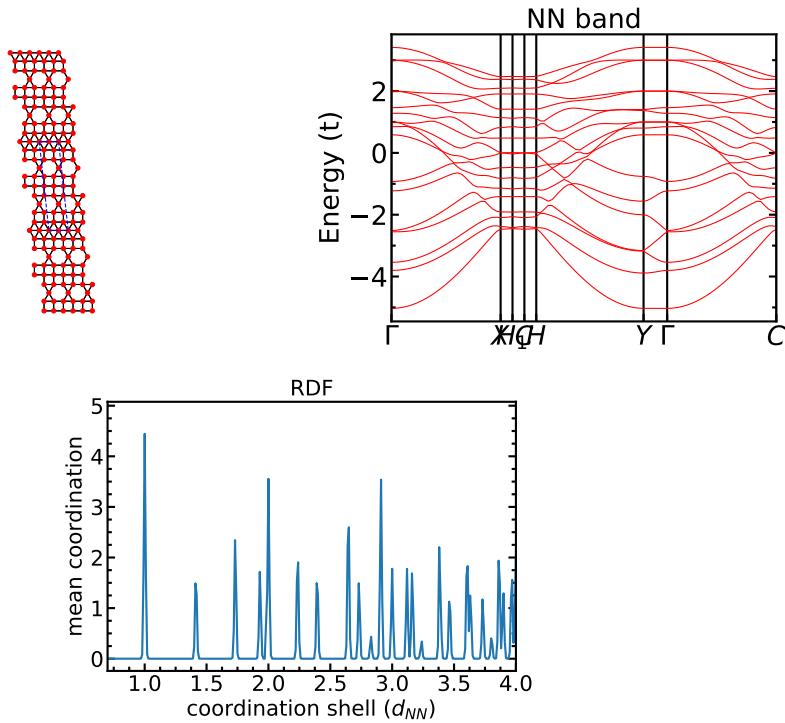


FIG. S285. t6285 lattice framework, nearest neighbors band structure and radial distribution function.

## t6286

Tiling reference number t6286 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S286. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S286.

TABLE S286. Tiling t6286 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	4	0	0	0	0	0	8	4

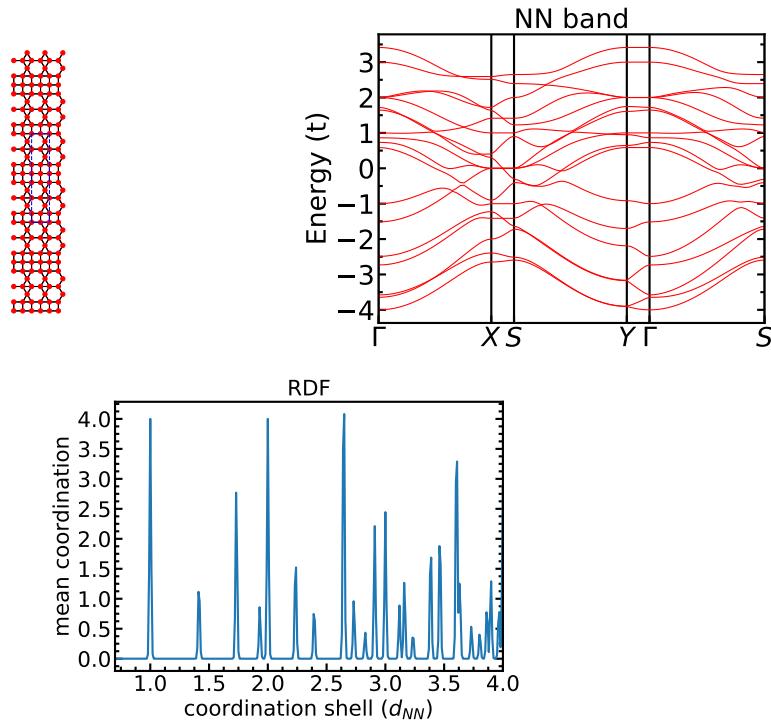


FIG. S286. t6286 lattice framework, nearest neighbors band structure and radial distribution function.

## t6287

Tiling reference number t6287 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S287. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S287.

TABLE S287. Tiling t6287 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	4	0	0	0	0	0	8	4

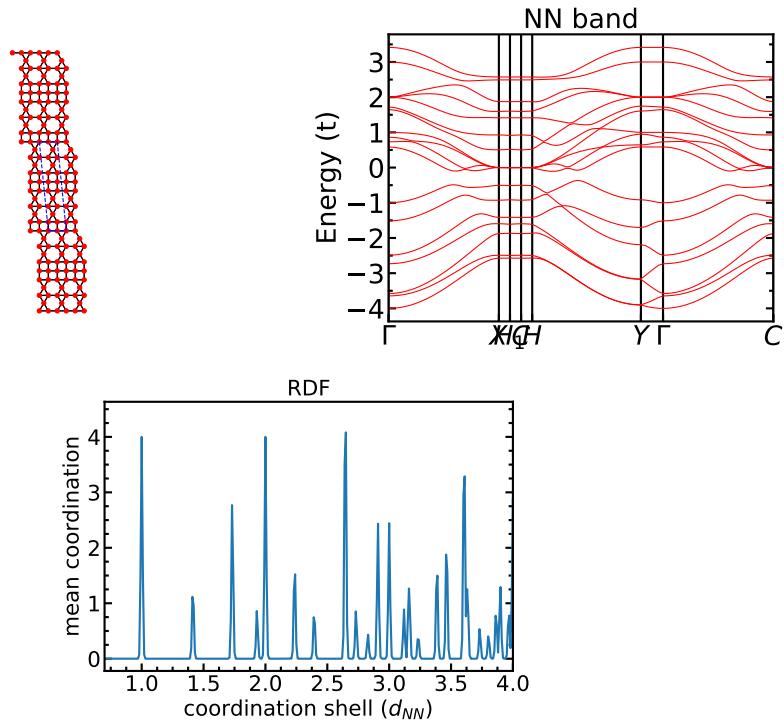


FIG. S287. t6287 lattice framework, nearest neighbors band structure and radial distribution function.

## t6288

Tiling reference number t6288 with space-group ' $Pmmm$ ' (47) and 16 sites in the unit cell, with vertex type indicated in Tab. S288. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S288.

TABLE S288. Tiling t6288 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	4	0	0	0	0	0	4	6

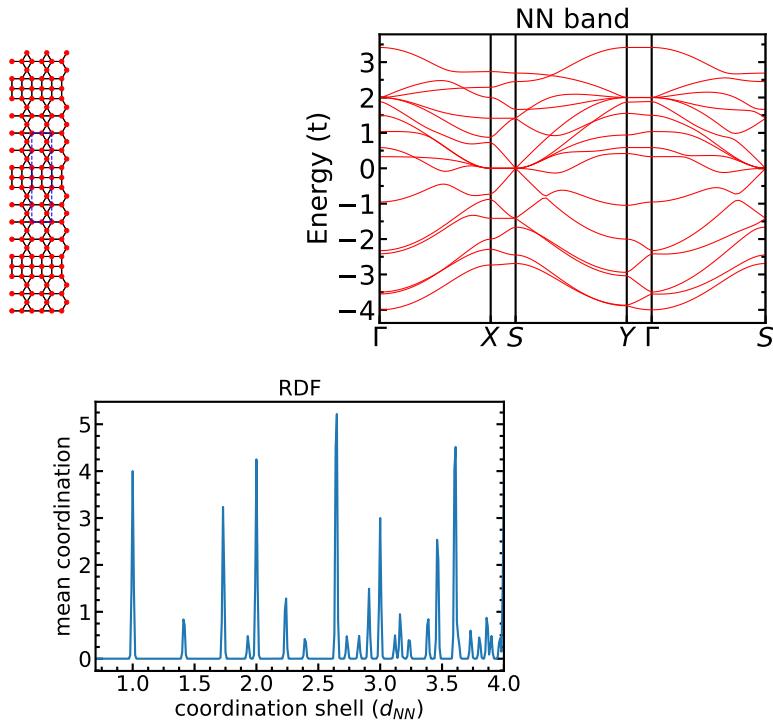


FIG. S288. t6288 lattice framework, nearest neighbors band structure and radial distribution function.

## t6289

Tiling reference number t6289 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S289. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S289.

TABLE S289. Tiling t6289 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	6	0	0	0	0	0	4	4

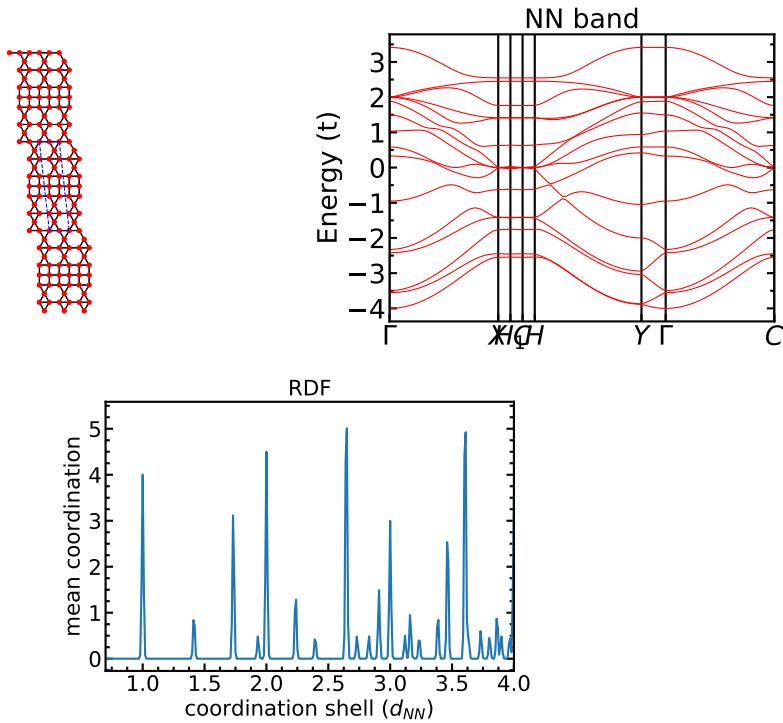


FIG. S289. t6289 lattice framework, nearest neighbors band structure and radial distribution function.

## t6290

Tiling reference number t6290 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S290. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S290.

TABLE S290. Tiling t6290 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	8	0	0	0	0	0	8	0

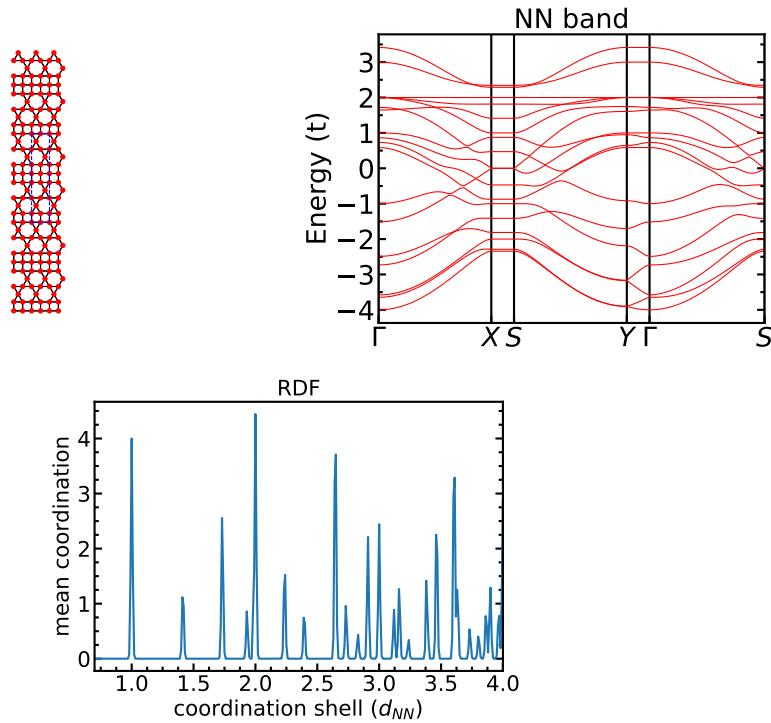


FIG. S290. t6290 lattice framework, nearest neighbors band structure and radial distribution function.

## t6291

Tiling reference number t6291 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S291. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S291.

TABLE S291. Tiling t6291 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	8	0	0	0	0	0	8	0

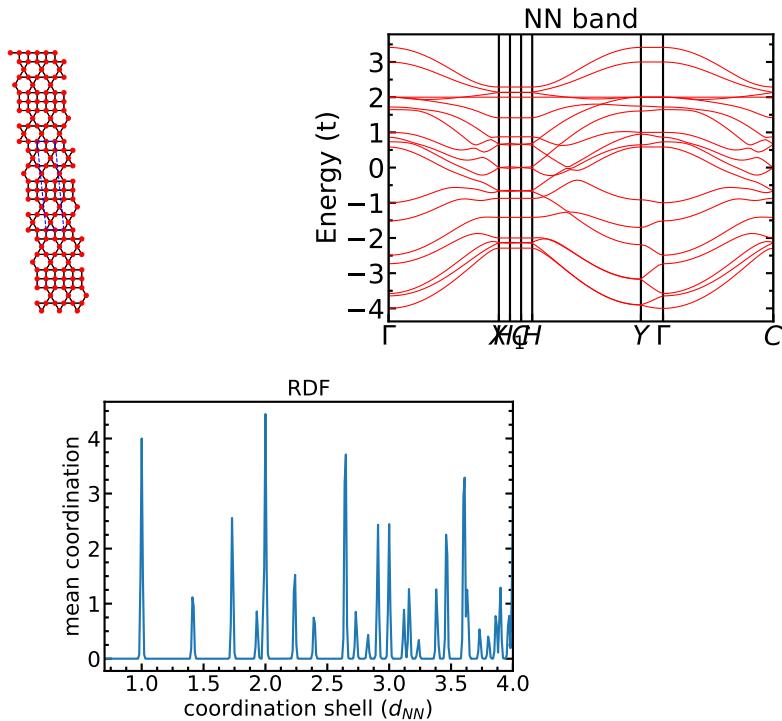


FIG. S291. t6291 lattice framework, nearest neighbors band structure and radial distribution function.

## t6292

Tiling reference number t6292 with space-group ' $Pmmm$ ' (47) and 16 sites in the unit cell, with vertex type indicated in Tab. S292. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S292.

TABLE S292. Tiling t6292 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	8	0	0	0	0	0	4	2

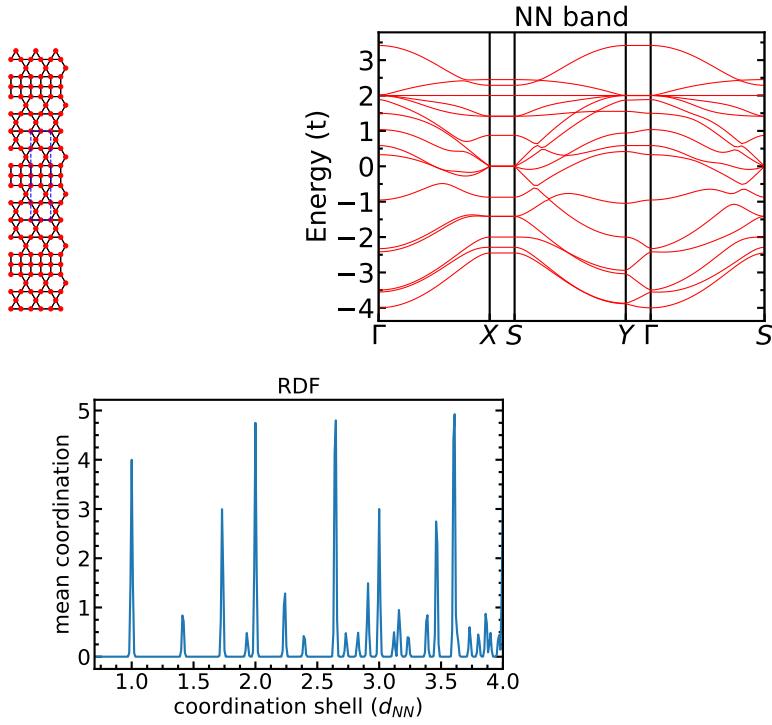


FIG. S292. t6292 lattice framework, nearest neighbors band structure and radial distribution function.

## t6293

Tiling reference number t6293 with space-group ' $Cmmm$ ' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S293. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S293.

TABLE S293. Tiling t6293 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	10	0	0	0	0	0	4	0

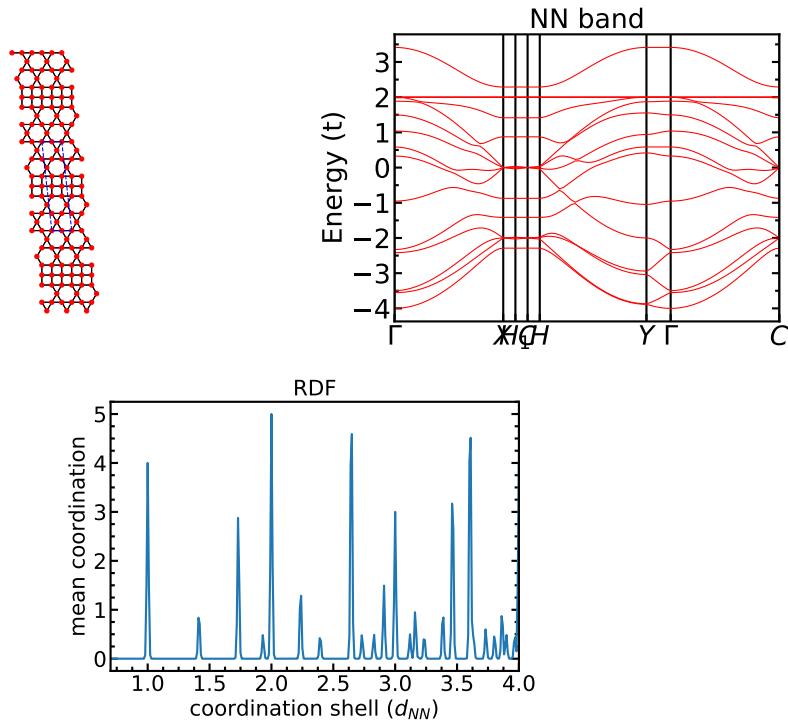


FIG. S293. t6293 lattice framework, nearest neighbors band structure and radial distribution function.

## t6294

Tiling reference number t6294 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S294. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S294.

TABLE S294. Tiling t6294 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	4	0	0	4	0

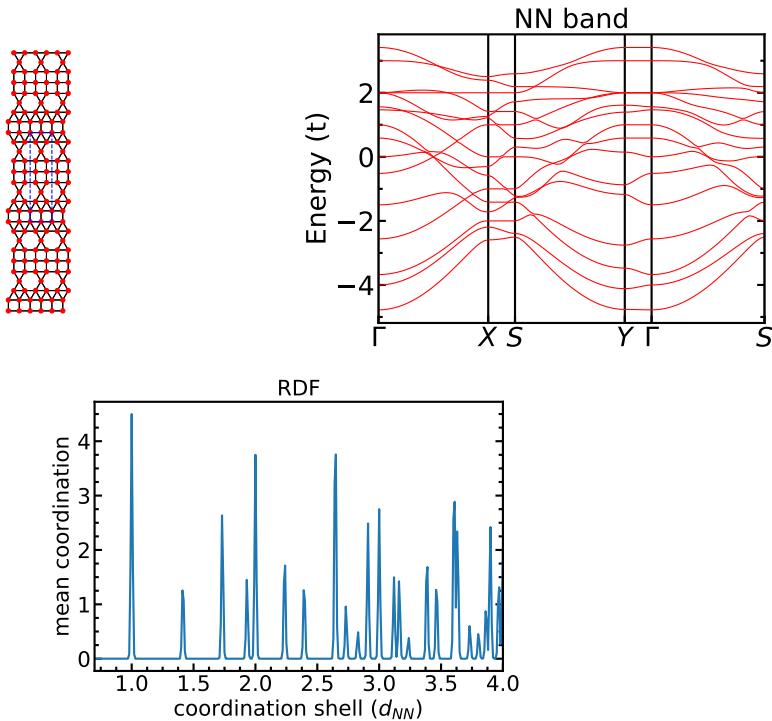


FIG. S294. t6294 lattice framework, nearest neighbors band structure and radial distribution function.

## t6295

Tiling reference number t6295 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S295. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S295.

TABLE S295. Tiling t6295 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	4	0	0	4	0

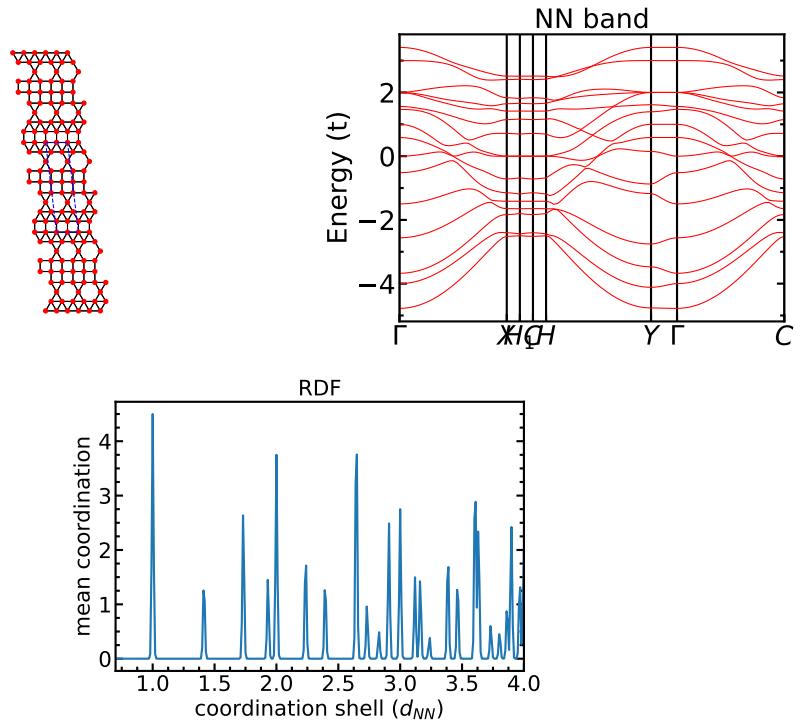


FIG. S295. t6295 lattice framework, nearest neighbors band structure and radial distribution function.

## t6296

Tiling reference number t6296 with space-group ' $Pmm2'$  (25) and 14 sites in the unit cell, with vertex type indicated in Tab. S296. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S296.

TABLE S296. Tiling t6296 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	2	4	0	0	0	0	4	0

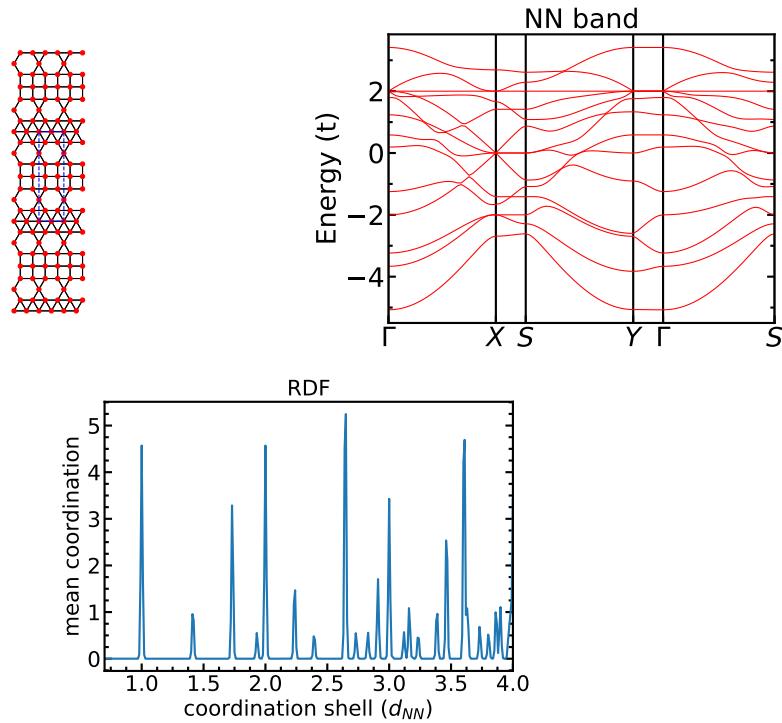


FIG. S296. t6296 lattice framework, nearest neighbors band structure and radial distribution function.

## t6297

Tiling reference number t6297 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S297. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S297.

TABLE S297. Tiling t6297 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	0	0	0	0	0	12	0

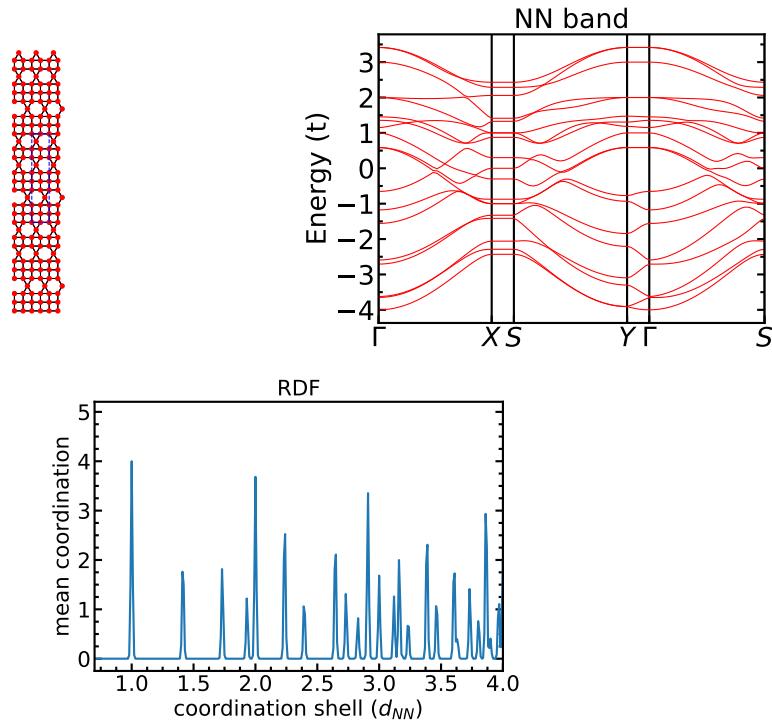


FIG. S297. t6297 lattice framework, nearest neighbors band structure and radial distribution function.

## t6298

Tiling reference number t6298 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S298. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S298.

TABLE S298. Tiling t6298 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	0	0	0	0	0	12	0

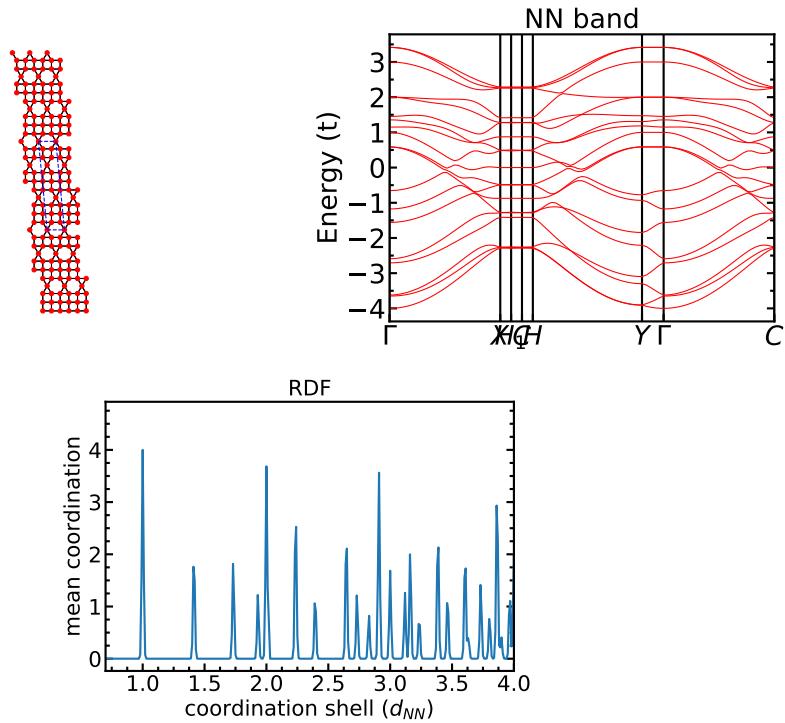


FIG. S298. t6298 lattice framework, nearest neighbors band structure and radial distribution function.

## t6299

Tiling reference number t6299 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S299. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S299.

TABLE S299. Tiling t6299 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	3	0	0	0	0	0	8	2

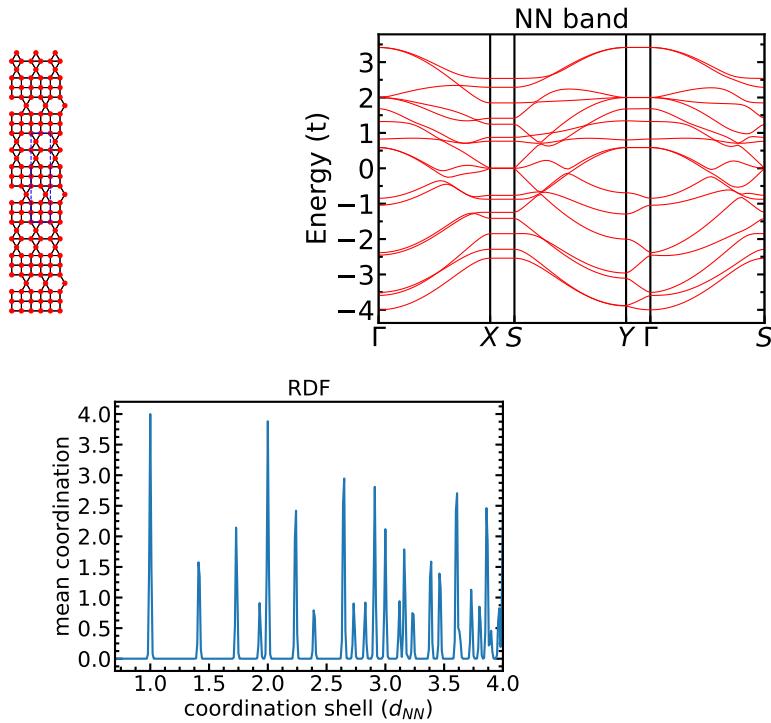


FIG. S299. t6299 lattice framework, nearest neighbors band structure and radial distribution function.

## t6300

Tiling reference number t6300 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S300. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S300.

TABLE S300. Tiling t6300 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	5	0	0	0	0	0	8	0

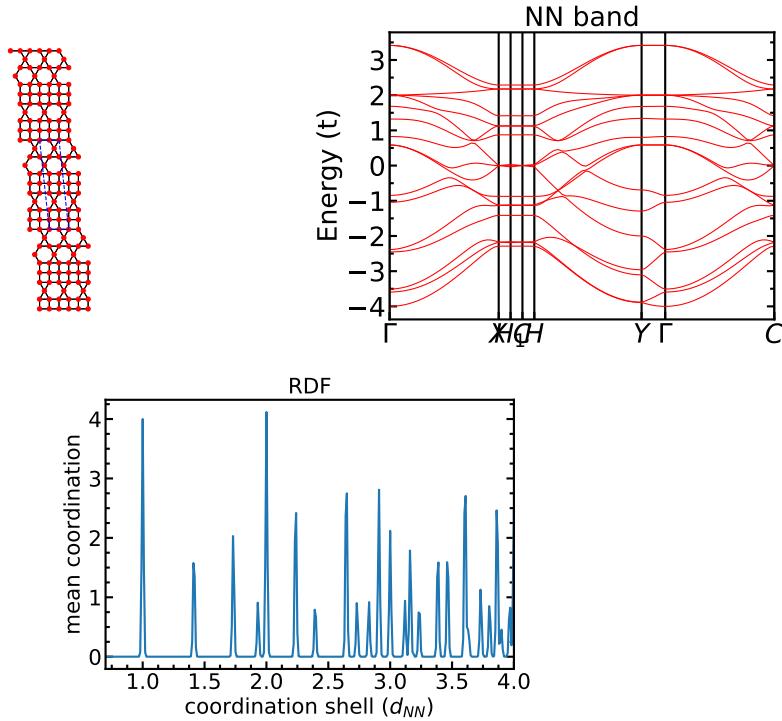


FIG. S300. t6300 lattice framework, nearest neighbors band structure and radial distribution function.

## t6301

Tiling reference number t6301 with space-group ' $Pm'$  (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S301. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S301.

TABLE S301. Tiling t6301 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	3	8	0	0	0	0	8	0

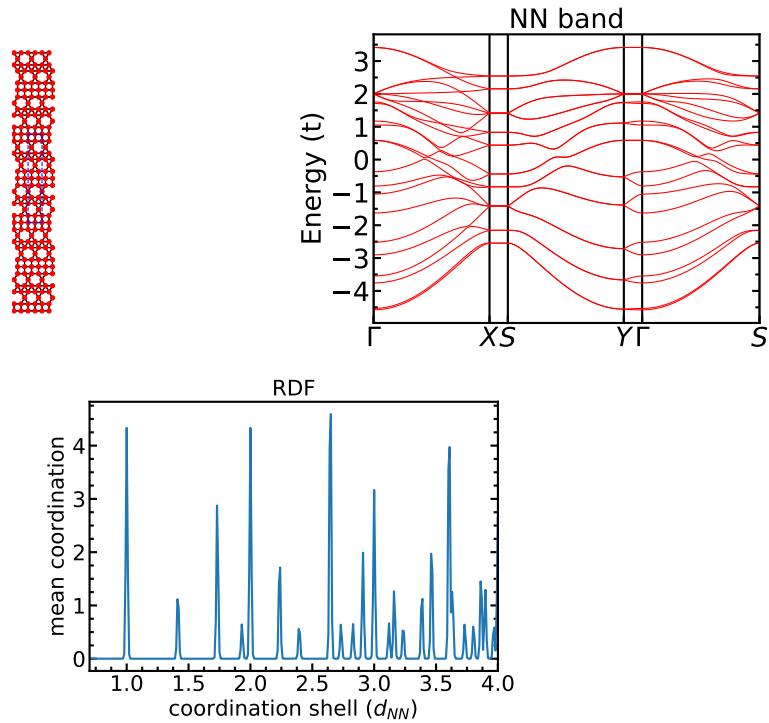


FIG. S301. t6301 lattice framework, nearest neighbors band structure and radial distribution function.

## t6302

Tiling reference number t6302 with space-group ' $Pmm2'$  (25) and 19 sites in the unit cell, with vertex type indicated in Tab. S302. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S302.

TABLE S302. Tiling t6302 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	2	0	0	0	0	0	12	0

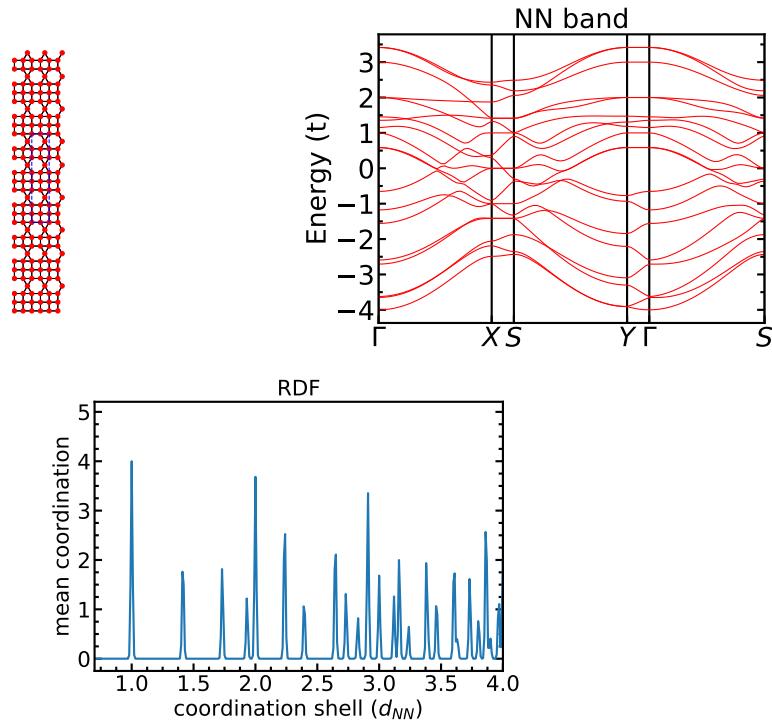


FIG. S302. t6302 lattice framework, nearest neighbors band structure and radial distribution function.

### t6303

Tiling reference number t6303 with space-group '*Amm2'* (38) and 19 sites in the unit cell, with vertex type indicated in Tab. S303. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S303.

TABLE S303. Tiling t6303 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	3	0	0	0	0	0	12	0

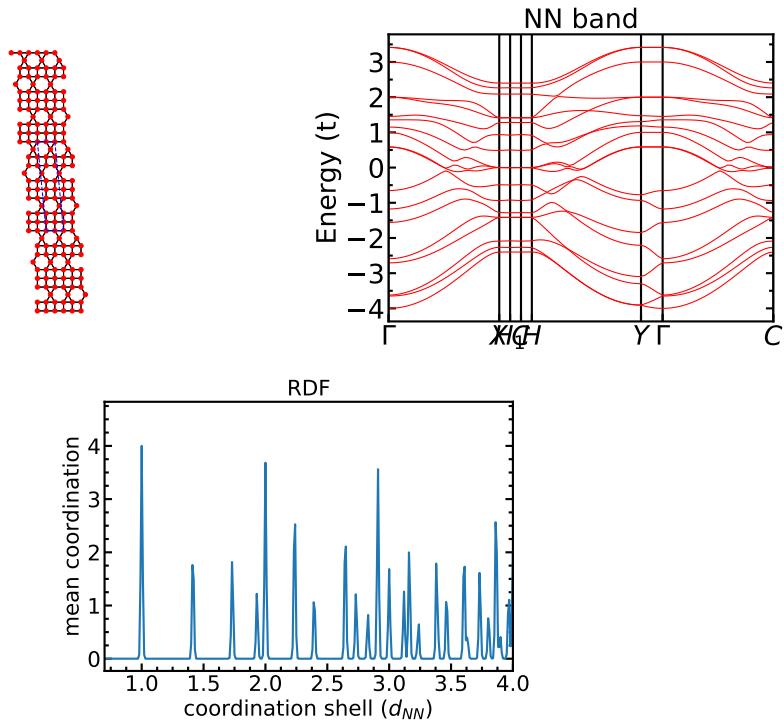


FIG. S303. t6303 lattice framework, nearest neighbors band structure and radial distribution function.

## t6304

Tiling reference number t6304 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S304. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S304.

TABLE S304. Tiling t6304 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	3	0	0	0	0	0	8	2

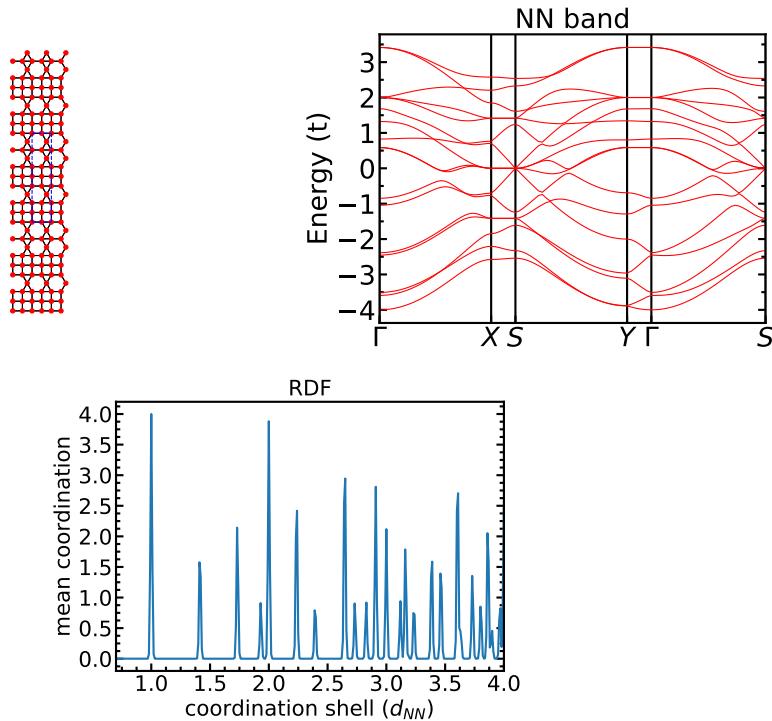


FIG. S304. t6304 lattice framework, nearest neighbors band structure and radial distribution function.

## t6305

Tiling reference number t6305 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S305. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S305.

TABLE S305. Tiling t6305 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	5	0	0	0	0	0	8	0

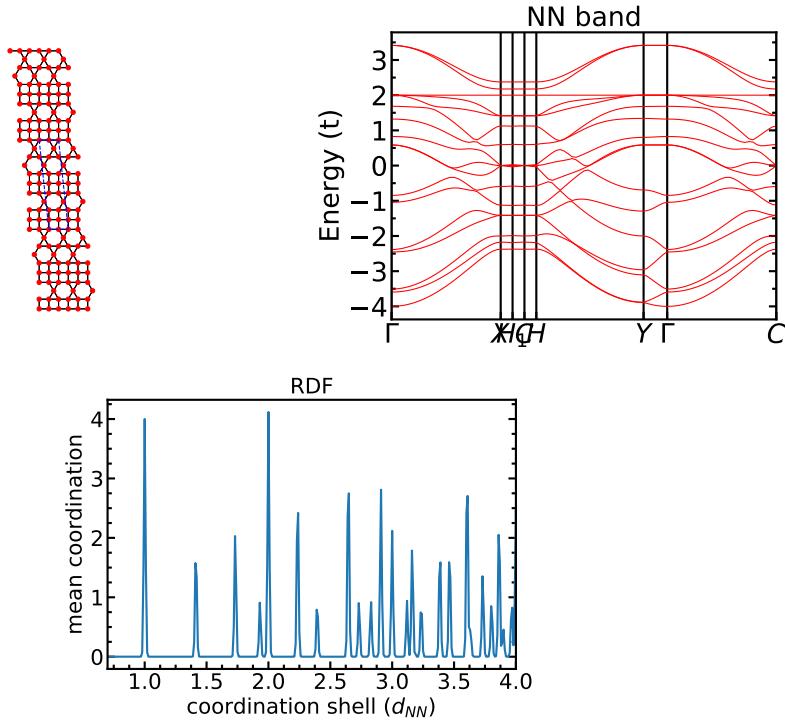


FIG. S305. t6305 lattice framework, nearest neighbors band structure and radial distribution function.

## t6306

Tiling reference number t6306 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S306. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S306.

TABLE S306. Tiling t6306 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	0	0	0	4	0

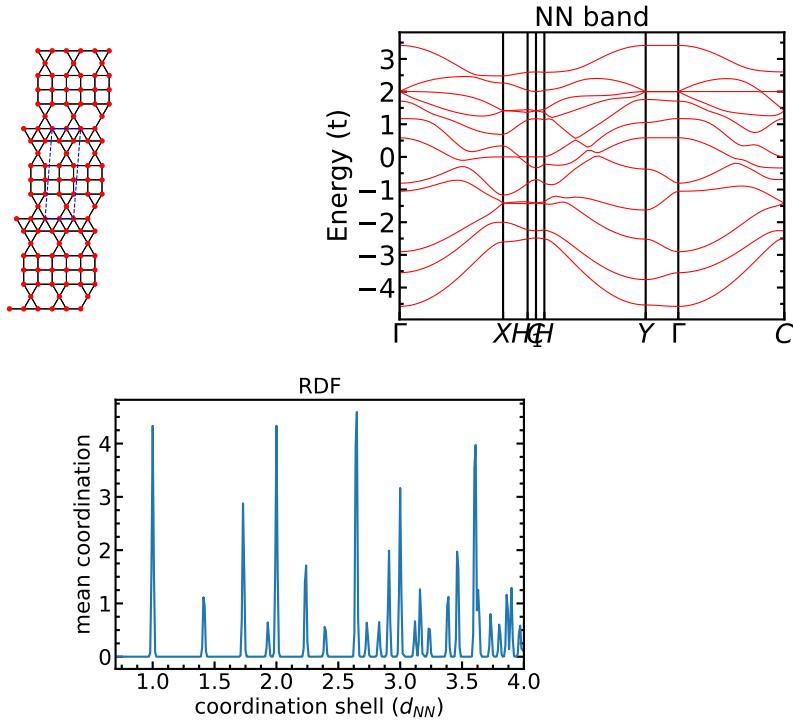


FIG. S306. t6306 lattice framework, nearest neighbors band structure and radial distribution function.

## t6307

Tiling reference number t6307 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S307. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S307.

TABLE S307. Tiling t6307 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	1	0	0	8	0	0	4	0

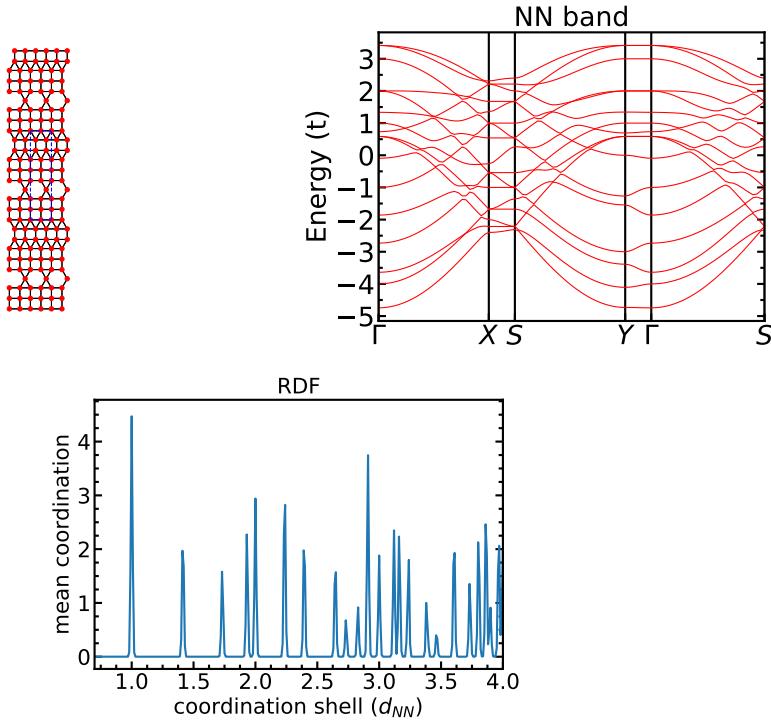


FIG. S307. t6307 lattice framework, nearest neighbors band structure and radial distribution function.

## t6308

Tiling reference number t6308 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S308. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S308.

TABLE S308. Tiling t6308 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	1	0	0	8	0	0	4	0

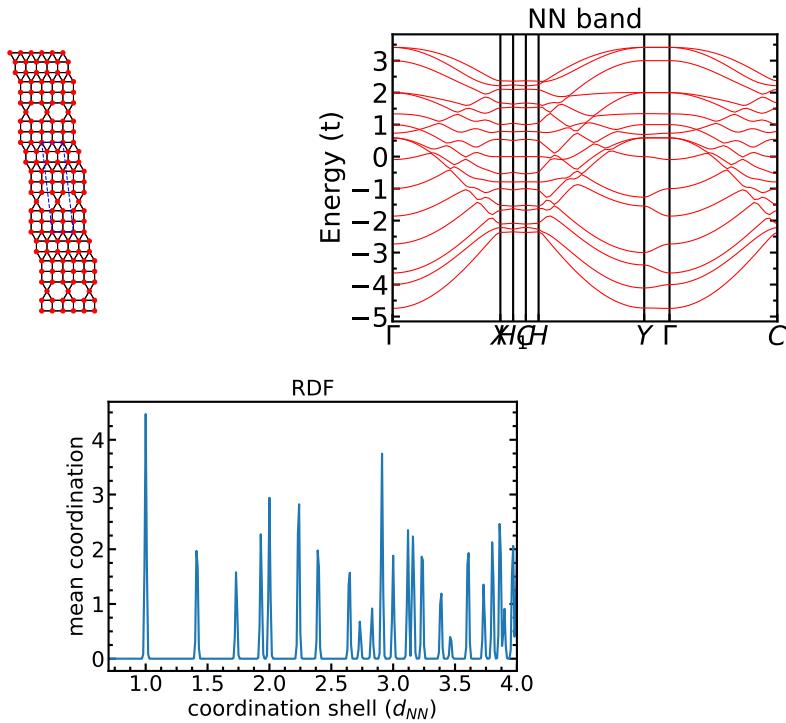


FIG. S308. t6308 lattice framework, nearest neighbors band structure and radial distribution function.

## t6309

Tiling reference number t6309 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S309. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S309.

TABLE S309. Tiling t6309 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	1	0	0	4	0	0	8	0

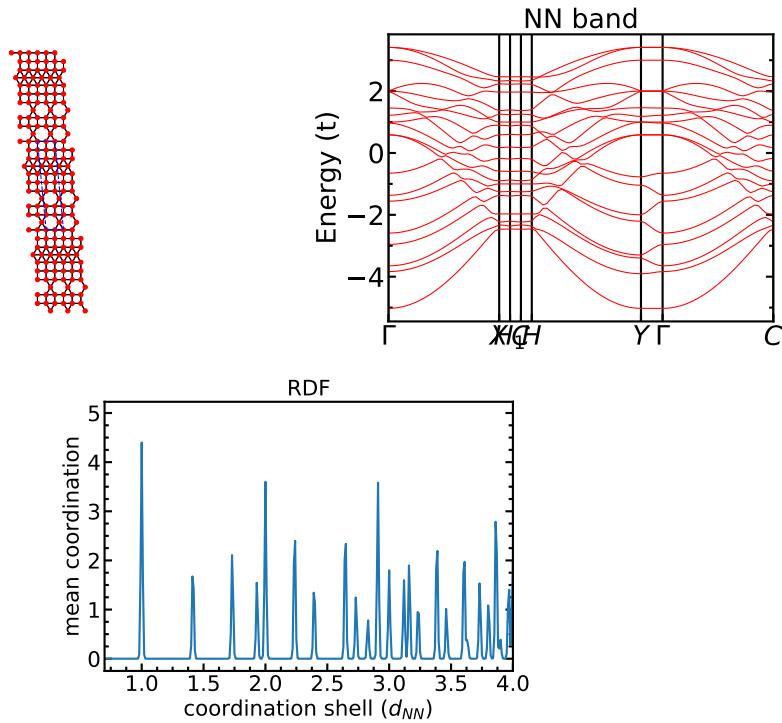


FIG. S309. t6309 lattice framework, nearest neighbors band structure and radial distribution function.

## t6310

Tiling reference number t6310 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S310. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S310.

TABLE S310. Tiling t6310 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	2	0	0	4	0	0	8	0

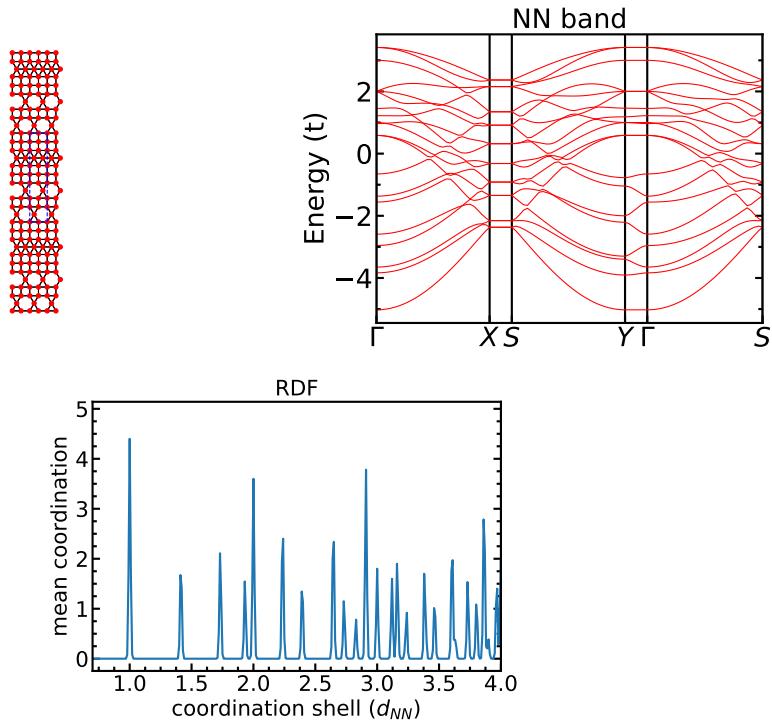


FIG. S310. t6310 lattice framework, nearest neighbors band structure and radial distribution function.

## t6311

Tiling reference number t6311 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S311. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S311.

TABLE S311. Tiling t6311 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	2	0	0	4	0	0	4	2

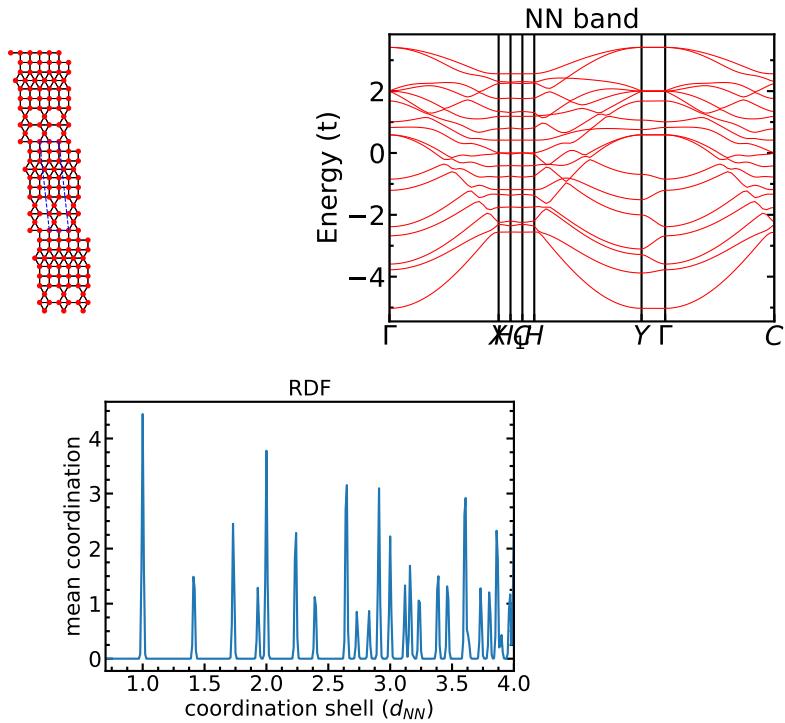


FIG. S311. t6311 lattice framework, nearest neighbors band structure and radial distribution function.

## t6312

Tiling reference number t6312 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S312. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S312.

TABLE S312. Tiling t6312 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	4	0	0	4	0	0	4	0

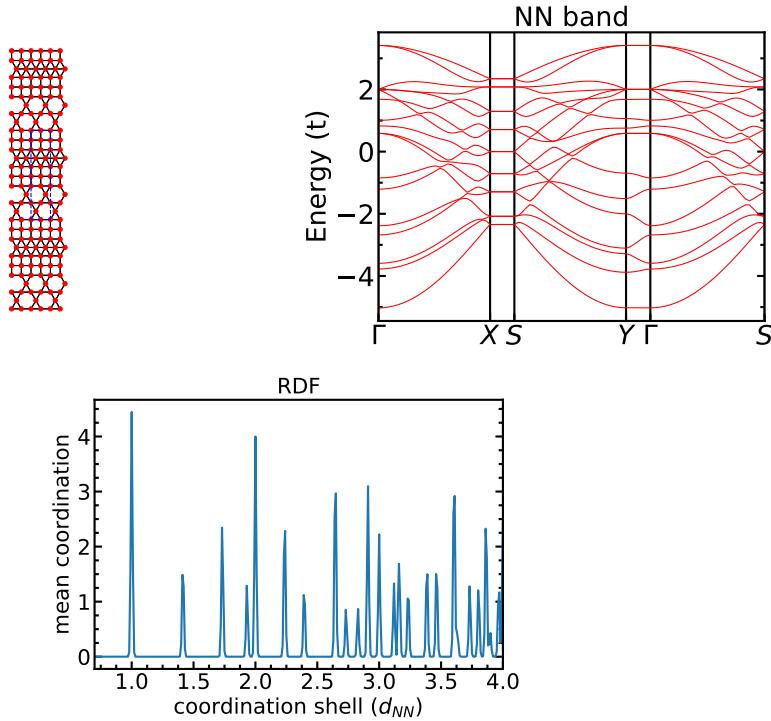


FIG. S312. t6312 lattice framework, nearest neighbors band structure and radial distribution function.

### t6313

Tiling reference number t6313 with space-group ' $Pmm2'$  (25) and 15 sites in the unit cell, with vertex type indicated in Tab. S313. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S313.

TABLE S313. Tiling t6313 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	1	0	0	4	0	0	4	0

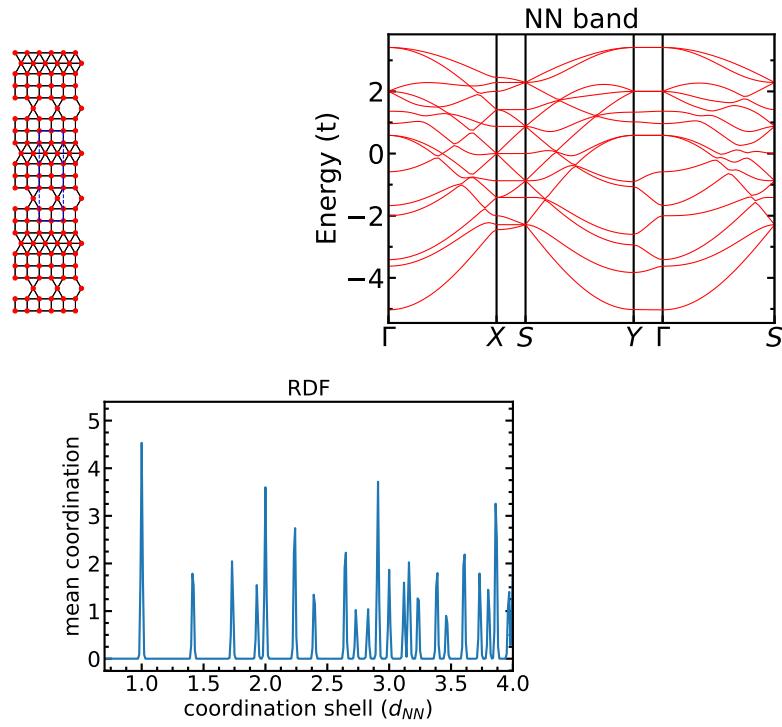


FIG. S313. t6313 lattice framework, nearest neighbors band structure and radial distribution function.

## t6314

Tiling reference number t6314 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S314. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S314.

TABLE S314. Tiling t6314 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	4	0	0	0	0	0	0	8	0	4	0	0	4	0

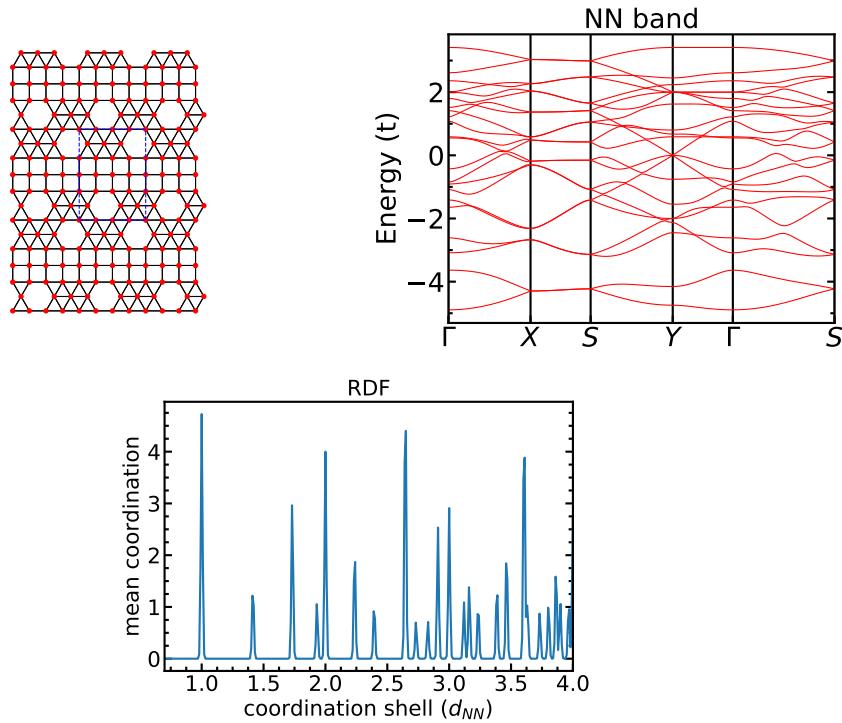


FIG. S314. t6314 lattice framework, nearest neighbors band structure and radial distribution function.

## t6315

Tiling reference number t6315 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S315. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S315.

TABLE S315. Tiling t6315 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	3	0	0	0	0	0	0	2	0	2	0	0	4	0

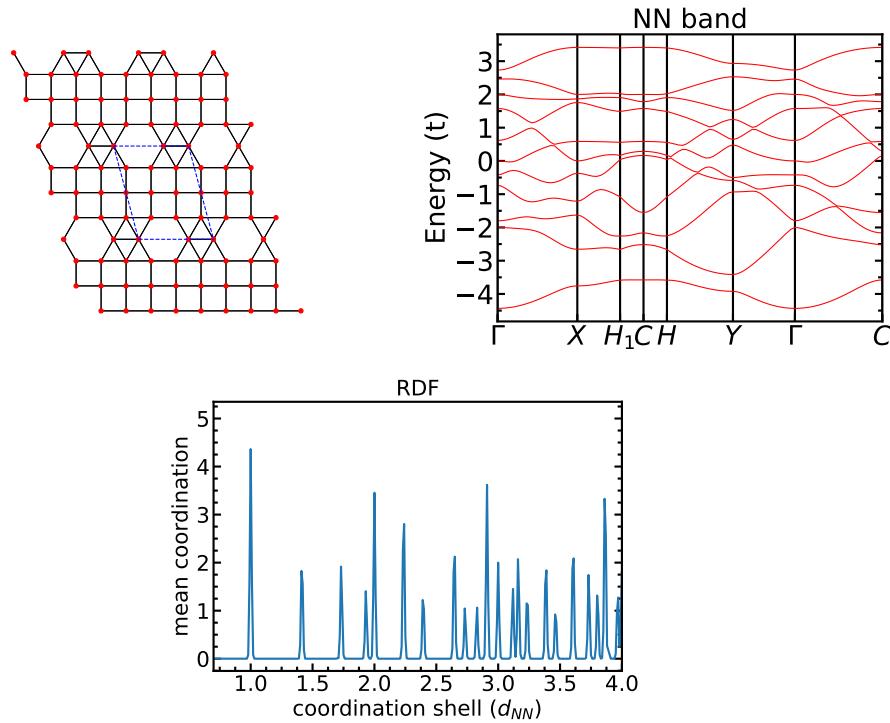


FIG. S315. t6315 lattice framework, nearest neighbors band structure and radial distribution function.

## t6316

Tiling reference number t6316 with space-group '*Amm2'* (38) and 42 sites in the unit cell, with vertex type indicated in Tab. S316. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S316.

TABLE S316. Tiling t6316 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	6	12	0	0	6	0	0	12	0

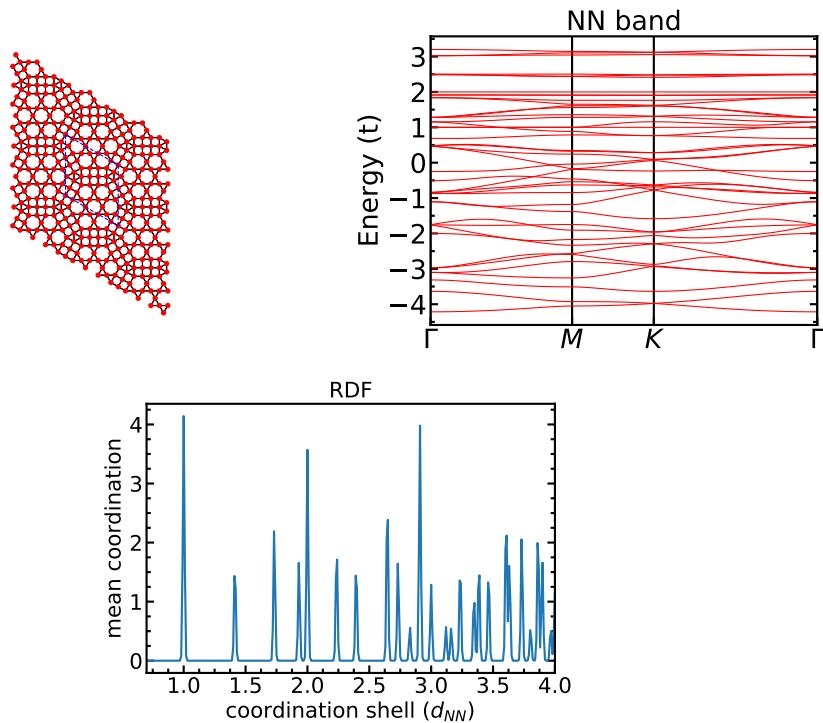


FIG. S316. t6316 lattice framework, nearest neighbors band structure and radial distribution function.

## t6317

Tiling reference number t6317 with space-group '*Amm2'* (38) and 54 sites in the unit cell, with vertex type indicated in Tab. S317. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S317.

TABLE S317. Tiling t6317 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	6	0	0	0	0	12	6	0	0	6	12	0	12	0

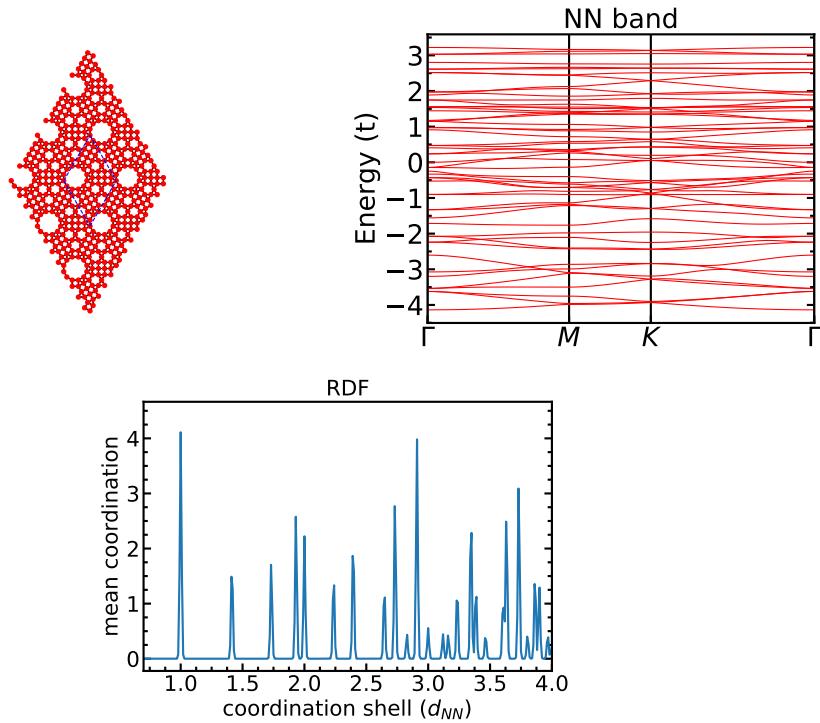


FIG. S317. t6317 lattice framework, nearest neighbors band structure and radial distribution function.

## t6318

Tiling reference number t6318 with space-group ' $Pmm2'$  (25) and 15 sites in the unit cell, with vertex type indicated in Tab. S318. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S318.

TABLE S318. Tiling t6318 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	4	0	0	0	0	0	0	2	0	4	0	0	4	0

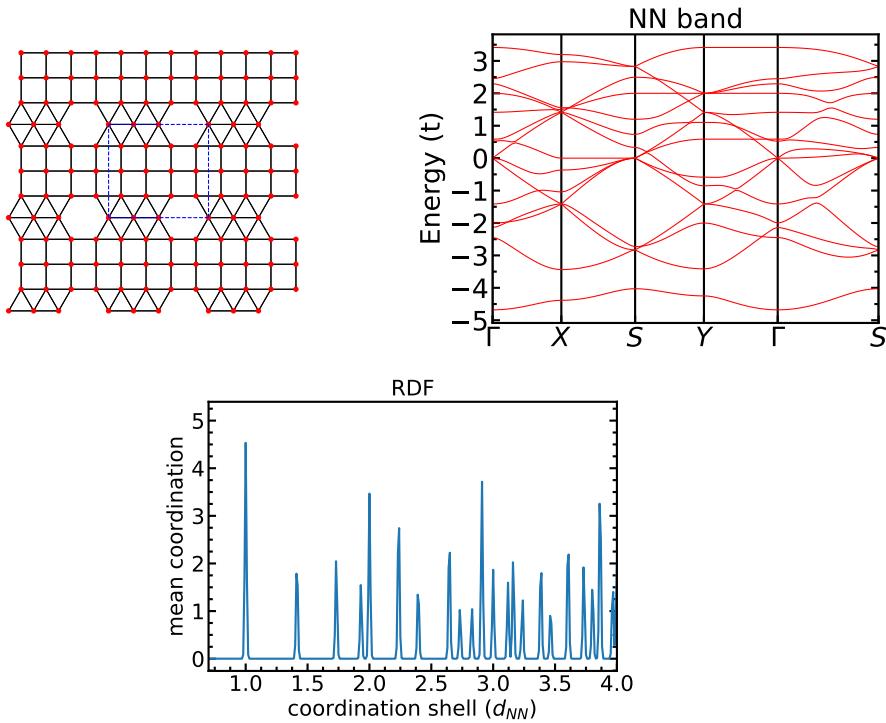


FIG. S318. t6318 lattice framework, nearest neighbors band structure and radial distribution function.

## t6319

Tiling reference number t6319 with space-group '*Amm2'* (38) and 37 sites in the unit cell, with vertex type indicated in Tab. S319. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S319.

TABLE S319. Tiling t6319 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	6	0	0	0	0	0	0	0	6	6	0	0	12	0

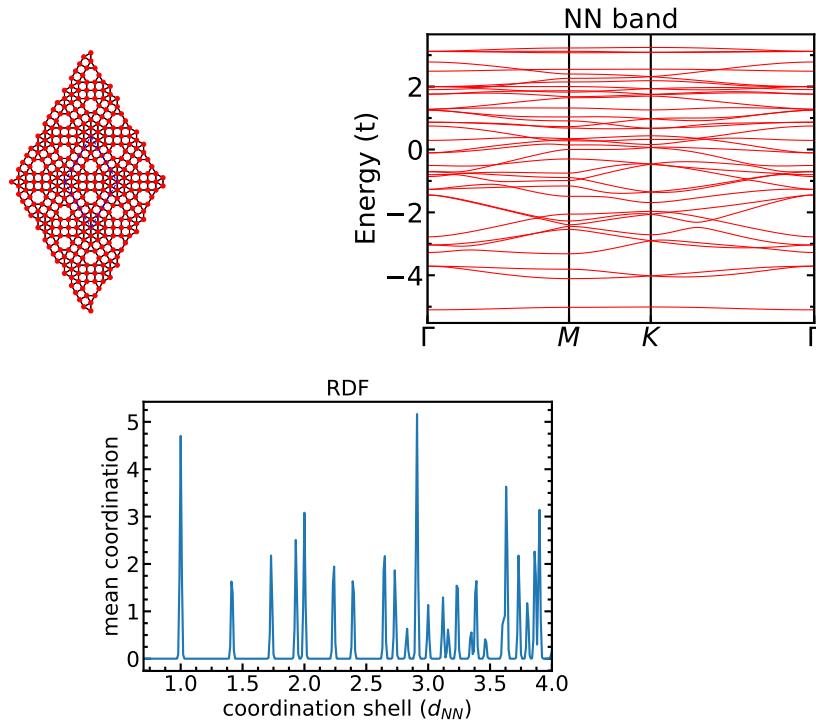


FIG. S319. t6319 lattice framework, nearest neighbors band structure and radial distribution function.

## t6320

Tiling reference number t6320 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S320. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S320.

TABLE S320. Tiling t6320 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	3	0	0	0	0	0	0	0	0	8	0	0	0	0

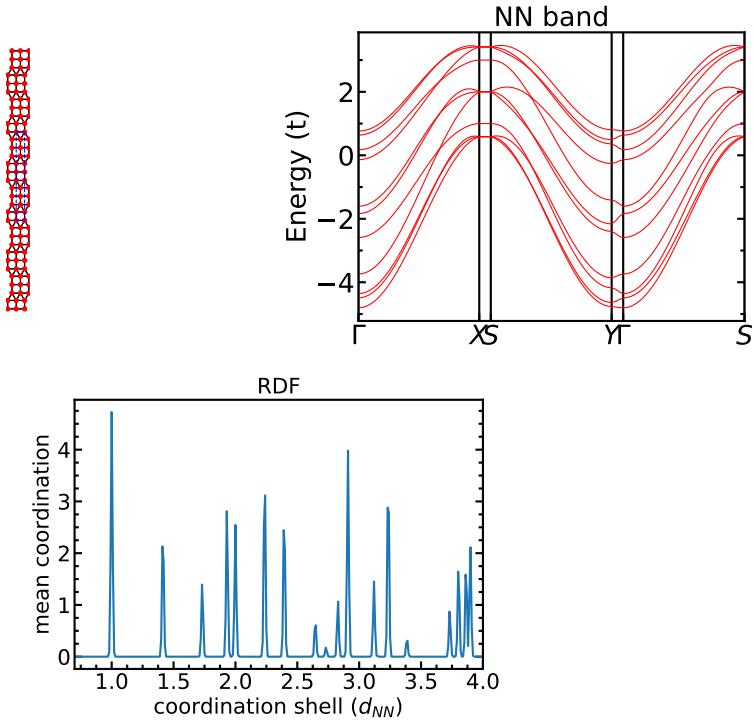


FIG. S320. t6320 lattice framework, nearest neighbors band structure and radial distribution function.

## t6321

Tiling reference number t6321 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S321. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S321.

TABLE S321. Tiling t6321 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	3	0	0	0	0	0	0	0	0	6	0	0	0	0

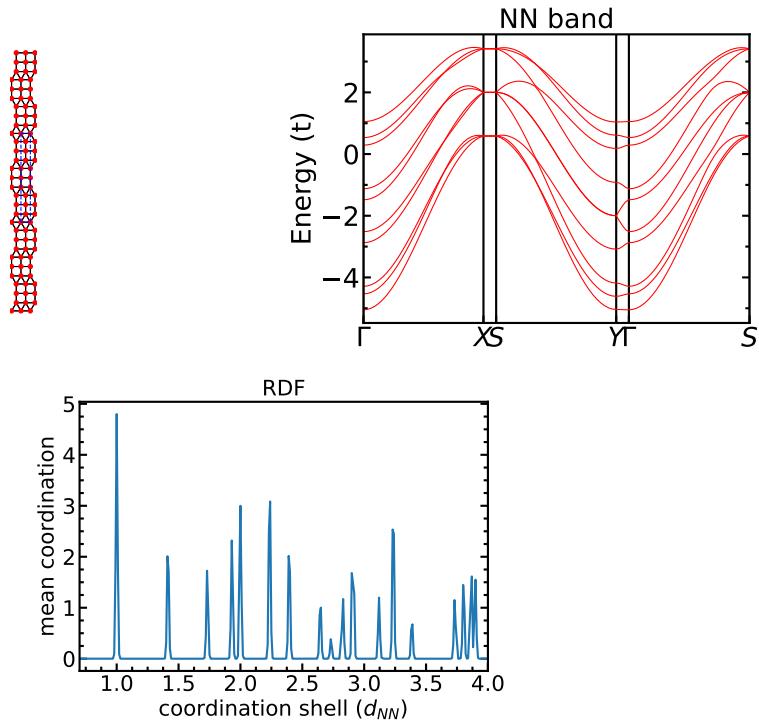


FIG. S321. t6321 lattice framework, nearest neighbors band structure and radial distribution function.

## t6322

Tiling reference number t6322 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S322. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S322.

TABLE S322. Tiling t6322 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	3	0	0	0	0	0	0	0	0	6	0	0	0	0

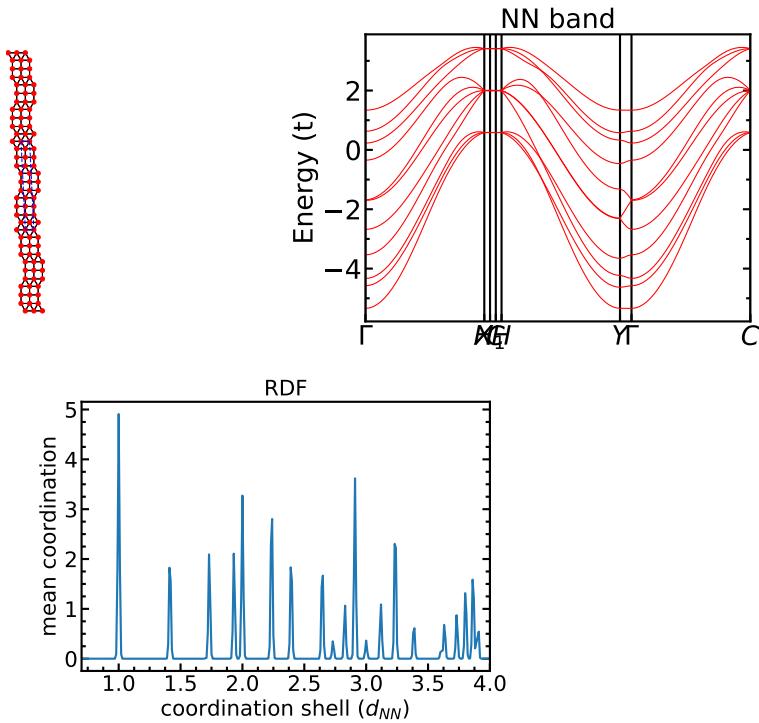


FIG. S322. t6322 lattice framework, nearest neighbors band structure and radial distribution function.

## t6323

Tiling reference number t6323 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S323. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S323.

TABLE S323. Tiling t6323 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	1	0	0	0	0	0	0	0	0	10	0	0	0	0

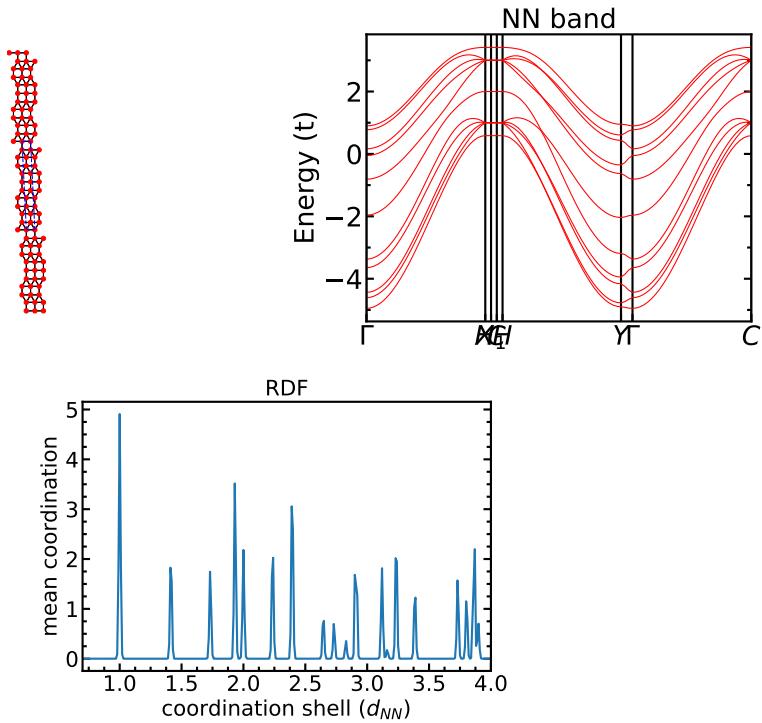


FIG. S323. t6323 lattice framework, nearest neighbors band structure and radial distribution function.

## t6324

Tiling reference number t6324 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S324. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S324.

TABLE S324. Tiling t6324 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	1	0	0	0	0	0	0	0	0	8	0	0	0	0

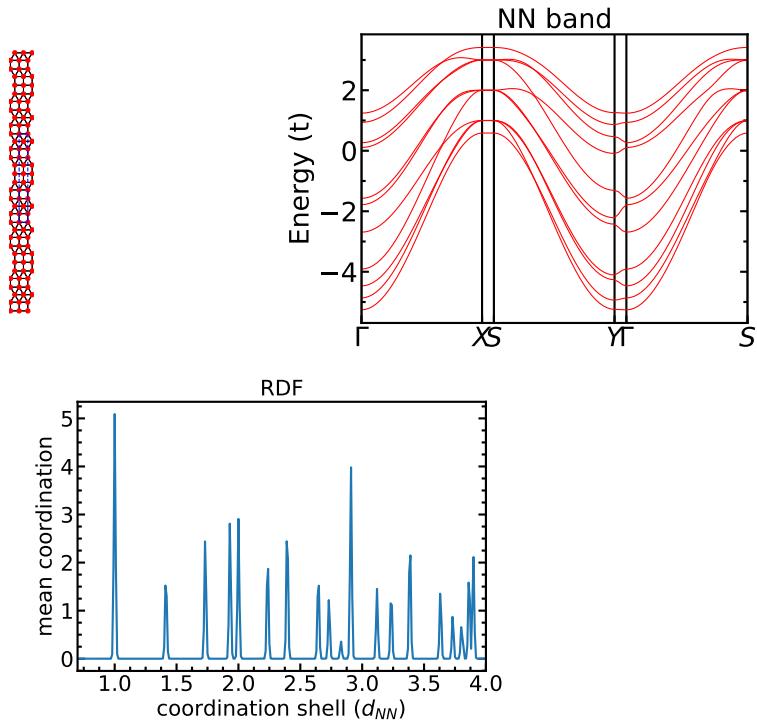


FIG. S324. t6324 lattice framework, nearest neighbors band structure and radial distribution function.

## t6325

Tiling reference number t6325 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S325. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S325.

TABLE S325. Tiling t6325 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	1	0	0	0	0	0	0	0	0	6	0	0	0	0

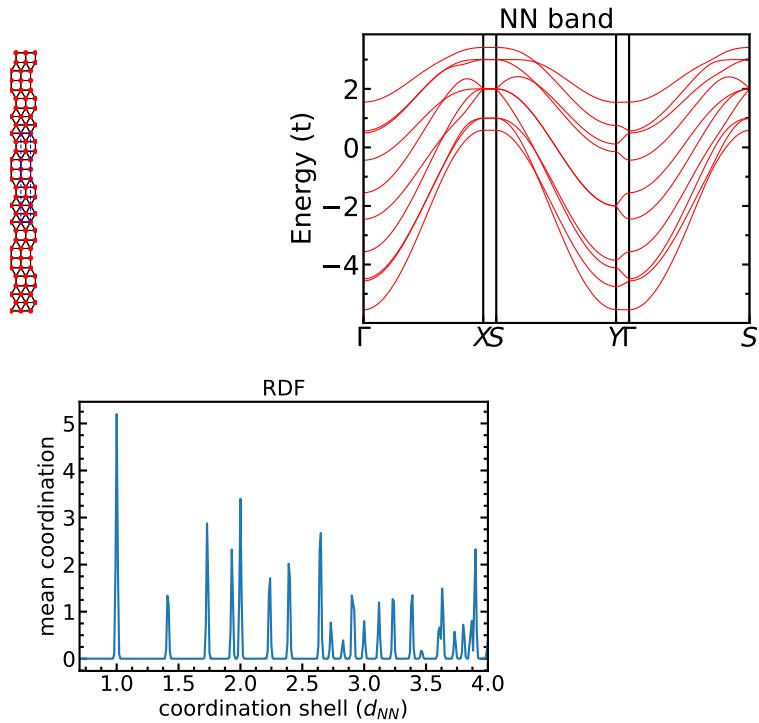


FIG. S325. t6325 lattice framework, nearest neighbors band structure and radial distribution function.

## t6326

Tiling reference number t6326 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S326. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S326.

TABLE S326. Tiling t6326 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	1	0	0	0	0	0	0	0	0	6	0	0	0	0

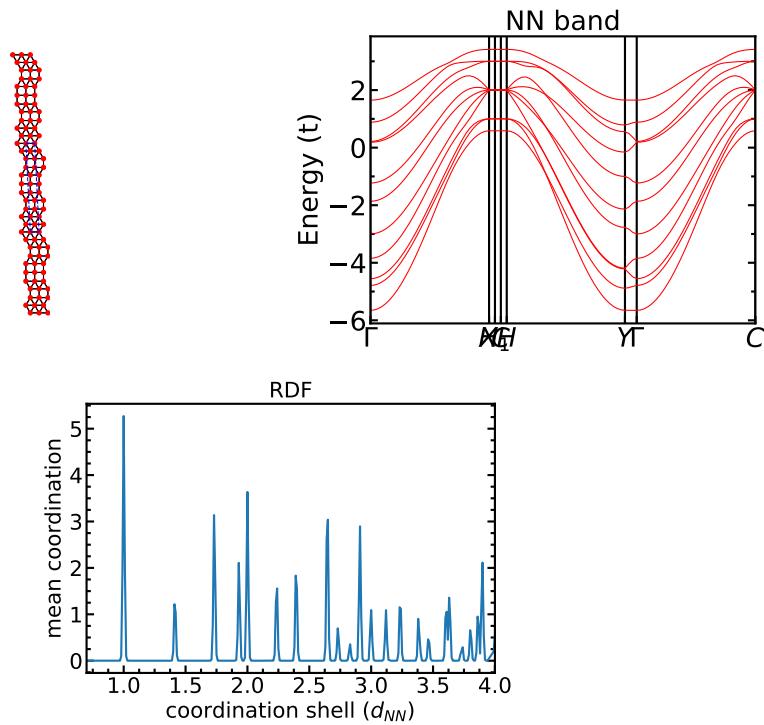


FIG. S326. t6326 lattice framework, nearest neighbors band structure and radial distribution function.

## t6327

Tiling reference number t6327 with space-group ' $Cmmm$ ' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S327. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S327.

TABLE S327. Tiling t6327 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	3	0	0	0	0	0	0	0	0	6	0	0	0	0

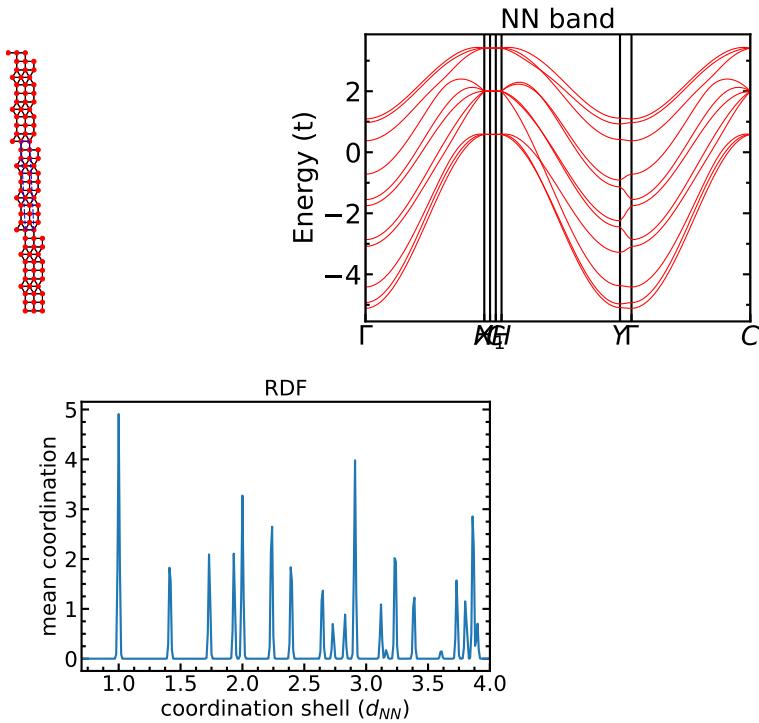


FIG. S327. t6327 lattice framework, nearest neighbors band structure and radial distribution function.

## t6328

Tiling reference number t6328 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S328. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S328.

TABLE S328. Tiling t6328 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	1	0	0	0	0	0	0	0	0	8	0	0	0	0

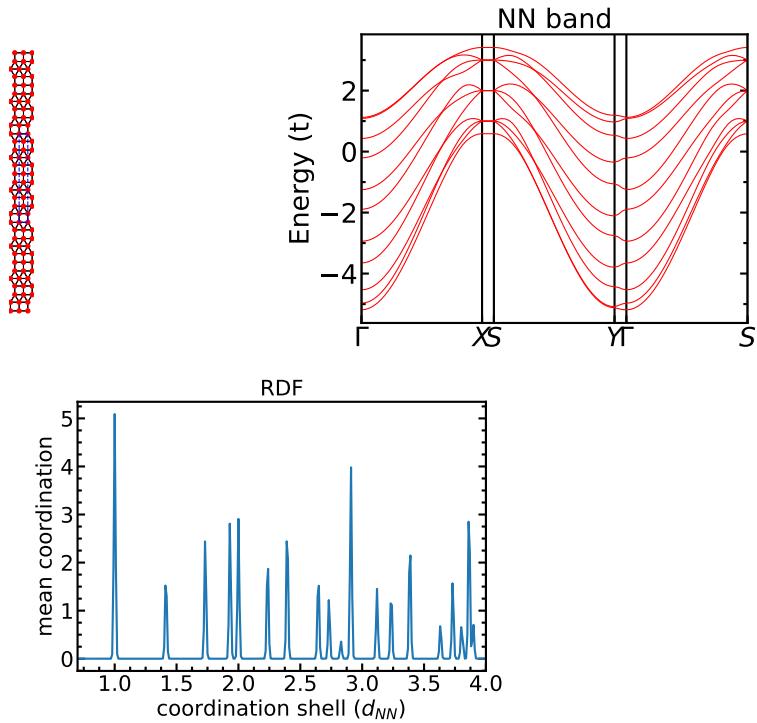


FIG. S328. t6328 lattice framework, nearest neighbors band structure and radial distribution function.

## t6329

Tiling reference number t6329 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S329. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S329.

TABLE S329. Tiling t6329 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	1	0	0	0	0	0	0	0	0	6	0	0	0	0

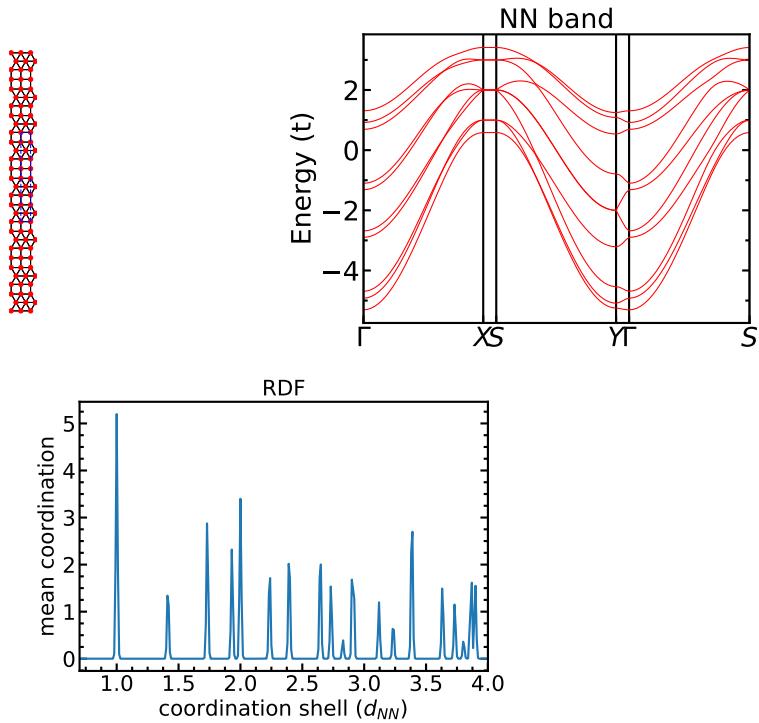


FIG. S329. t6329 lattice framework, nearest neighbors band structure and radial distribution function.

## t6330

Tiling reference number t6330 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S330. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S330.

TABLE S330. Tiling t6330 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	1	0	0	0	0	0	0	0	0	6	0	0	0	0

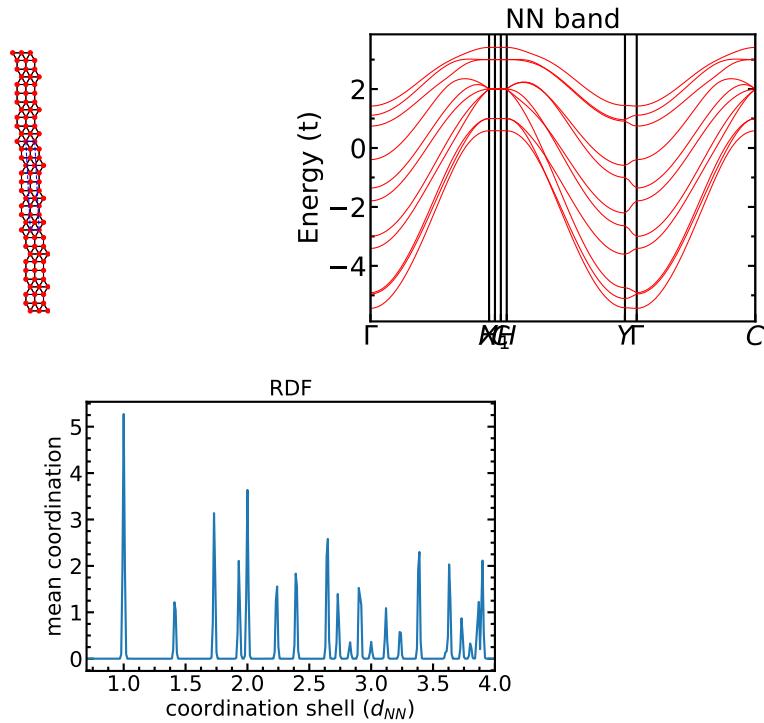


FIG. S330. t6330 lattice framework, nearest neighbors band structure and radial distribution function.

## t6331

Tiling reference number t6331 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S331. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S331.

TABLE S331. Tiling t6331 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	1	0	0	0	0	0	0	0	0	6	0	0	0	0

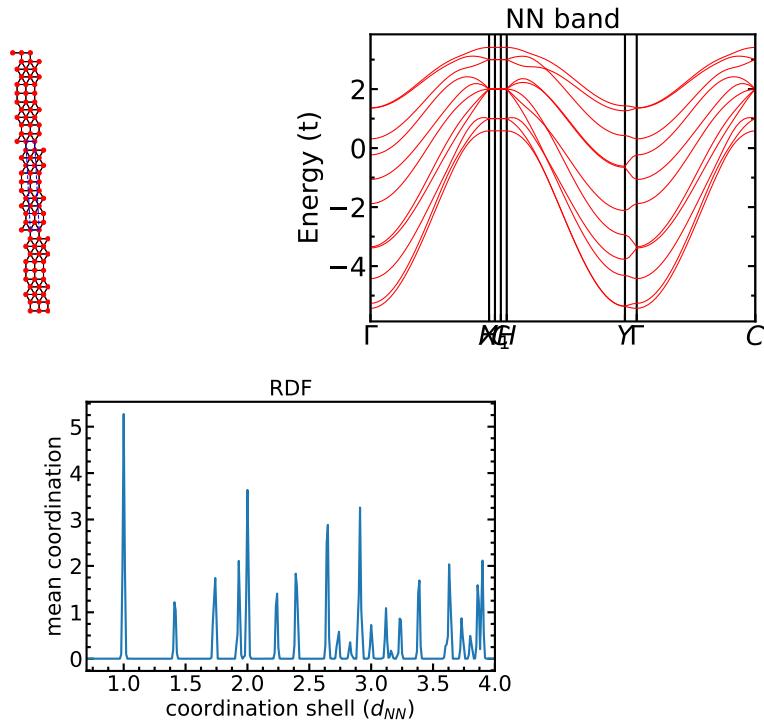


FIG. S331. t6331 lattice framework, nearest neighbors band structure and radial distribution function.

## t6332

Tiling reference number t6332 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S332. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S332.

TABLE S332. Tiling t6332 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	1	0	0	0	0	0	0	0	0	4	0	0	0	0

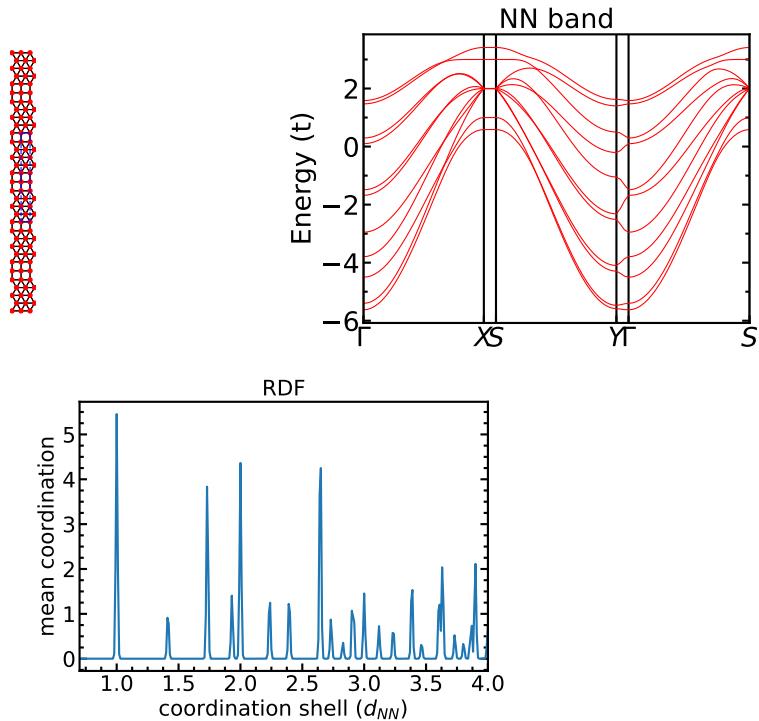


FIG. S332. t6332 lattice framework, nearest neighbors band structure and radial distribution function.

## t6333

Tiling reference number t6333 with space-group ' $Pmmm$ ' (47) and 10 sites in the unit cell, with vertex type indicated in Tab. S333. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S333.

TABLE S333. Tiling t6333 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	1	0	0	0	0	0	0	0	0	2	0	0	0	0

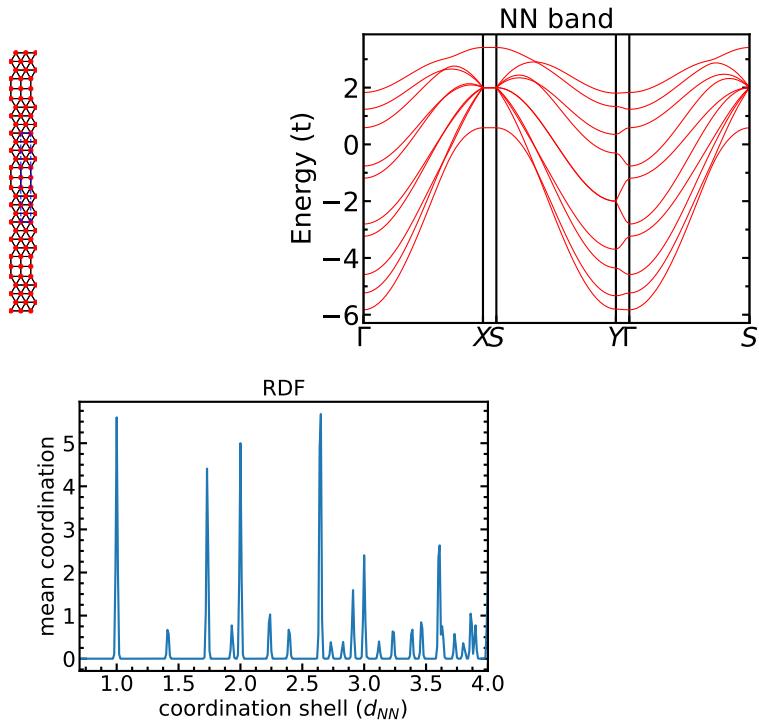


FIG. S333. t6333 lattice framework, nearest neighbors band structure and radial distribution function.

## t6334

Tiling reference number t6334 with space-group ' $Cmmm$ ' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S334. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S334.

TABLE S334. Tiling t6334 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	1	0	0	0	0	0	0	0	0	2	0	0	0	0

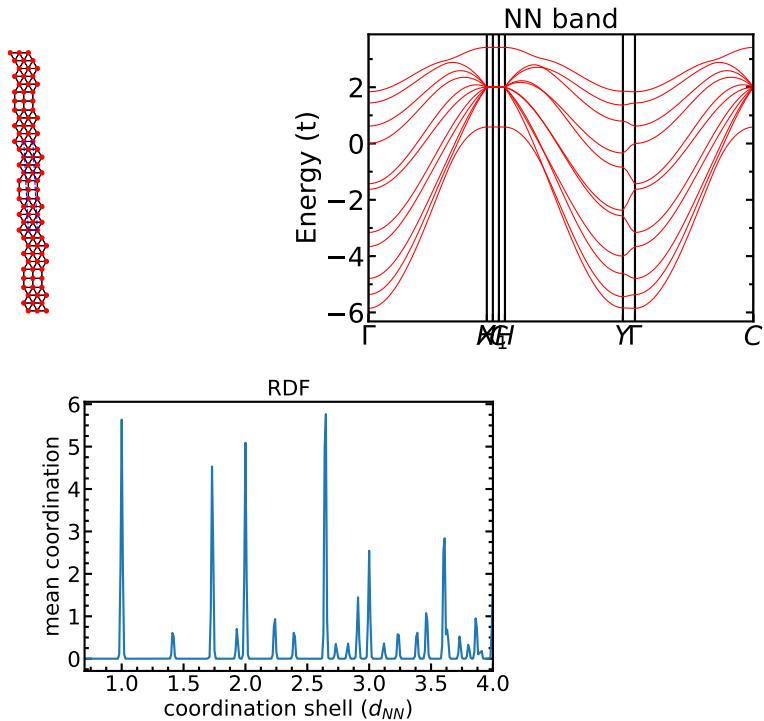


FIG. S334. t6334 lattice framework, nearest neighbors band structure and radial distribution function.

## t6335

Tiling reference number t6335 with space-group '*Cmmm*' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S335. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S335.

TABLE S335. Tiling t6335 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	1	4	0	4	0	0	0	0

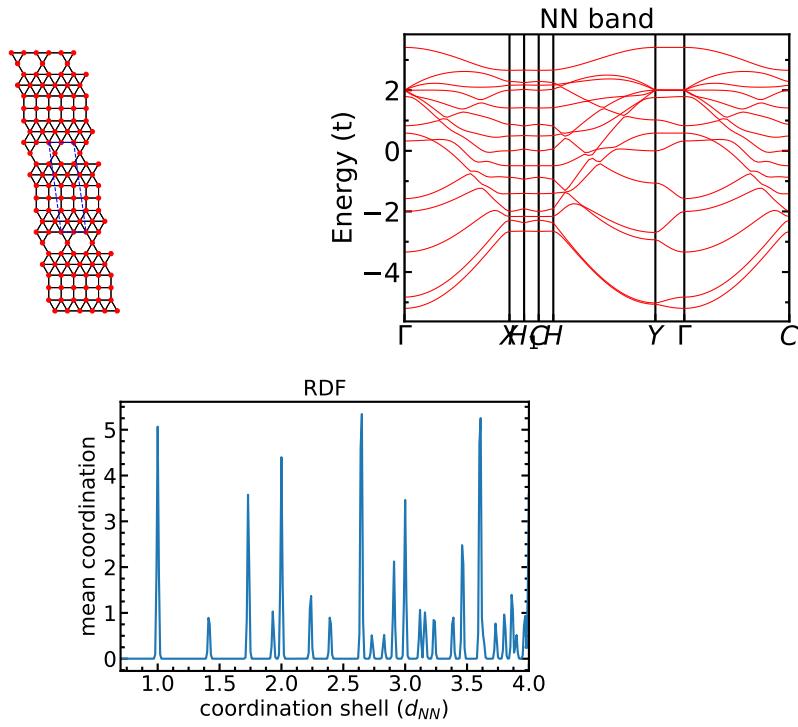


FIG. S335. t6335 lattice framework, nearest neighbors band structure and radial distribution function.

## t6336

Tiling reference number t6336 with space-group ' $Pmm2'$  (25) and 15 sites in the unit cell, with vertex type indicated in Tab. S336. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S336.

TABLE S336. Tiling t6336 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	1	4	0	4	0	0	0	0

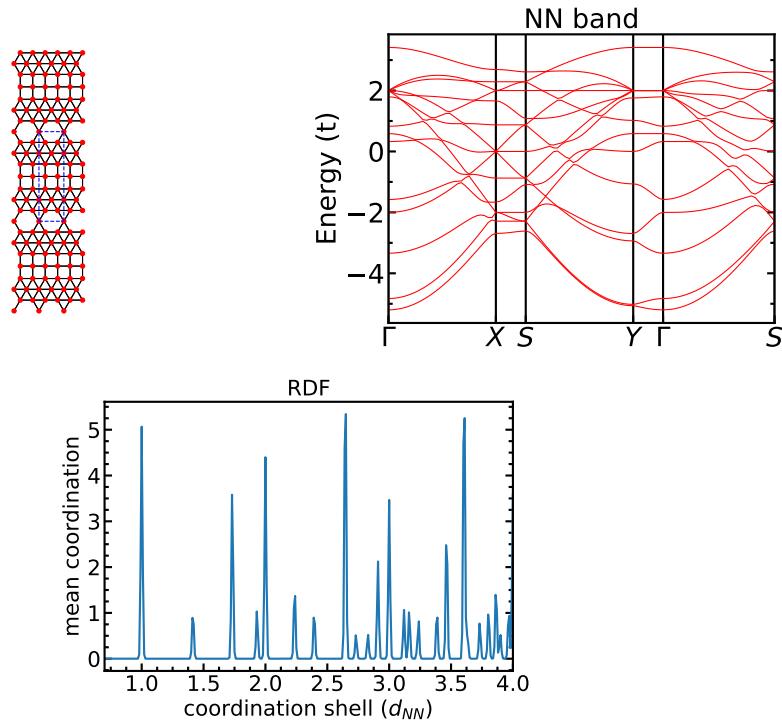


FIG. S336. t6336 lattice framework, nearest neighbors band structure and radial distribution function.

## t6337

Tiling reference number t6337 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S337. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S337.

TABLE S337. Tiling t6337 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	0	0	0	10	0	0	0	0

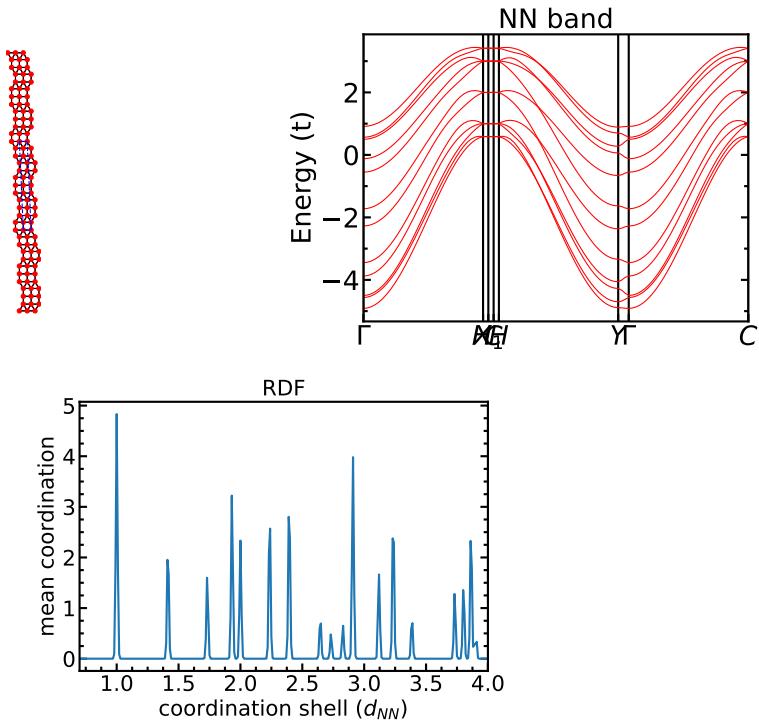


FIG. S337. t6337 lattice framework, nearest neighbors band structure and radial distribution function.

## t6338

Tiling reference number t6338 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S338. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S338.

TABLE S338. Tiling t6338 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	2	0	0	0	0	0	0	0	0	8	0	0	0	0

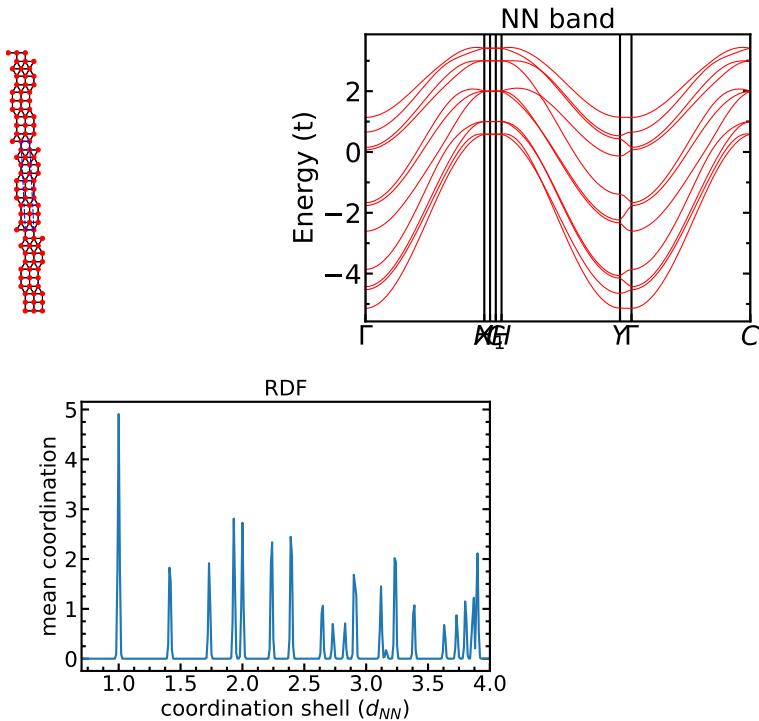


FIG. S338. t6338 lattice framework, nearest neighbors band structure and radial distribution function.

## t6339

Tiling reference number t6339 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S339. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S339.

TABLE S339. Tiling t6339 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	0	0	0	8	0	0	0	0

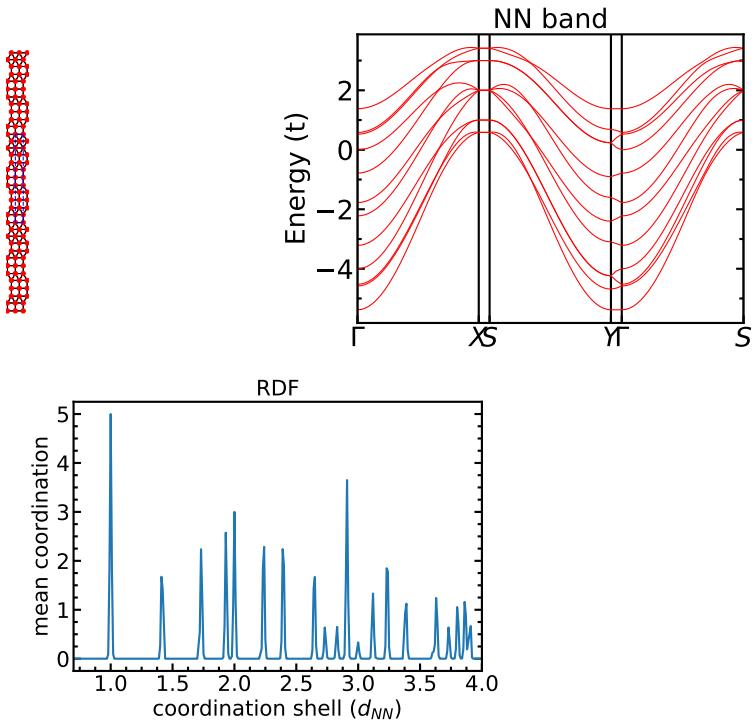


FIG. S339. t6339 lattice framework, nearest neighbors band structure and radial distribution function.

## t6340

Tiling reference number t6340 with space-group '*Pmma*' (51) and 12 sites in the unit cell, with vertex type indicated in Tab. S340. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S340.

TABLE S340. Tiling t6340 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	0	0	0	8	0	0	0	0

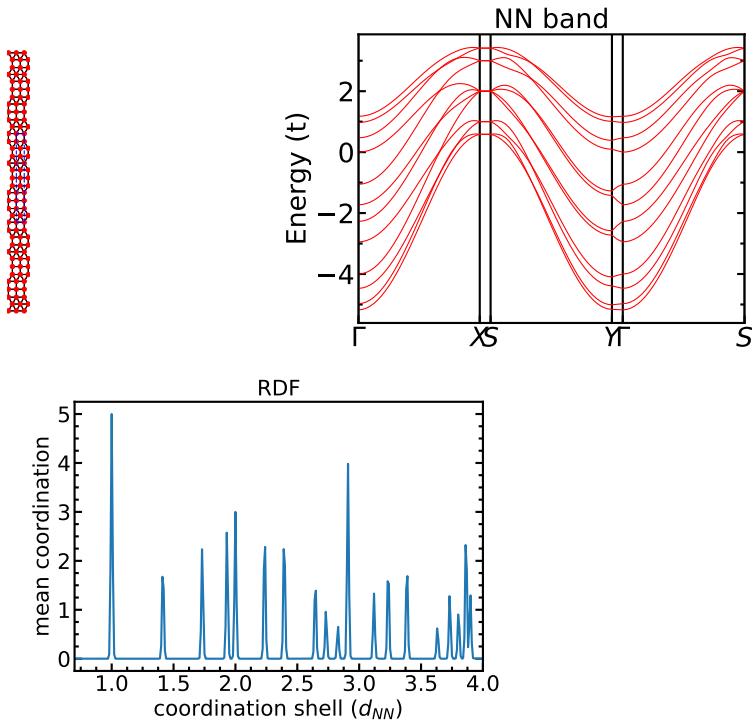


FIG. S340. t6340 lattice framework, nearest neighbors band structure and radial distribution function.

## t6341

Tiling reference number t6341 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S341. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S341.

TABLE S341. Tiling t6341 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	0	0	0	6	0	0	0	0

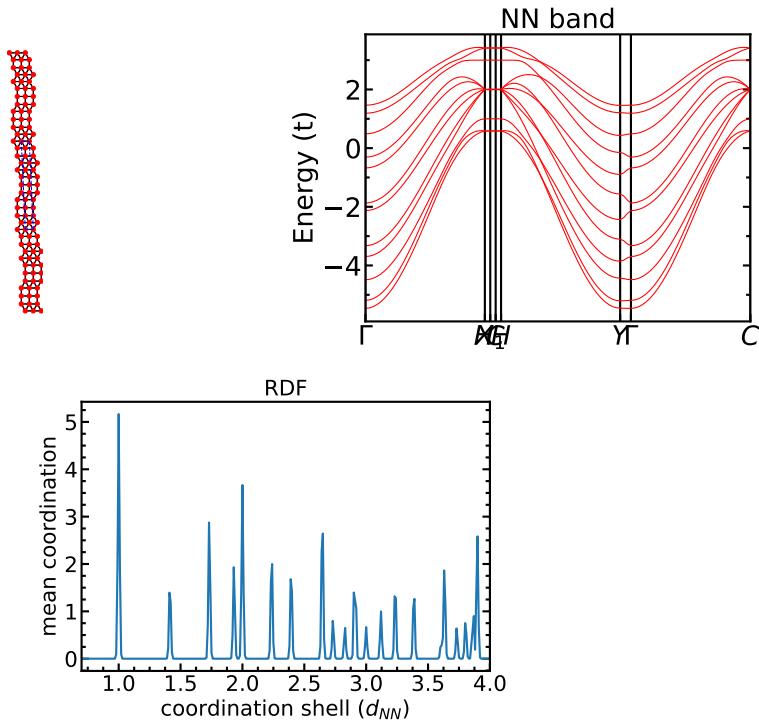


FIG. S341. t6341 lattice framework, nearest neighbors band structure and radial distribution function.

## t6342

Tiling reference number t6342 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S342. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S342.

TABLE S342. Tiling t6342 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	2	0	0	0	0	0	0	0	0	4	0	0	0	0

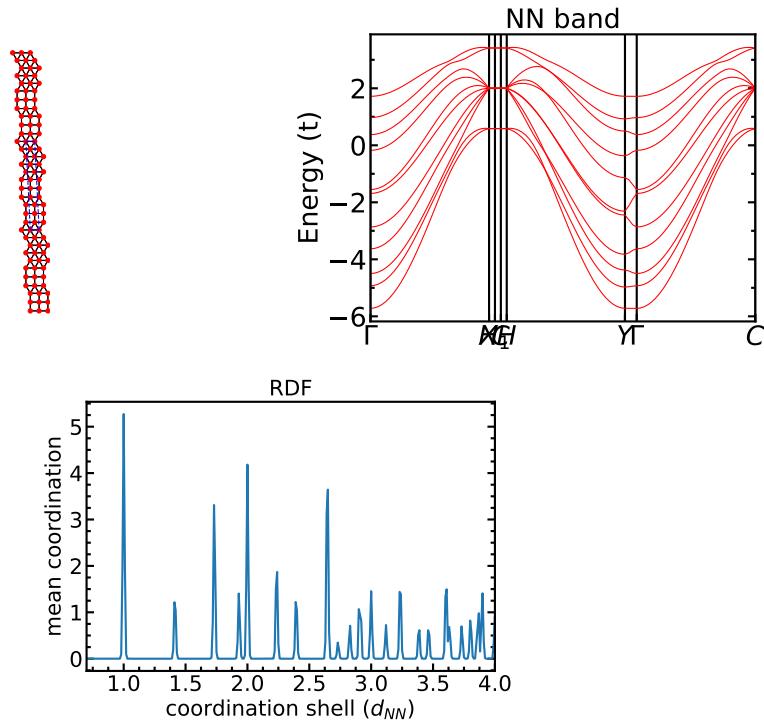


FIG. S342. t6342 lattice framework, nearest neighbors band structure and radial distribution function.

### t6343

Tiling reference number t6343 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S343. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S343.

TABLE S343. Tiling t6343 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	2	0	0	0	0	0	0	0	0	4	0	0	0	0

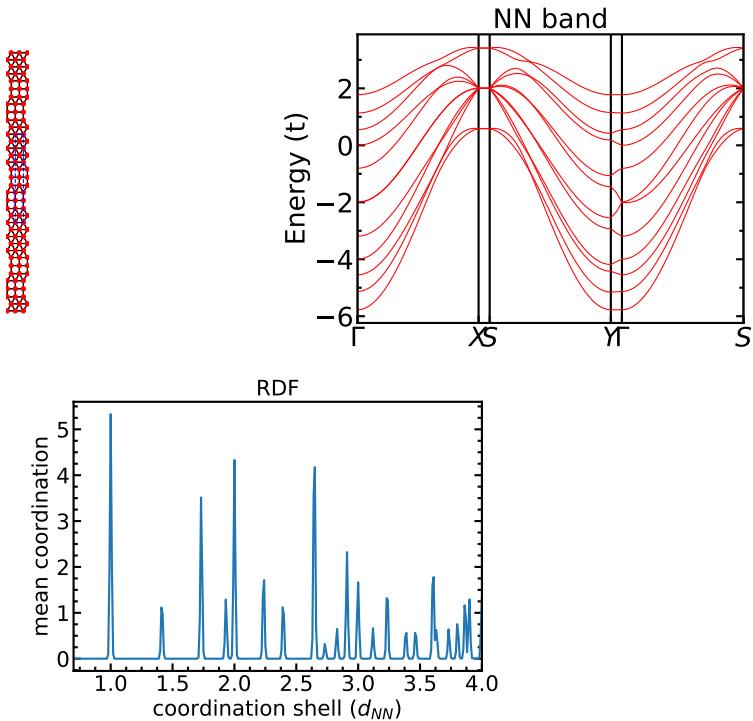


FIG. S343. t6343 lattice framework, nearest neighbors band structure and radial distribution function.

## t6344

Tiling reference number t6344 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S344. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S344.

TABLE S344. Tiling t6344 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	0	0	0	10	0	0	0	0

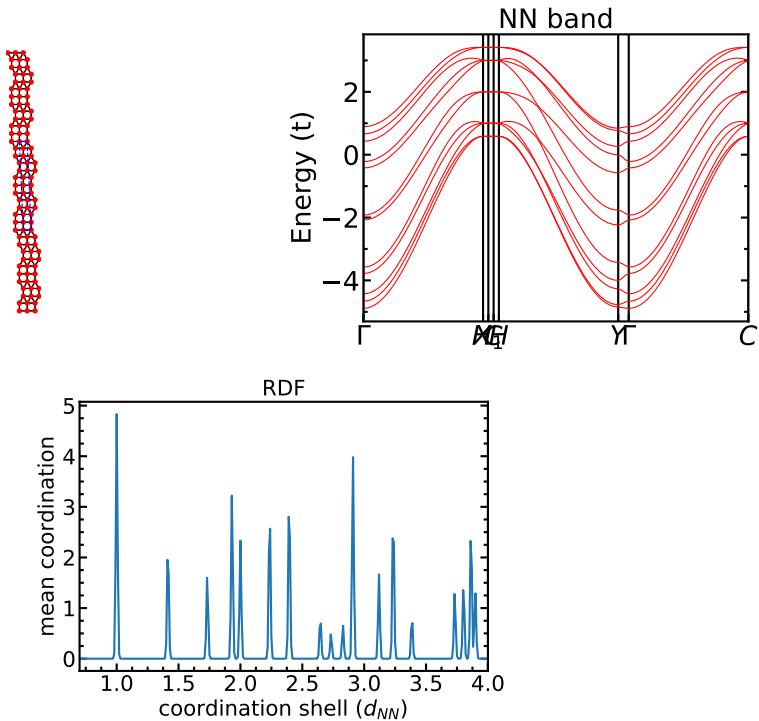


FIG. S344. t6344 lattice framework, nearest neighbors band structure and radial distribution function.

## t6345

Tiling reference number t6345 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S345. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S345.

TABLE S345. Tiling t6345 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	0	0	0	8	0	0	0	0

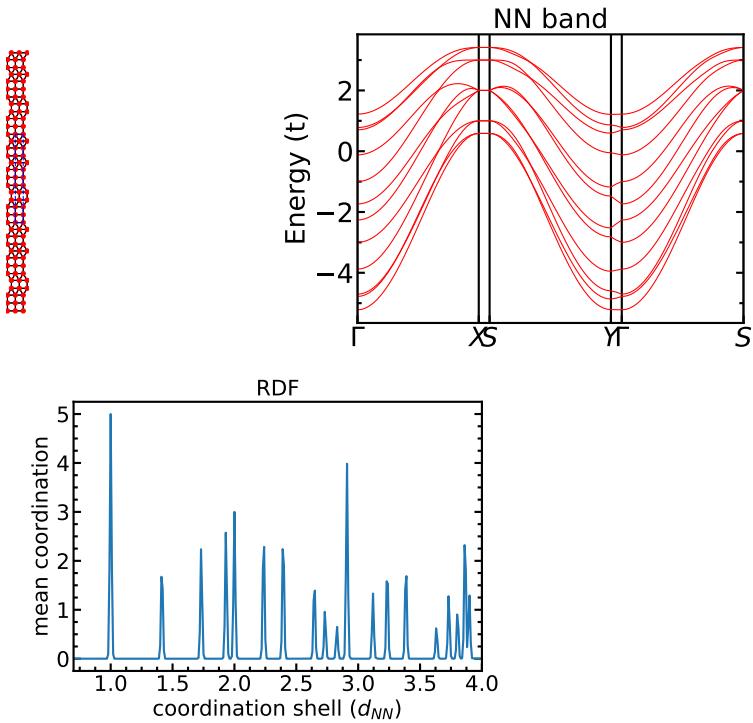


FIG. S345. t6345 lattice framework, nearest neighbors band structure and radial distribution function.

## t6346

Tiling reference number t6346 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S346. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S346.

TABLE S346. Tiling t6346 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	2	0	0	0	0	0	0	0	0	6	0	0	0	0

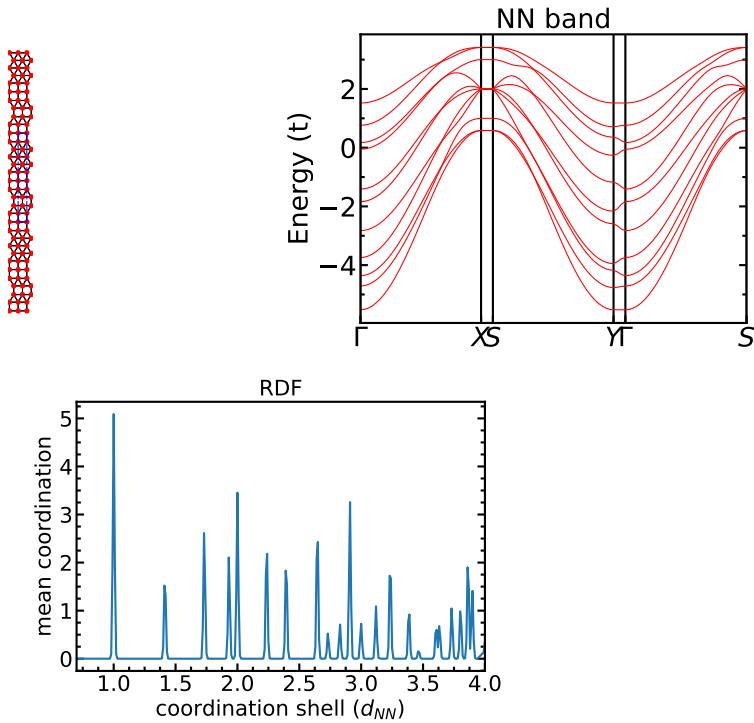


FIG. S346. t6346 lattice framework, nearest neighbors band structure and radial distribution function.

## t6347

Tiling reference number t6347 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S347. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S347.

TABLE S347. Tiling t6347 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	0	0	0	6	0	0	0	0

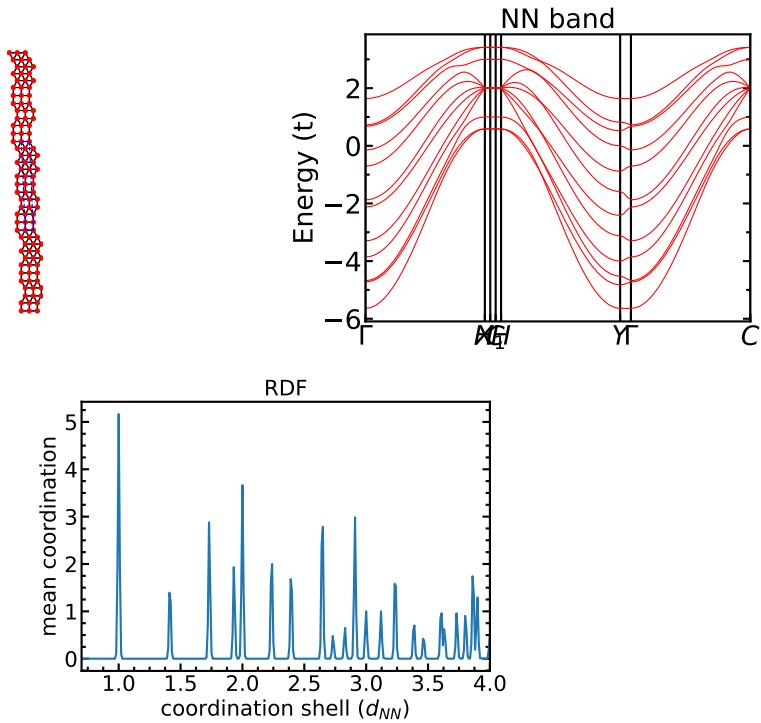


FIG. S347. t6347 lattice framework, nearest neighbors band structure and radial distribution function.

## t6348

Tiling reference number t6348 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S348. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S348.

TABLE S348. Tiling t6348 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	2	0	0	0	0	0	0	0	0	8	0	0	0	0

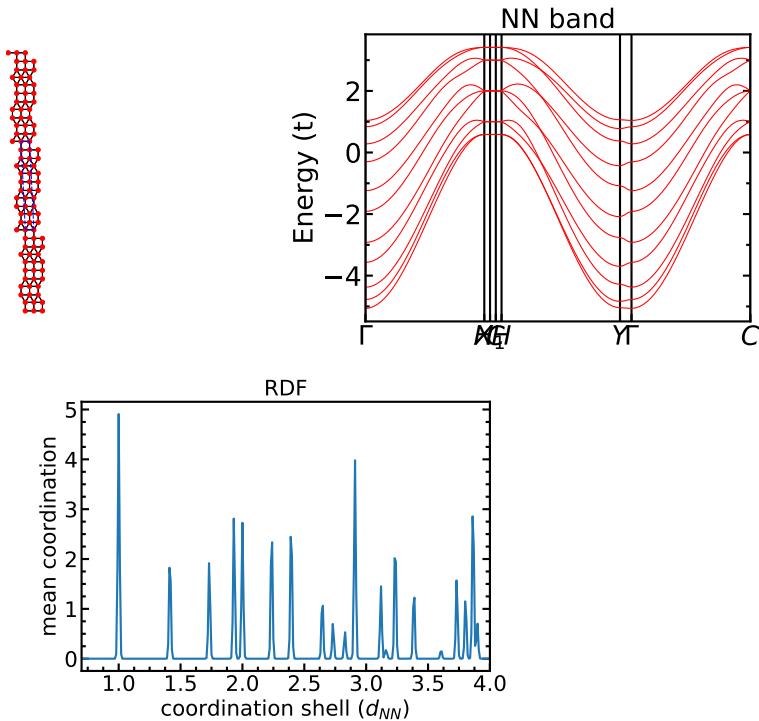


FIG. S348. t6348 lattice framework, nearest neighbors band structure and radial distribution function.

## t6349

Tiling reference number t6349 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S349. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S349.

TABLE S349. Tiling t6349 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	2	0	0	0	0	0	0	0	0	8	0	0	0	0

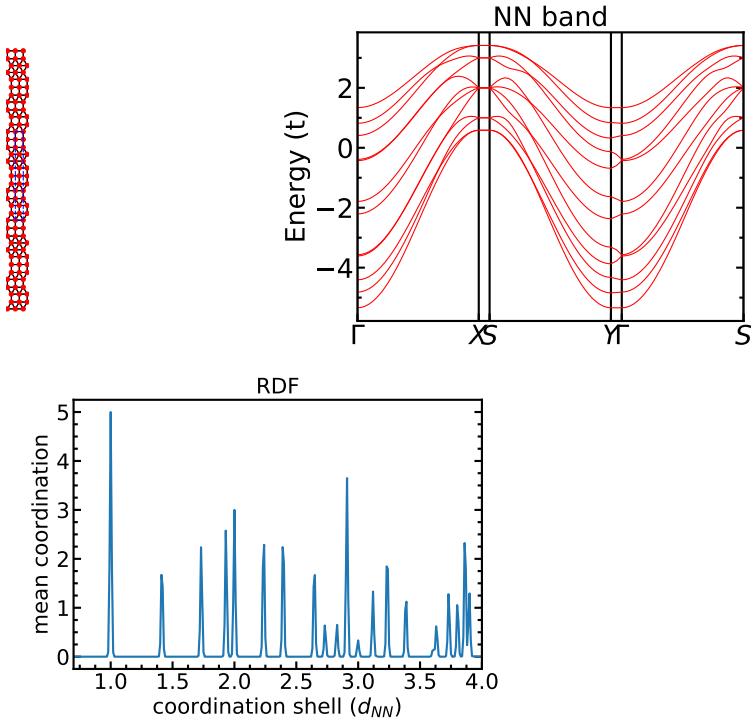


FIG. S349. t6349 lattice framework, nearest neighbors band structure and radial distribution function.

## t6350

Tiling reference number t6350 with space-group '*Amm2*' (38) and 6 sites in the unit cell, with vertex type indicated in Tab. S350. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S350.

TABLE S350. Tiling t6350 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	1	0	0	0	0	0	0	0	0	4	0	0	0	0

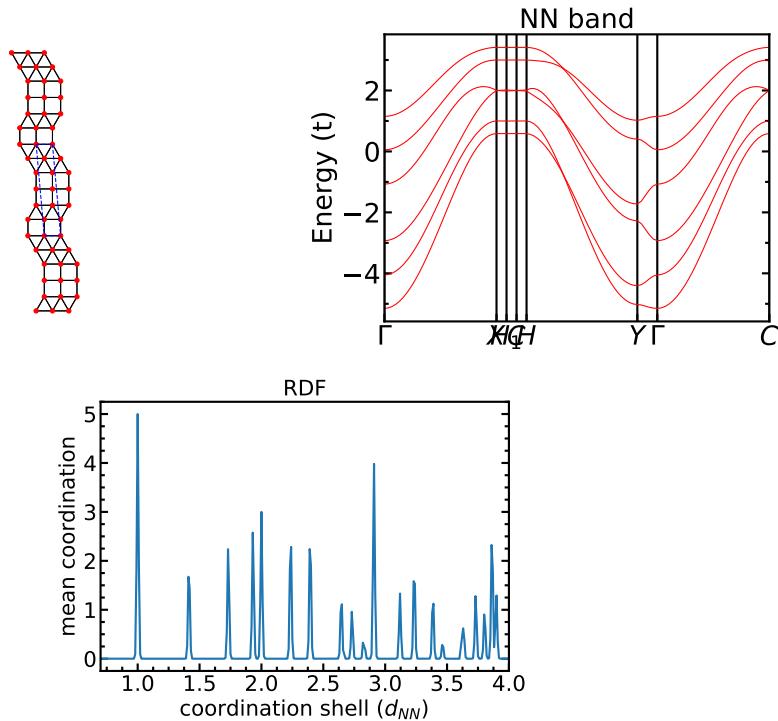


FIG. S350. t6350 lattice framework, nearest neighbors band structure and radial distribution function.

## t6351

Tiling reference number t6351 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S351. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S351.

TABLE S351. Tiling t6351 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	2	0	0	0	0	0	0	0	0	6	0	0	0	0

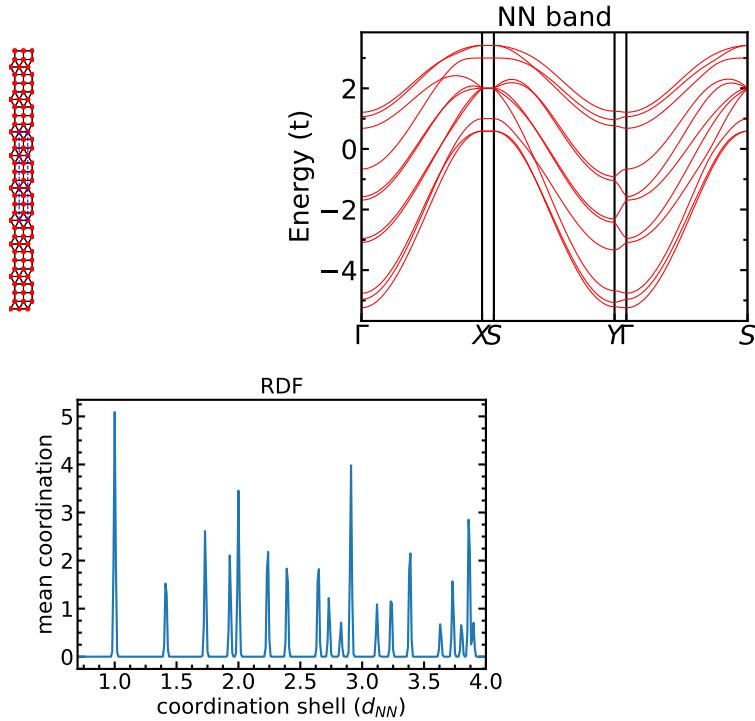


FIG. S351. t6351 lattice framework, nearest neighbors band structure and radial distribution function.

## t6352

Tiling reference number t6352 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S352. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S352.

TABLE S352. Tiling t6352 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	0	0	0	4	0	0	0	0

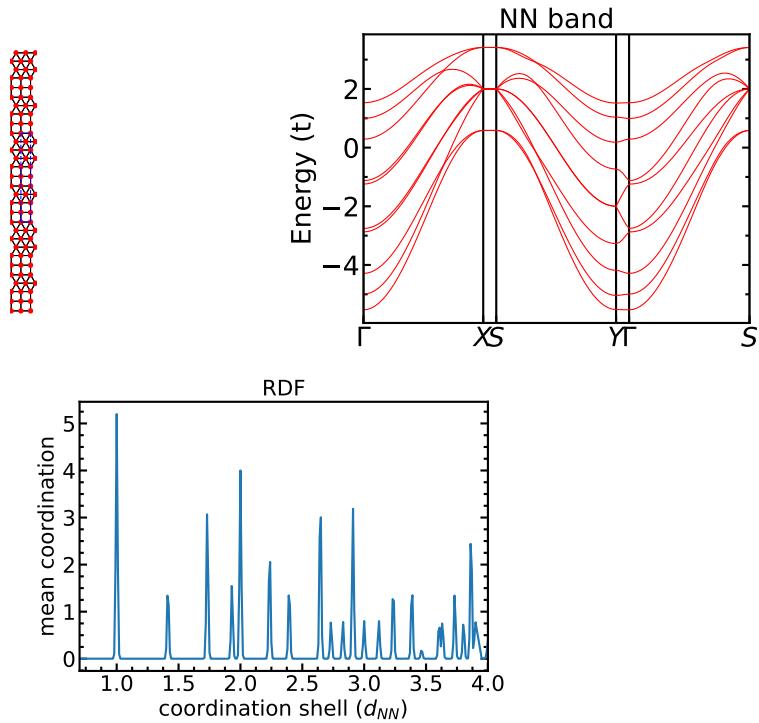


FIG. S352. t6352 lattice framework, nearest neighbors band structure and radial distribution function.

### t6353

Tiling reference number t6353 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S353. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S353.

TABLE S353. Tiling t6353 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	2	0	0	0	0	0	0	0	0	4	0	0	0	0

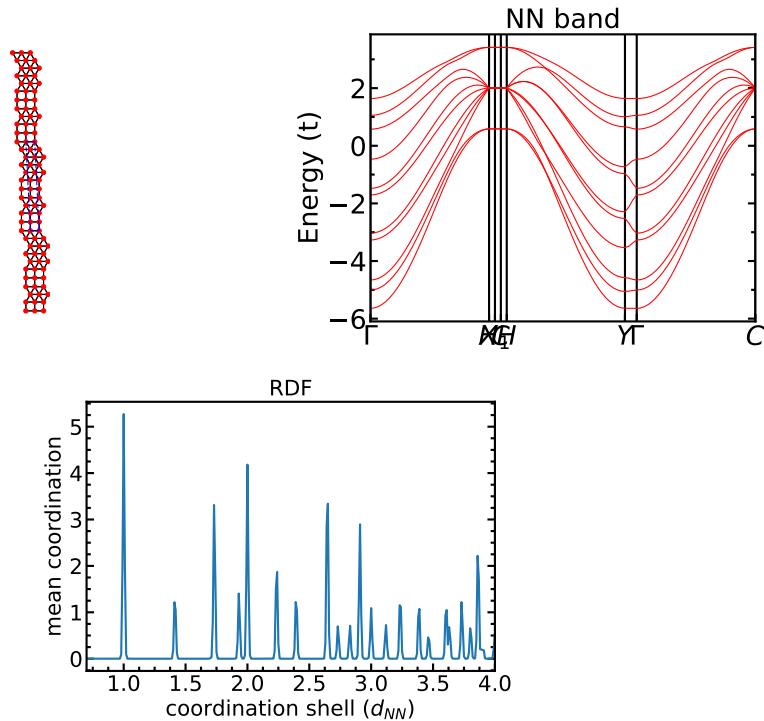


FIG. S353. t6353 lattice framework, nearest neighbors band structure and radial distribution function.

## t6354

Tiling reference number t6354 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S354. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S354.

TABLE S354. Tiling t6354 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	2	0	0	0	0	0	0	0	0	6	0	0	0	0

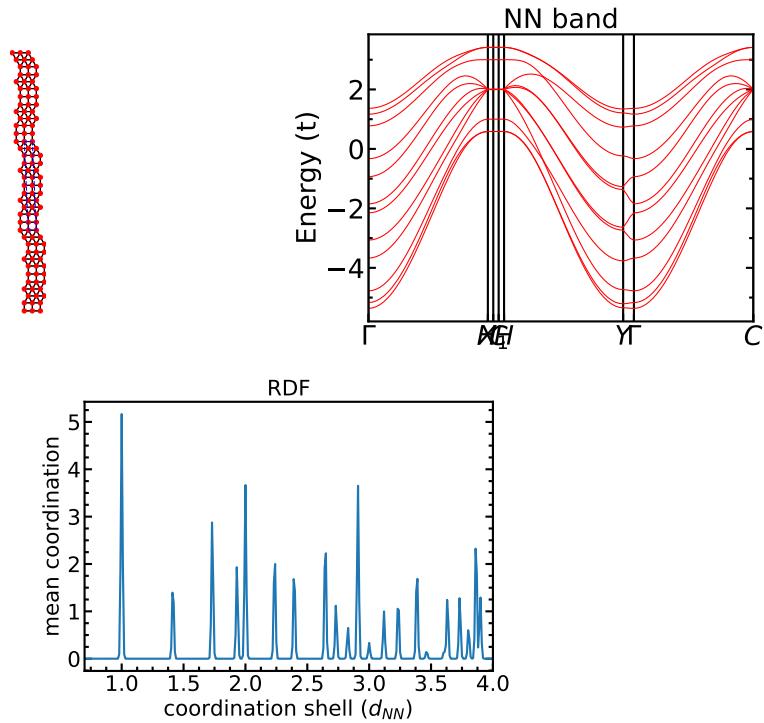


FIG. S354. t6354 lattice framework, nearest neighbors band structure and radial distribution function.

## t6355

Tiling reference number t6355 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S355. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S355.

TABLE S355. Tiling t6355 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	2	0	0	0	0	0	0	0	0	4	0	0	0	0

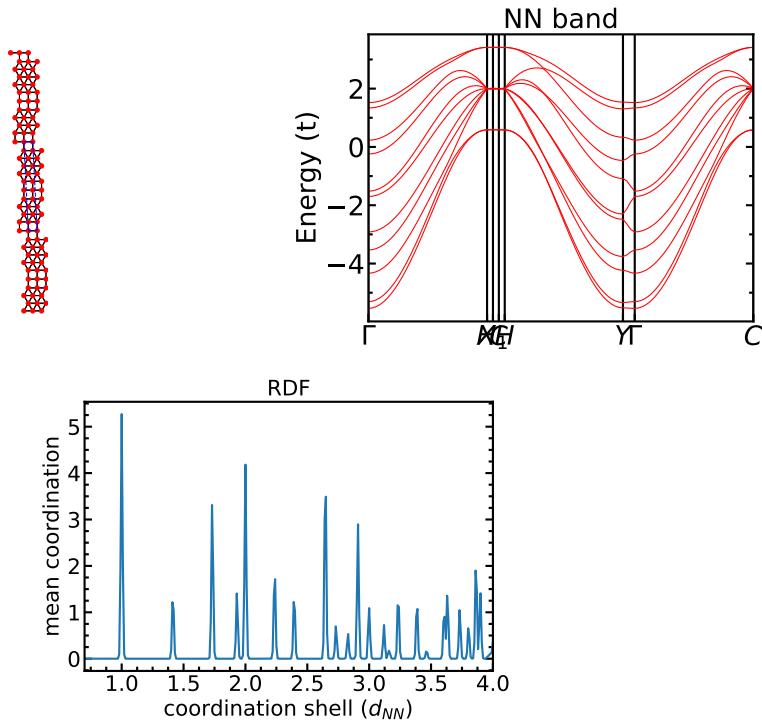


FIG. S355. t6355 lattice framework, nearest neighbors band structure and radial distribution function.

## t6356

Tiling reference number t6356 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S356. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S356.

TABLE S356. Tiling t6356 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	2	0	0	0	0	0	0	0	0	4	0	0	0	0

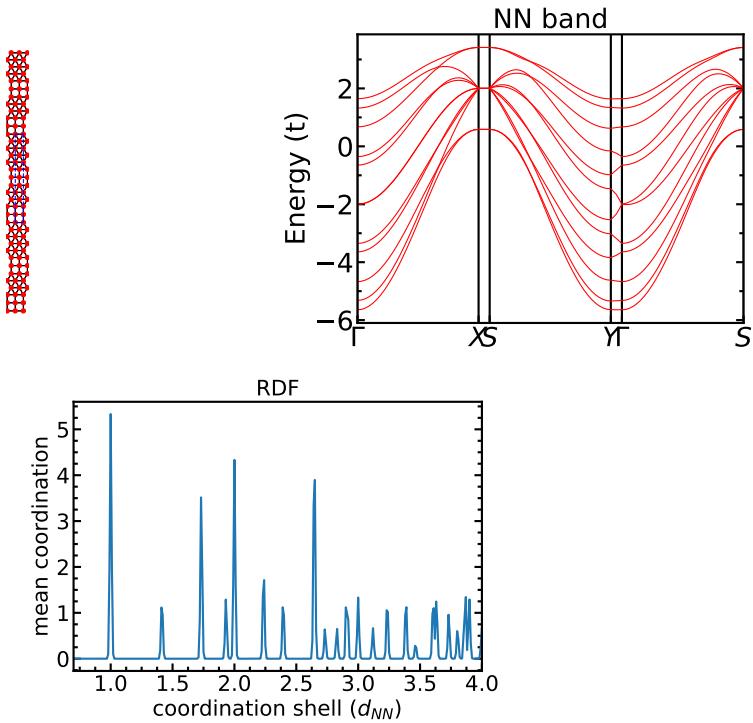


FIG. S356. t6356 lattice framework, nearest neighbors band structure and radial distribution function.

## t6357

Tiling reference number t6357 with space-group '*Cmmm*' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S357. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S357.

TABLE S357. Tiling t6357 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	1	0	0	8	0	0	4	0

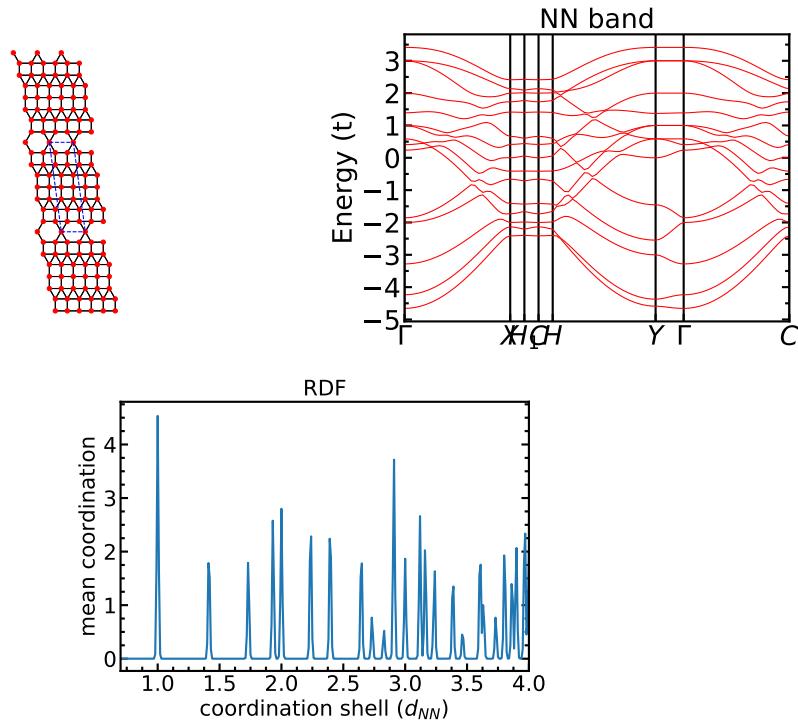


FIG. S357. t6357 lattice framework, nearest neighbors band structure and radial distribution function.

## t6358

Tiling reference number t6358 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S358. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S358.

TABLE S358. Tiling t6358 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	4	0	0	4	0

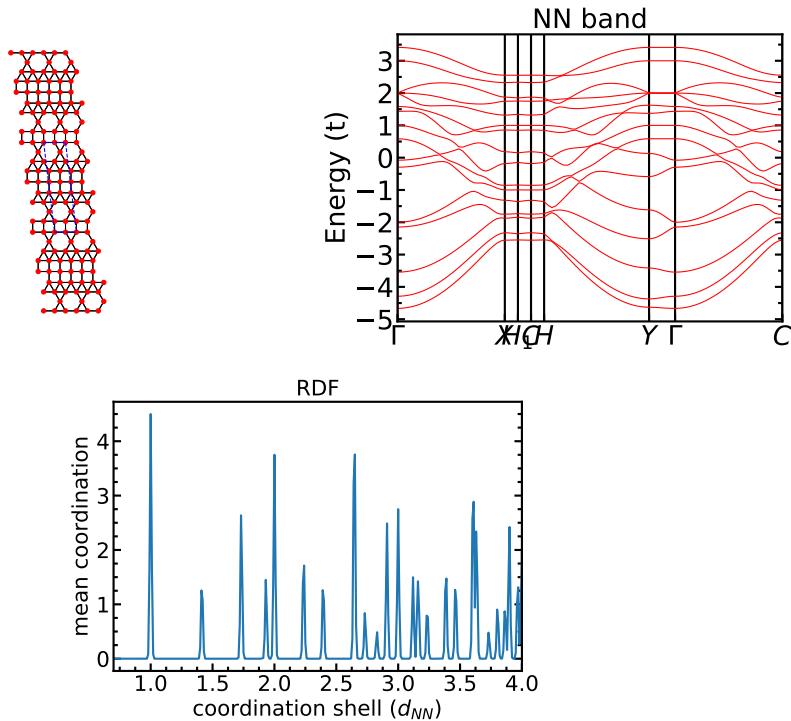


FIG. S358. t6358 lattice framework, nearest neighbors band structure and radial distribution function.

## t6359

Tiling reference number t6359 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S359. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S359.

TABLE S359. Tiling t6359 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	4	0	0	4	0

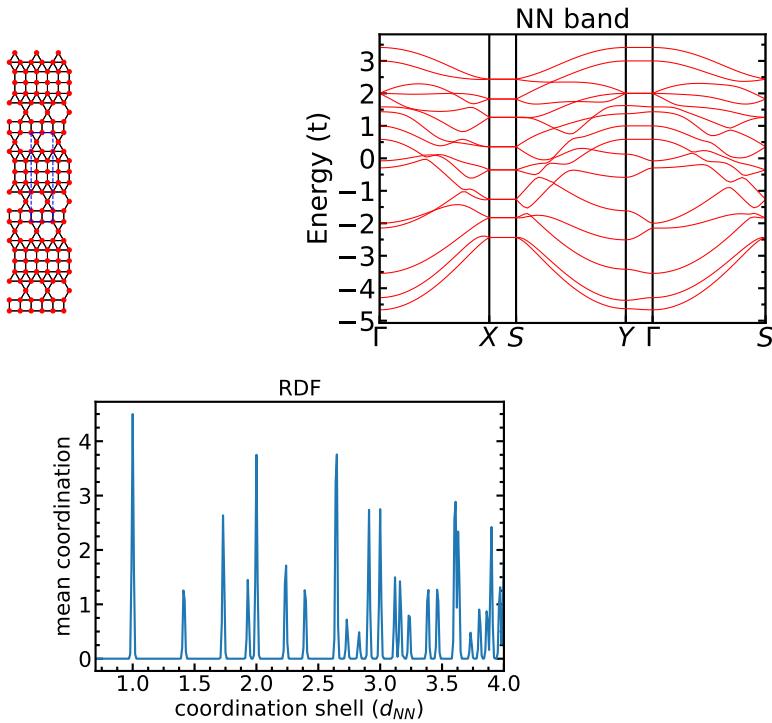


FIG. S359. t6359 lattice framework, nearest neighbors band structure and radial distribution function.

## t6360

Tiling reference number t6360 with space-group '*Amm2'* (38) and 14 sites in the unit cell, with vertex type indicated in Tab. S360. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S360.

TABLE S360. Tiling t6360 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	2	4	0	4	0	0	0	2

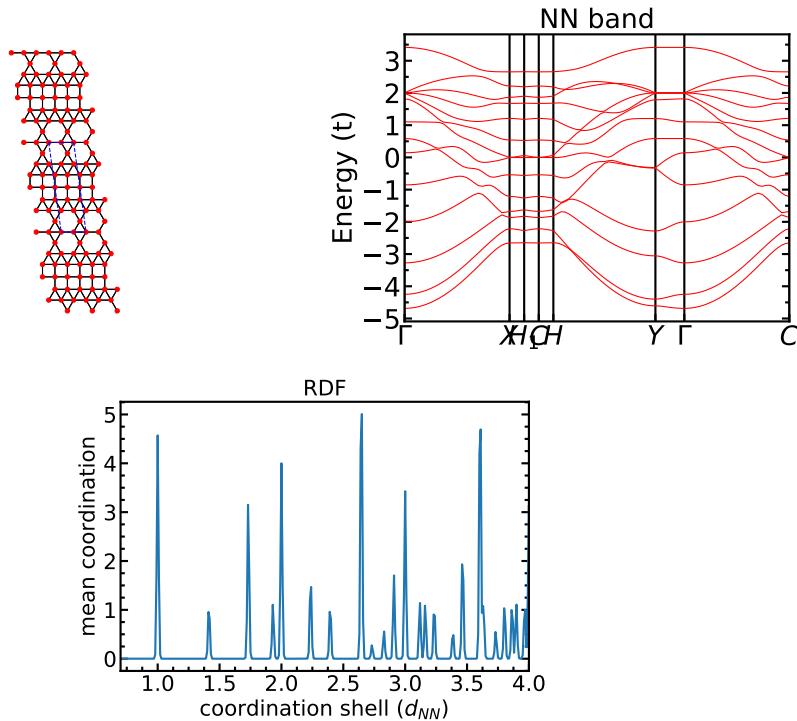


FIG. S360. t6360 lattice framework, nearest neighbors band structure and radial distribution function.

## t6361

Tiling reference number t6361 with space-group ' $Pmm2'$  (25) and 14 sites in the unit cell, with vertex type indicated in Tab. S361. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S361.

TABLE S361. Tiling t6361 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	4	4	0	4	0	0	0	0

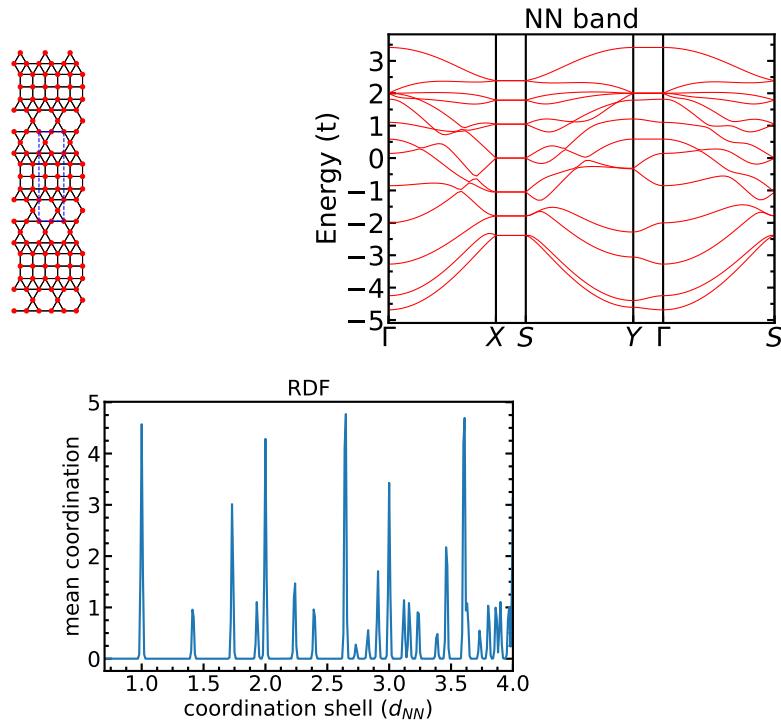


FIG. S361. t6361 lattice framework, nearest neighbors band structure and radial distribution function.

## t6362

Tiling reference number t6362 with space-group '*Amm2'* (38) and 38 sites in the unit cell, with vertex type indicated in Tab. S362. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S362.

TABLE S362. Tiling t6362 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	6	0	0	0	0	0	0	6	6	18	0	0	0	0

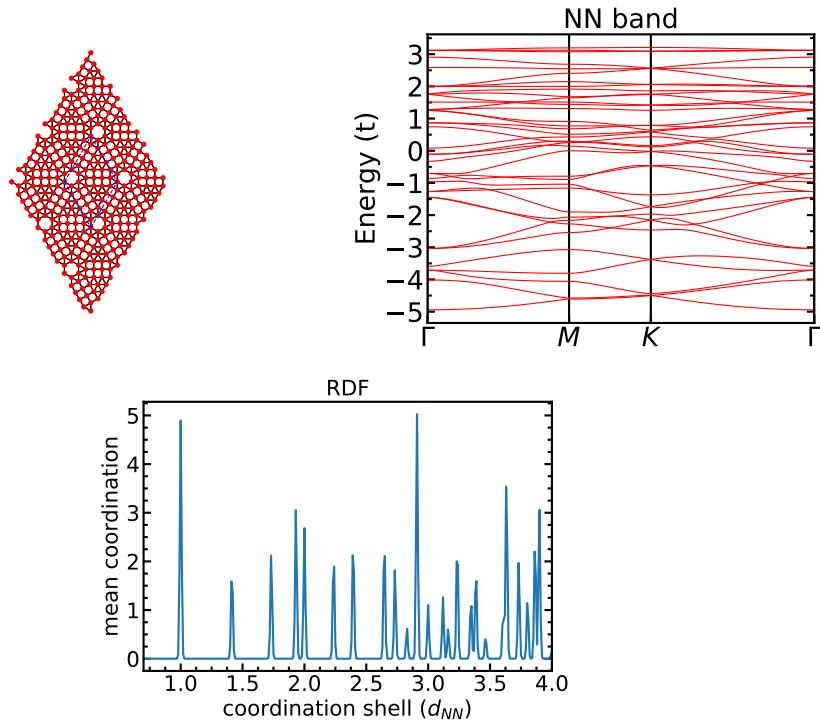


FIG. S362. t6362 lattice framework, nearest neighbors band structure and radial distribution function.

## t6363

Tiling reference number t6363 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S363. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S363.

TABLE S363. Tiling t6363 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	0	0	4	6	0	0	0	0

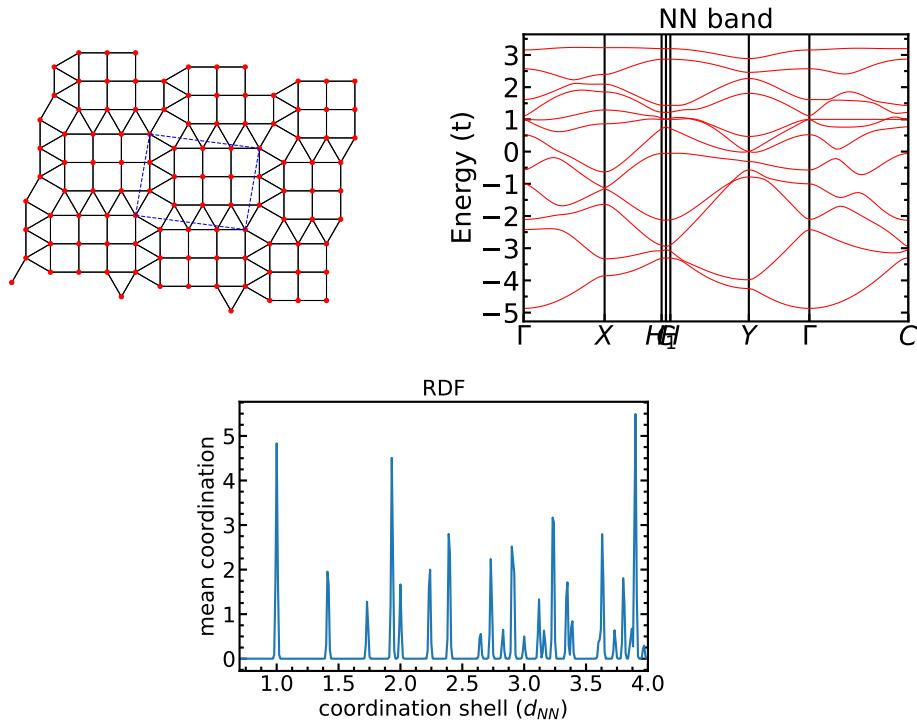


FIG. S363. t6363 lattice framework, nearest neighbors band structure and radial distribution function.

## t6364

Tiling reference number t6364 with space-group ' $Pmc2_1'$  (26) and 24 sites in the unit cell, with vertex type indicated in Tab. S364. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S364.

TABLE S364. Tiling t6364 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	4	0	0	0	0	0	0	0	4	12	0	0	0	0

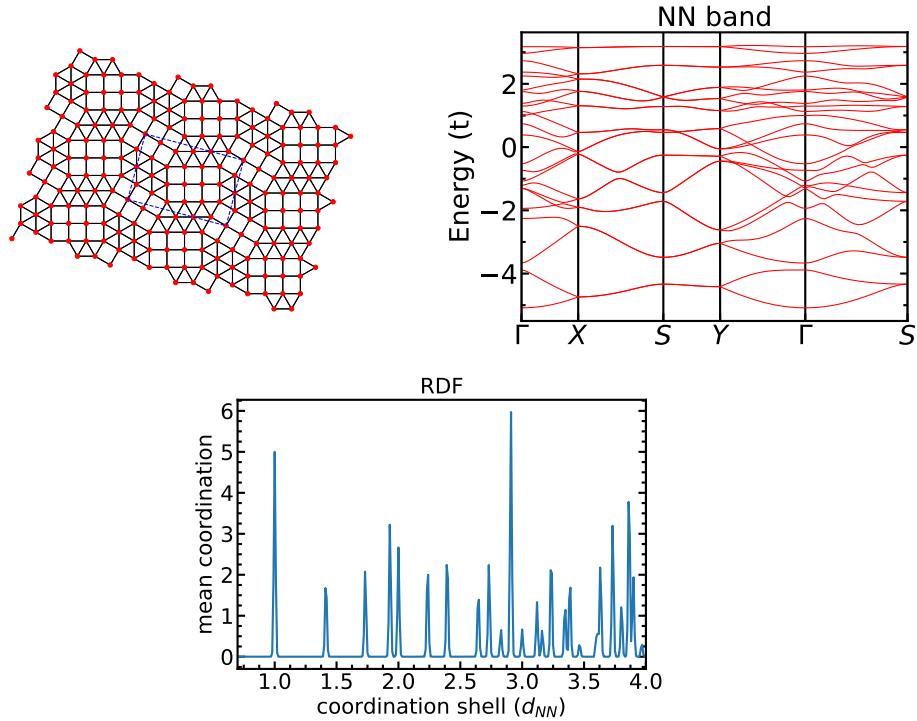


FIG. S364. t6364 lattice framework, nearest neighbors band structure and radial distribution function.

## t6365

Tiling reference number t6365 with space-group '*Amm2'* (38) and 13 sites in the unit cell, with vertex type indicated in Tab. S365. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S365.

TABLE S365. Tiling t6365 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	4	0	0	0	0	0	1	4	0	4	0	0	0	0

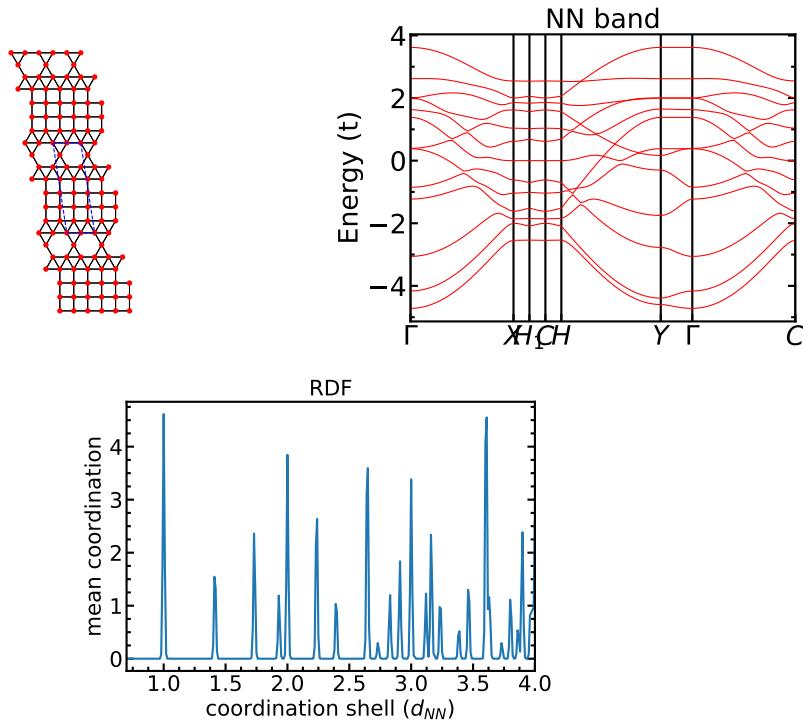


FIG. S365. t6365 lattice framework, nearest neighbors band structure and radial distribution function.

## t6366

Tiling reference number t6366 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S366. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S366.

TABLE S366. Tiling t6366 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	1	4	0	4	0	0	0	0

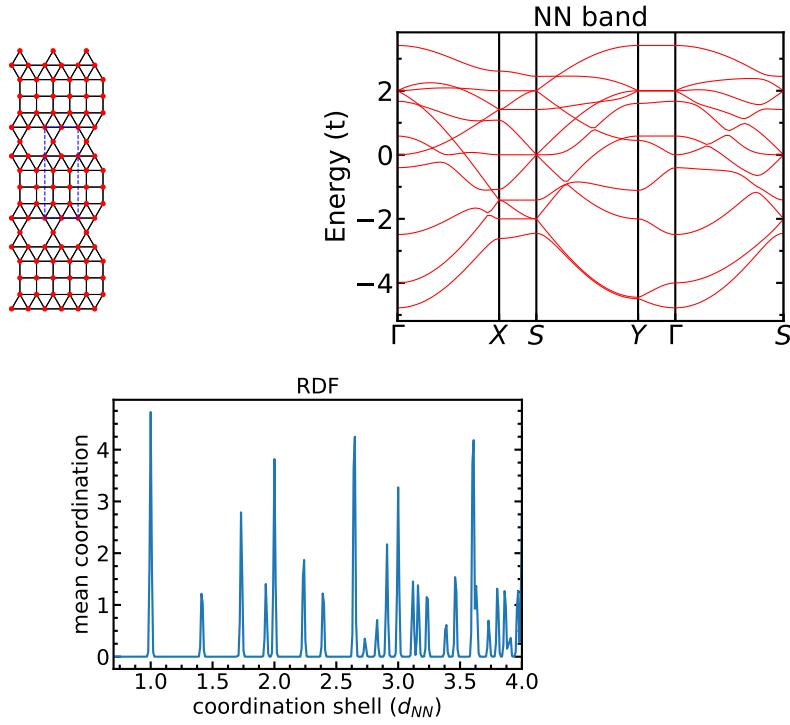


FIG. S366. t6366 lattice framework, nearest neighbors band structure and radial distribution function.

## t6367

Tiling reference number t6367 with space-group '*Amm2'* (38) and 15 sites in the unit cell, with vertex type indicated in Tab. S367. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S367.

TABLE S367. Tiling t6367 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	2	0	0	0	0	2	0	0	2	4	0	0	4	0

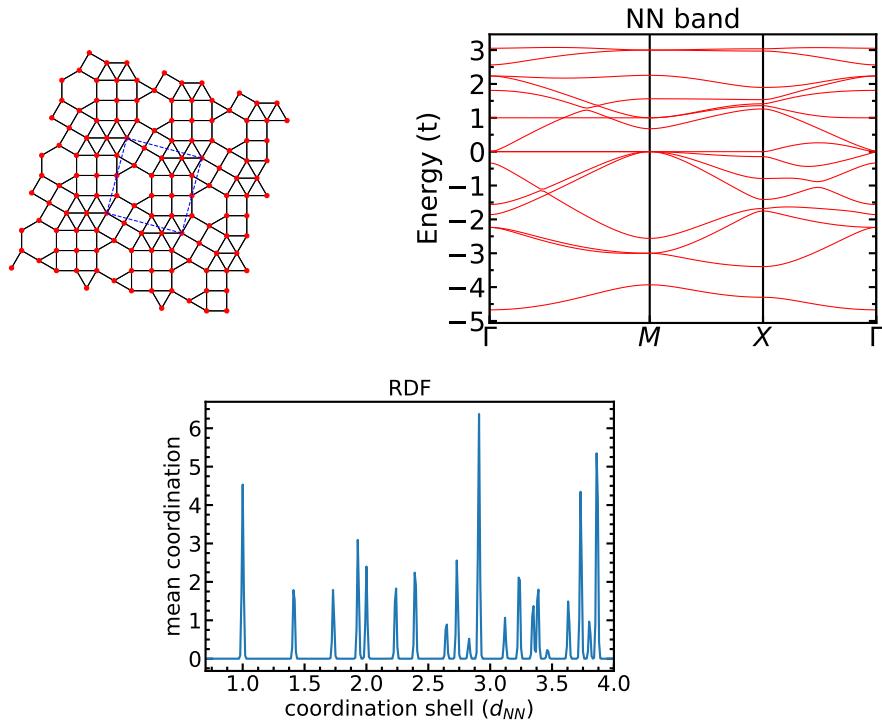


FIG. S367. t6367 lattice framework, nearest neighbors band structure and radial distribution function.

## t6368

Tiling reference number t6368 with space-group ' $Pm'$  (6) and 11 sites in the unit cell, with vertex type indicated in Tab. S368. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S368.

TABLE S368. Tiling t6368 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	1	0	0	0	0	2	0	0	2	2	0	0	4	0

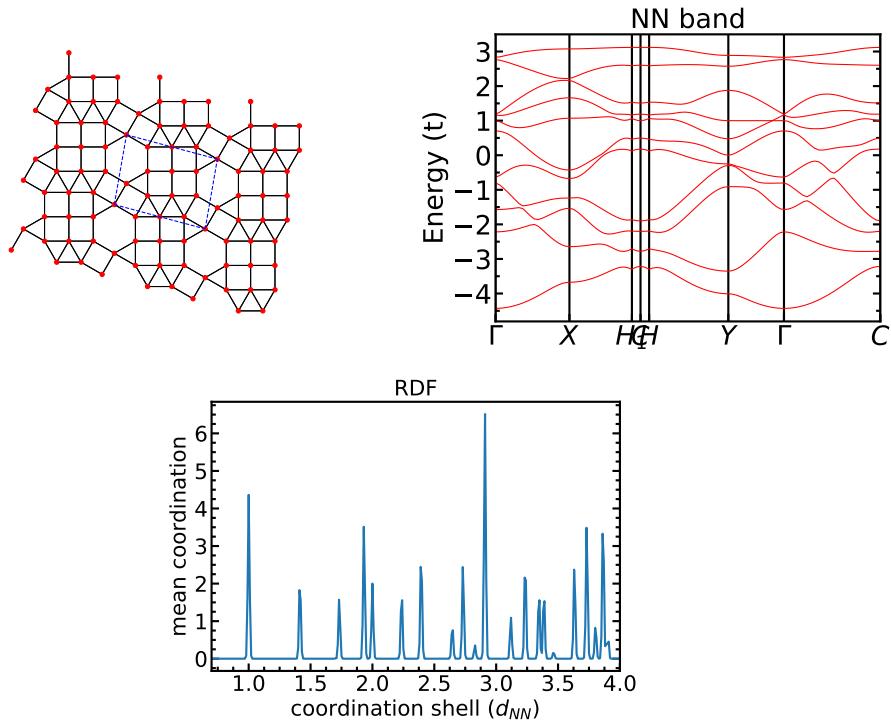


FIG. S368. t6368 lattice framework, nearest neighbors band structure and radial distribution function.

## t6369

Tiling reference number t6369 with space-group ' $Cmmm$ ' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S369. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S369.

TABLE S369. Tiling t6369 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	1	0	0	0	0	0	0	0	8	8	0	0	0	0

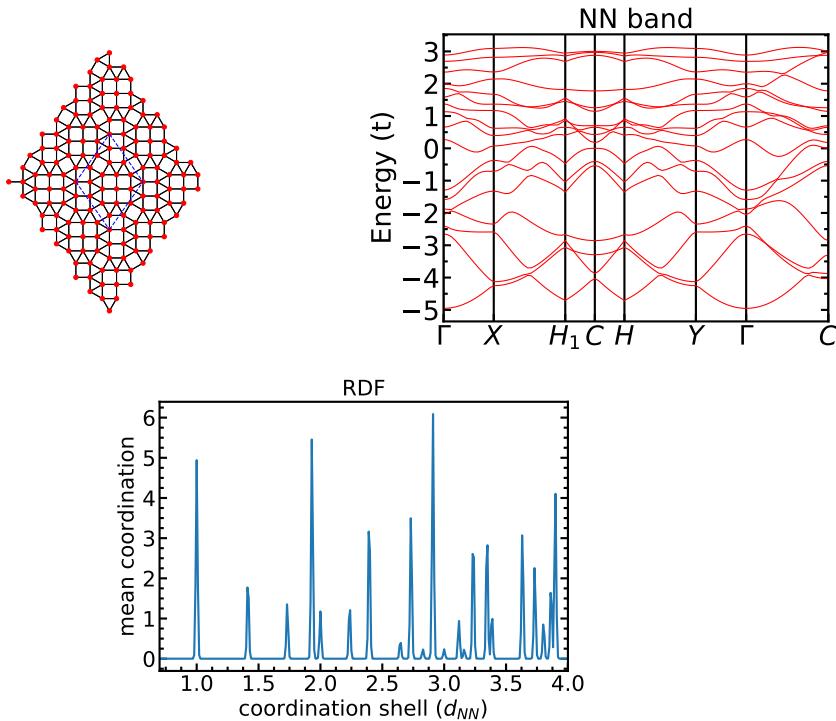


FIG. S369. t6369 lattice framework, nearest neighbors band structure and radial distribution function.

## t6370

Tiling reference number t6370 with space-group '*Amm2'* (38) and 28 sites in the unit cell, with vertex type indicated in Tab. S370. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S370.

TABLE S370. Tiling t6370 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	3	0	0	0	0	0	0	0	6	12	0	0	0	0

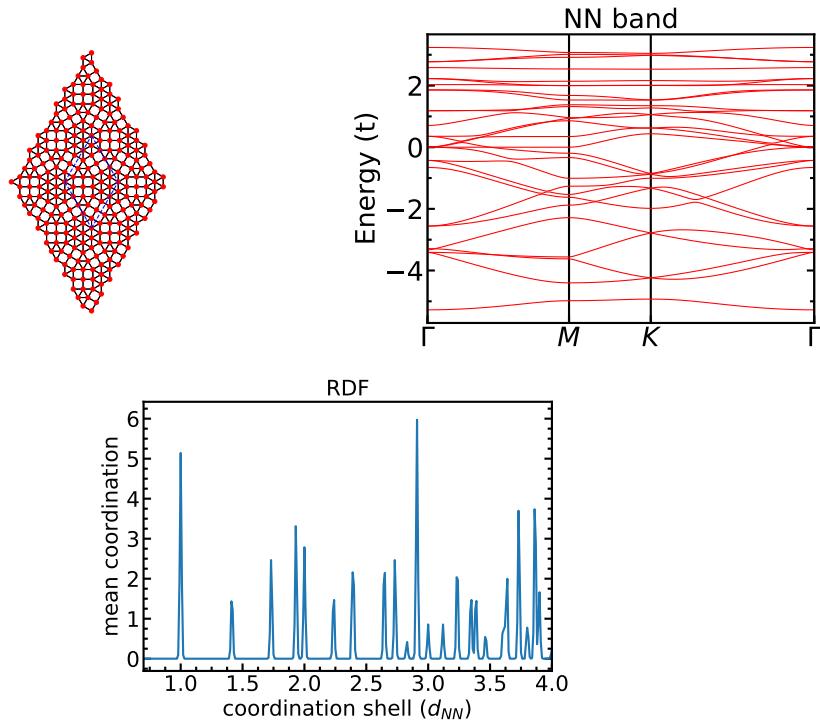


FIG. S370. t6370 lattice framework, nearest neighbors band structure and radial distribution function.

## t6371

Tiling reference number t6371 with space-group ' $Pm'$  (6) and 45 sites in the unit cell, with vertex type indicated in Tab. S371. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S371.

TABLE S371. Tiling t6371 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	3	0	0	0	0	0	0	0	12	12	12	0	0	0

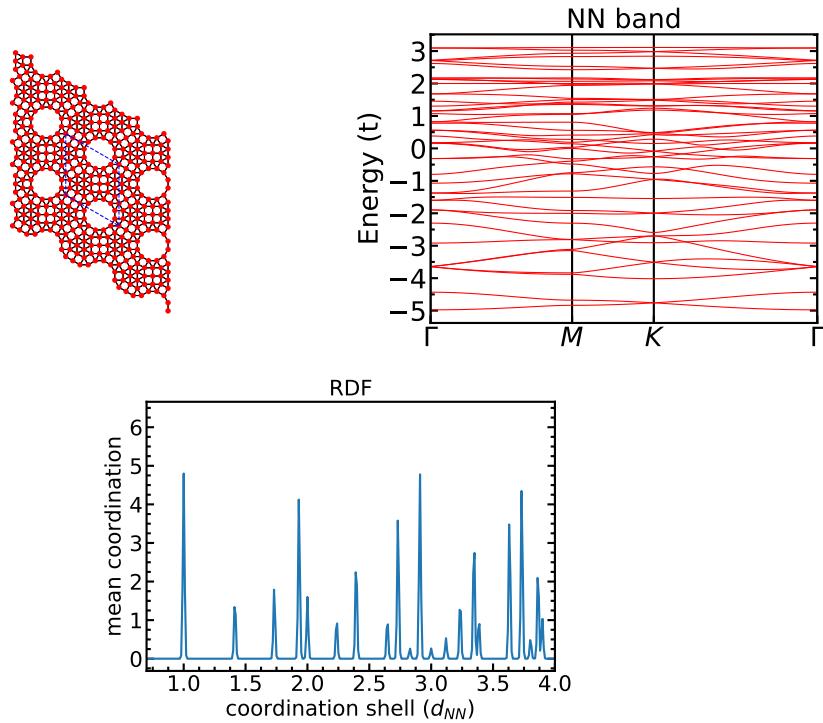


FIG. S371. t6371 lattice framework, nearest neighbors band structure and radial distribution function.

## t6372

Tiling reference number t6372 with space-group ' $Pm'$  (6) and 48 sites in the unit cell, with vertex type indicated in Tab. S372. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S372.

TABLE S372. Tiling t6372 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	12	0	6	0	0	0	24	0

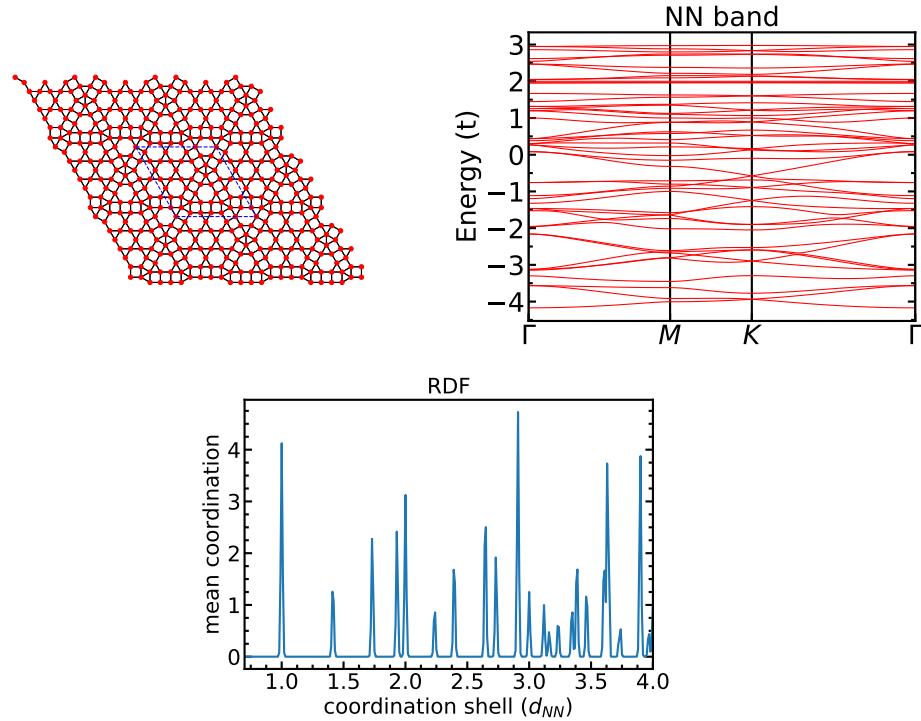


FIG. S372. t6372 lattice framework, nearest neighbors band structure and radial distribution function.

### t6373

Tiling reference number t6373 with space-group '*Amm2'* (38) and 27 sites in the unit cell, with vertex type indicated in Tab. S373. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S373.

TABLE S373. Tiling t6373 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	3	0	6	0	0	0	12	0

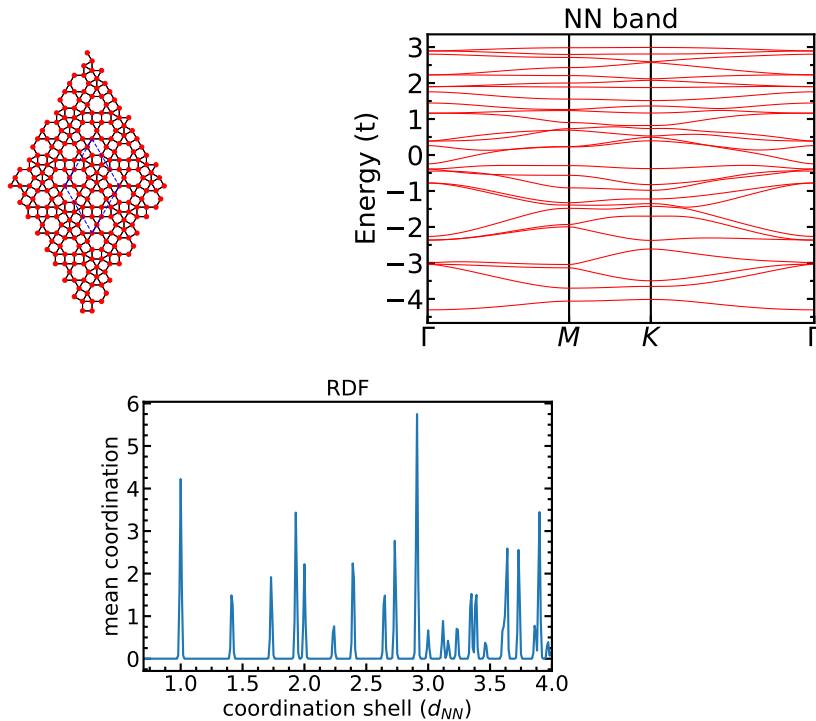


FIG. S373. t6373 lattice framework, nearest neighbors band structure and radial distribution function.

**t6374**

Tiling reference number t6374 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S374. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S374.

TABLE S374. Tiling t6374 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	0	6	6	0	0	6	0

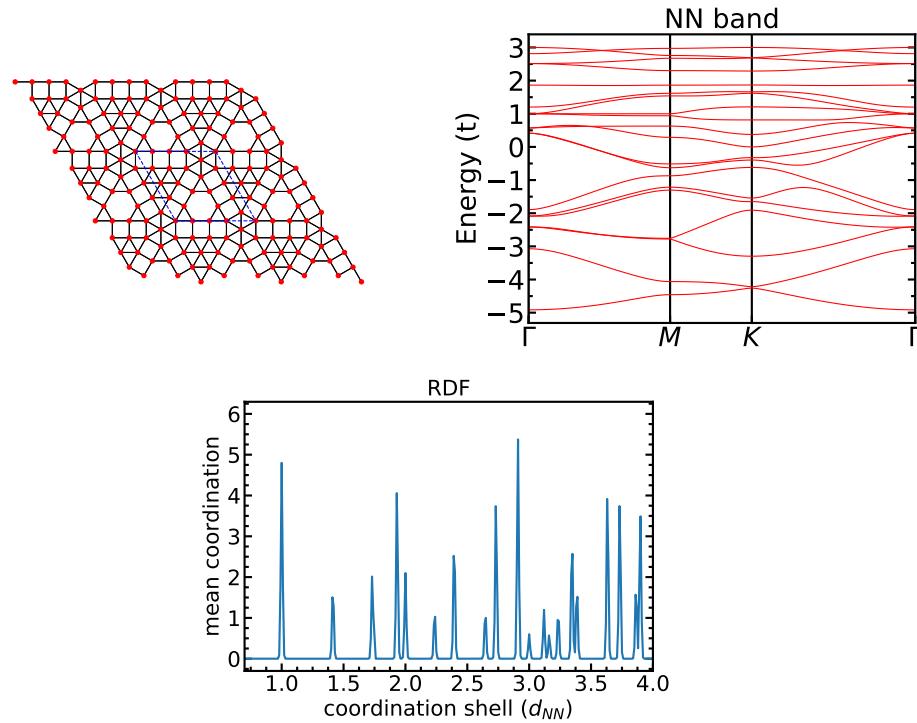


FIG. S374. t6374 lattice framework, nearest neighbors band structure and radial distribution function.

## t6375

Tiling reference number t6375 with space-group '*Amm2'* (38) and 56 sites in the unit cell, with vertex type indicated in Tab. S375. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S375.

TABLE S375. Tiling t6375 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	6	0	0	12	0	0	0	36	0

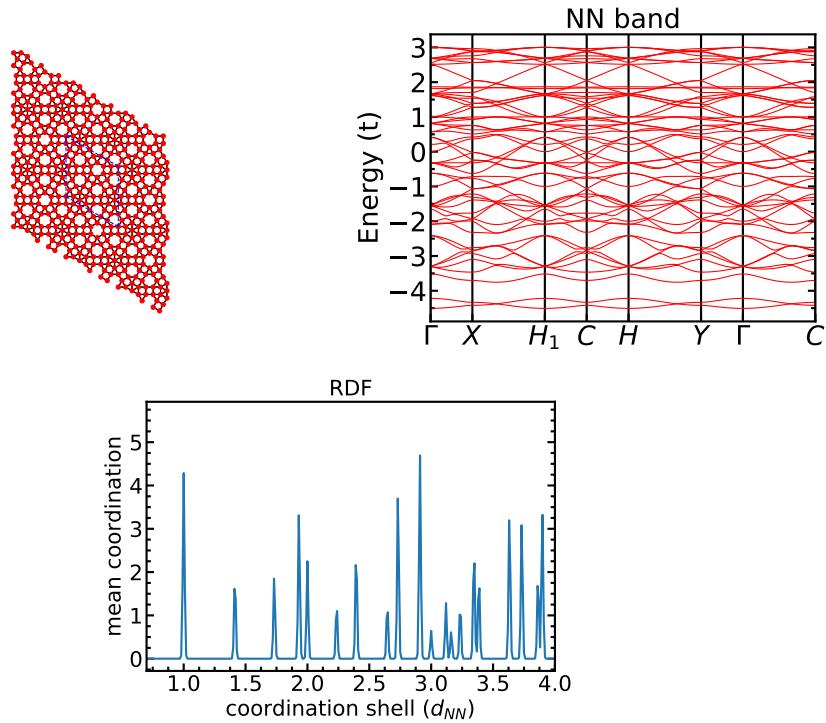


FIG. S375. t6375 lattice framework, nearest neighbors band structure and radial distribution function.

## t6376

Tiling reference number t6376 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S376. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S376.

TABLE S376. Tiling t6376 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	8	18	0	0	0	0	0	34	0

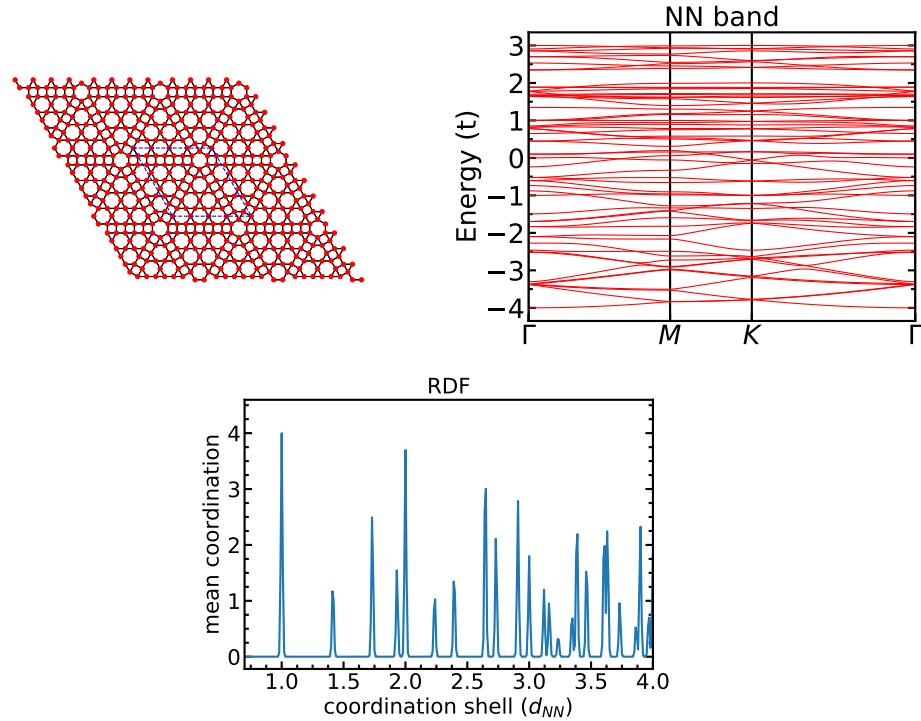


FIG. S376. t6376 lattice framework, nearest neighbors band structure and radial distribution function.

## t6377

Tiling reference number t6377 with space-group ' $Pm'$  (6) and 50 sites in the unit cell, with vertex type indicated in Tab. S377. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S377.

TABLE S377. Tiling t6377 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	6	0	12	0	6	0	0	24	0

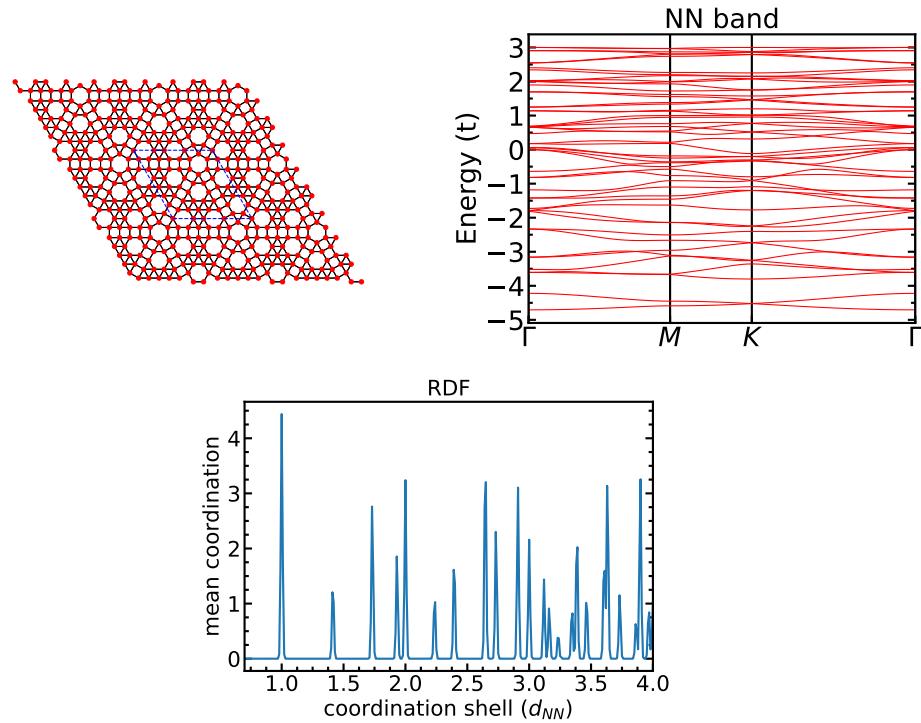


FIG. S377. t6377 lattice framework, nearest neighbors band structure and radial distribution function.

## t6378

Tiling reference number t6378 with space-group ' $Pm'$  (6) and 55 sites in the unit cell, with vertex type indicated in Tab. S378. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S378.

TABLE S378. Tiling t6378 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	15	0	0	6	0	0	0	33	0

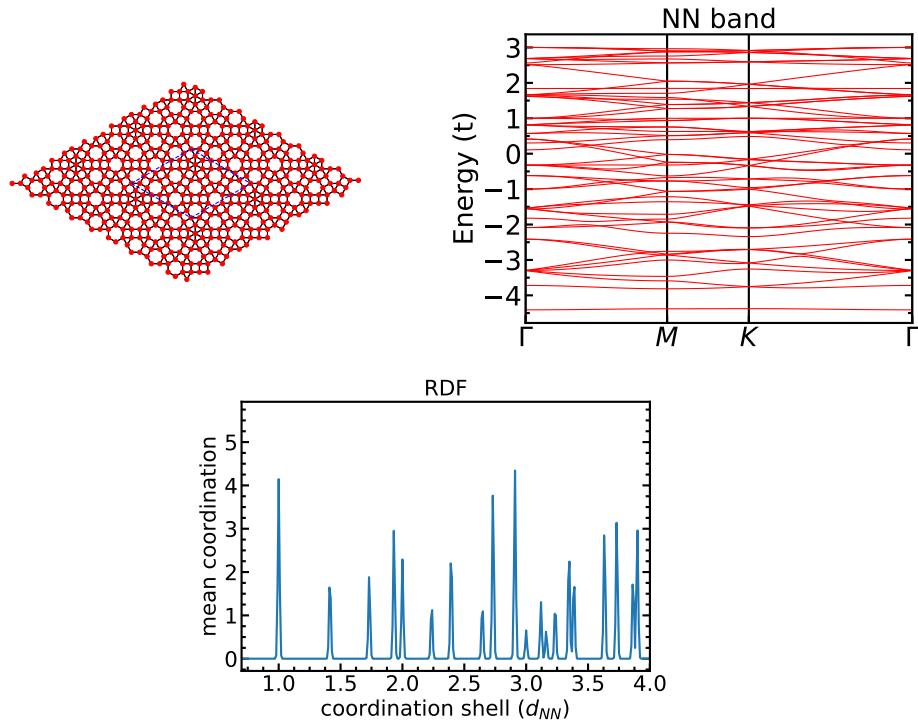


FIG. S378. t6378 lattice framework, nearest neighbors band structure and radial distribution function.

## t6379

Tiling reference number t6379 with space-group ' $Pm'$  (6) and 49 sites in the unit cell, with vertex type indicated in Tab. S379. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S379.

TABLE S379. Tiling t6379 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	6	6	0	0	24	12

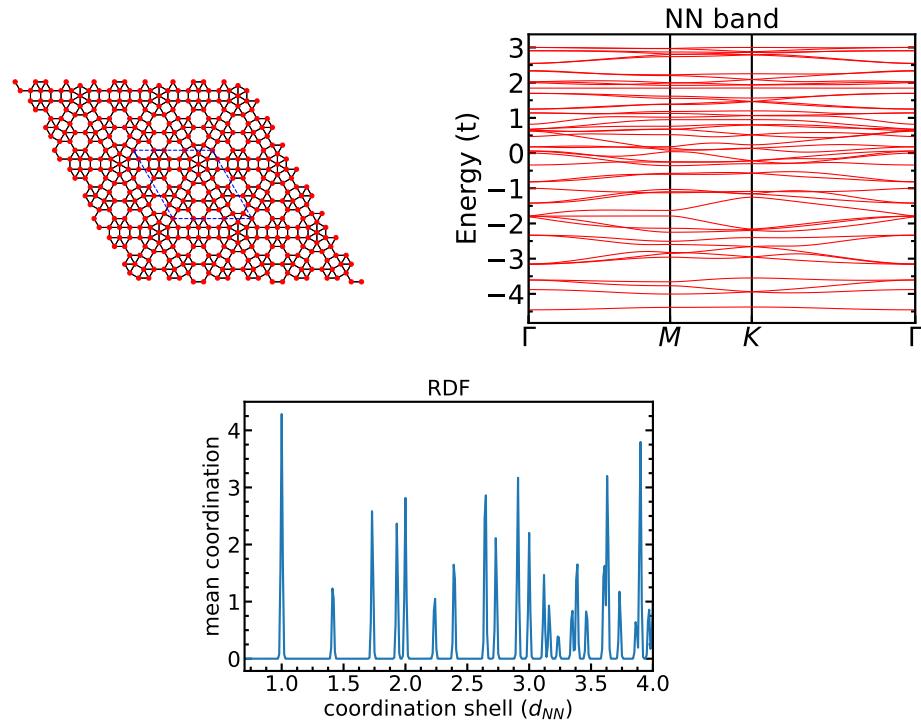


FIG. S379. t6379 lattice framework, nearest neighbors band structure and radial distribution function.

## t6380

Tiling reference number t6380 with space-group ' $Pm'$  (6) and 43 sites in the unit cell, with vertex type indicated in Tab. S380. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S380.

TABLE S380. Tiling t6380 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	12	0	0	0	24	6

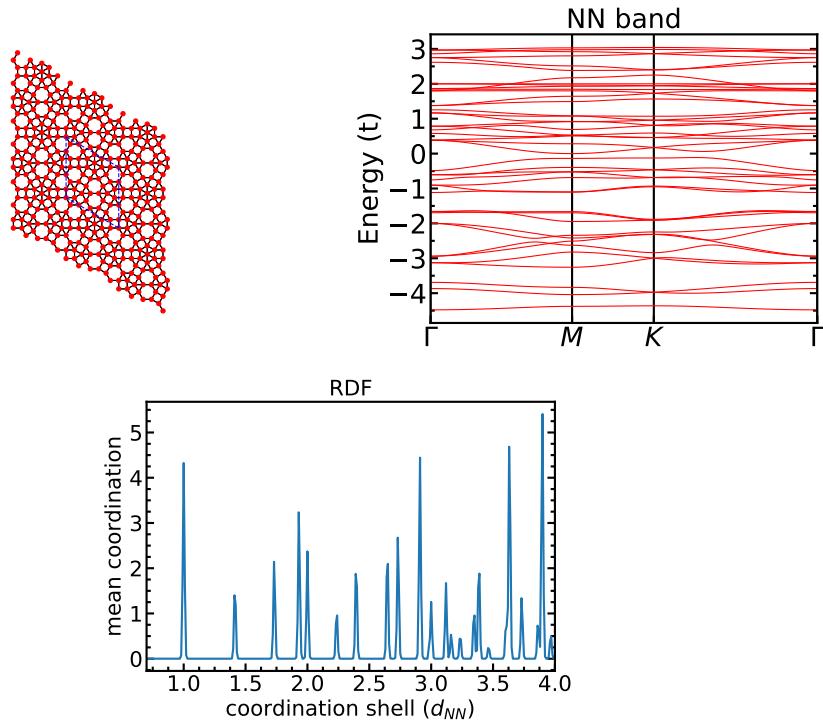


FIG. S380. t6380 lattice framework, nearest neighbors band structure and radial distribution function.

## t6381

Tiling reference number t6381 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S381. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S381.

TABLE S381. Tiling t6381 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	8	0	0	6	0	0	0	4	0

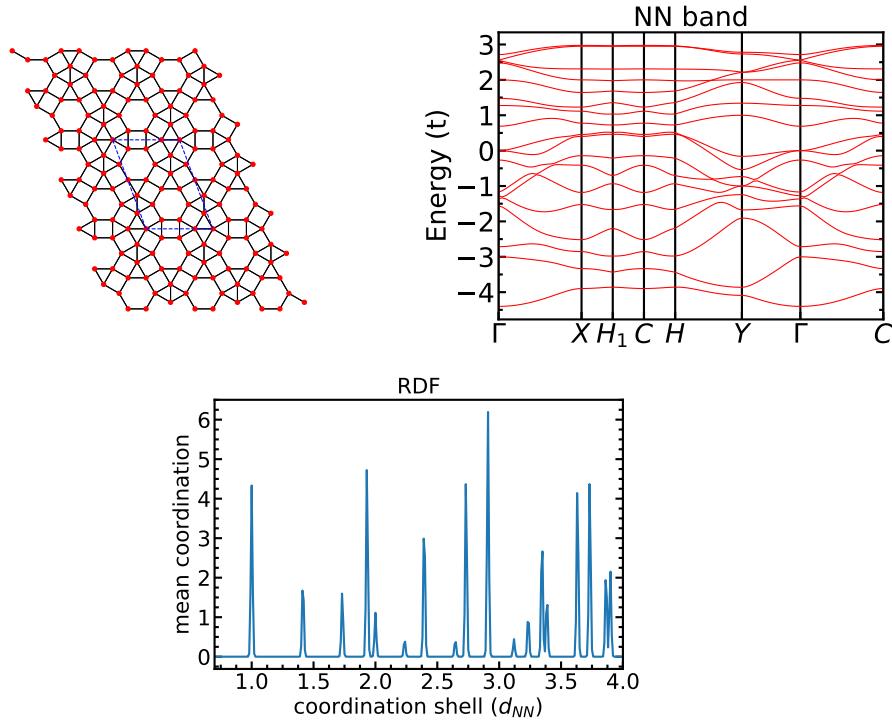


FIG. S381. t6381 lattice framework, nearest neighbors band structure and radial distribution function.

## t6382

Tiling reference number t6382 with space-group ' $Pmm2'$  (25) and 20 sites in the unit cell, with vertex type indicated in Tab. S382. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S382.

TABLE S382. Tiling t6382 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	8	0	0	8	0	0	0	4	0

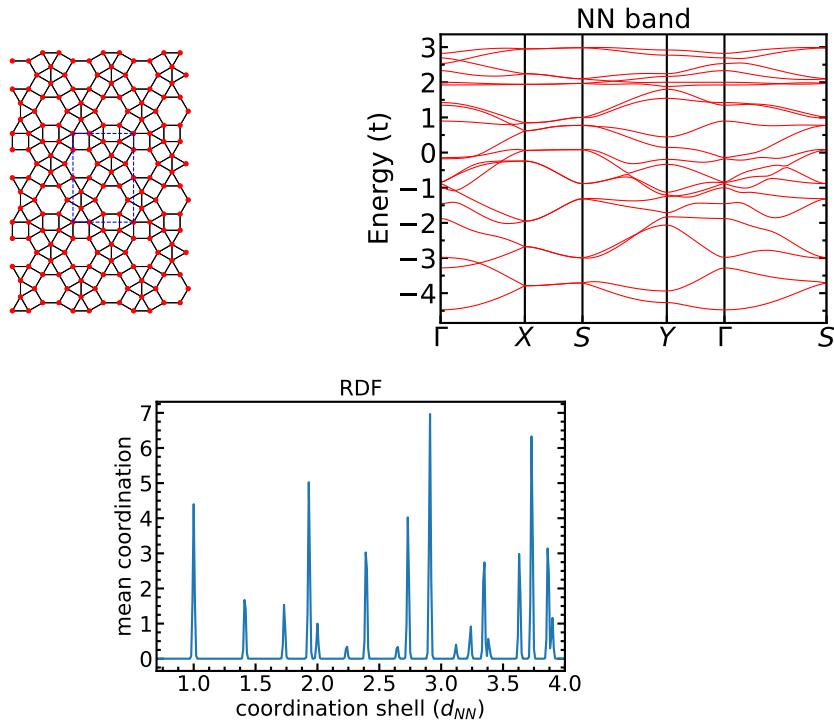


FIG. S382. t6382 lattice framework, nearest neighbors band structure and radial distribution function.

### t6383

Tiling reference number t6383 with space-group ' $Pm'$  (6) and 54 sites in the unit cell, with vertex type indicated in Tab. S383. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S383.

TABLE S383. Tiling t6383 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	42	0	0	0	0	0	0	12	0

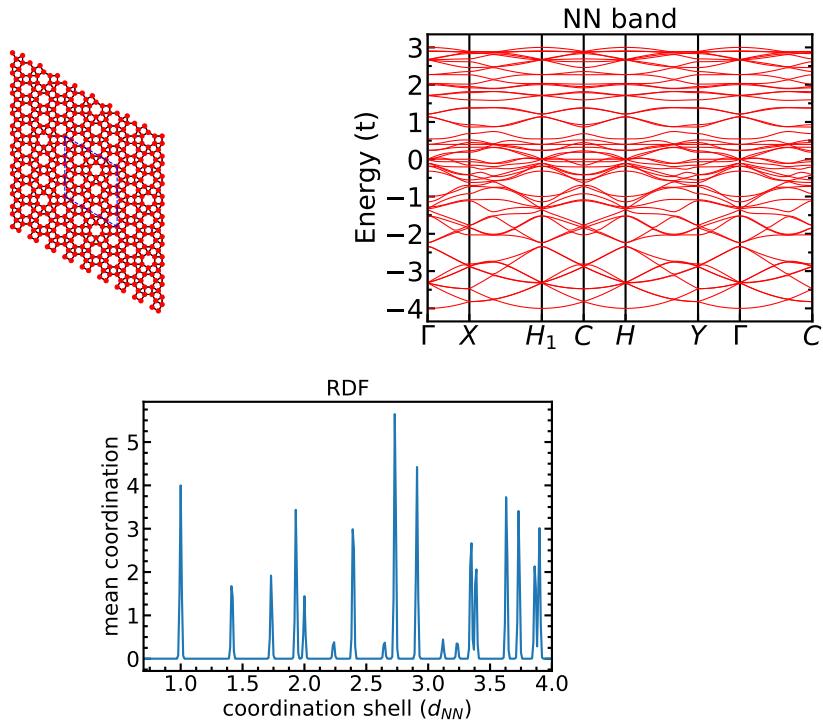


FIG. S383. t6383 lattice framework, nearest neighbors band structure and radial distribution function.

## t6384

Tiling reference number t6384 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S384. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S384.

TABLE S384. Tiling t6384 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	8	0	0	4	4	0	0	4	0

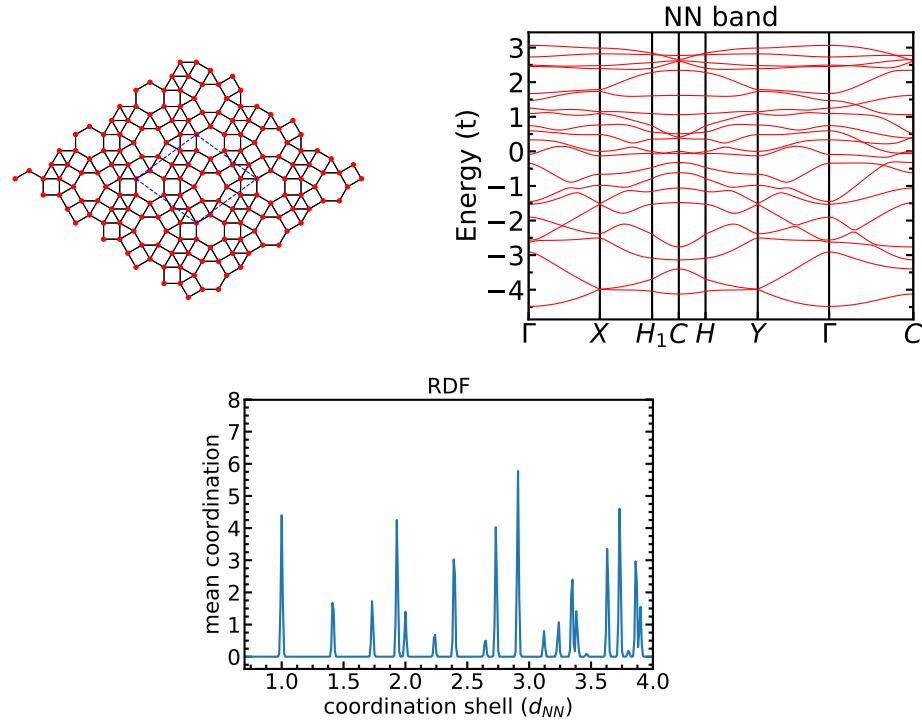


FIG. S384. t6384 lattice framework, nearest neighbors band structure and radial distribution function.

## t6385

Tiling reference number t6385 with space-group ' $Pm'$  (6) and 55 sites in the unit cell, with vertex type indicated in Tab. S385. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S385.

TABLE S385. Tiling t6385 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	24	0	0	6	0	0	0	24	0

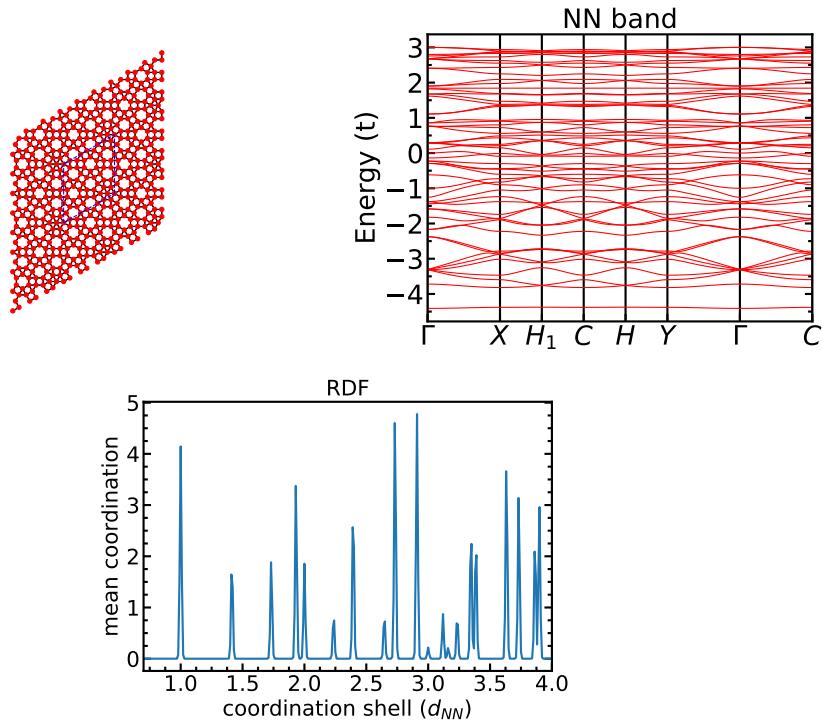


FIG. S385. t6385 lattice framework, nearest neighbors band structure and radial distribution function.

## t6386

Tiling reference number t6386 with space-group ' $Pm'$  (6) and 56 sites in the unit cell, with vertex type indicated in Tab. S386. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S386.

TABLE S386. Tiling t6386 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	18	0	0	12	0	0	0	24	0

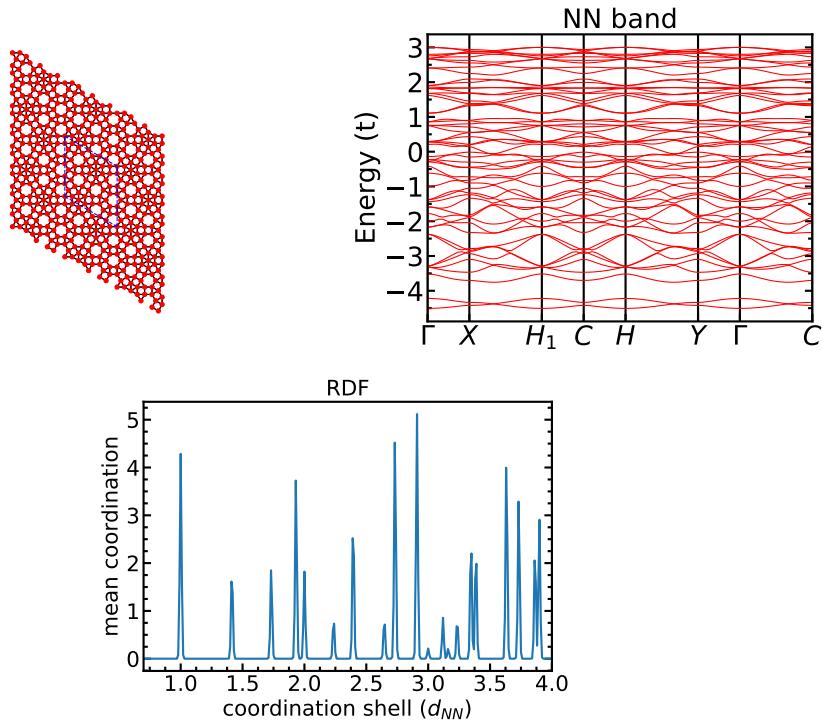


FIG. S386. t6386 lattice framework, nearest neighbors band structure and radial distribution function.

## t6387

Tiling reference number t6387 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S387. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S387.

TABLE S387. Tiling t6387 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	0	2	0	0	4	10

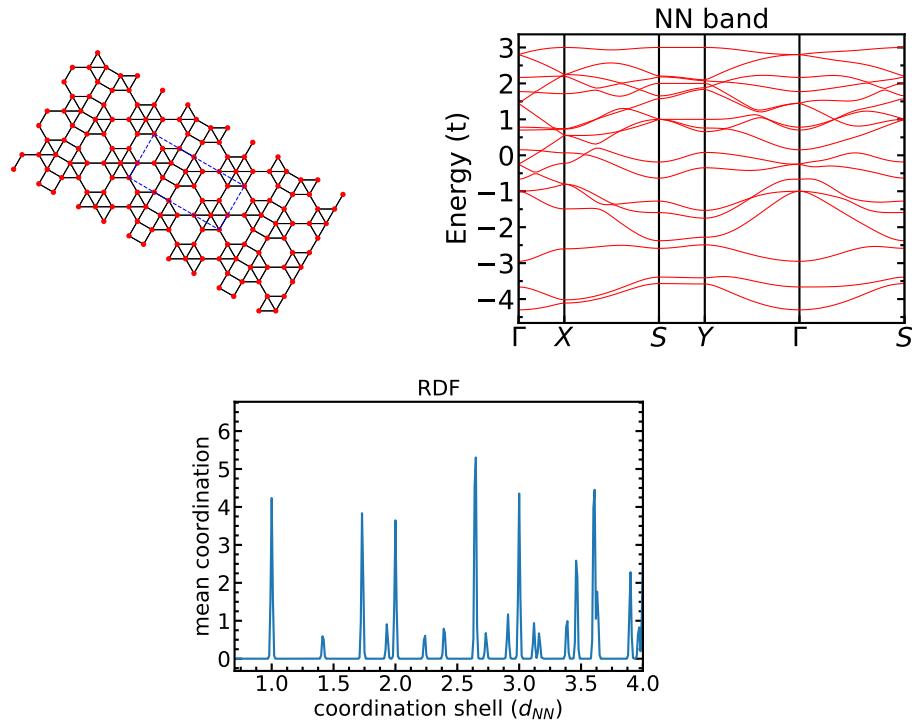


FIG. S387. t6387 lattice framework, nearest neighbors band structure and radial distribution function.

## t6388

Tiling reference number t6388 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S388. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S388.

TABLE S388. Tiling t6388 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	4	0	2	0	0	4	8

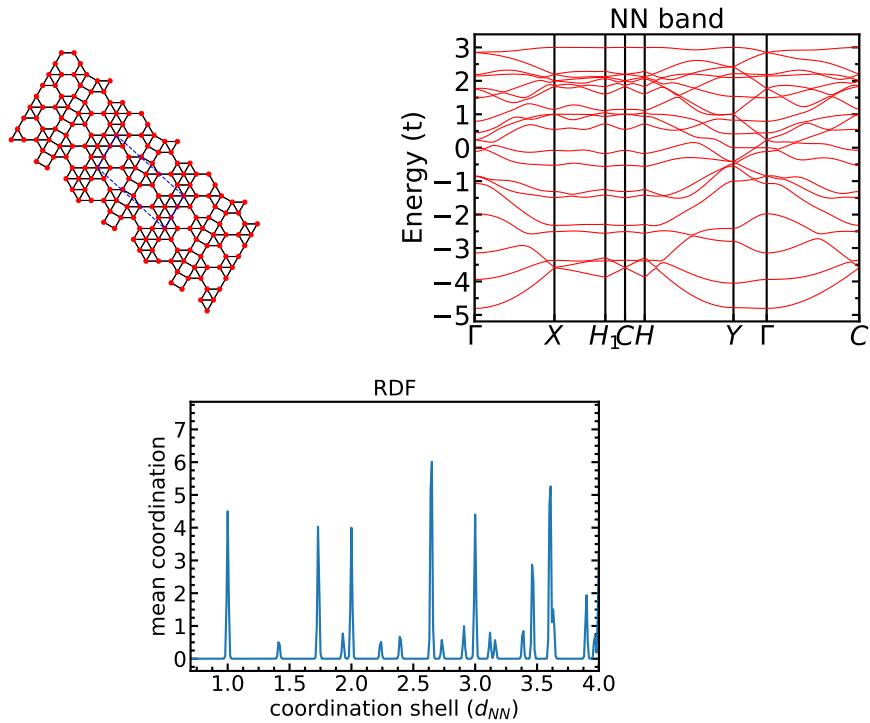


FIG. S388. t6388 lattice framework, nearest neighbors band structure and radial distribution function.

## t6389

Tiling reference number t6389 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S389. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S389.

TABLE S389. Tiling t6389 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	2	0	4	0	0	8	4

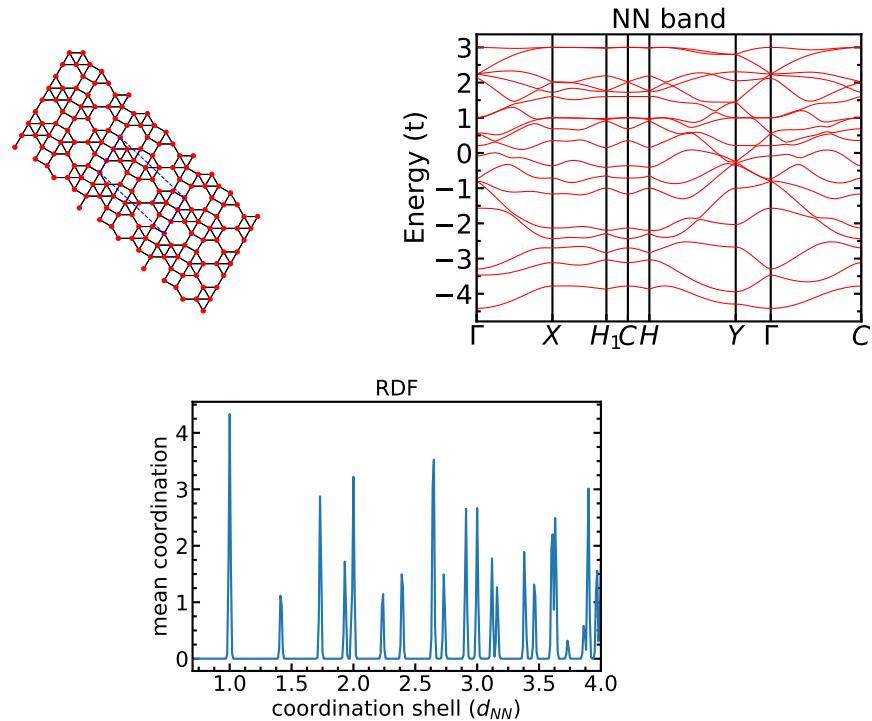


FIG. S389. t6389 lattice framework, nearest neighbors band structure and radial distribution function.

## t6390

Tiling reference number t6390 with space-group ' $Pm'$  (6) and 49 sites in the unit cell, with vertex type indicated in Tab. S390. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S390.

TABLE S390. Tiling t6390 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	14	0	0	6	6	0	0	10	12

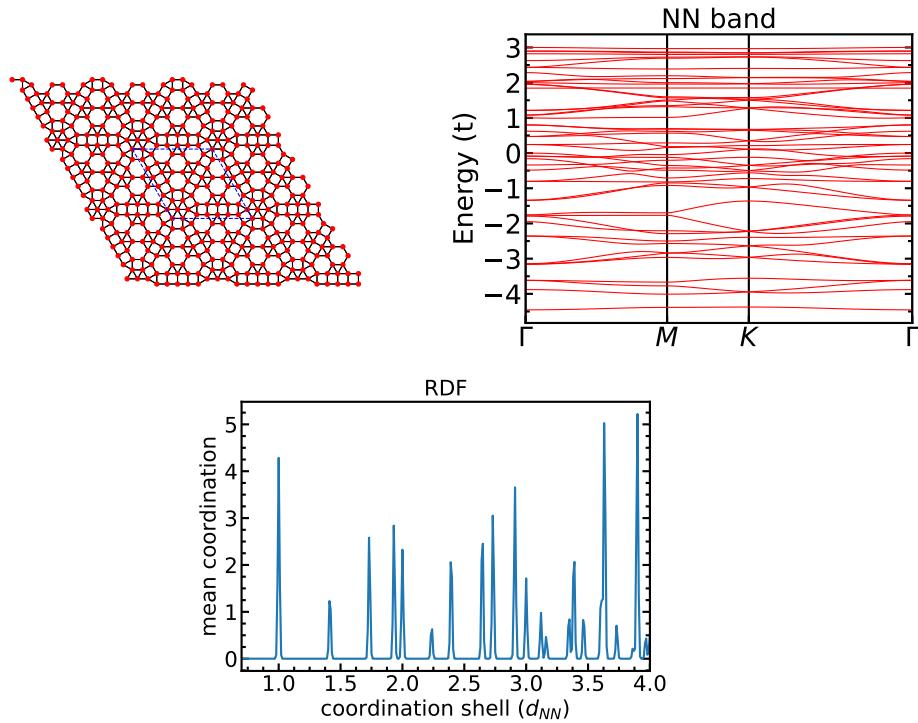


FIG. S390. t6390 lattice framework, nearest neighbors band structure and radial distribution function.

## t6391

Tiling reference number t6391 with space-group ' $Pm'$  (6) and 43 sites in the unit cell, with vertex type indicated in Tab. S391. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S391.

TABLE S391. Tiling t6391 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	12	0	0	12	0	0	0	12	6

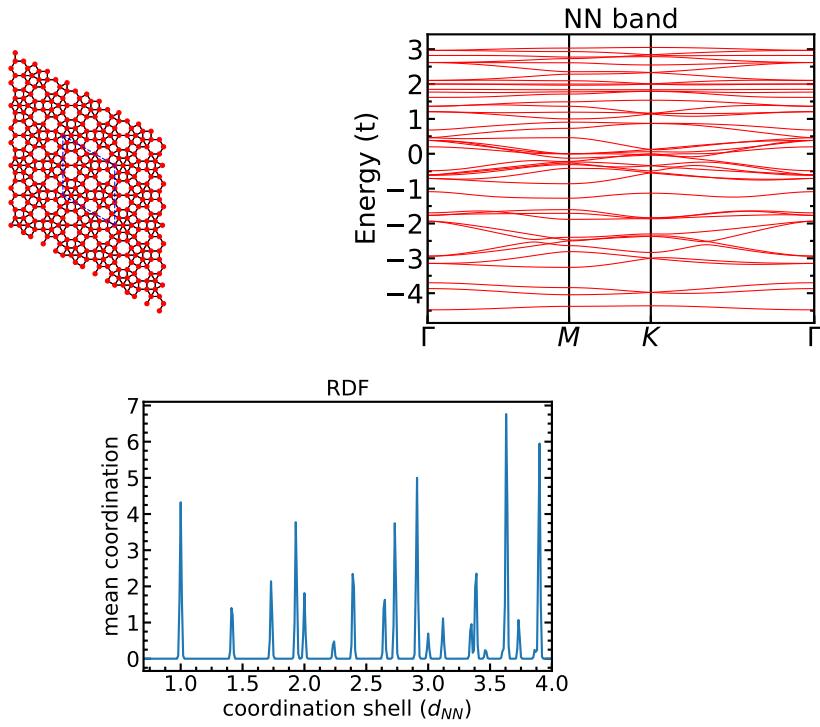


FIG. S391. t6391 lattice framework, nearest neighbors band structure and radial distribution function.

## t6392

Tiling reference number t6392 with space-group ' $P2/m$ ' (10) and 20 sites in the unit cell, with vertex type indicated in Tab. S392. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S392.

TABLE S392. Tiling t6392 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	4	0	2	2	4	0	0	4	4

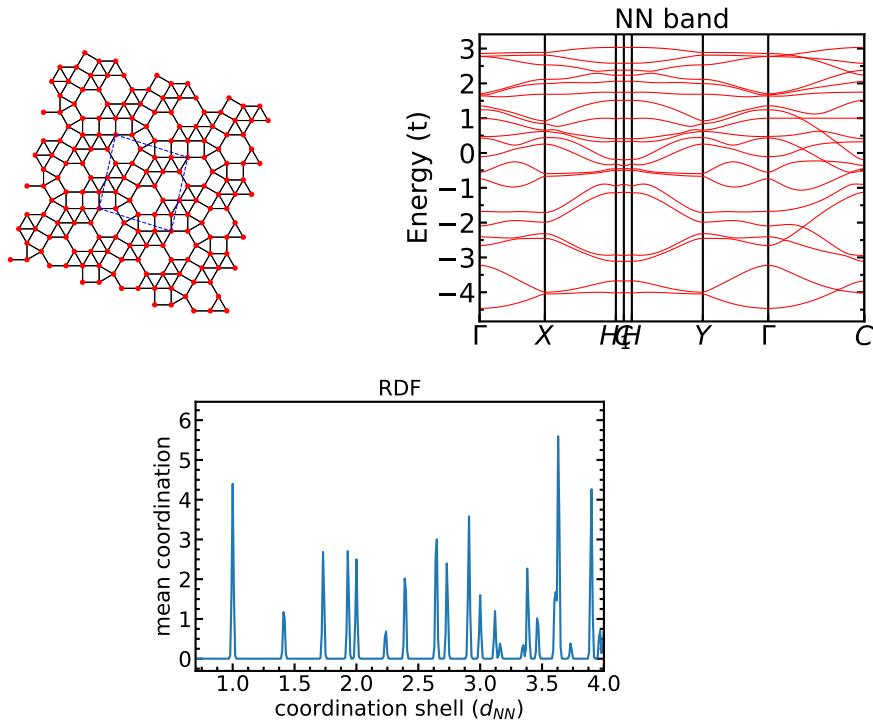


FIG. S392. t6392 lattice framework, nearest neighbors band structure and radial distribution function.

## t6393

Tiling reference number t6393 with space-group ' $Pm'$  (6) and 20 sites in the unit cell, with vertex type indicated in Tab. S393. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S393.

TABLE S393. Tiling t6393 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	16	0

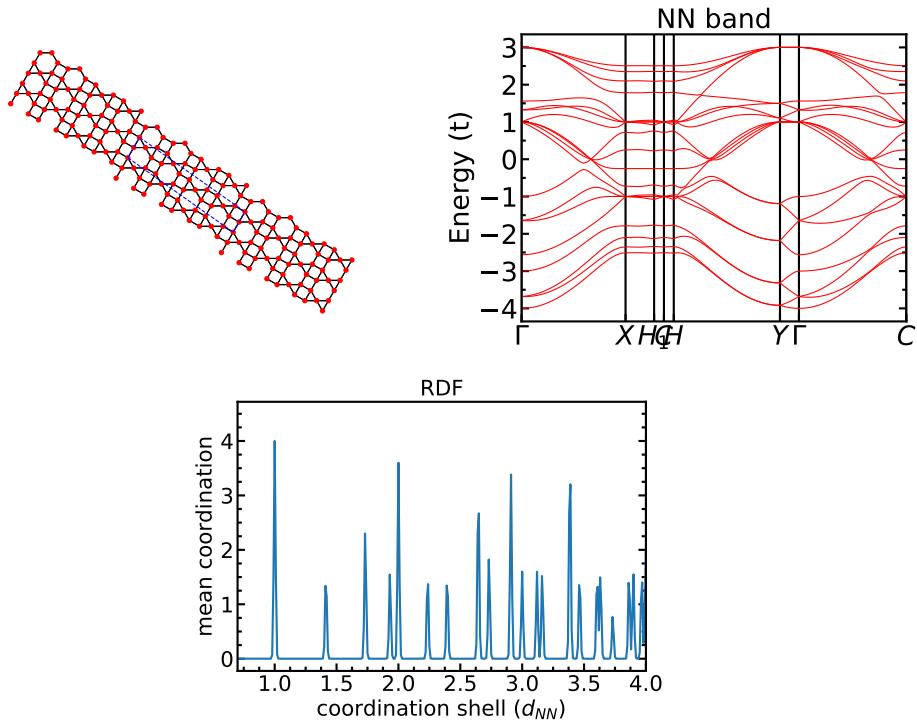


FIG. S393. t6393 lattice framework, nearest neighbors band structure and radial distribution function.

## t6394

Tiling reference number t6394 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S394. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S394.

TABLE S394. Tiling t6394 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	12	2

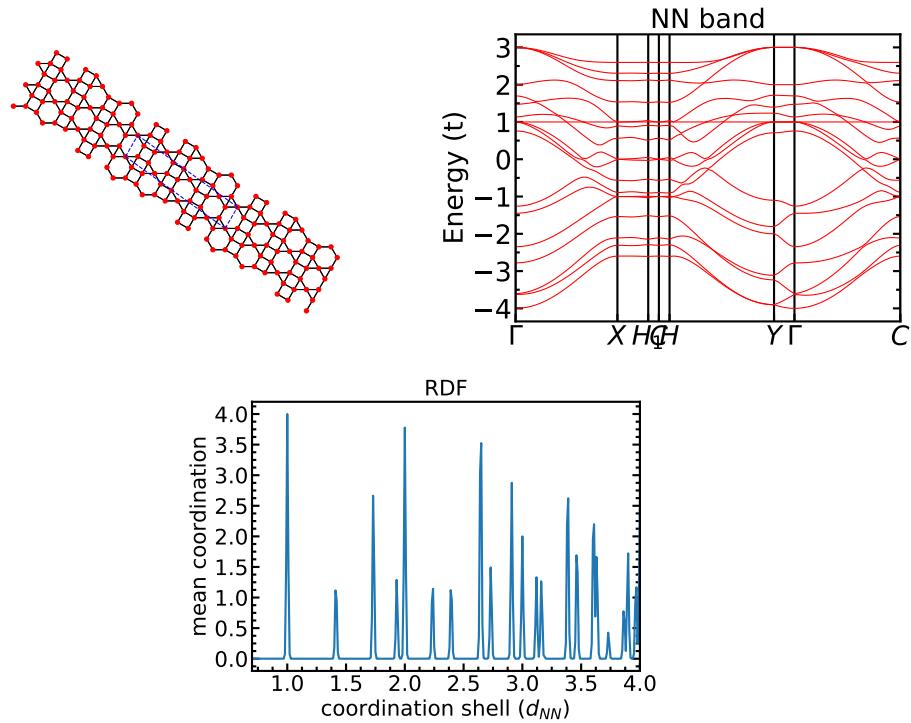


FIG. S394. t6394 lattice framework, nearest neighbors band structure and radial distribution function.

## t6395

Tiling reference number t6395 with space-group ' $Pmc2_1'$  (26) and 18 sites in the unit cell, with vertex type indicated in Tab. S395. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S395.

TABLE S395. Tiling t6395 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	0	0	0	0	0	12	0

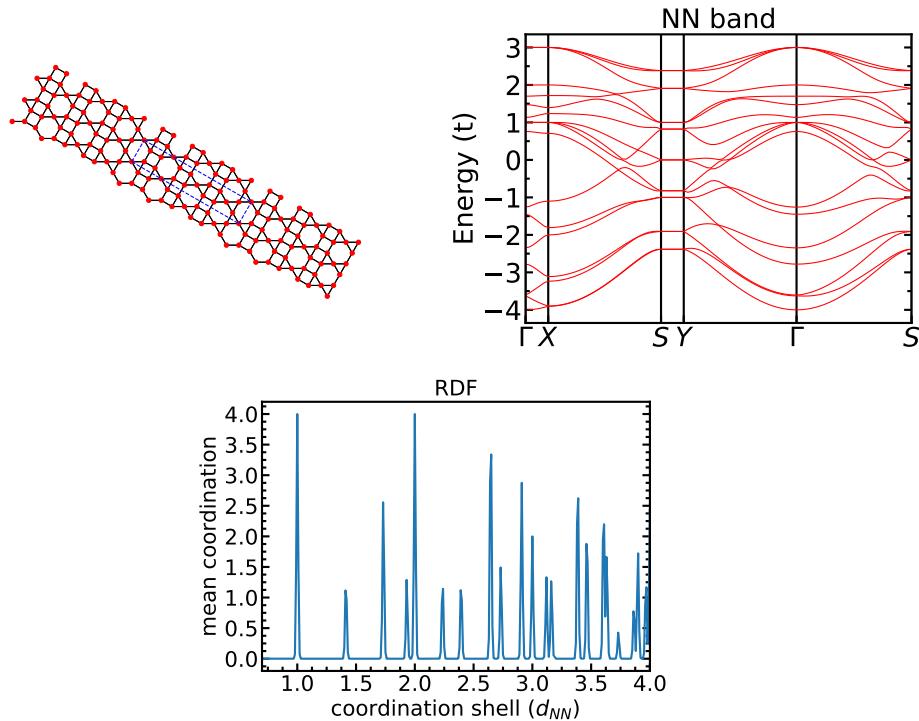


FIG. S395. t6395 lattice framework, nearest neighbors band structure and radial distribution function.

## t6396

Tiling reference number t6396 with space-group ' $Pm'$  (6) and 20 sites in the unit cell, with vertex type indicated in Tab. S396. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S396.

TABLE S396. Tiling t6396 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	16	0

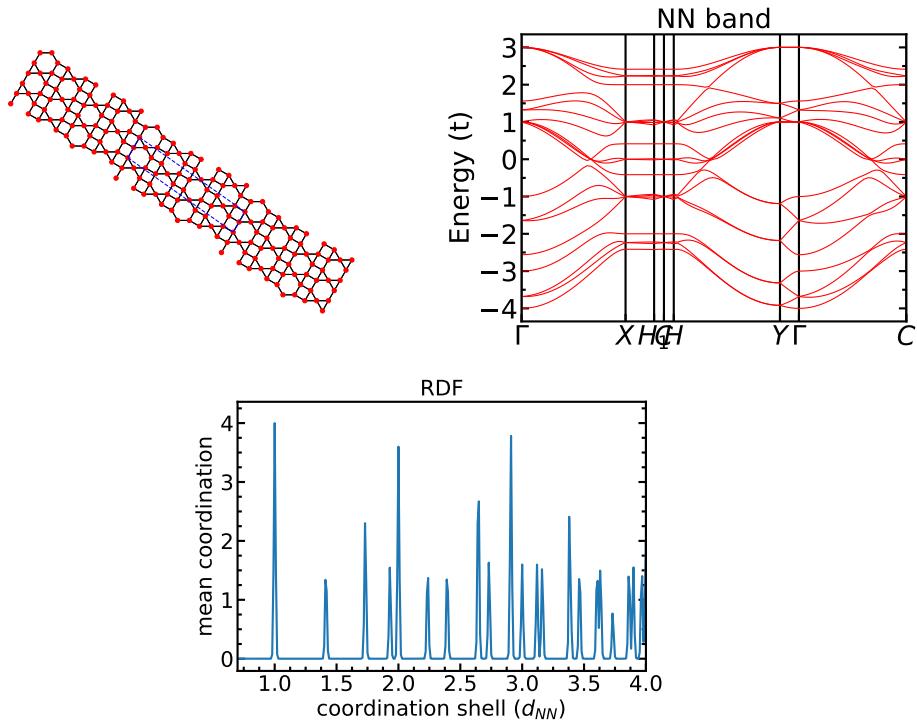


FIG. S396. t6396 lattice framework, nearest neighbors band structure and radial distribution function.

## t6397

Tiling reference number t6397 with space-group ' $Cmmm$ ' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S397. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S397.

TABLE S397. Tiling t6397 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	12	2

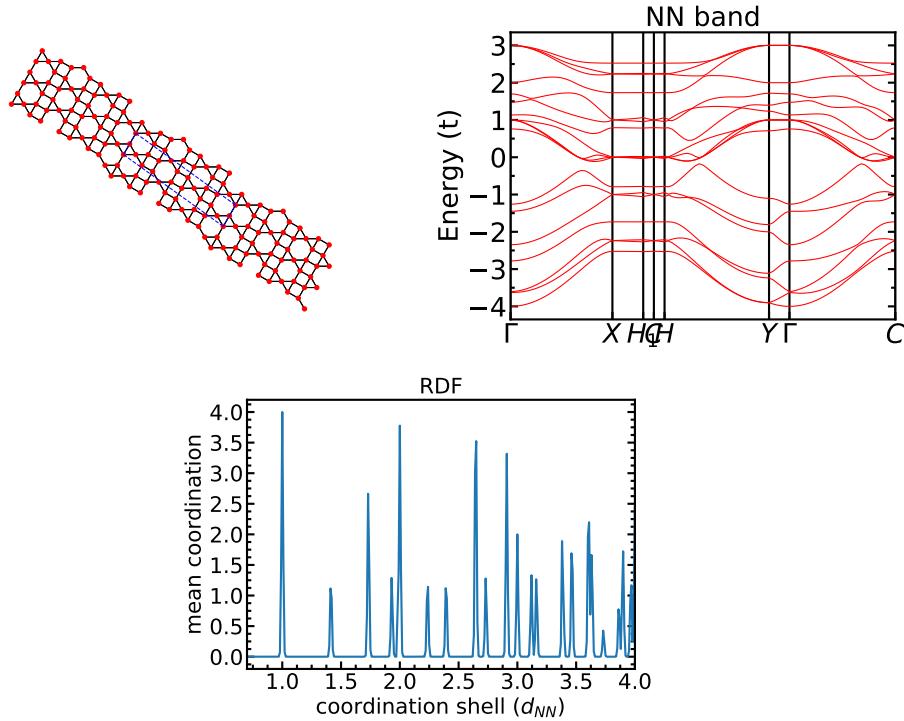


FIG. S397. t6397 lattice framework, nearest neighbors band structure and radial distribution function.

## t6398

Tiling reference number t6398 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S398. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S398.

TABLE S398. Tiling t6398 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	0	0	0	0	0	12	0

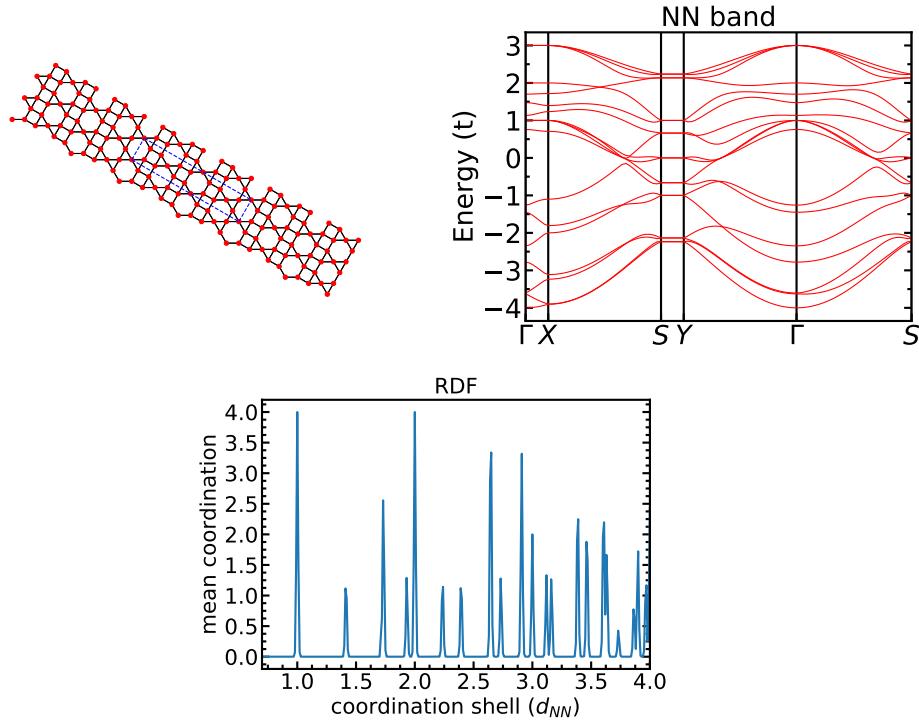


FIG. S398. t6398 lattice framework, nearest neighbors band structure and radial distribution function.

## t6399

Tiling reference number t6399 with space-group '*Amm2'* (38) and 18 sites in the unit cell, with vertex type indicated in Tab. S399. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S399.

TABLE S399. Tiling t6399 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	0	0	8	0	0	8	0

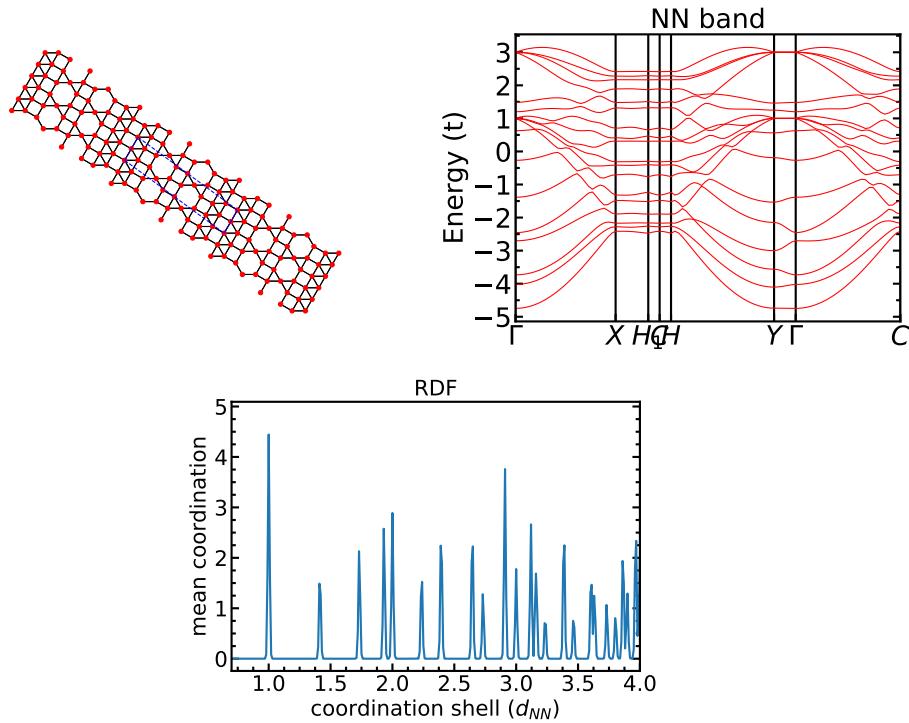


FIG. S399. t6399 lattice framework, nearest neighbors band structure and radial distribution function.

## t6400

Tiling reference number t6400 with space-group ' $Pm'$  (6) and 18 sites in the unit cell, with vertex type indicated in Tab. S400. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S400.

TABLE S400. Tiling t6400 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	0	0	8	0	0	8	0

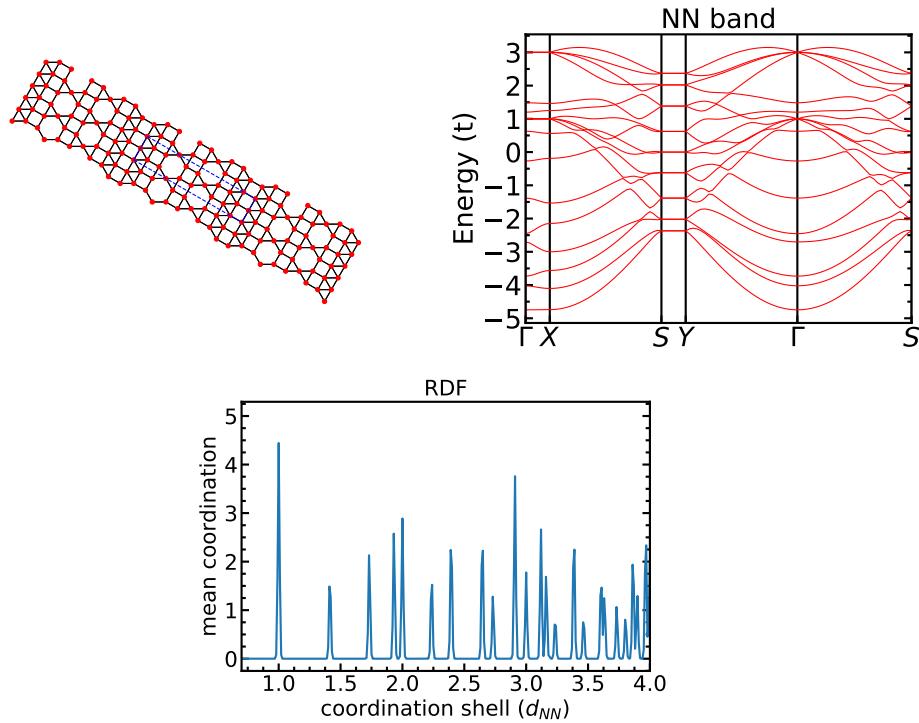


FIG. S400. t6400 lattice framework, nearest neighbors band structure and radial distribution function.

## t6401

Tiling reference number t6401 with space-group '*Amm2'* (38) and 16 sites in the unit cell, with vertex type indicated in Tab. S401. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S401.

TABLE S401. Tiling t6401 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	0	0	4	0	0	8	0

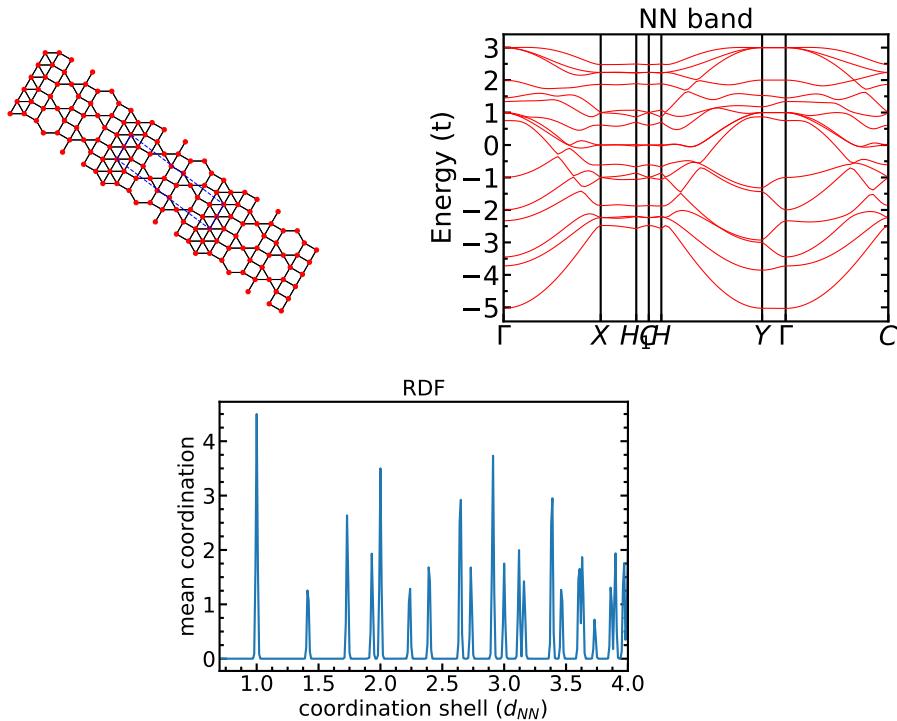


FIG. S401. t6401 lattice framework, nearest neighbors band structure and radial distribution function.

## t6402

Tiling reference number t6402 with space-group '*Cmmm*' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S402. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S402.

TABLE S402. Tiling t6402 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	5	0	0	0	0	0	4	8

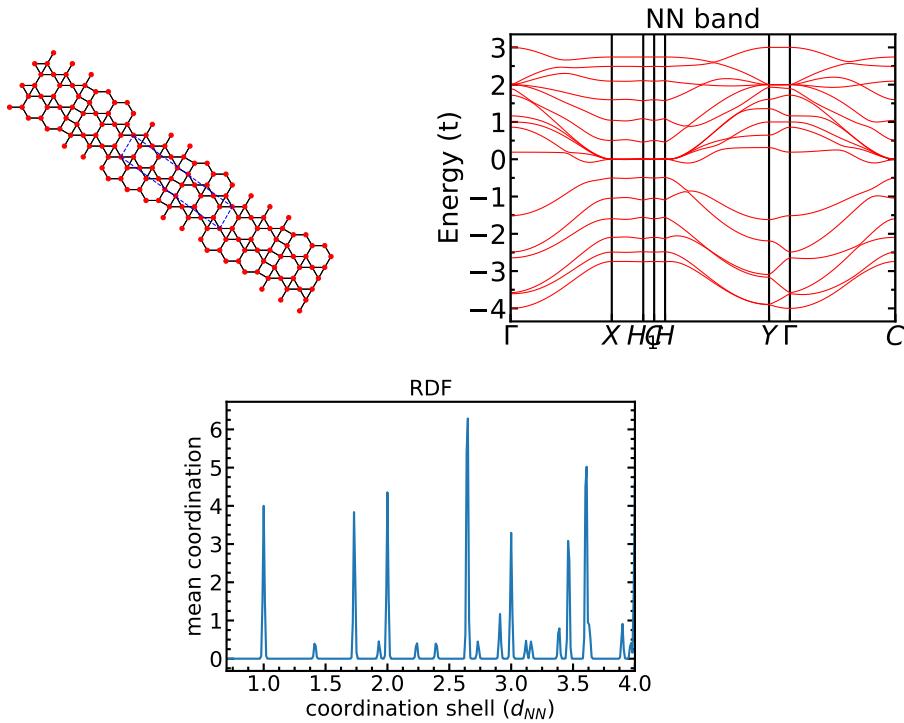


FIG. S402. t6402 lattice framework, nearest neighbors band structure and radial distribution function.

## t6403

Tiling reference number t6403 with space-group '*Cmmm*' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S403. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S403.

TABLE S403. Tiling t6403 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	9	0	0	0	0	0	4	4

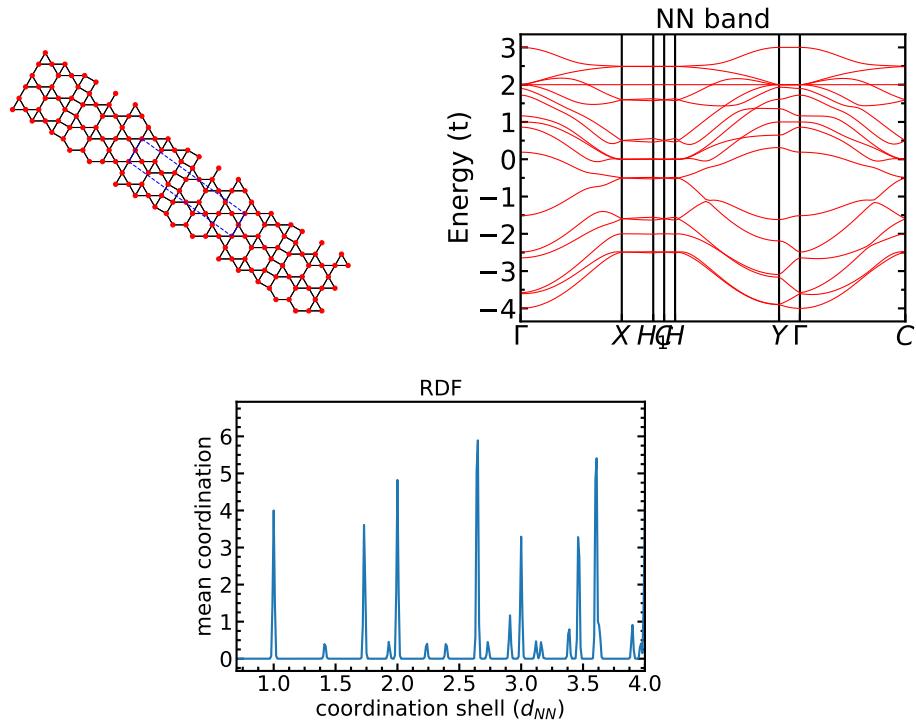


FIG. S403. t6403 lattice framework, nearest neighbors band structure and radial distribution function.

## t6404

Tiling reference number t6404 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S404. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S404.

TABLE S404. Tiling t6404 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	4	4	0	0	0	0	4	4

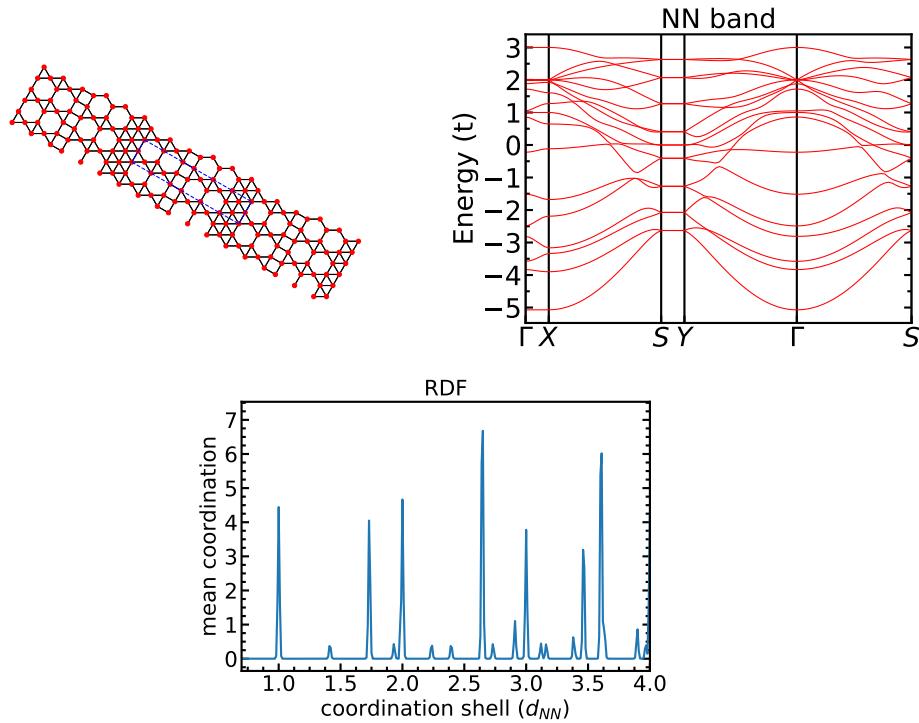


FIG. S404. t6404 lattice framework, nearest neighbors band structure and radial distribution function.

## t6405

Tiling reference number t6405 with space-group '*Cmmm*' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S405. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S405.

TABLE S405. Tiling t6405 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	9	0	0	0	0	0	4	4

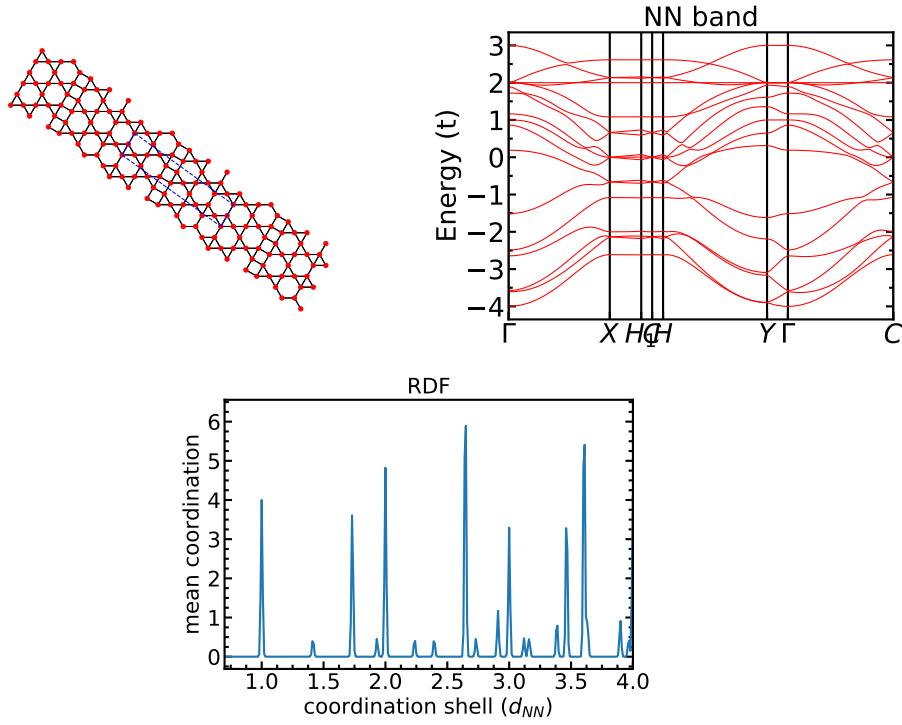


FIG. S405. t6405 lattice framework, nearest neighbors band structure and radial distribution function.

## t6406

Tiling reference number t6406 with space-group '*Cmmm*' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S406. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S406.

TABLE S406. Tiling t6406 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	13	0	0	0	0	0	4	0

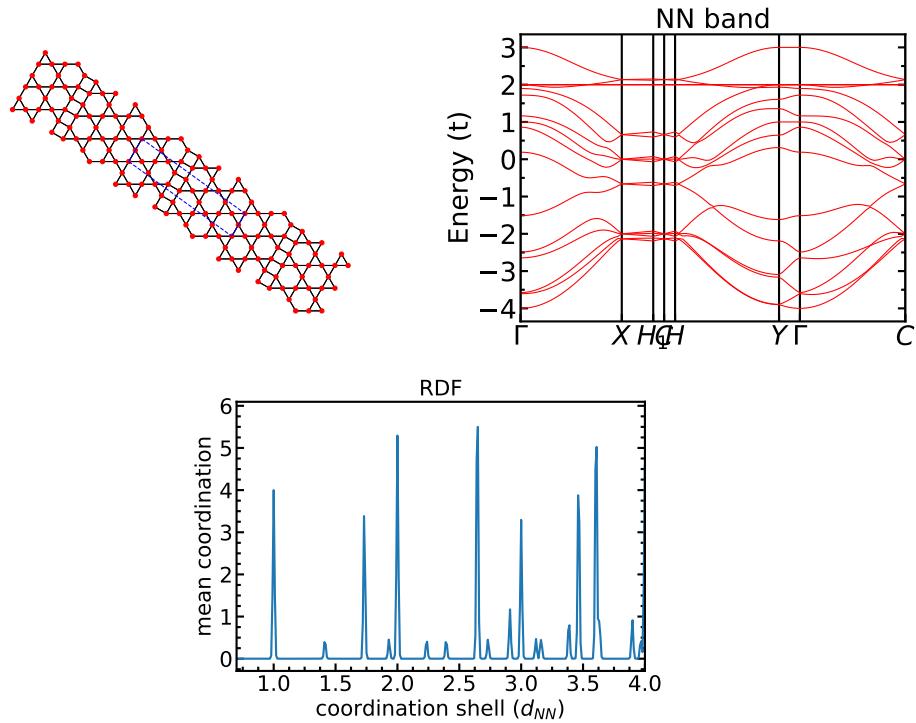


FIG. S406. t6406 lattice framework, nearest neighbors band structure and radial distribution function.

## t6407

Tiling reference number t6407 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S407. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S407.

TABLE S407. Tiling t6407 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	8	4	0	0	0	0	4	0

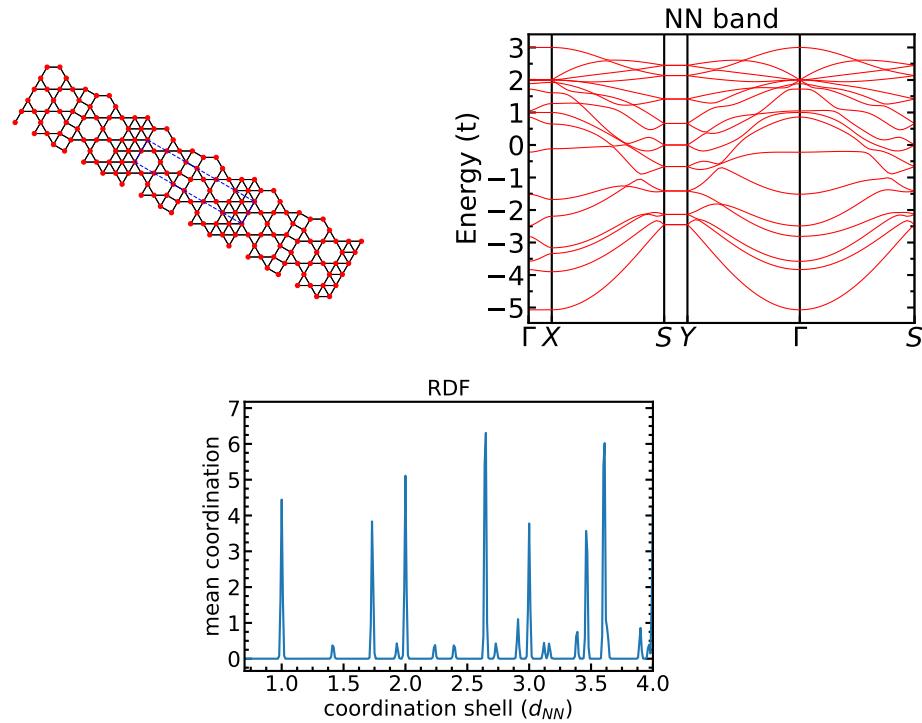


FIG. S407. t6407 lattice framework, nearest neighbors band structure and radial distribution function.

## t6408

Tiling reference number t6408 with space-group '*Pmma*' (51) and 18 sites in the unit cell, with vertex type indicated in Tab. S408. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S408.

TABLE S408. Tiling t6408 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	4	0	0	4	0

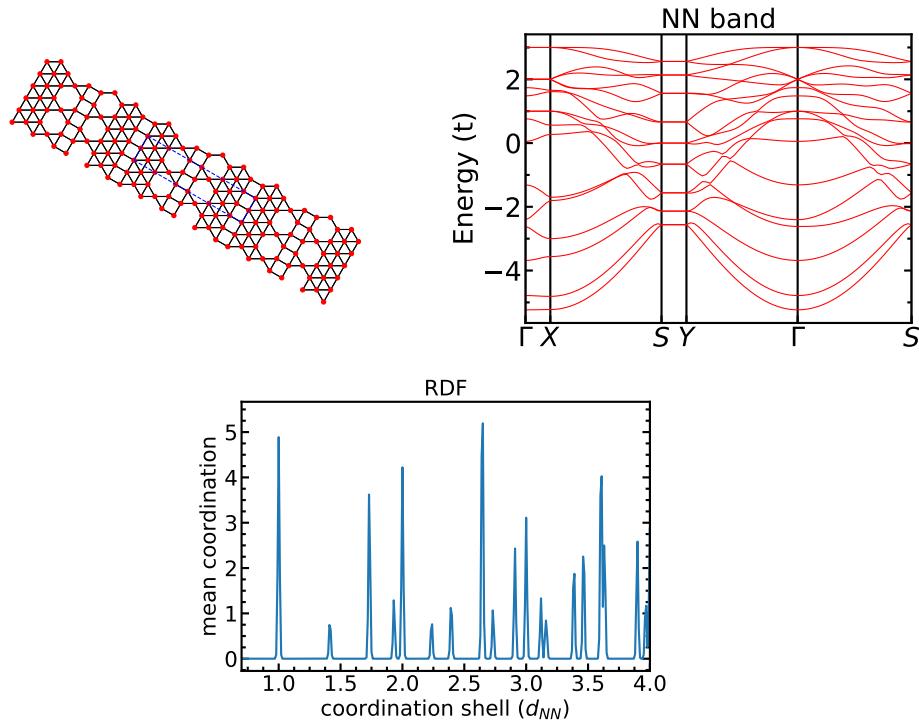


FIG. S408. t6408 lattice framework, nearest neighbors band structure and radial distribution function.

## t6409

Tiling reference number t6409 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S409. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S409.

TABLE S409. Tiling t6409 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	4	0	0	4	0

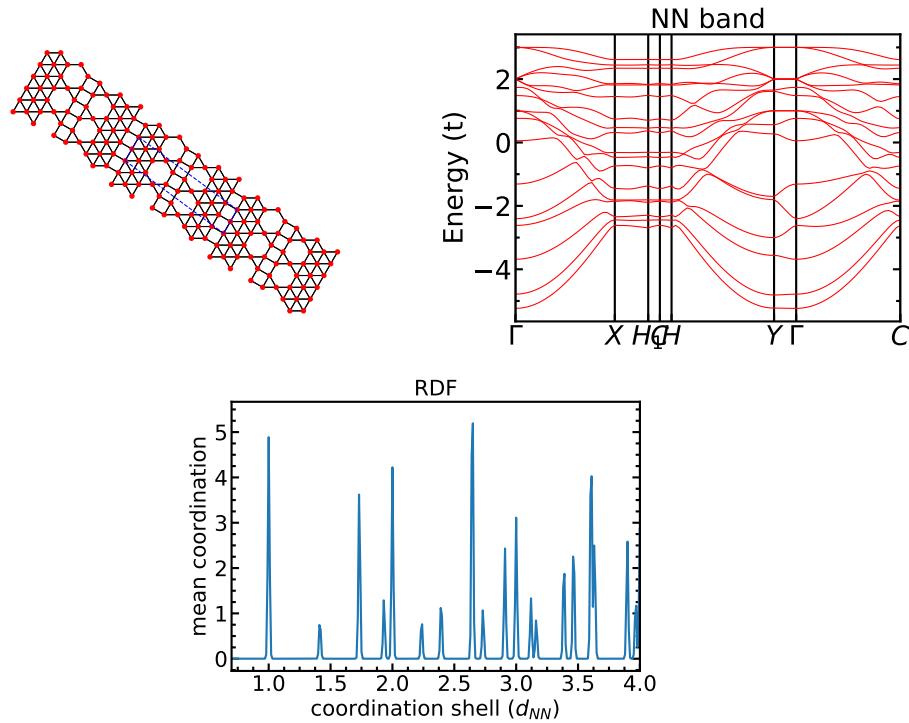


FIG. S409. t6409 lattice framework, nearest neighbors band structure and radial distribution function.

## t6410

Tiling reference number t6410 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S410. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S410.

TABLE S410. Tiling t6410 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	2	4	0	0	0	0	4	0

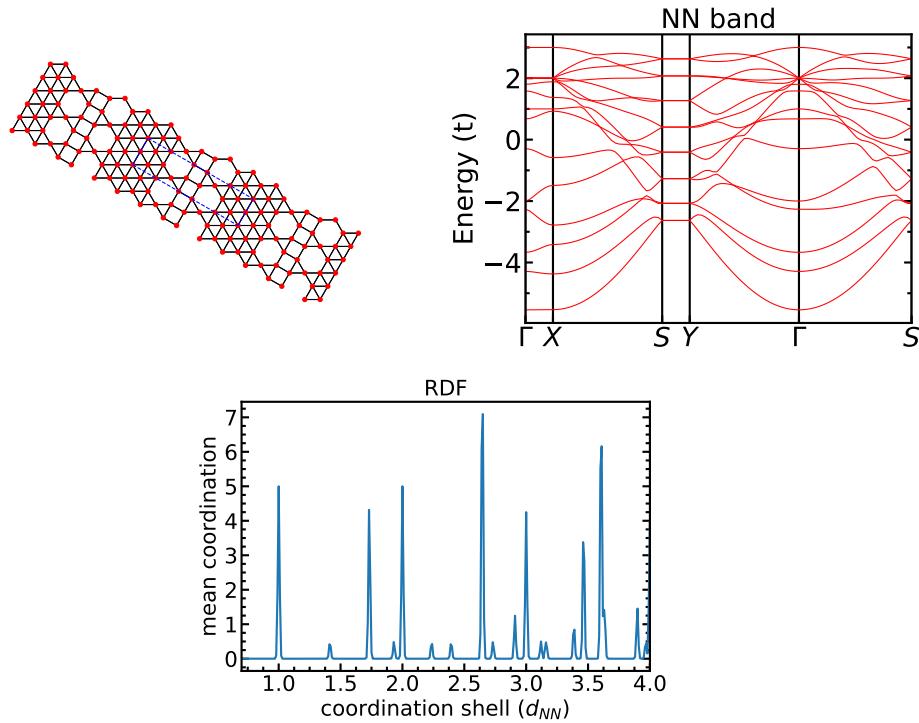


FIG. S410. t6410 lattice framework, nearest neighbors band structure and radial distribution function.

## t6411

Tiling reference number t6411 with space-group ' $P2/m$ ' (10) and 16 sites in the unit cell, with vertex type indicated in Tab. S411. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S411.

TABLE S411. Tiling t6411 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	2	4	0	0	0	0	4	0

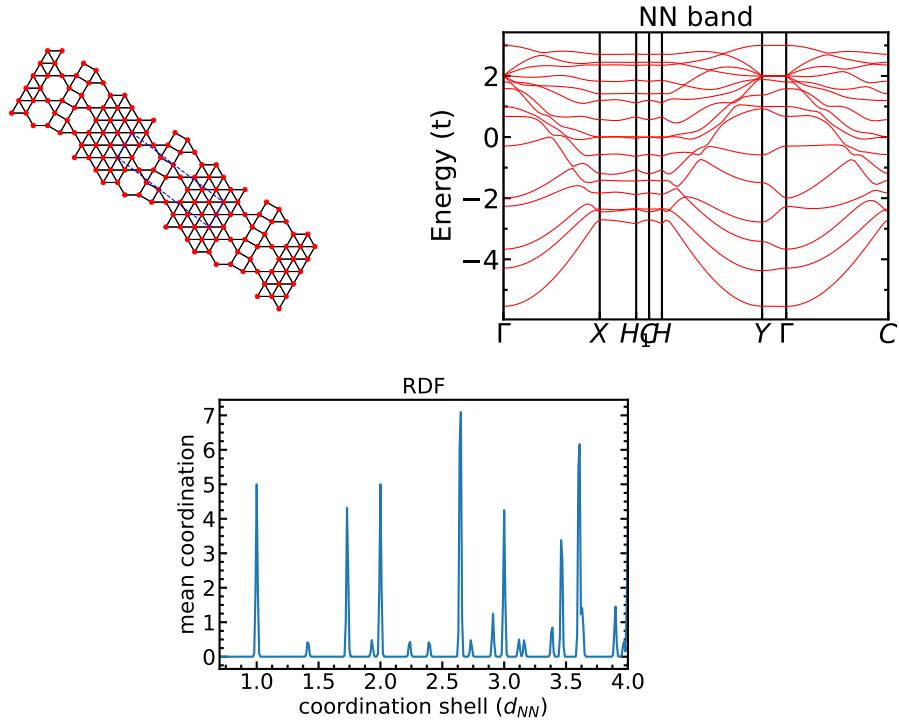


FIG. S411. t6411 lattice framework, nearest neighbors band structure and radial distribution function.

## t6412

Tiling reference number t6412 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S412. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S412.

TABLE S412. Tiling t6412 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	12	2

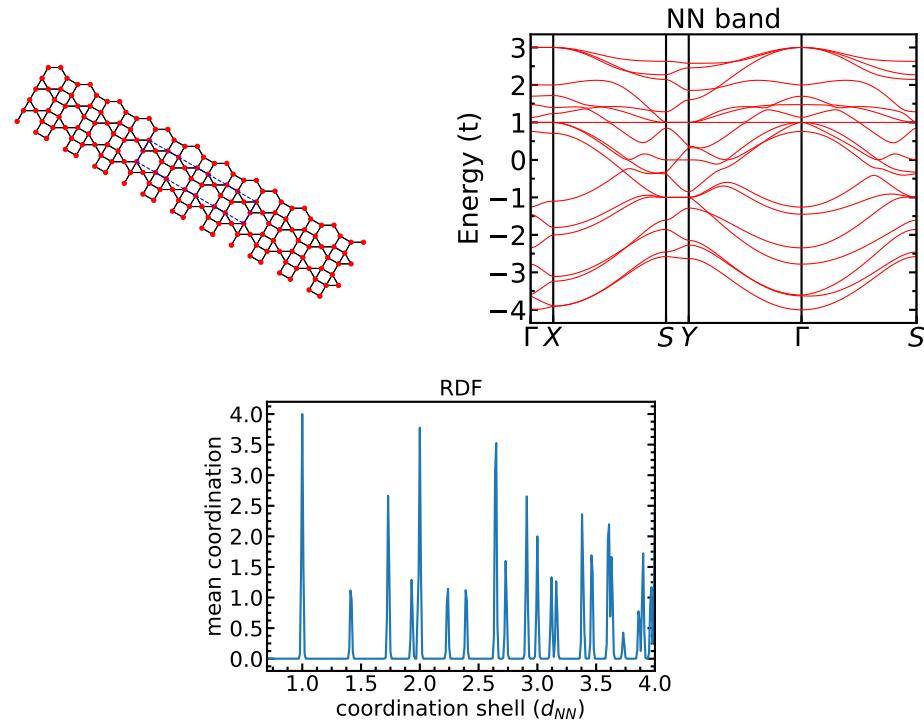


FIG. S412. t6412 lattice framework, nearest neighbors band structure and radial distribution function.

## t6413

Tiling reference number t6413 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S413. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S413.

TABLE S413. Tiling t6413 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	0	0	0	0	0	12	0

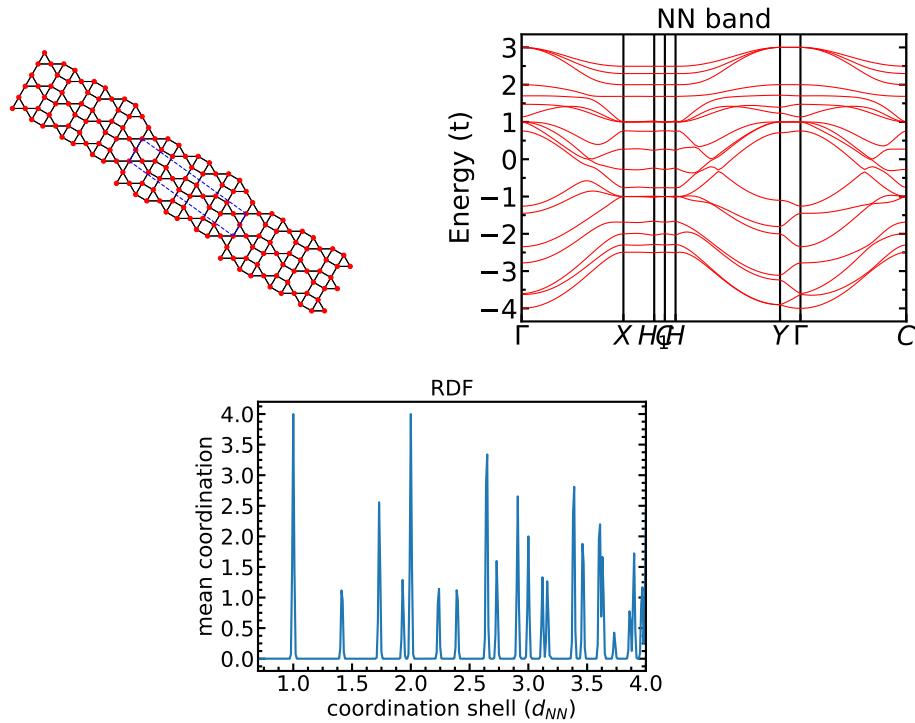


FIG. S413. t6413 lattice framework, nearest neighbors band structure and radial distribution function.

## t6414

Tiling reference number t6414 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S414. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S414.

TABLE S414. Tiling t6414 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	12	2

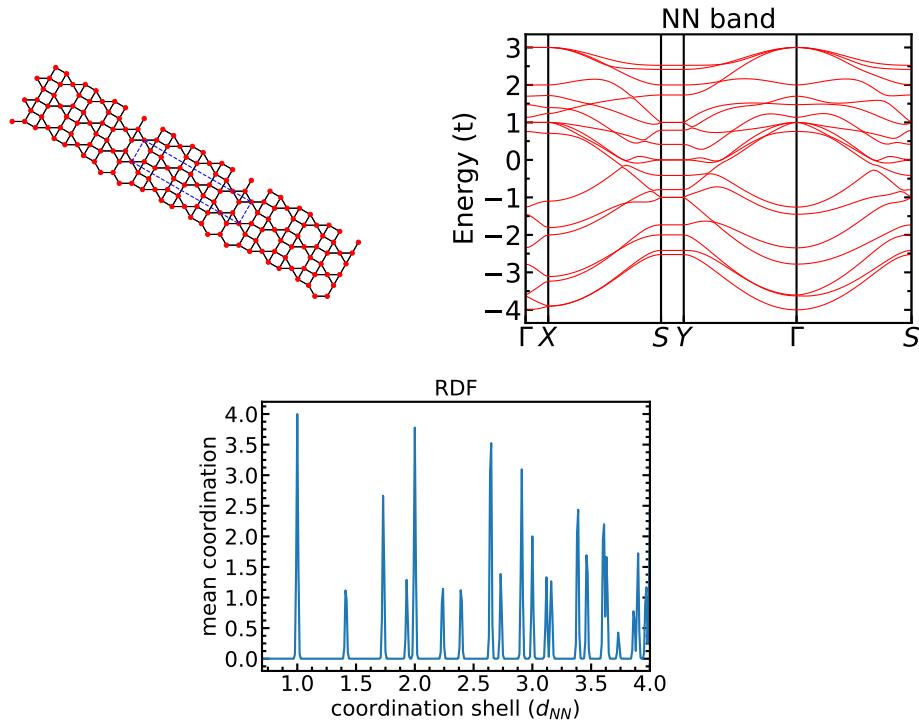


FIG. S414. t6414 lattice framework, nearest neighbors band structure and radial distribution function.

## t6415

Tiling reference number t6415 with space-group ' $Pm'$  (6) and 18 sites in the unit cell, with vertex type indicated in Tab. S415. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S415.

TABLE S415. Tiling t6415 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	0	0	0	0	0	12	0

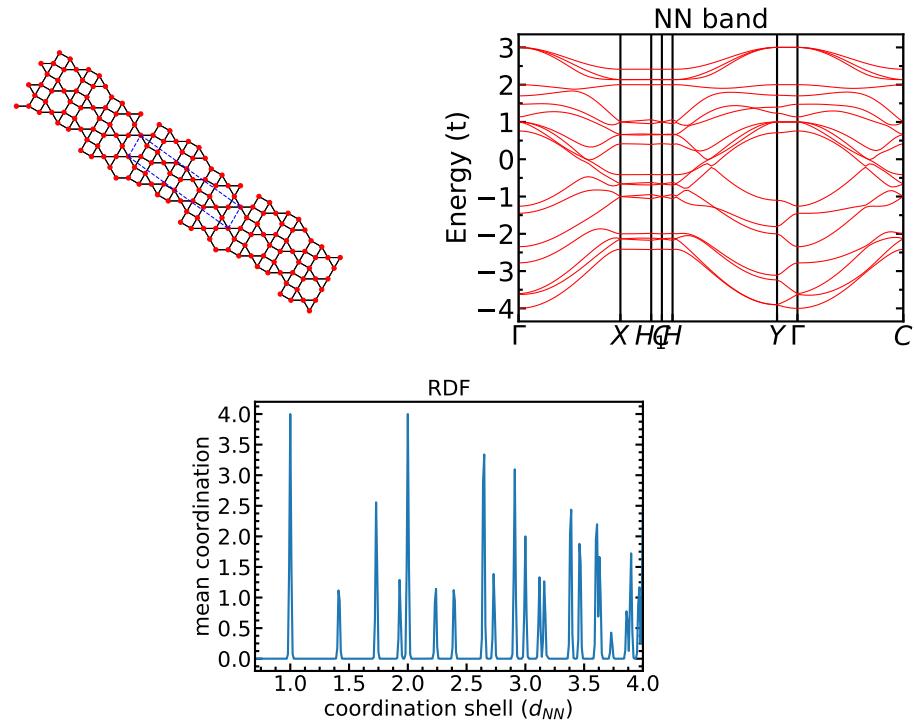


FIG. S415. t6415 lattice framework, nearest neighbors band structure and radial distribution function.

## t6416

Tiling reference number t6416 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S416. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S416.

TABLE S416. Tiling t6416 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	0	0	8	0	0	8	0

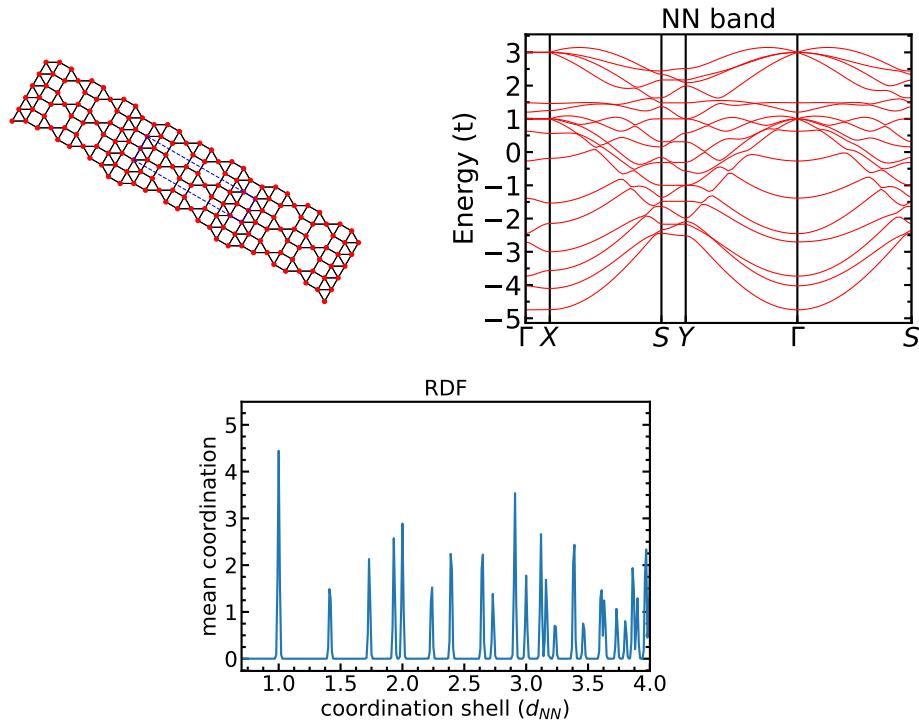


FIG. S416. t6416 lattice framework, nearest neighbors band structure and radial distribution function.

## t6417

Tiling reference number t6417 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S417. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S417.

TABLE S417. Tiling t6417 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	0	0	8	0	0	8	0

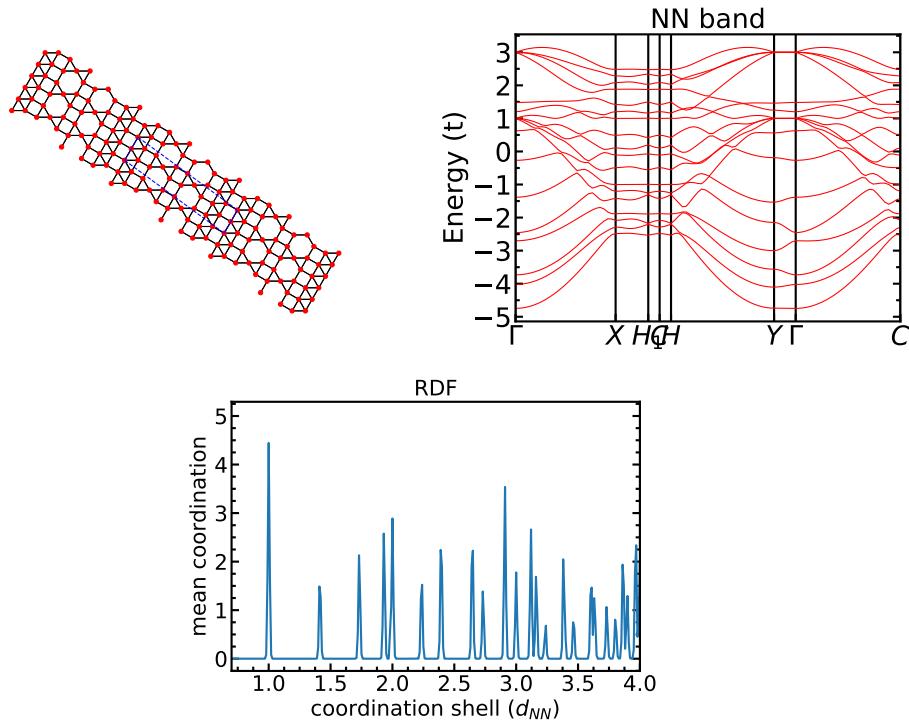


FIG. S417. t6417 lattice framework, nearest neighbors band structure and radial distribution function.

## t6418

Tiling reference number t6418 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S418. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S418.

TABLE S418. Tiling t6418 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	0	0	4	0	0	8	0

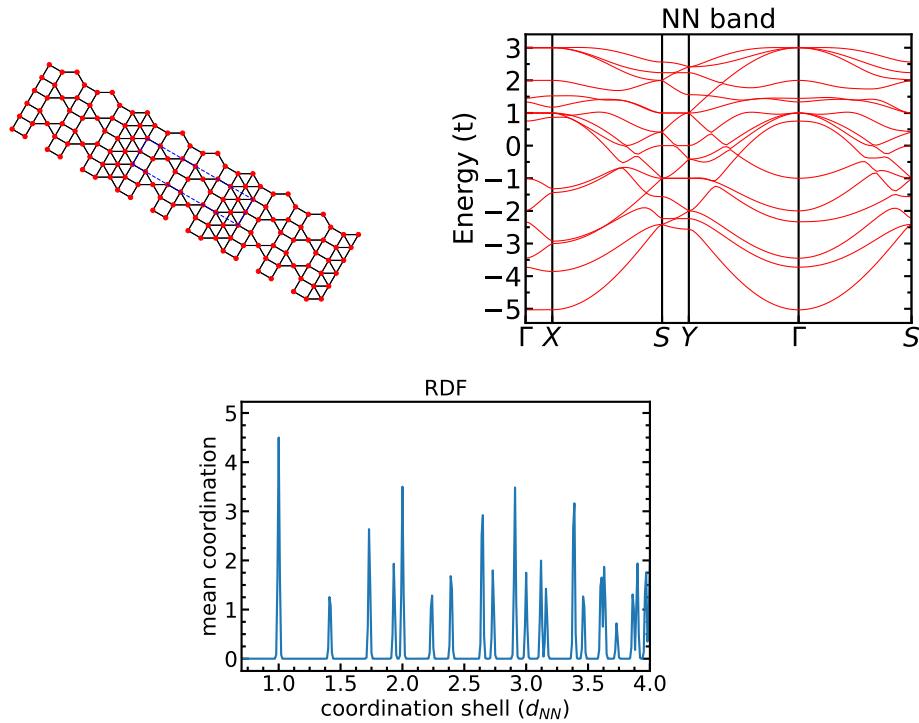


FIG. S418. t6418 lattice framework, nearest neighbors band structure and radial distribution function.

## t6419

Tiling reference number t6419 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S419. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S419.

TABLE S419. Tiling t6419 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	5	0	0	0	0	0	4	8

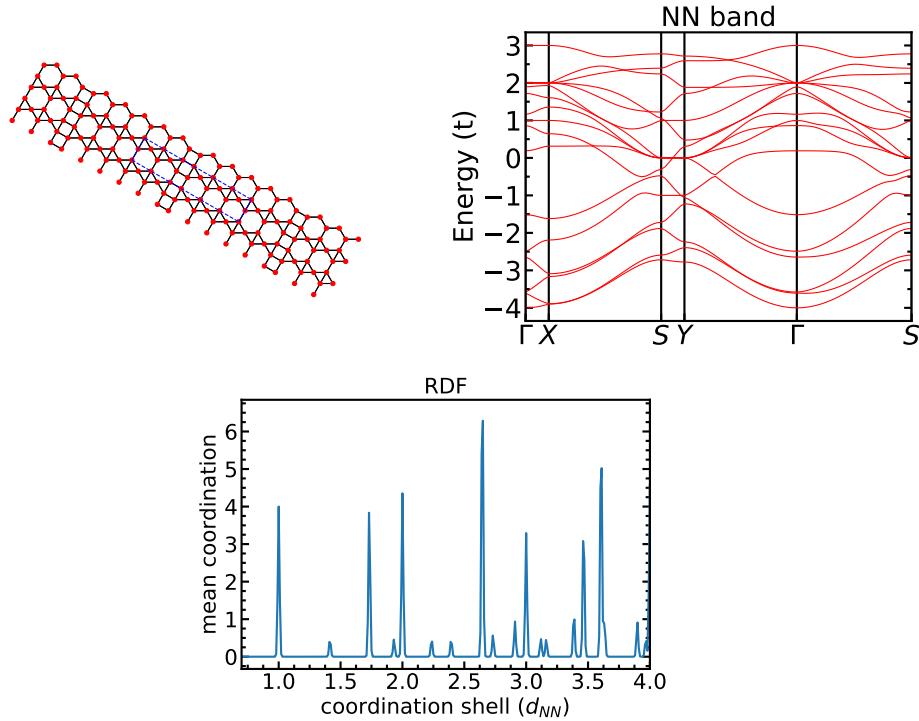


FIG. S419. t6419 lattice framework, nearest neighbors band structure and radial distribution function.

## t6420

Tiling reference number t6420 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S420. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S420.

TABLE S420. Tiling t6420 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	9	0	0	0	0	0	4	4

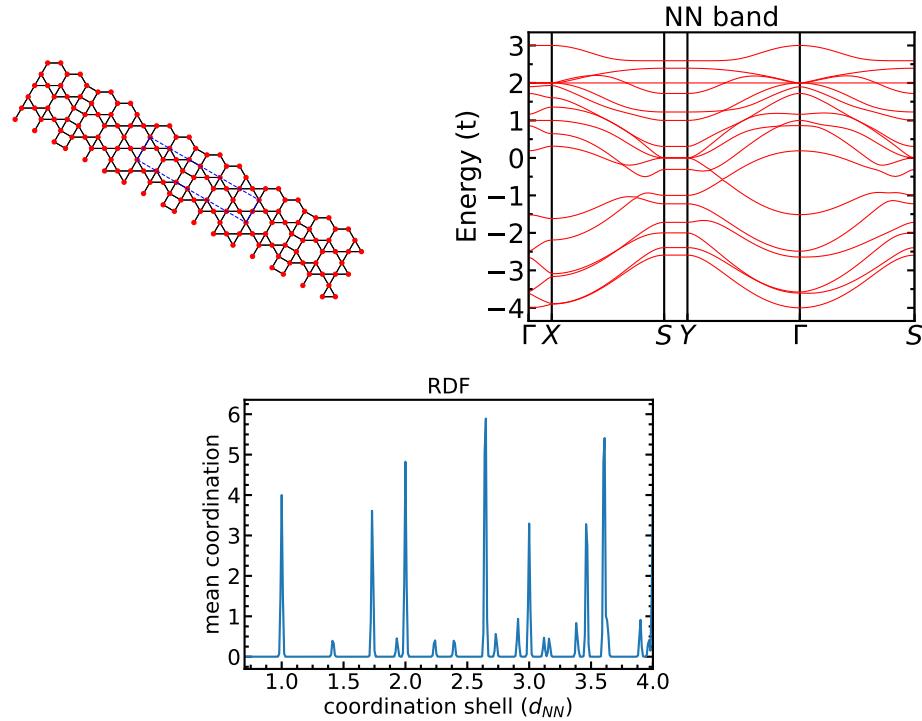


FIG. S420. t6420 lattice framework, nearest neighbors band structure and radial distribution function.

## t6421

Tiling reference number t6421 with space-group ' $Cmmm$ ' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S421. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S421.

TABLE S421. Tiling t6421 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	4	4	0	0	0	0	4	4

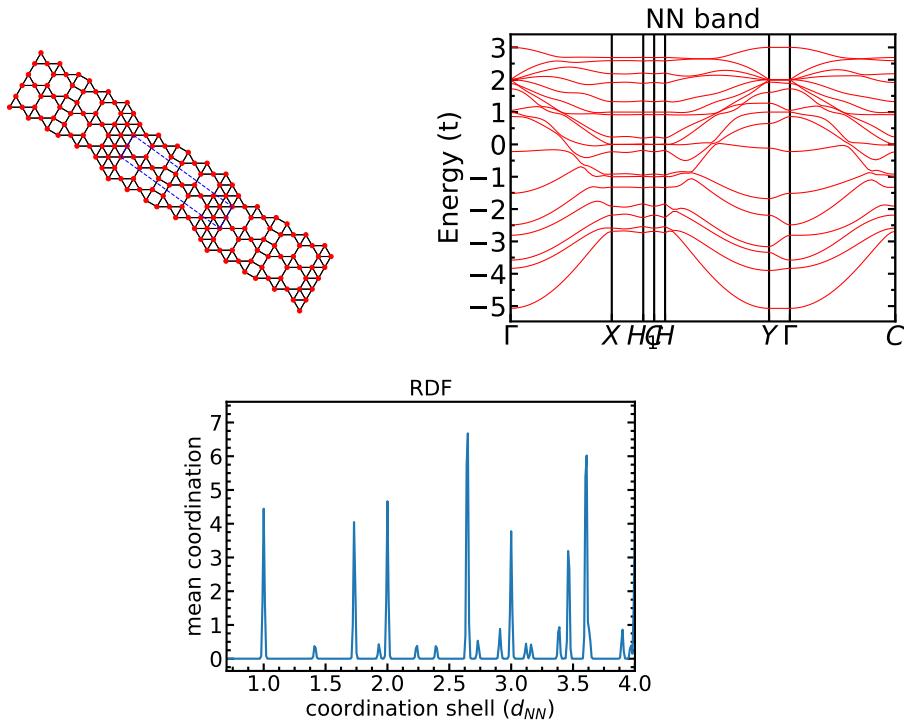


FIG. S421. t6421 lattice framework, nearest neighbors band structure and radial distribution function.

## t6422

Tiling reference number t6422 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S422. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S422.

TABLE S422. Tiling t6422 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	9	0	0	0	0	0	4	4

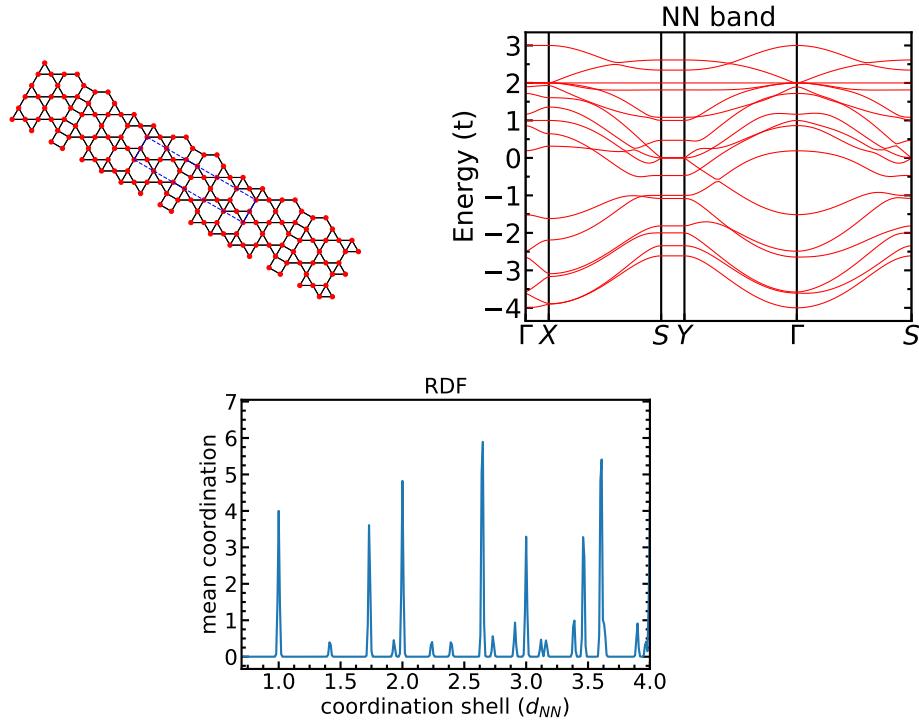


FIG. S422. t6422 lattice framework, nearest neighbors band structure and radial distribution function.

## t6423

Tiling reference number t6423 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S423. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S423.

TABLE S423. Tiling t6423 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	13	0	0	0	0	0	4	0

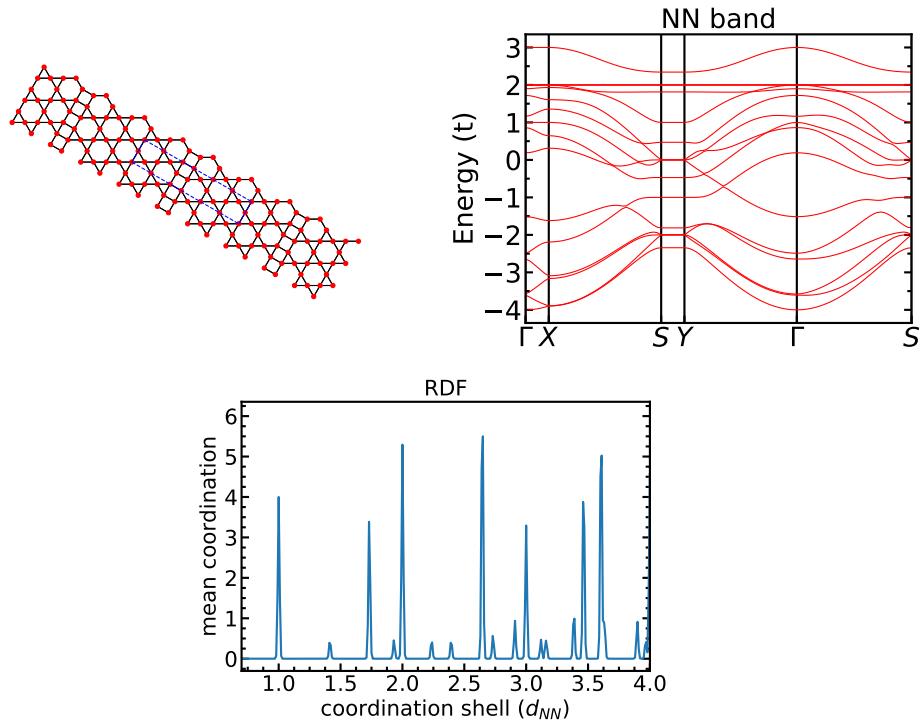


FIG. S423. t6423 lattice framework, nearest neighbors band structure and radial distribution function.

## t6424

Tiling reference number t6424 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S424. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S424.

TABLE S424. Tiling t6424 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	8	4	0	0	0	0	4	0

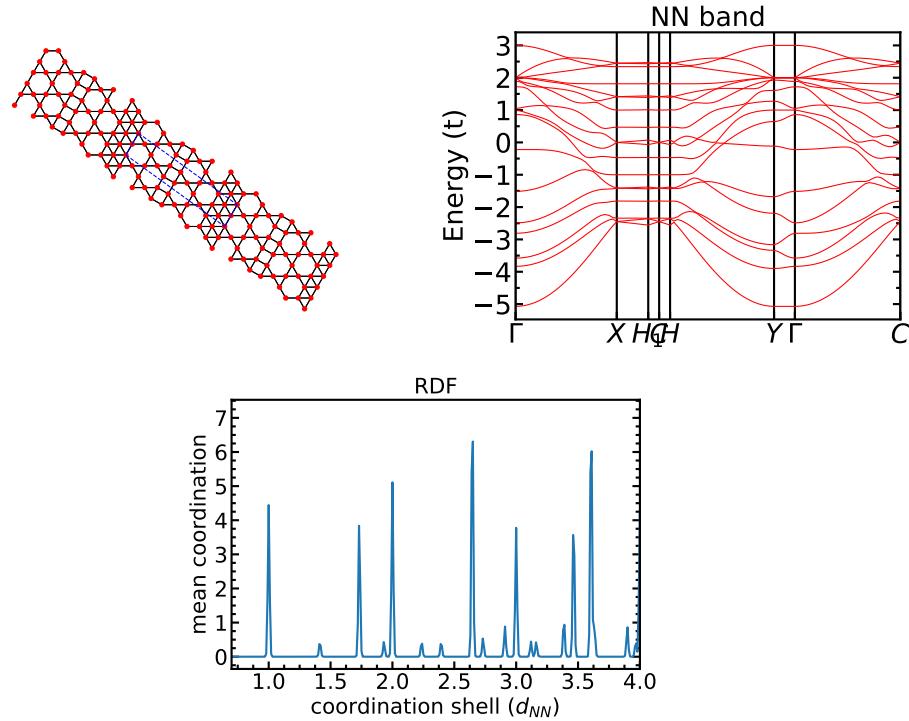


FIG. S424. t6424 lattice framework, nearest neighbors band structure and radial distribution function.

## t6425

Tiling reference number t6425 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S425. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S425.

TABLE S425. Tiling t6425 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	4	0	0	4	0

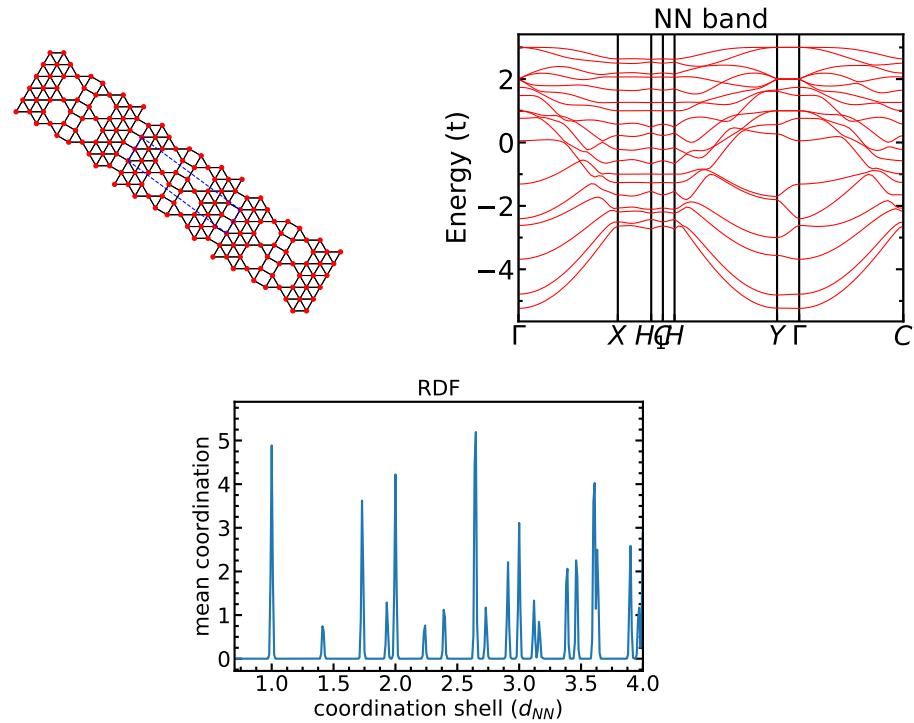


FIG. S425. t6425 lattice framework, nearest neighbors band structure and radial distribution function.

## t6426

Tiling reference number t6426 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S426. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S426.

TABLE S426. Tiling t6426 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	4	0	0	4	0

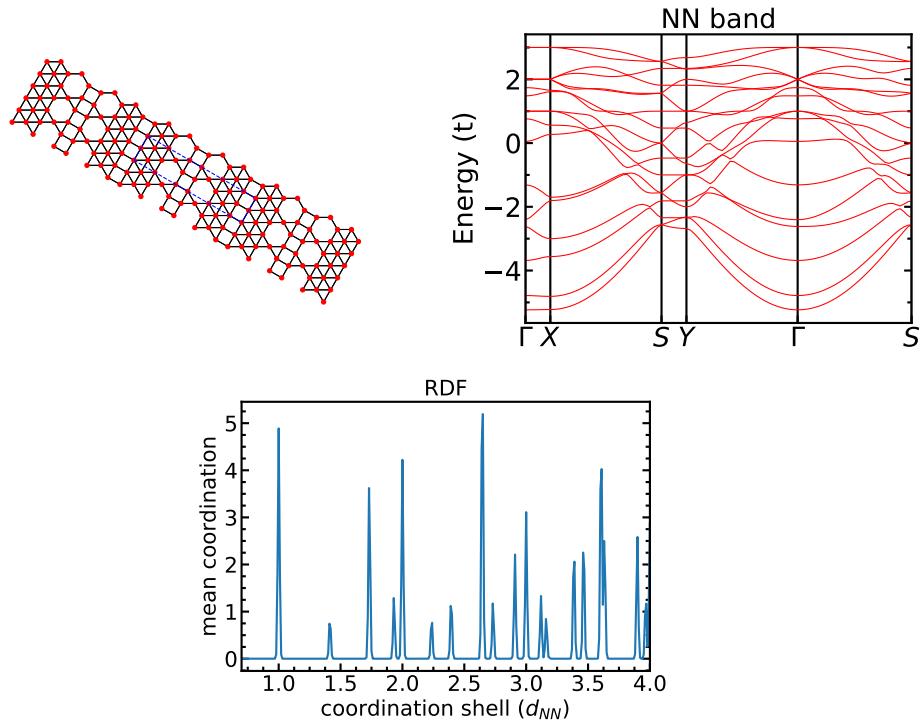


FIG. S426. t6426 lattice framework, nearest neighbors band structure and radial distribution function.

## t6427

Tiling reference number t6427 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S427. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S427.

TABLE S427. Tiling t6427 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	2	4	0	0	0	0	4	0

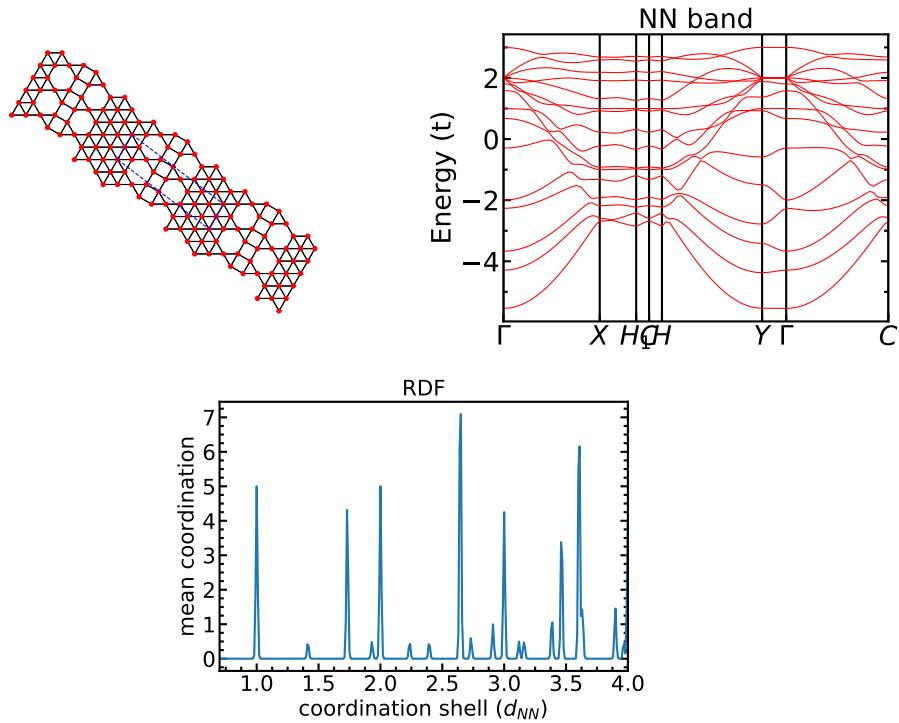


FIG. S427. t6427 lattice framework, nearest neighbors band structure and radial distribution function.

## t6428

Tiling reference number t6428 with space-group ' $Pmmm$ ' (47) and 16 sites in the unit cell, with vertex type indicated in Tab. S428. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S428.

TABLE S428. Tiling t6428 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	2	4	0	0	0	0	4	0

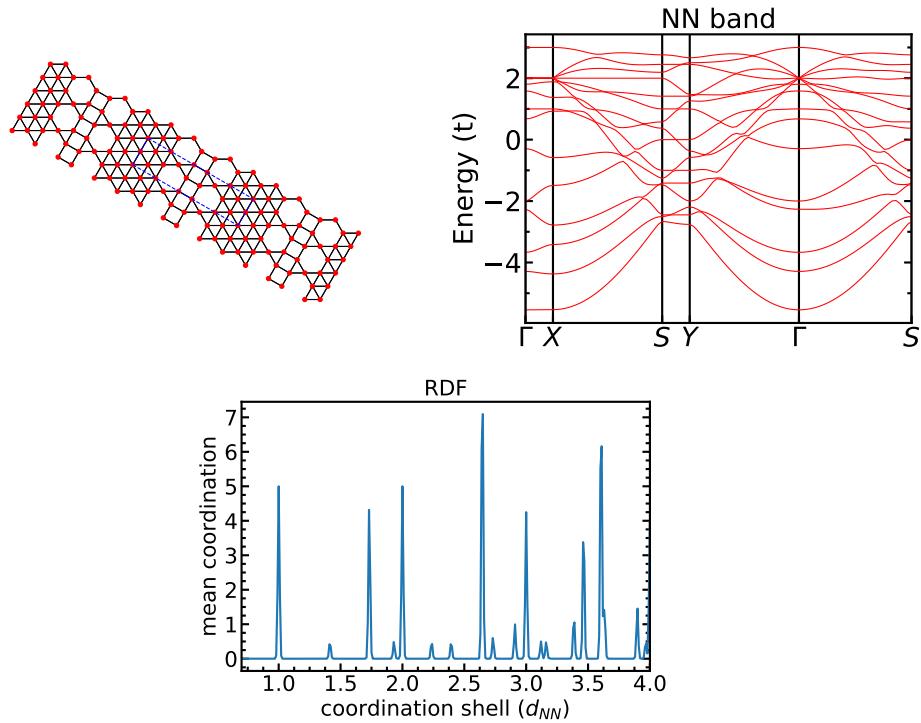


FIG. S428. t6428 lattice framework, nearest neighbors band structure and radial distribution function.

## t6429

Tiling reference number t6429 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S429. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S429.

TABLE S429. Tiling t6429 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	2	0	2	0	0	12	0

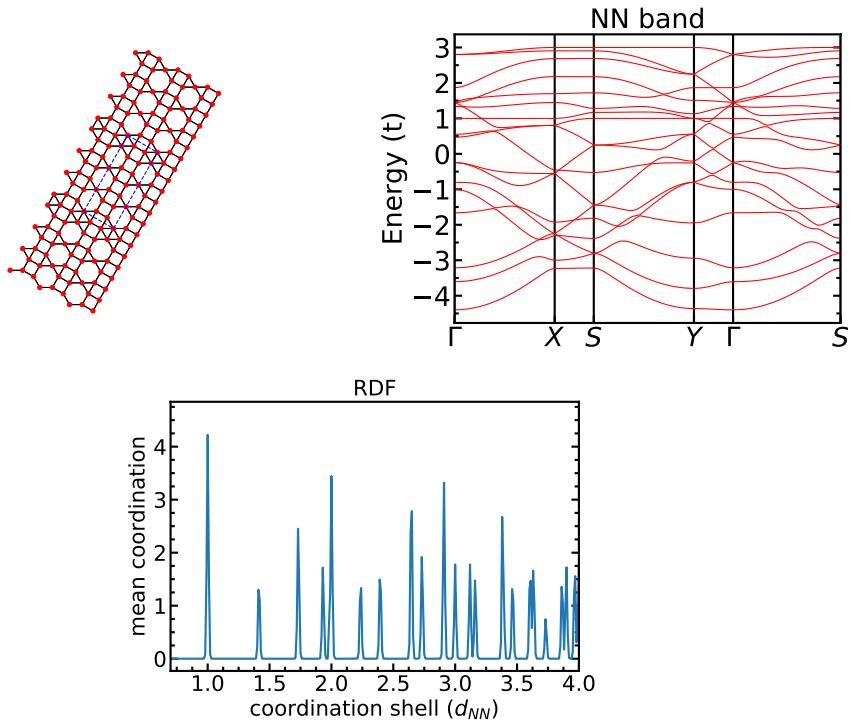


FIG. S429. t6429 lattice framework, nearest neighbors band structure and radial distribution function.

## t6430

Tiling reference number t6430 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S430. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S430.

TABLE S430. Tiling t6430 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	21	17	0	0	0	0	0	21	1

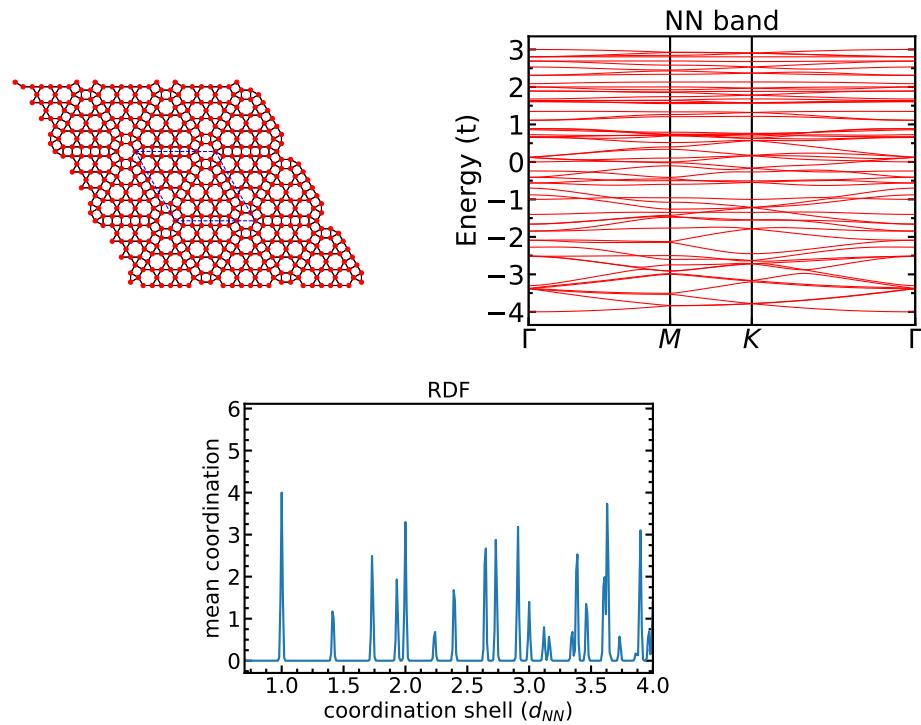


FIG. S430. t6430 lattice framework, nearest neighbors band structure and radial distribution function.

## t6431

Tiling reference number t6431 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S431. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S431.

TABLE S431. Tiling t6431 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	8	4

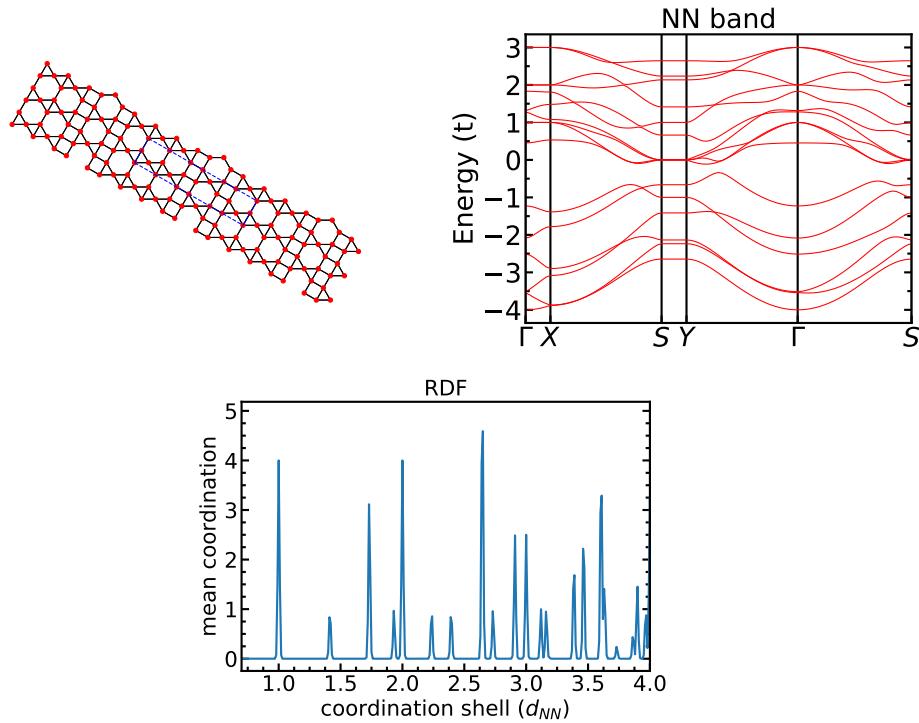


FIG. S431. t6431 lattice framework, nearest neighbors band structure and radial distribution function.

## t6432

Tiling reference number t6432 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S432. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S432.

TABLE S432. Tiling t6432 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	8	0	0	0	0	0	8	0

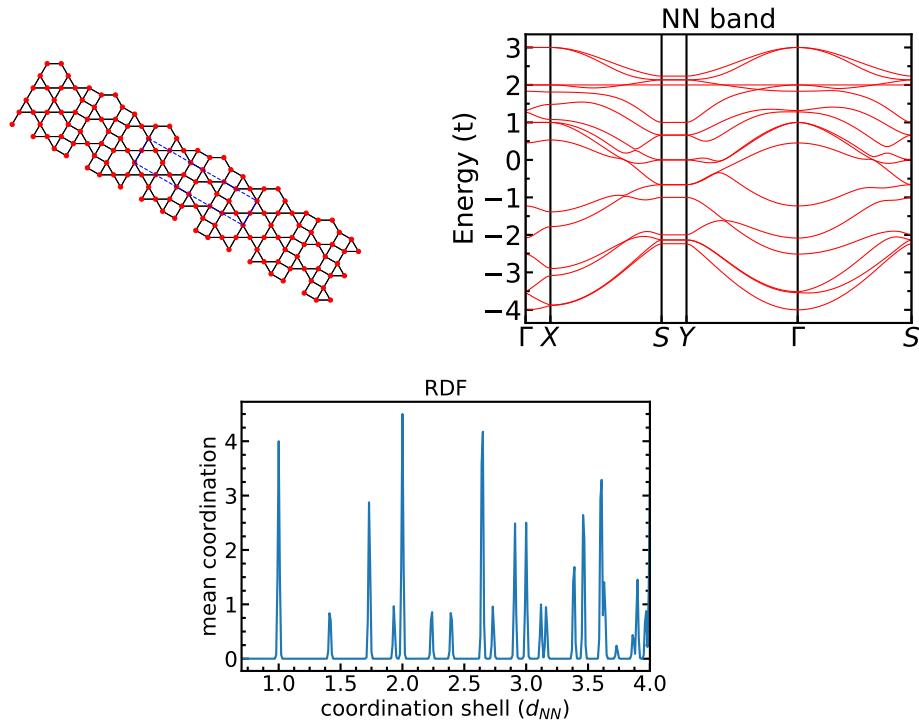


FIG. S432. t6432 lattice framework, nearest neighbors band structure and radial distribution function.

## t6433

Tiling reference number t6433 with space-group ' $Pm'$  (6) and 17 sites in the unit cell, with vertex type indicated in Tab. S433. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S433.

TABLE S433. Tiling t6433 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	3	4	0	0	0	0	8	0

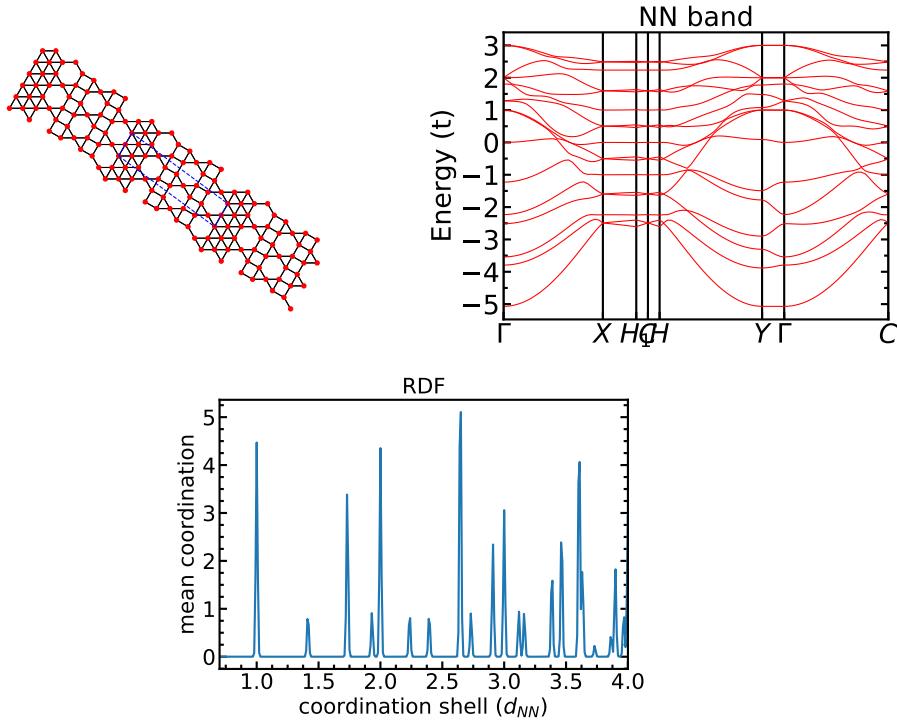


FIG. S433. t6433 lattice framework, nearest neighbors band structure and radial distribution function.

## t6434

Tiling reference number t6434 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S434. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S434.

TABLE S434. Tiling t6434 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	0	0	0	0	0	8	2

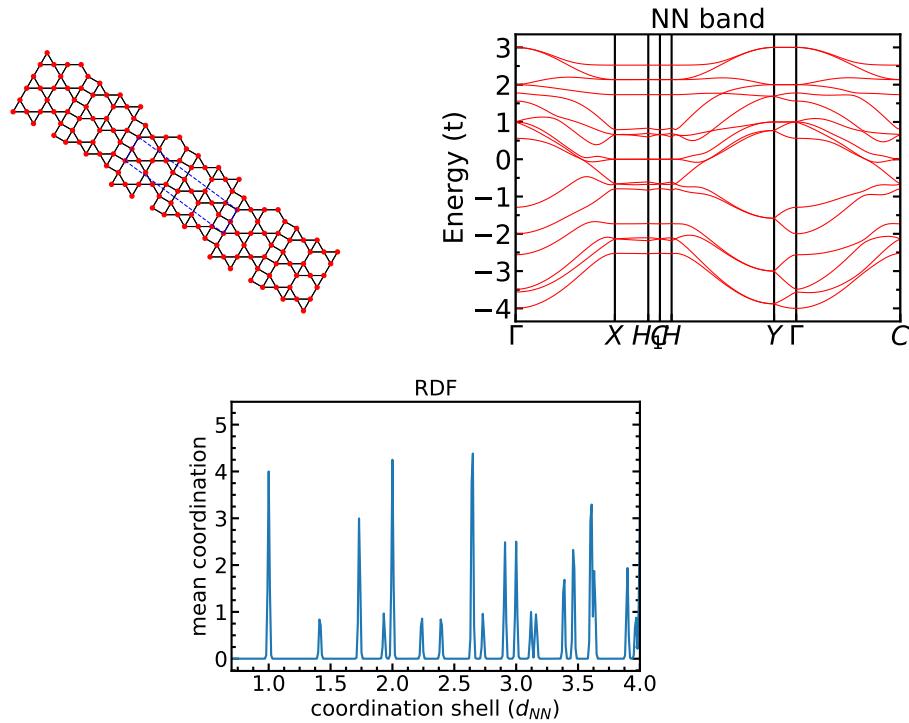


FIG. S434. t6434 lattice framework, nearest neighbors band structure and radial distribution function.

## t6435

Tiling reference number t6435 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S435. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S435.

TABLE S435. Tiling t6435 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	0	0	0	8	4

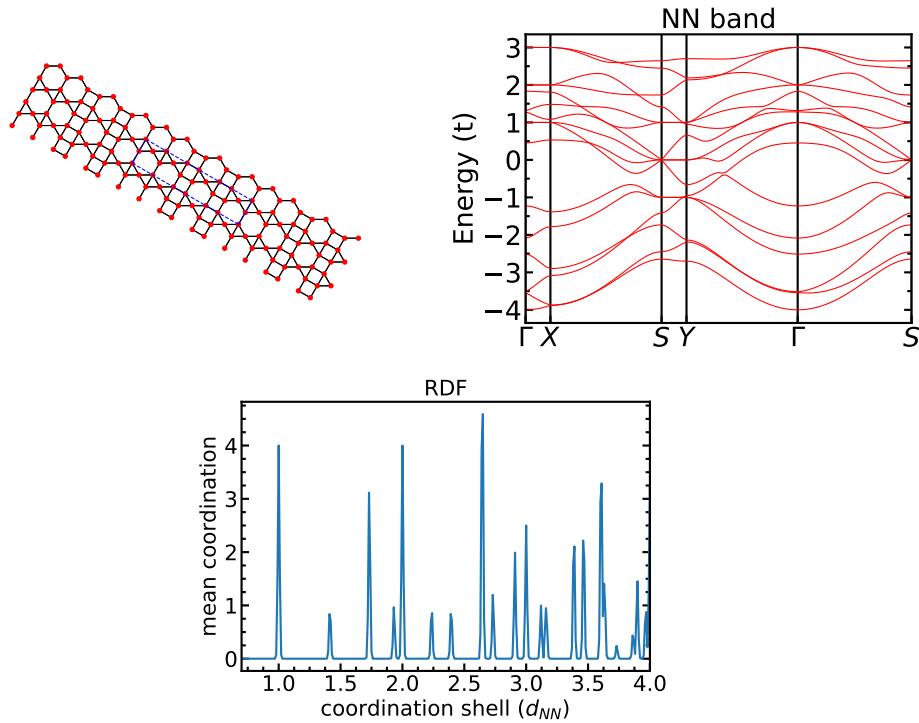


FIG. S435. t6435 lattice framework, nearest neighbors band structure and radial distribution function.

## t6436

Tiling reference number t6436 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S436. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S436.

TABLE S436. Tiling t6436 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	8	0	0	0	0	0	8	0

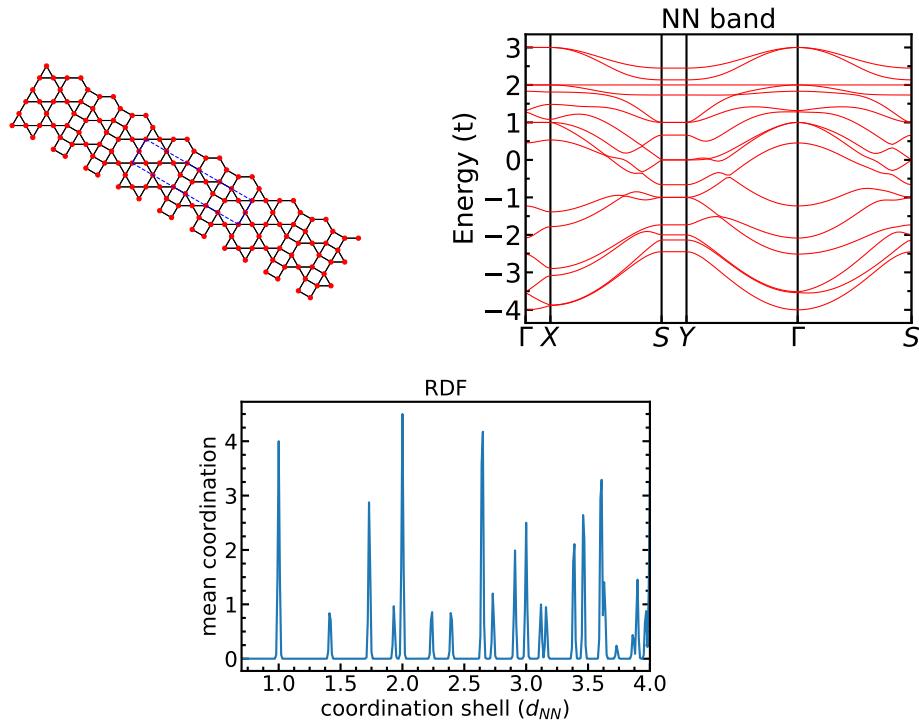


FIG. S436. t6436 lattice framework, nearest neighbors band structure and radial distribution function.

## t6437

Tiling reference number t6437 with space-group ' $Pm'$  (6) and 17 sites in the unit cell, with vertex type indicated in Tab. S437. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S437.

TABLE S437. Tiling t6437 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	3	4	0	0	0	0	8	0

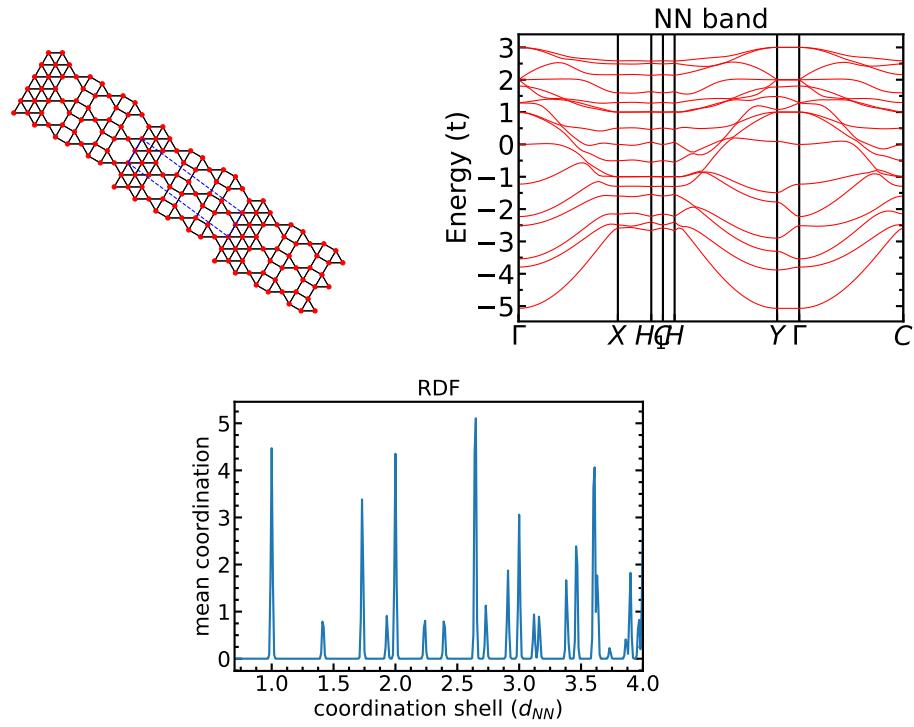


FIG. S437. t6437 lattice framework, nearest neighbors band structure and radial distribution function.

## t6438

Tiling reference number t6438 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S438. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S438.

TABLE S438. Tiling t6438 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	0	0	0	0	0	8	2

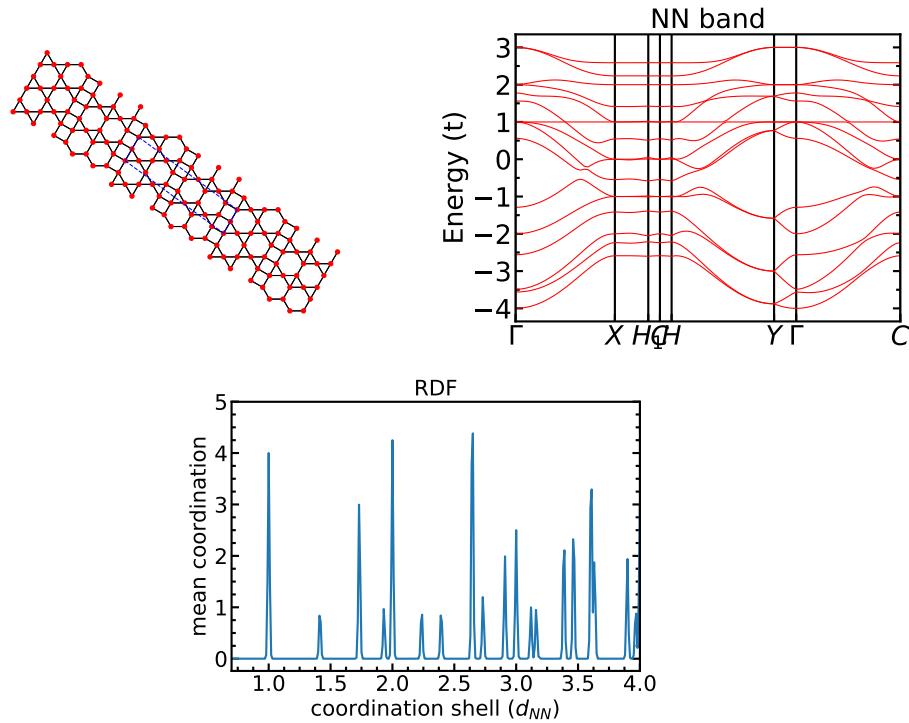


FIG. S438. t6438 lattice framework, nearest neighbors band structure and radial distribution function.

## t6439

Tiling reference number t6439 with space-group ' $Pm'$  (6) and 17 sites in the unit cell, with vertex type indicated in Tab. S439. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S439.

TABLE S439. Tiling t6439 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	1	0	0	8	0	0	4	0

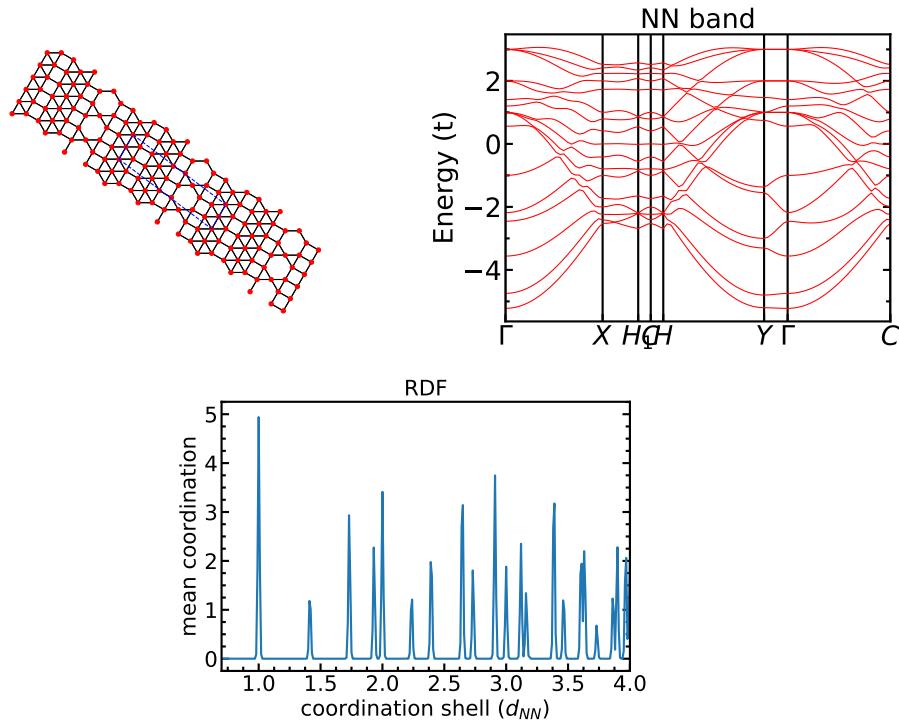


FIG. S439. t6439 lattice framework, nearest neighbors band structure and radial distribution function.

## t6440

Tiling reference number t6440 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S440. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S440.

TABLE S440. Tiling t6440 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	1	0	0	8	0	0	4	0

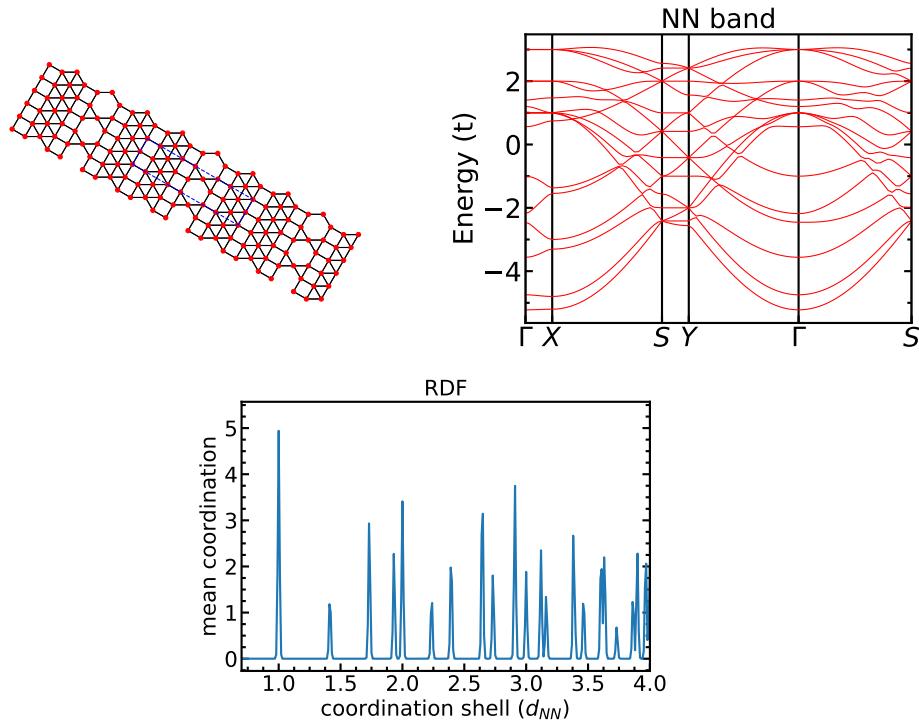


FIG. S440. t6440 lattice framework, nearest neighbors band structure and radial distribution function.

## t6441

Tiling reference number t6441 with space-group '*Amm2'* (38) and 15 sites in the unit cell, with vertex type indicated in Tab. S441. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S441.

TABLE S441. Tiling t6441 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	1	0	0	4	0	0	4	0

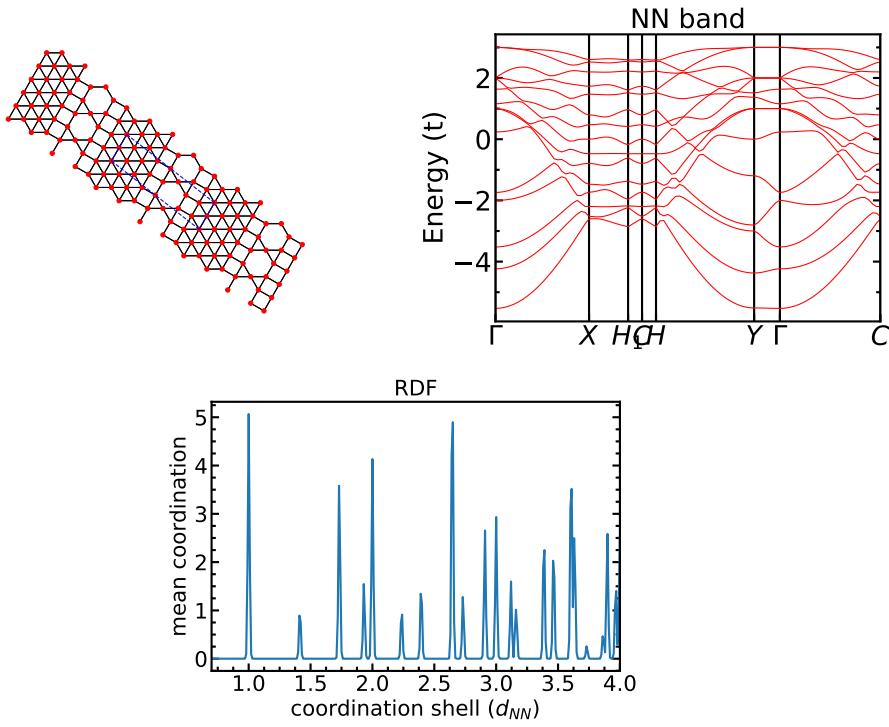


FIG. S441. t6441 lattice framework, nearest neighbors band structure and radial distribution function.

## t6442

Tiling reference number t6442 with space-group ' $Pmm2'$  (25) and 15 sites in the unit cell, with vertex type indicated in Tab. S442. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S442.

TABLE S442. Tiling t6442 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	1	0	0	4	0	0	4	0

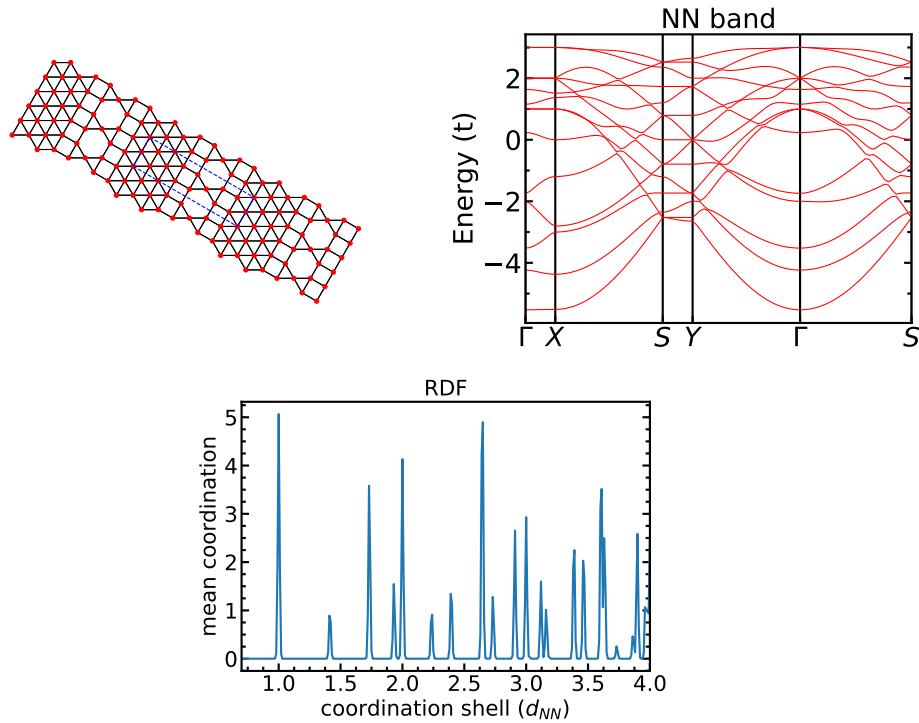


FIG. S442. t6442 lattice framework, nearest neighbors band structure and radial distribution function.

### t6443

Tiling reference number t6443 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S443. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S443.

TABLE S443. Tiling t6443 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	0	0	8	0	0	4	2

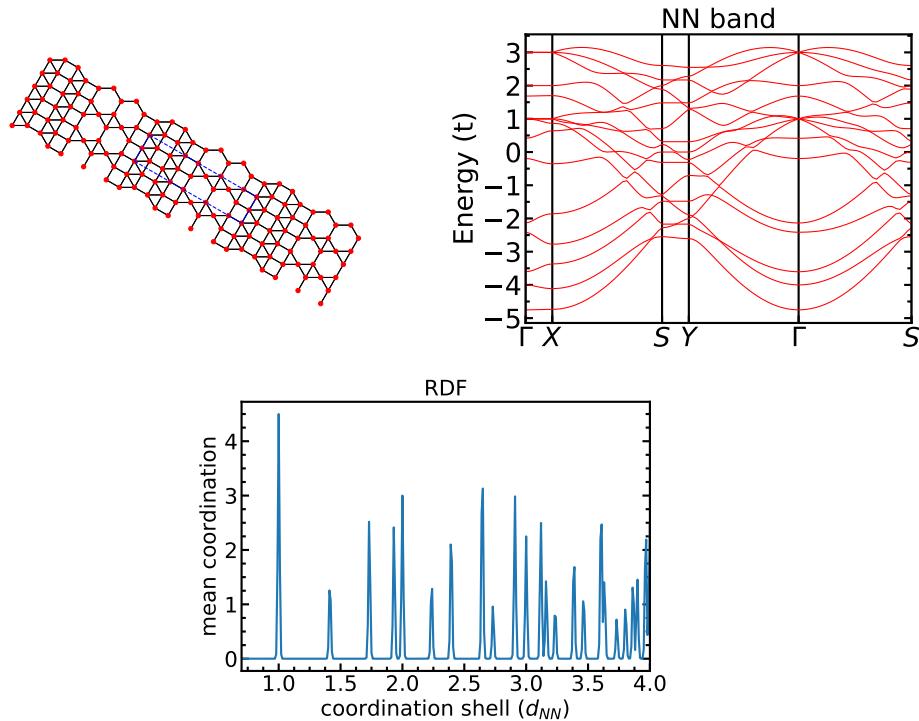


FIG. S443. t6443 lattice framework, nearest neighbors band structure and radial distribution function.

## t6444

Tiling reference number t6444 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S444. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S444.

TABLE S444. Tiling t6444 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	0	0	8	0	0	4	2

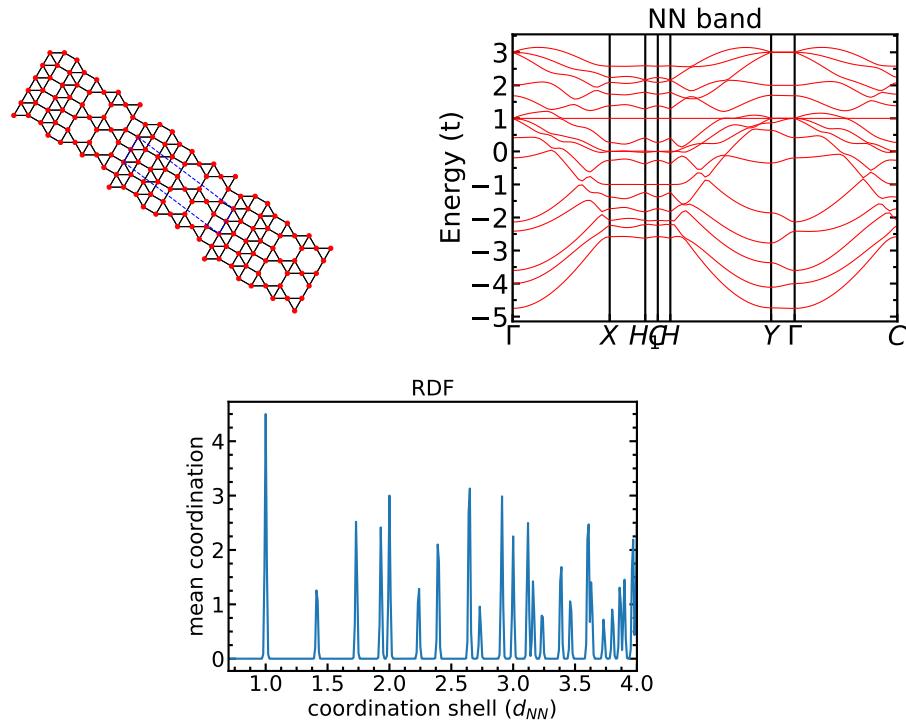


FIG. S444. t6444 lattice framework, nearest neighbors band structure and radial distribution function.

## t6445

Tiling reference number t6445 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S445. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S445.

TABLE S445. Tiling t6445 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	3	0	0	4	0	0	4	4

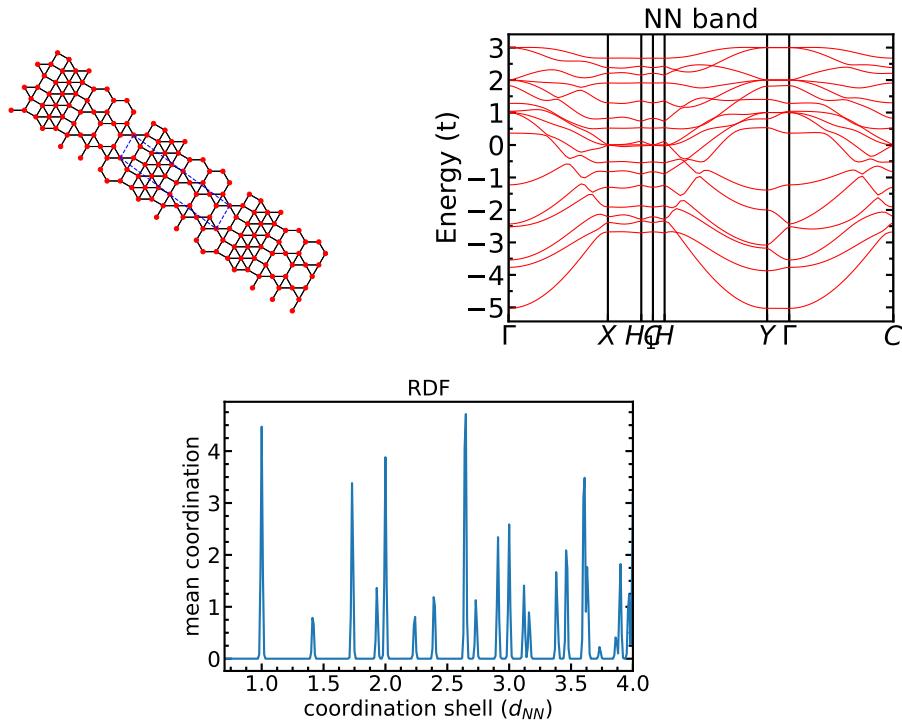


FIG. S445. t6445 lattice framework, nearest neighbors band structure and radial distribution function.

## t6446

Tiling reference number t6446 with space-group ' $Pmm2'$  (25) and 14 sites in the unit cell, with vertex type indicated in Tab. S446. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S446.

TABLE S446. Tiling t6446 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	0	0	4	0	0	4	2

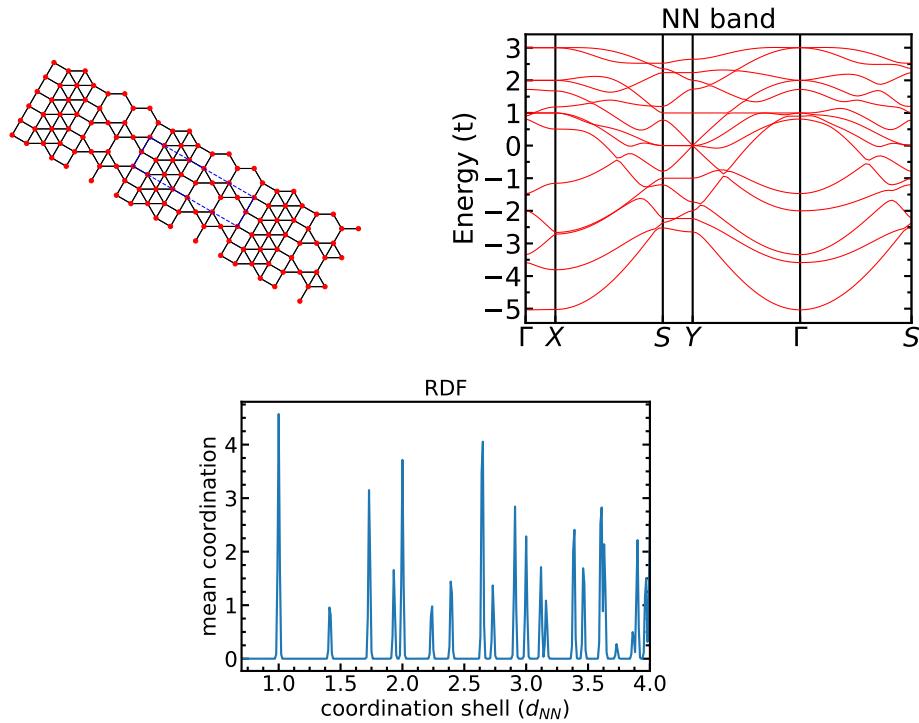


FIG. S446. t6446 lattice framework, nearest neighbors band structure and radial distribution function.

## t6447

Tiling reference number t6447 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S447. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S447.

TABLE S447. Tiling t6447 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	8	0	0	4	0

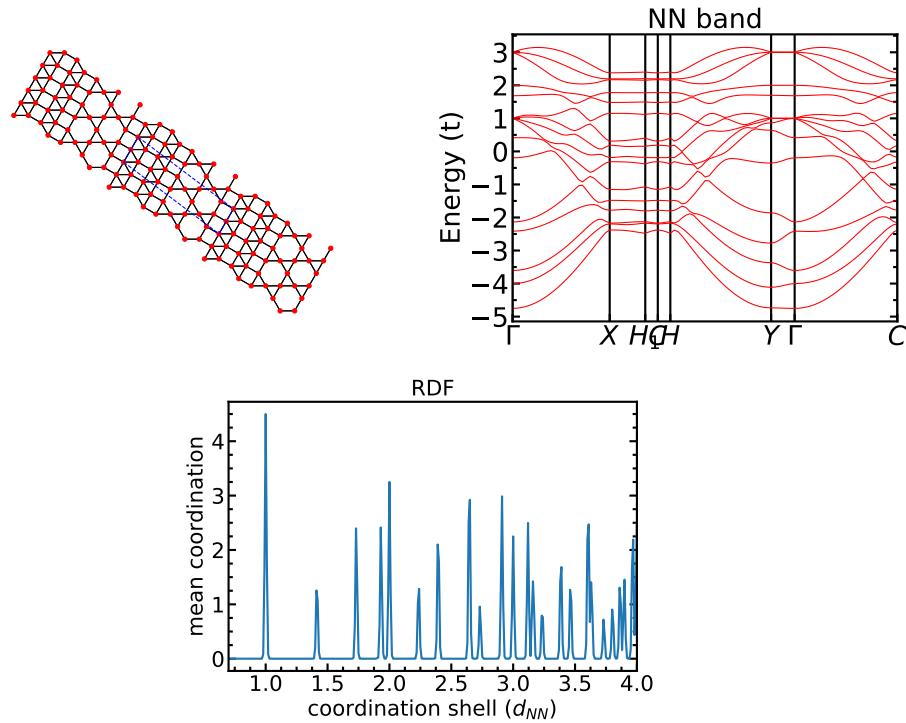


FIG. S447. t6447 lattice framework, nearest neighbors band structure and radial distribution function.

## t6448

Tiling reference number t6448 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S448. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S448.

TABLE S448. Tiling t6448 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	0	0	8	0	0	4	0

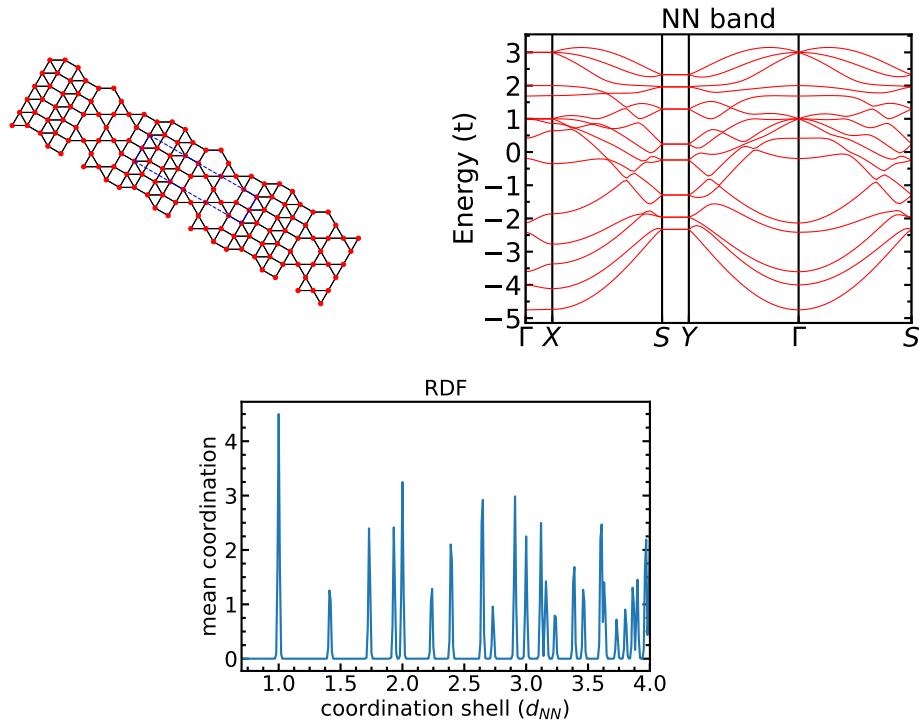


FIG. S448. t6448 lattice framework, nearest neighbors band structure and radial distribution function.

## t6449

Tiling reference number t6449 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S449. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S449.

TABLE S449. Tiling t6449 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	7	0	0	4	0	0	4	0

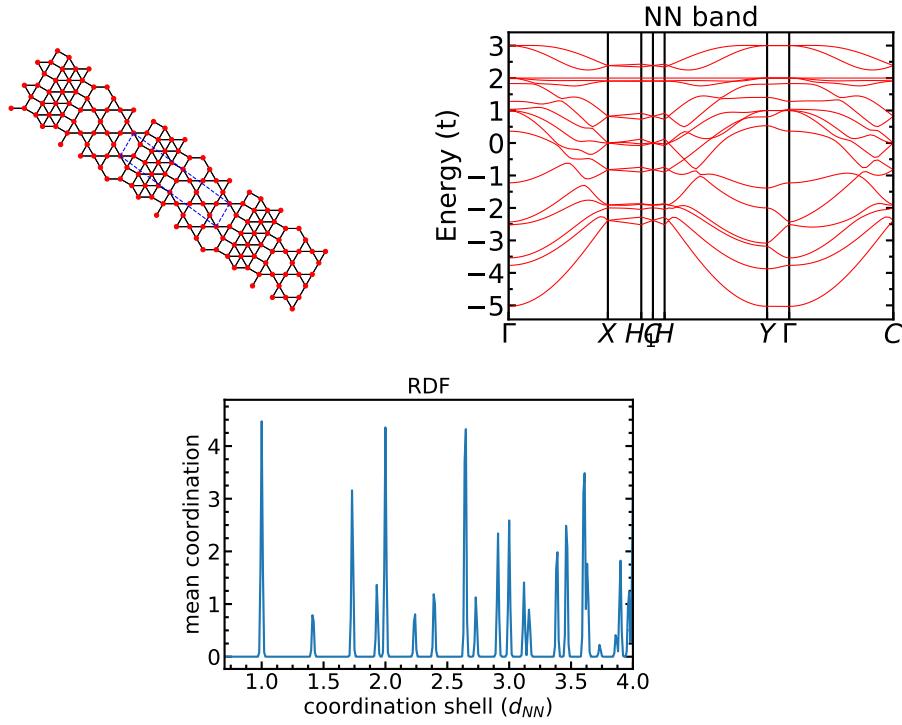


FIG. S449. t6449 lattice framework, nearest neighbors band structure and radial distribution function.

## t6450

Tiling reference number t6450 with space-group ' $Pm'$  (6) and 14 sites in the unit cell, with vertex type indicated in Tab. S450. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S450.

TABLE S450. Tiling t6450 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	4	0	0	4	0	0	4	0

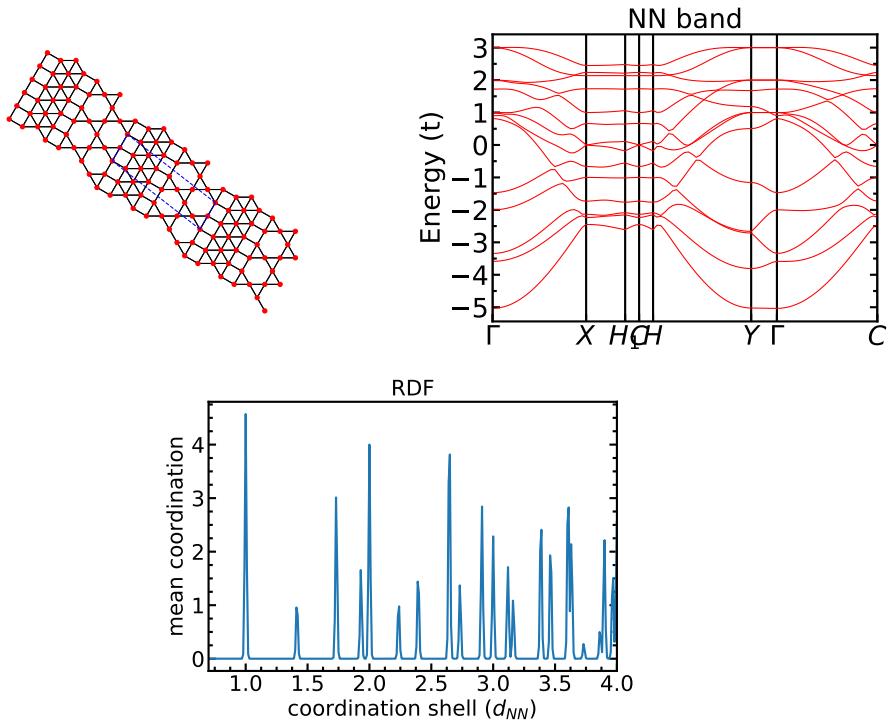


FIG. S450. t6450 lattice framework, nearest neighbors band structure and radial distribution function.

## t6451

Tiling reference number t6451 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S451. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S451.

TABLE S451. Tiling t6451 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	4	0	0	4	0

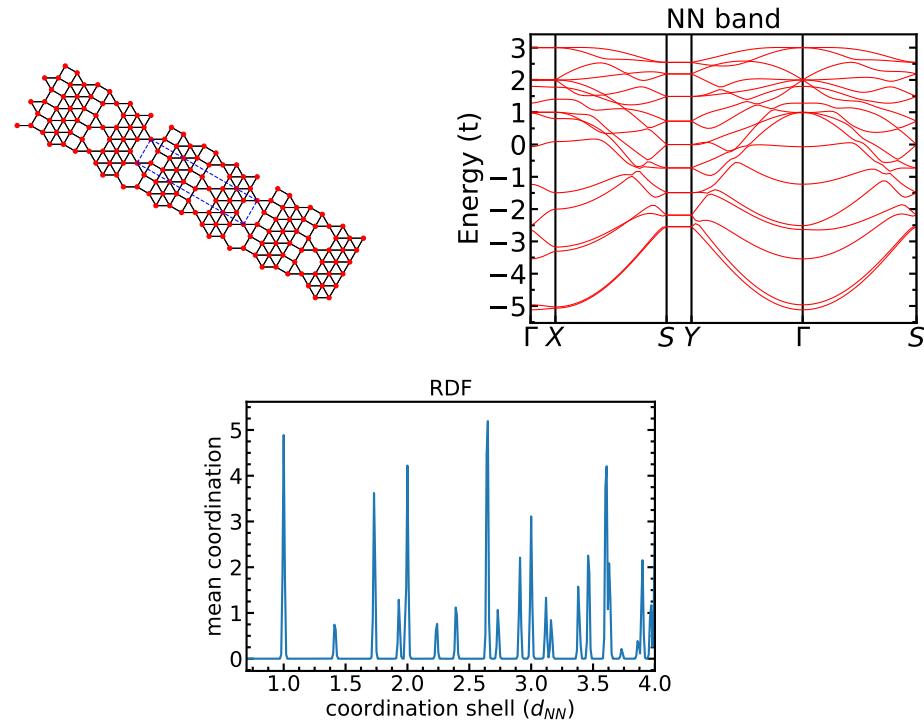


FIG. S451. t6451 lattice framework, nearest neighbors band structure and radial distribution function.

## t6452

Tiling reference number t6452 with space-group '*Amm2*' (38) and 9 sites in the unit cell, with vertex type indicated in Tab. S452. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S452.

TABLE S452. Tiling t6452 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	1	2	0	2	0	0	2	0

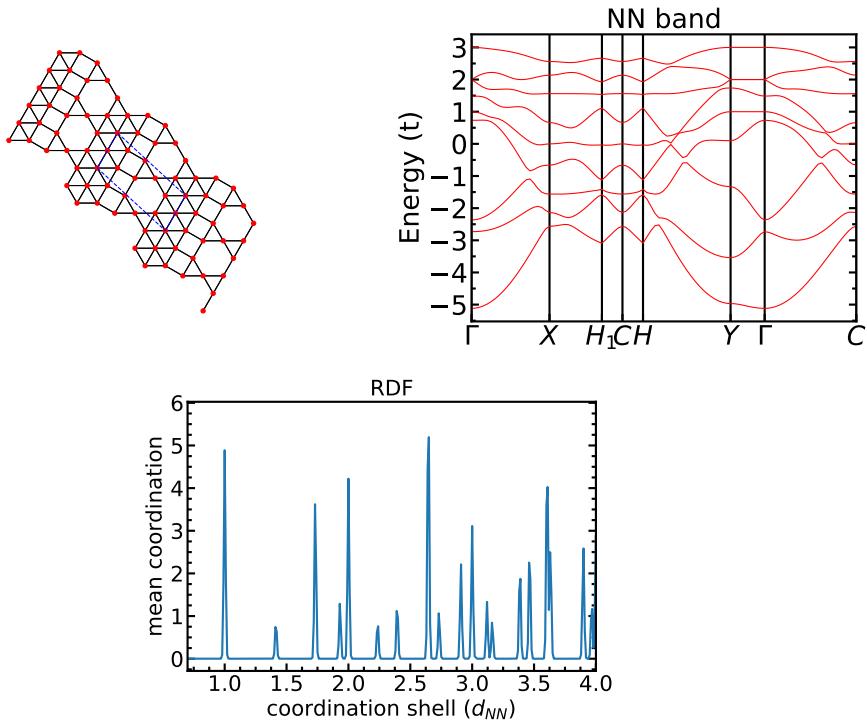


FIG. S452. t6452 lattice framework, nearest neighbors band structure and radial distribution function.

### t6453

Tiling reference number t6453 with space-group '*Pmm2*' (25) and 9 sites in the unit cell, with vertex type indicated in Tab. S453. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S453.

TABLE S453. Tiling t6453 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	1	2	0	2	0	0	2	0

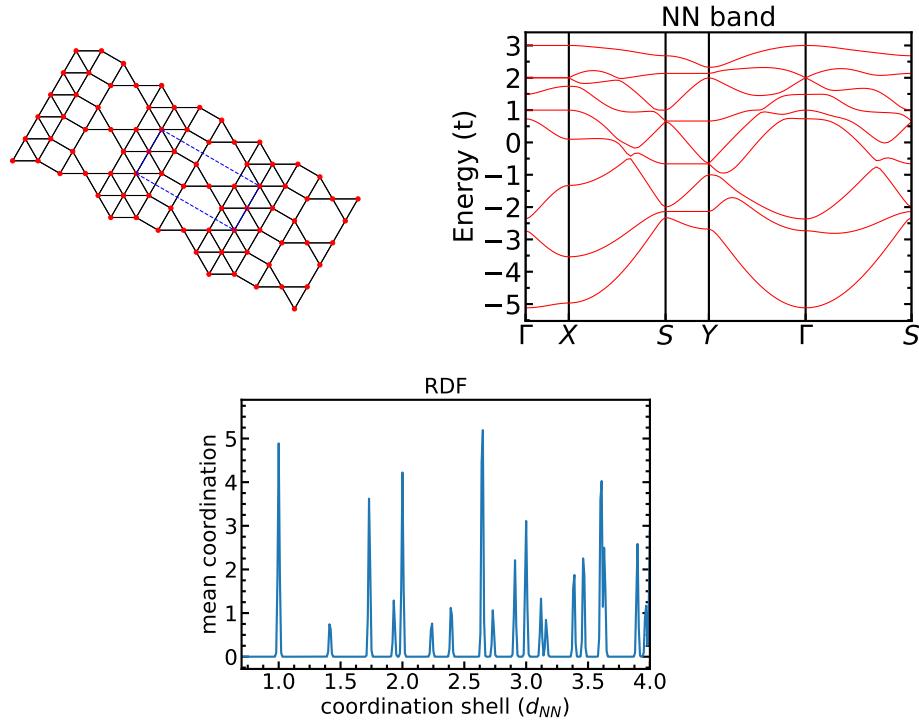


FIG. S453. t6453 lattice framework, nearest neighbors band structure and radial distribution function.

## t6454

Tiling reference number t6454 with space-group ' $Pmm2'$  (25) and 16 sites in the unit cell, with vertex type indicated in Tab. S454. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S454.

TABLE S454. Tiling t6454 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	1	2	0	4	0	0	8	0

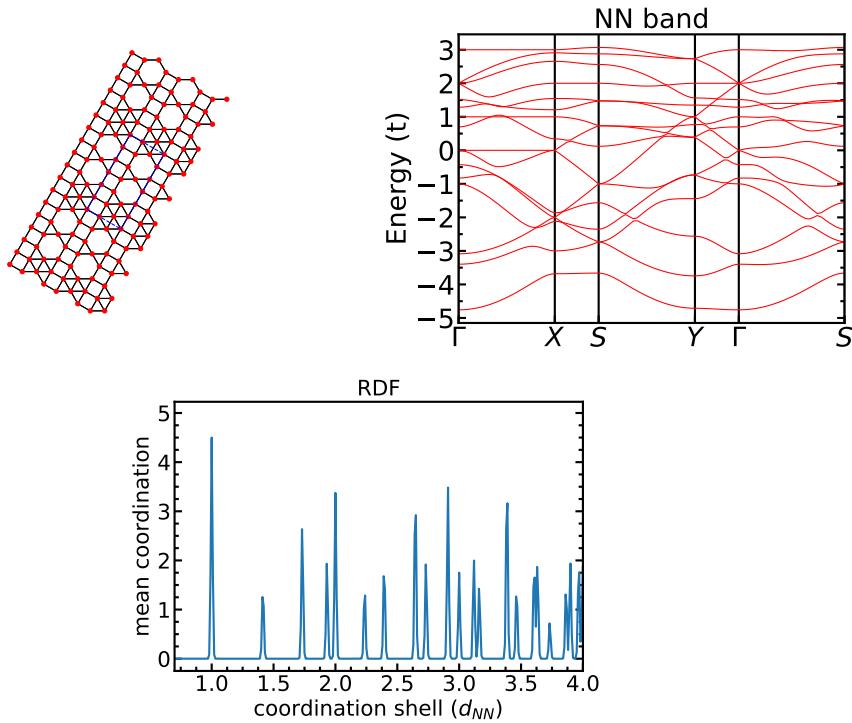


FIG. S454. t6454 lattice framework, nearest neighbors band structure and radial distribution function.

## t6455

Tiling reference number t6455 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S455. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S455.

TABLE S455. Tiling t6455 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	1	2	6	0	0	0	8	0

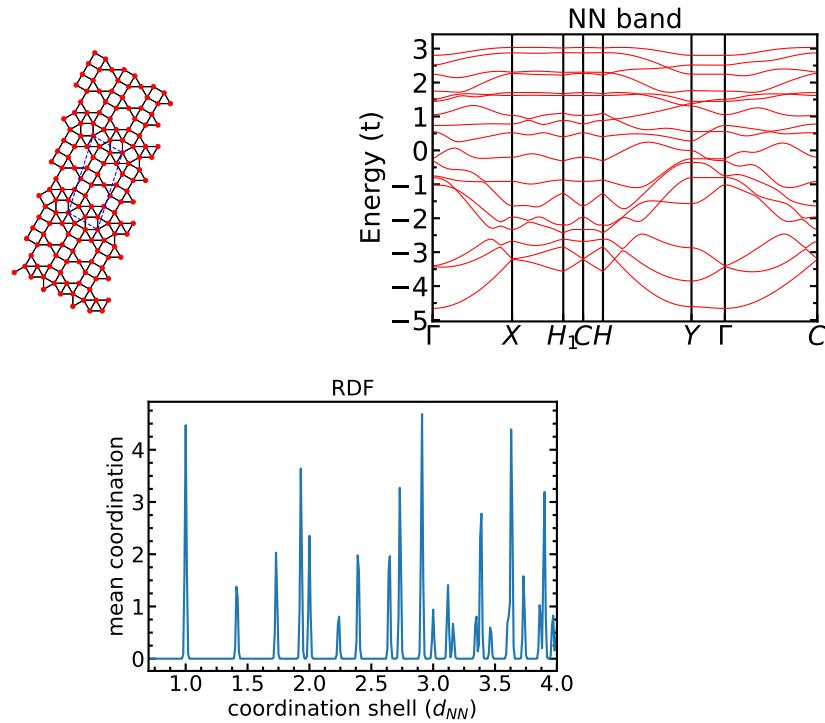


FIG. S455. t6455 lattice framework, nearest neighbors band structure and radial distribution function.

## t6456

Tiling reference number t6456 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S456. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S456.

TABLE S456. Tiling t6456 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	1	2	0	4	0	0	8	0

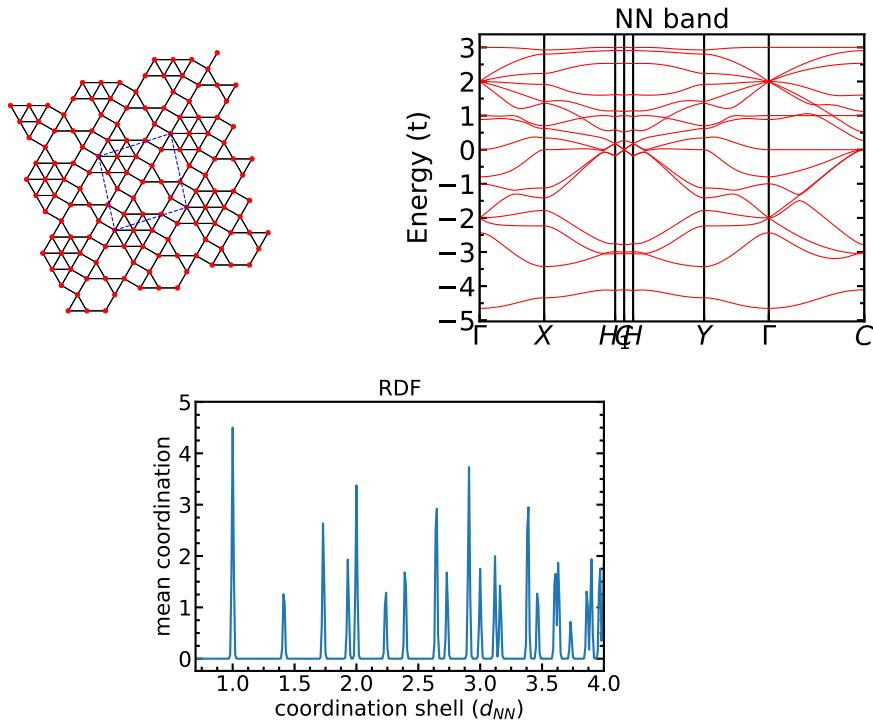


FIG. S456. t6456 lattice framework, nearest neighbors band structure and radial distribution function.

## t6457

Tiling reference number t6457 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S457. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S457.

TABLE S457. Tiling t6457 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	0	0	4	0	0	4	2

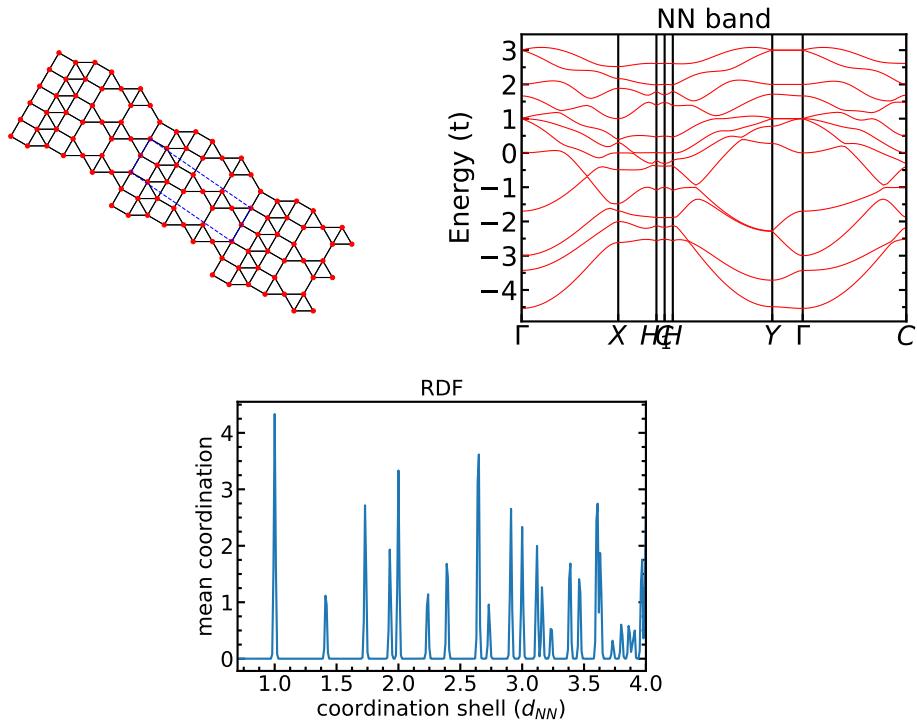


FIG. S457. t6457 lattice framework, nearest neighbors band structure and radial distribution function.

## t6458

Tiling reference number t6458 with space-group ' $Pm'$  (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S458. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S458.

TABLE S458. Tiling t6458 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	8	0	0	8	0	0	8	0

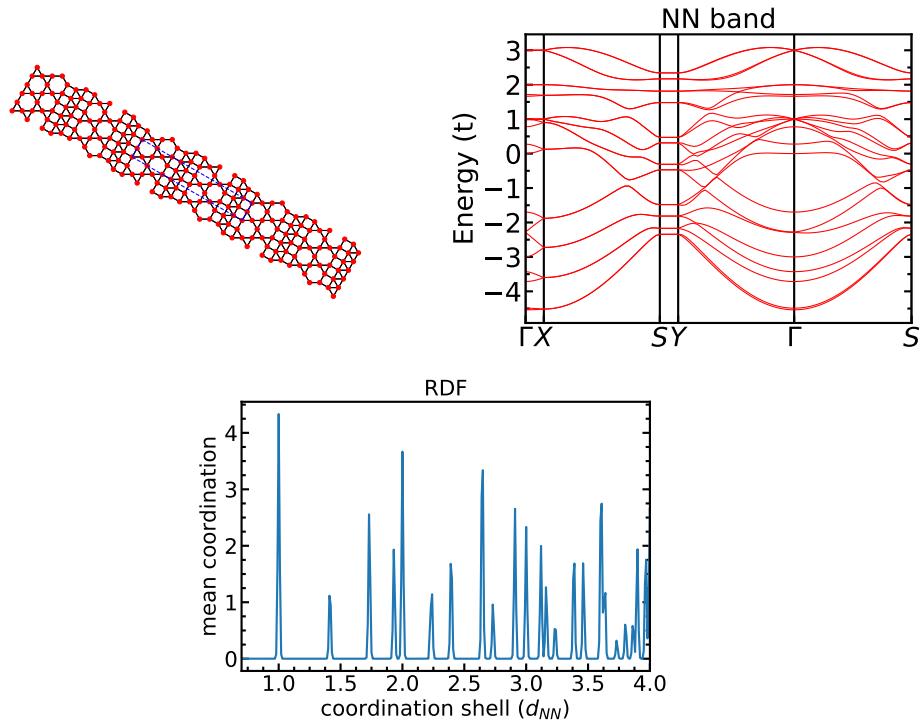


FIG. S458. t6458 lattice framework, nearest neighbors band structure and radial distribution function.

## t6459

Tiling reference number t6459 with space-group ' $Pmmm$ ' (47) and 17 sites in the unit cell, with vertex type indicated in Tab. S459. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S459.

TABLE S459. Tiling t6459 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	12	1	0	0	0	0	0	4	0

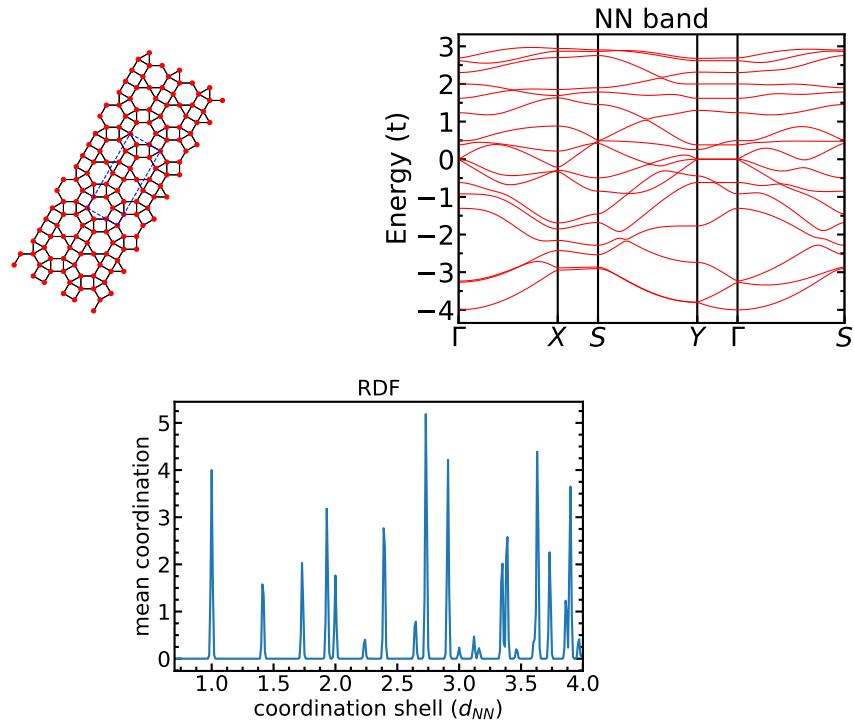


FIG. S459. t6459 lattice framework, nearest neighbors band structure and radial distribution function.

## t6460

Tiling reference number t6460 with space-group ' $Pm'$  (6) and 15 sites in the unit cell, with vertex type indicated in Tab. S460. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S460.

TABLE S460. Tiling t6460 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	1	0	4	0	0	0	4	0

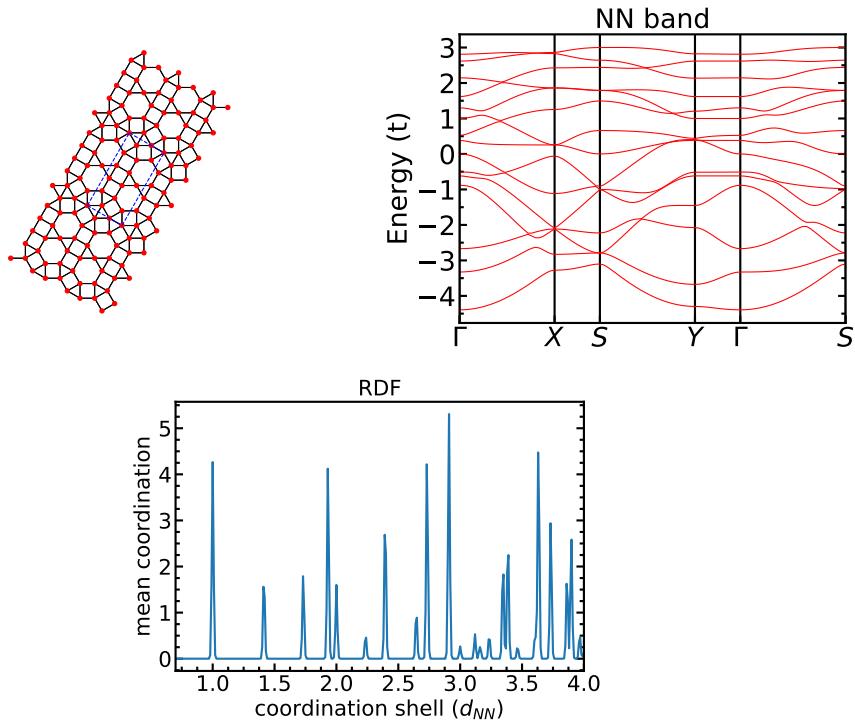


FIG. S460. t6460 lattice framework, nearest neighbors band structure and radial distribution function.

## t6461

Tiling reference number t6461 with space-group ' $Pm'$  (6) and 19 sites in the unit cell, with vertex type indicated in Tab. S461. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S461.

TABLE S461. Tiling t6461 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	5	0	0	0	0	0	8	0

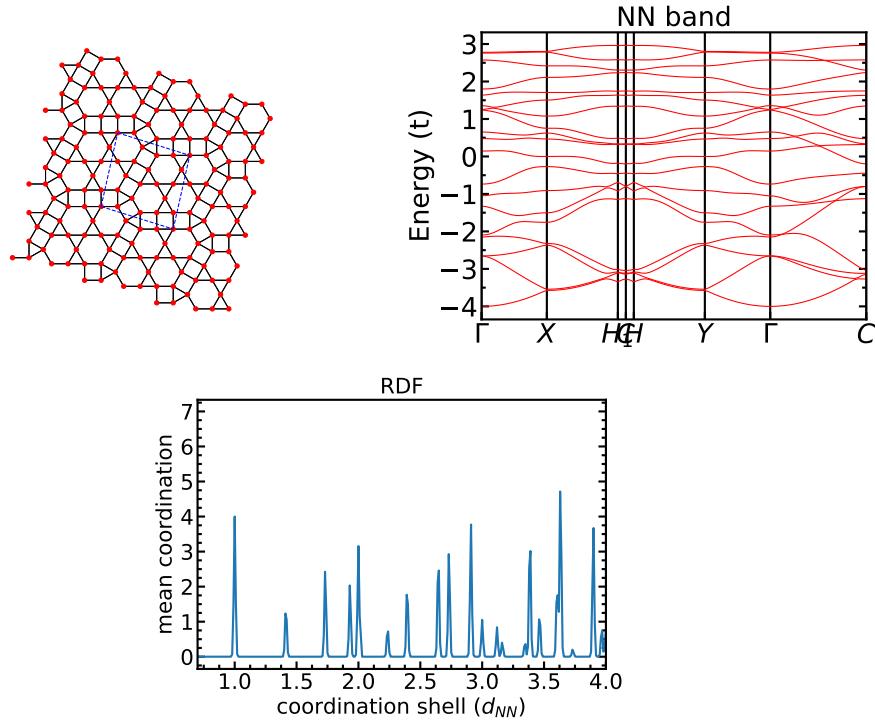


FIG. S461. t6461 lattice framework, nearest neighbors band structure and radial distribution function.

## t6462

Tiling reference number t6462 with space-group ' $Pmm2'$  (25) and 17 sites in the unit cell, with vertex type indicated in Tab. S462. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S462.

TABLE S462. Tiling t6462 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	2	0	8	0	0	4	0

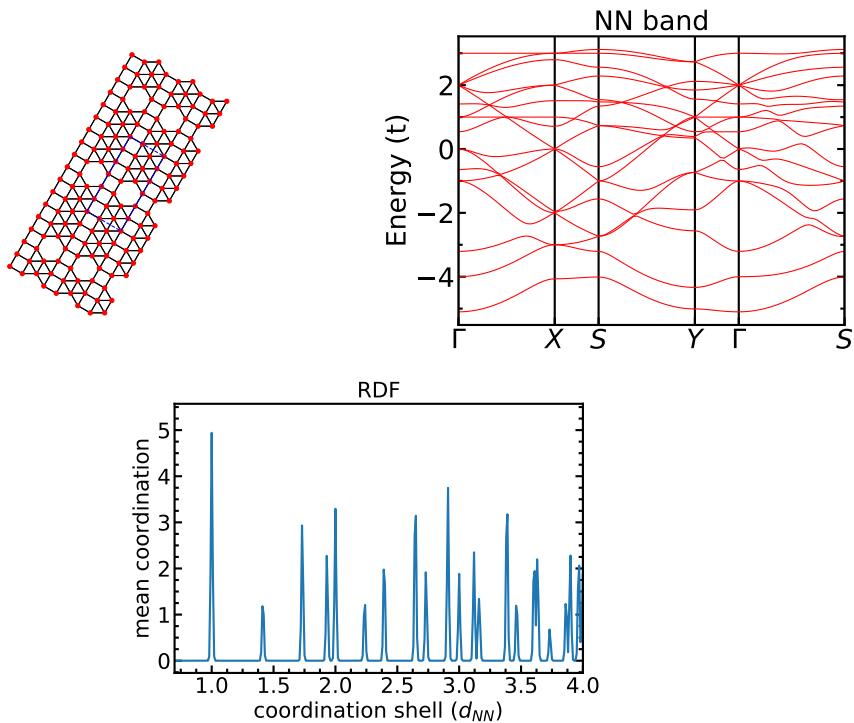


FIG. S462. t6462 lattice framework, nearest neighbors band structure and radial distribution function.

## t6463

Tiling reference number t6463 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S463. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S463.

TABLE S463. Tiling t6463 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	2	6	4	0	0	4	0

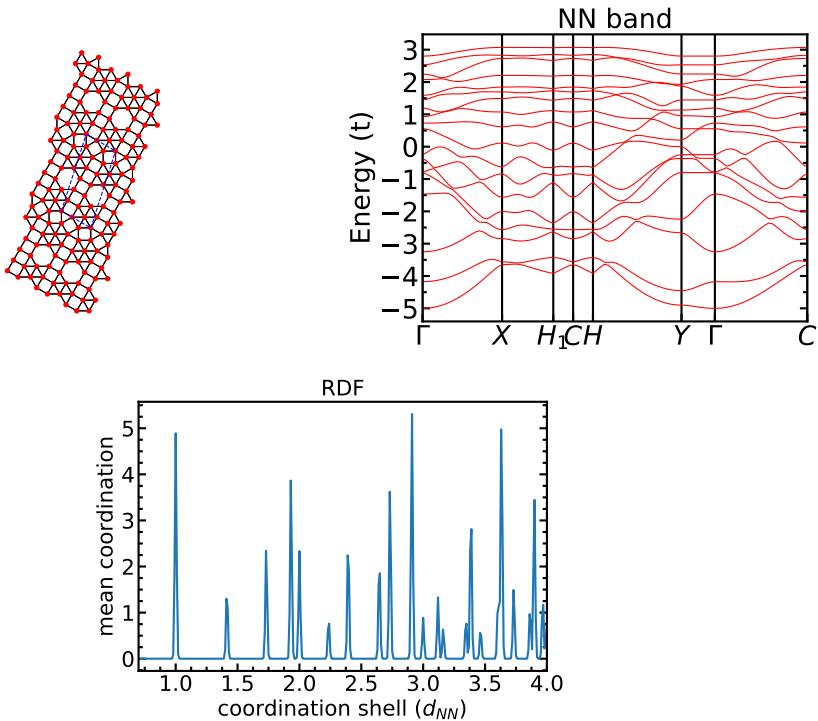


FIG. S463. t6463 lattice framework, nearest neighbors band structure and radial distribution function.

## t6464

Tiling reference number t6464 with space-group '*Cmmm*' (65) and 22 sites in the unit cell, with vertex type indicated in Tab. S464. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S464.

TABLE S464. Tiling t6464 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	4	0	8	0	0	8	0

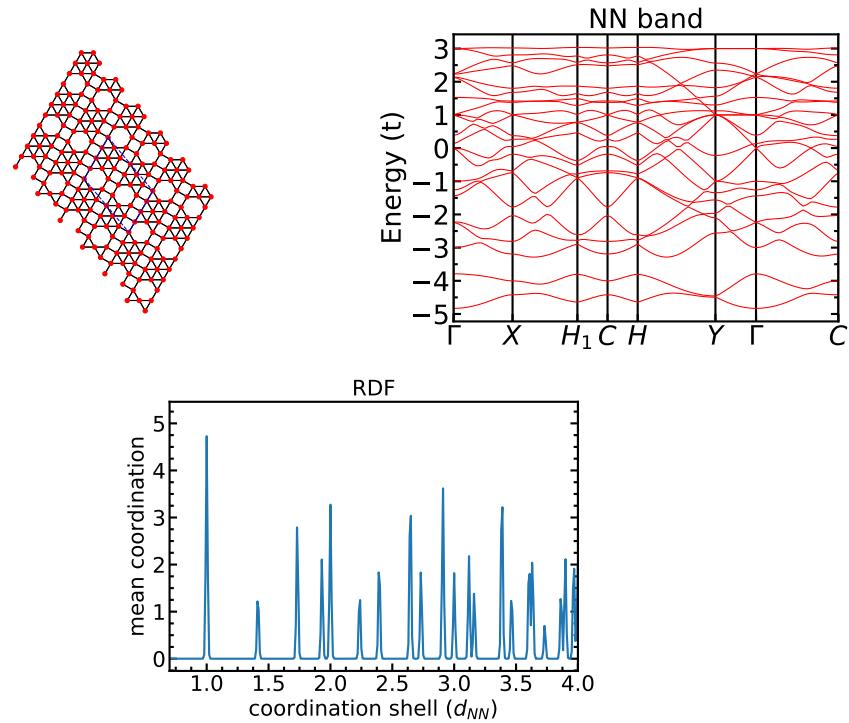


FIG. S464. t6464 lattice framework, nearest neighbors band structure and radial distribution function.

## t6465

Tiling reference number t6465 with space-group ' $Pm'$  (6) and 20 sites in the unit cell, with vertex type indicated in Tab. S465. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S465.

TABLE S465. Tiling t6465 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	4	0	2	0	0	4	8

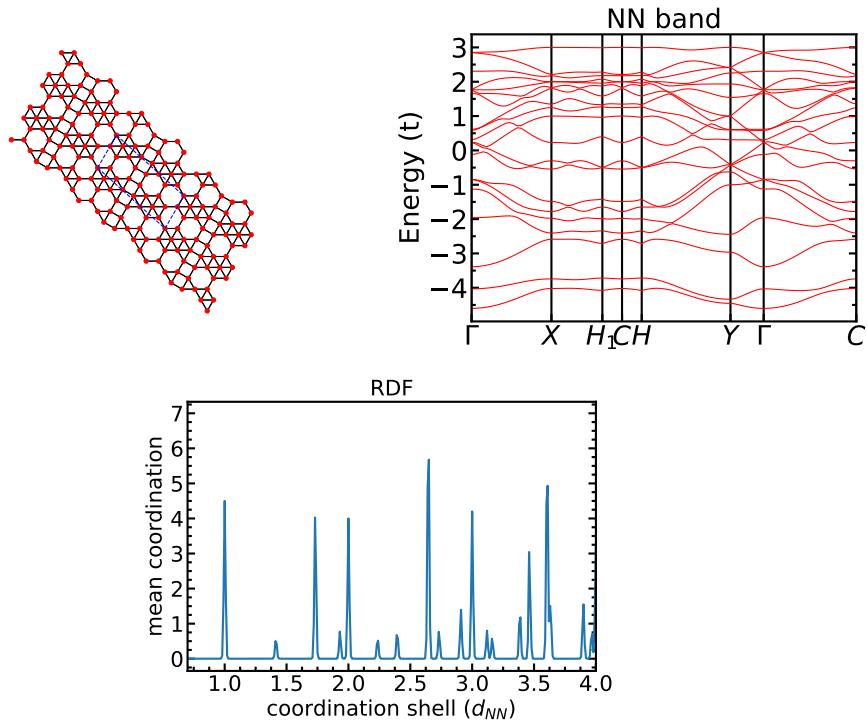


FIG. S465. t6465 lattice framework, nearest neighbors band structure and radial distribution function.

## t6466

Tiling reference number t6466 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S466. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S466.

TABLE S466. Tiling t6466 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	6	0	2	0	0	4	4

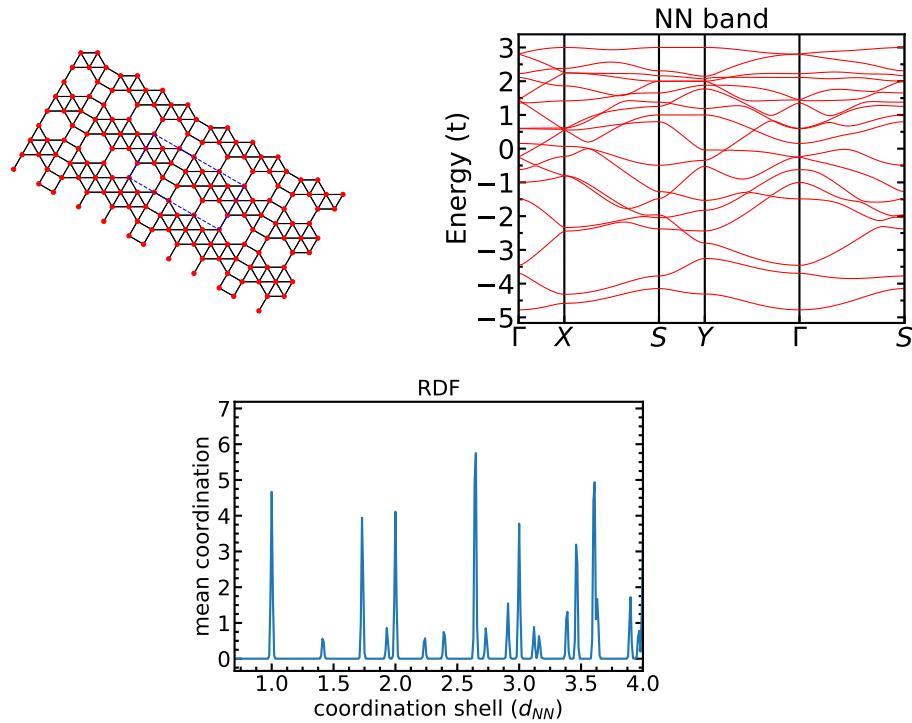


FIG. S466. t6466 lattice framework, nearest neighbors band structure and radial distribution function.

## t6467

Tiling reference number t6467 with space-group ' $Pmmm$ ' (47) and 18 sites in the unit cell, with vertex type indicated in Tab. S467. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S467.

TABLE S467. Tiling t6467 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	4	0	4	0	0	4	2

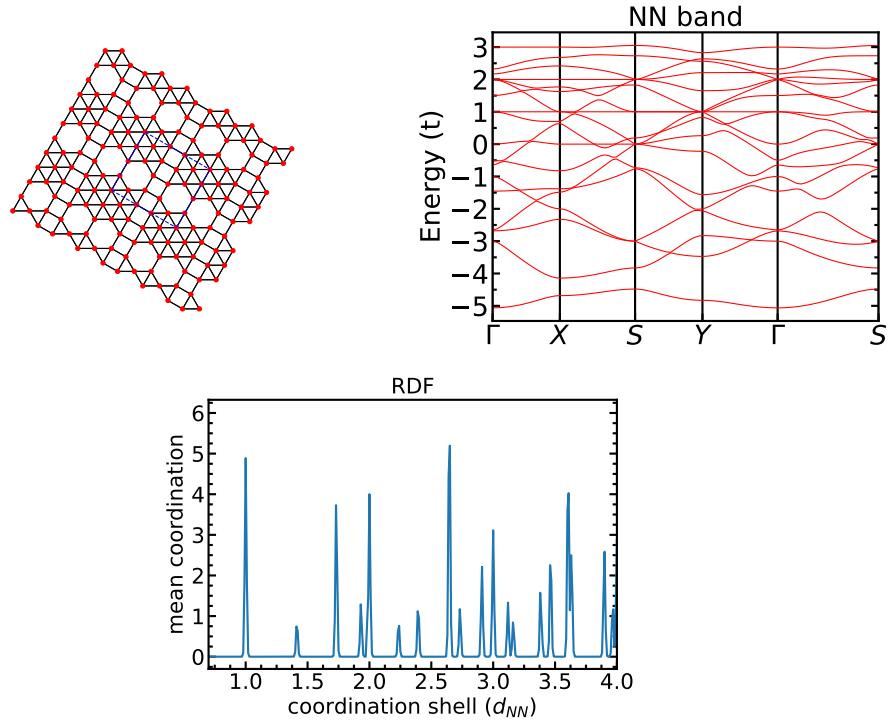


FIG. S467. t6467 lattice framework, nearest neighbors band structure and radial distribution function.

## t6468

Tiling reference number t6468 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S468. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S468.

TABLE S468. Tiling t6468 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	1	6	12	1	11	12	0	11	0

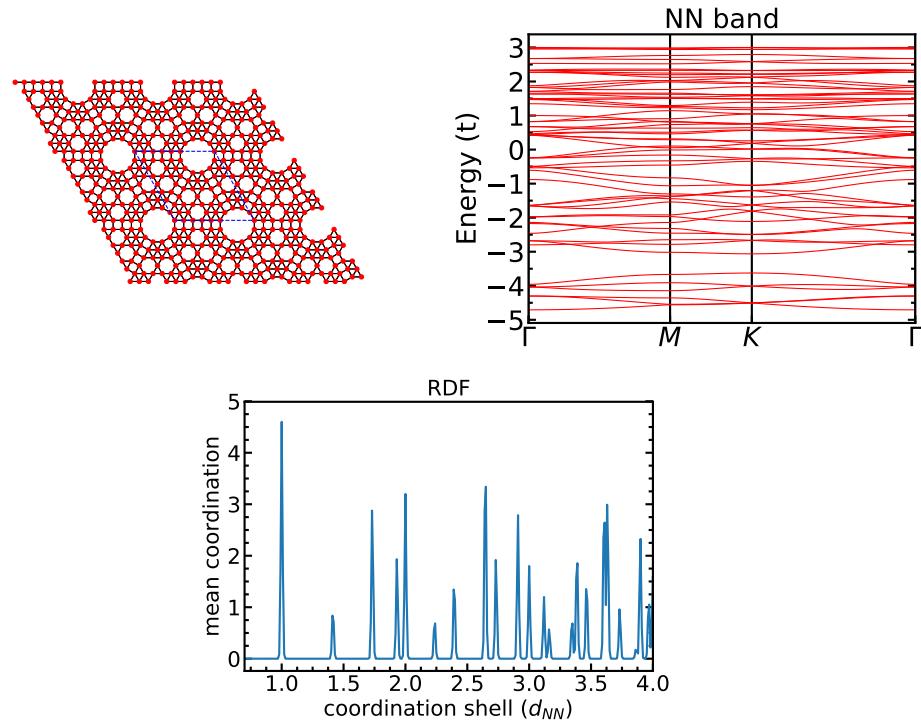


FIG. S468. t6468 lattice framework, nearest neighbors band structure and radial distribution function.

## t6469

Tiling reference number t6469 with space-group ' $P2/m$ ' (10) and 18 sites in the unit cell, with vertex type indicated in Tab. S469. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S469.

TABLE S469. Tiling t6469 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	0	2	6	0	0	0	4	0

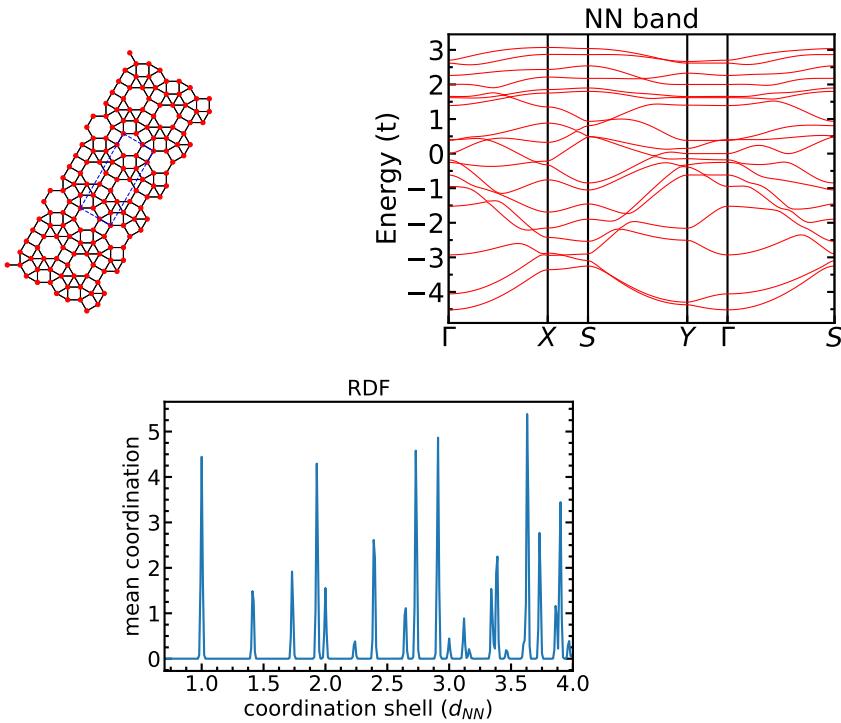


FIG. S469. t6469 lattice framework, nearest neighbors band structure and radial distribution function.

## t6470

Tiling reference number t6470 with space-group ' $P2/m$ ' (10) and 16 sites in the unit cell, with vertex type indicated in Tab. S470. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S470.

TABLE S470. Tiling t6470 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	2	10	0	0	0	4	0

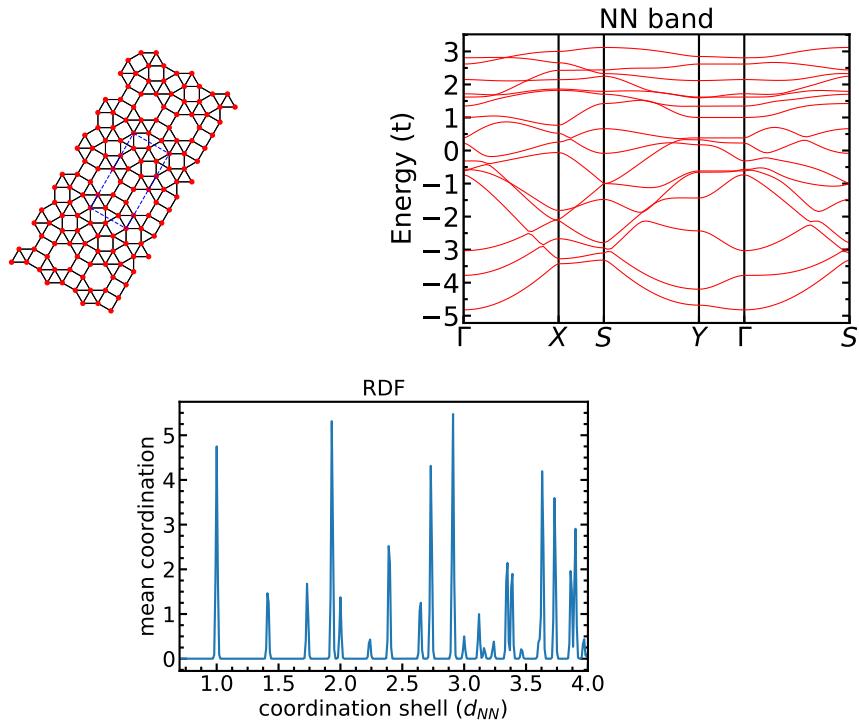


FIG. S470. t6470 lattice framework, nearest neighbors band structure and radial distribution function.

## t6471

Tiling reference number t6471 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S471. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S471.

TABLE S471. Tiling t6471 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	4	0	4	0	0	4	2

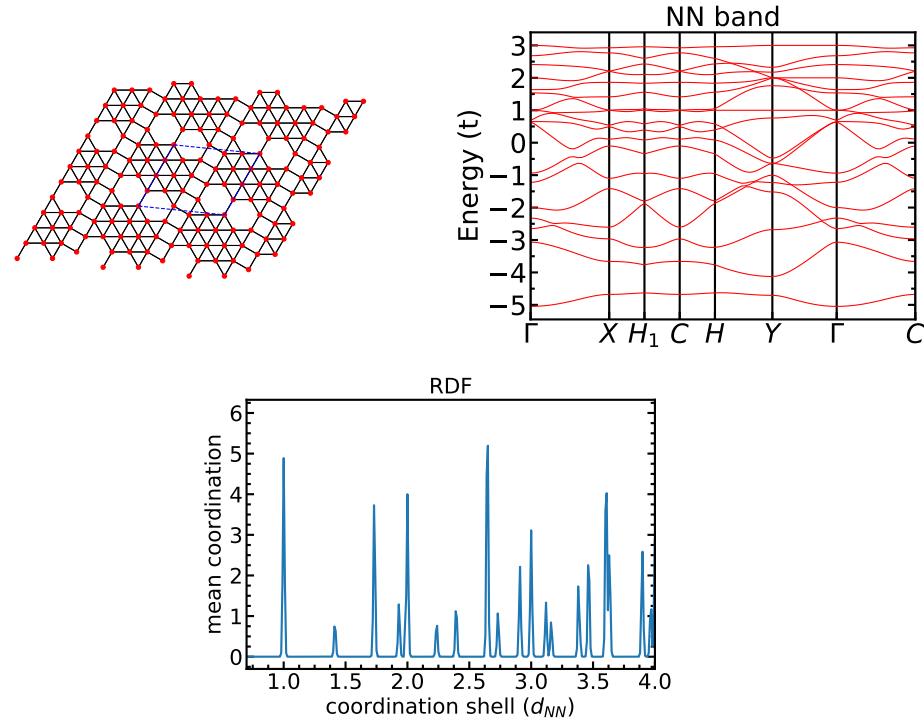


FIG. S471. t6471 lattice framework, nearest neighbors band structure and radial distribution function.

## t6472

Tiling reference number t6472 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S472. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S472.

TABLE S472. Tiling t6472 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	2	0	8	0	0	4	0

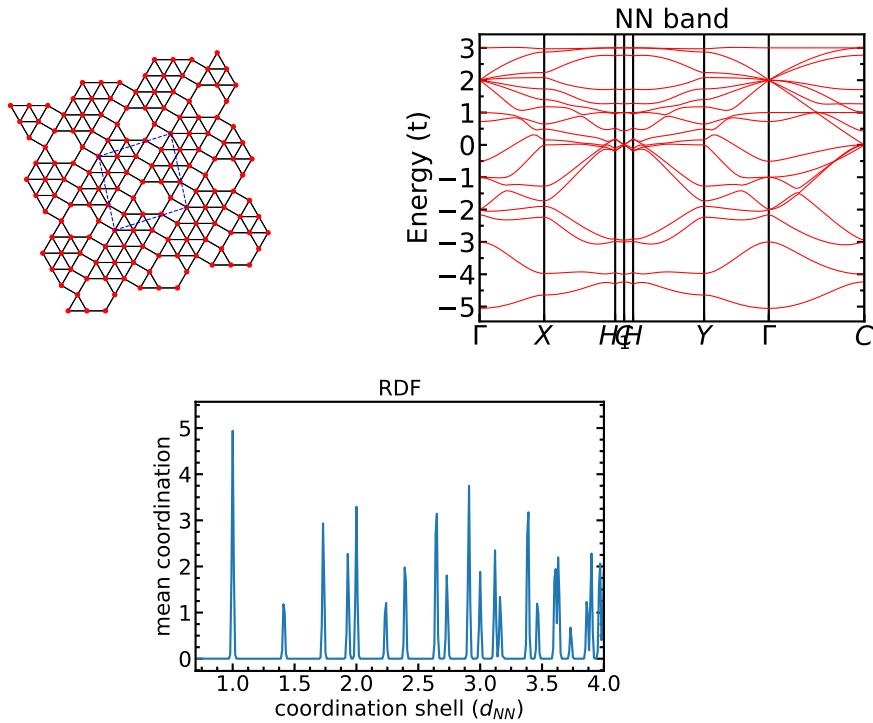


FIG. S472. t6472 lattice framework, nearest neighbors band structure and radial distribution function.

## t6473

Tiling reference number t6473 with space-group ' $Pm'$  (6) and 33 sites in the unit cell, with vertex type indicated in Tab. S473. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S473.

TABLE S473. Tiling t6473 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	6	6	6	0	0	6	6

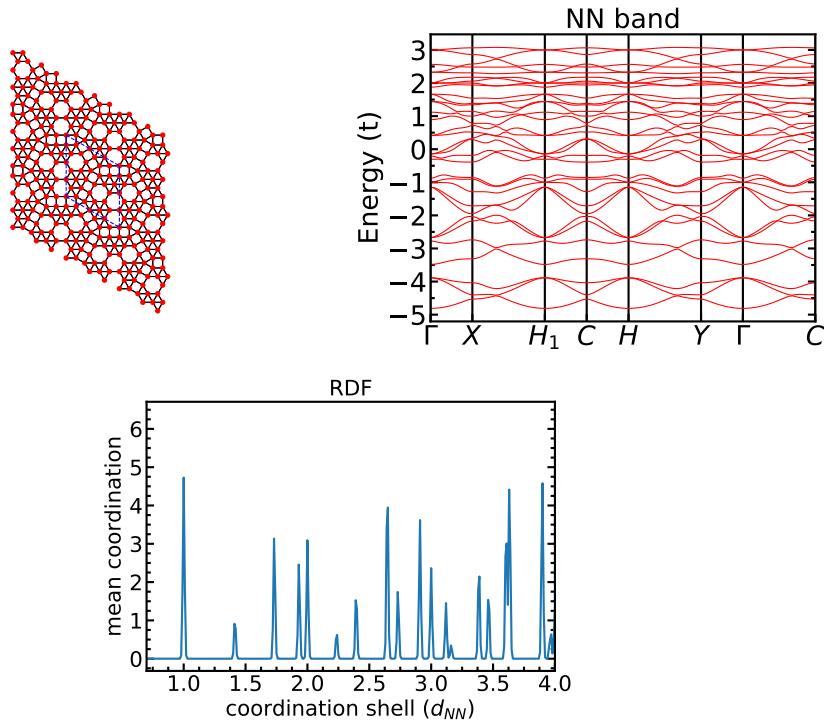


FIG. S473. t6473 lattice framework, nearest neighbors band structure and radial distribution function.

## t6474

Tiling reference number t6474 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S474. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S474.

TABLE S474. Tiling t6474 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	2	0	4	0	0	4	0

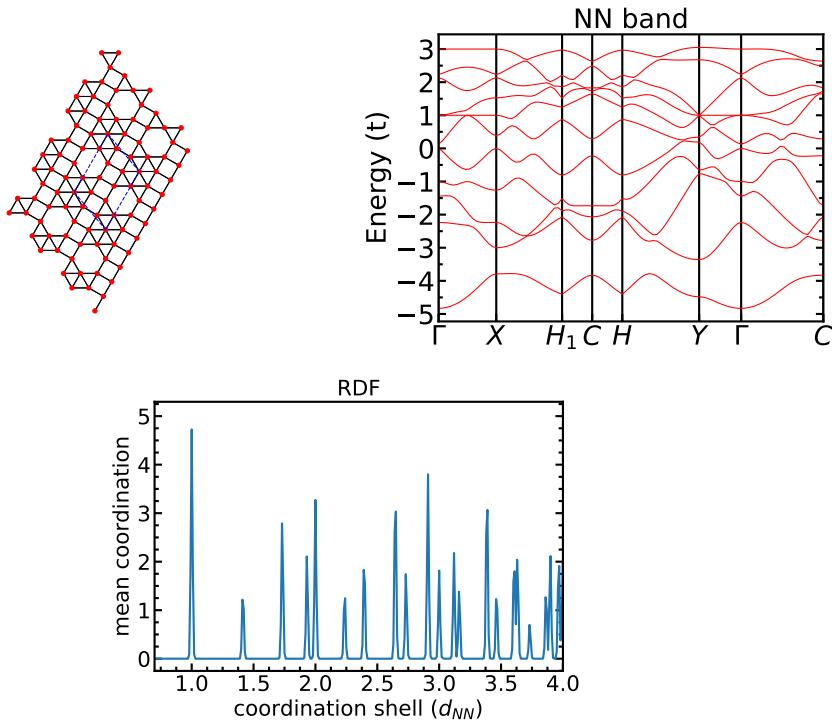


FIG. S474. t6474 lattice framework, nearest neighbors band structure and radial distribution function.

## t6475

Tiling reference number t6475 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S475. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S475.

TABLE S475. Tiling t6475 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	2	1	4	4	2	0	0	4	0

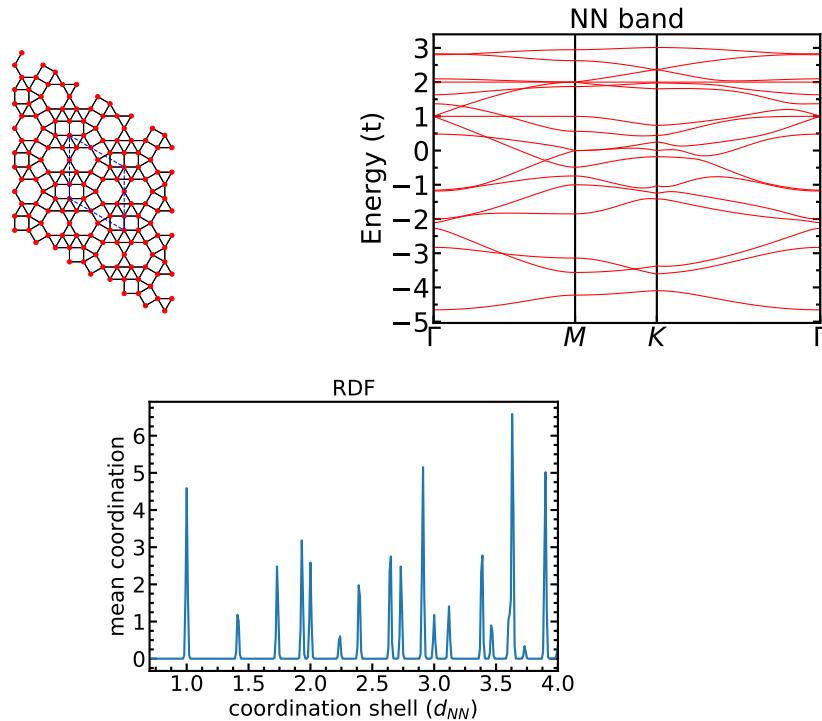


FIG. S475. t6475 lattice framework, nearest neighbors band structure and radial distribution function.

## t6476

Tiling reference number t6476 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S476. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S476.

TABLE S476. Tiling t6476 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	6	0	2	0	4	0	0	4	0

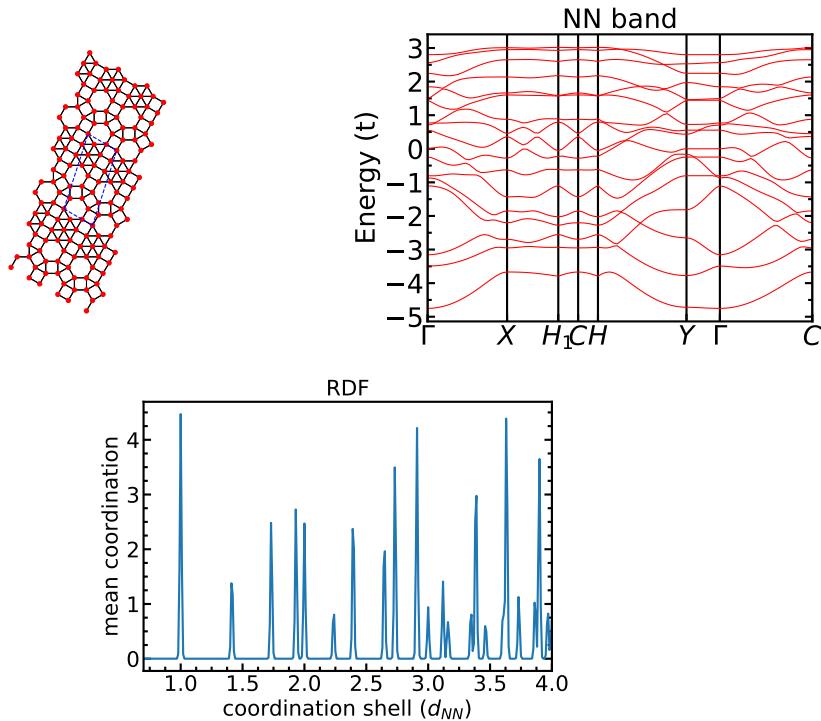


FIG. S476. t6476 lattice framework, nearest neighbors band structure and radial distribution function.

## t6477

Tiling reference number t6477 with space-group ' $Pm'$  (6) and 50 sites in the unit cell, with vertex type indicated in Tab. S477. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S477.

TABLE S477. Tiling t6477 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	20	0	12	0	6	0	0	10	0

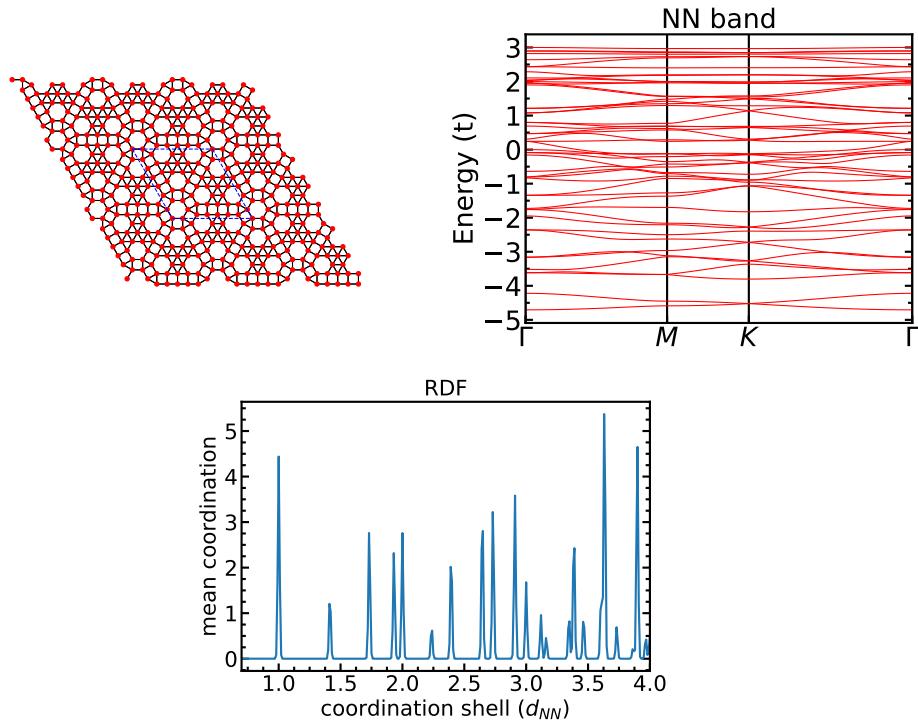


FIG. S477. t6477 lattice framework, nearest neighbors band structure and radial distribution function.

## t6478

Tiling reference number t6478 with space-group '*Amm2*' (38) and 9 sites in the unit cell, with vertex type indicated in Tab. S478. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S478.

TABLE S478. Tiling t6478 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	3	0	1	3	0	0	0	2	0

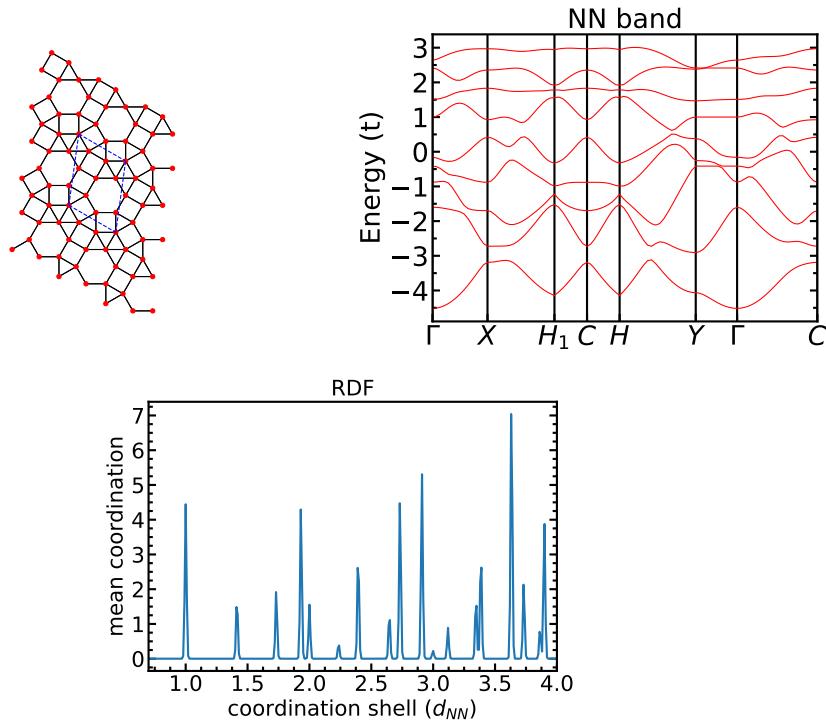


FIG. S478. t6478 lattice framework, nearest neighbors band structure and radial distribution function.

## t6479

Tiling reference number t6479 with space-group ' $Pmc2_1'$  (26) and 18 sites in the unit cell, with vertex type indicated in Tab. S479. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S479.

TABLE S479. Tiling t6479 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	0	2	6	0	0	0	4	0

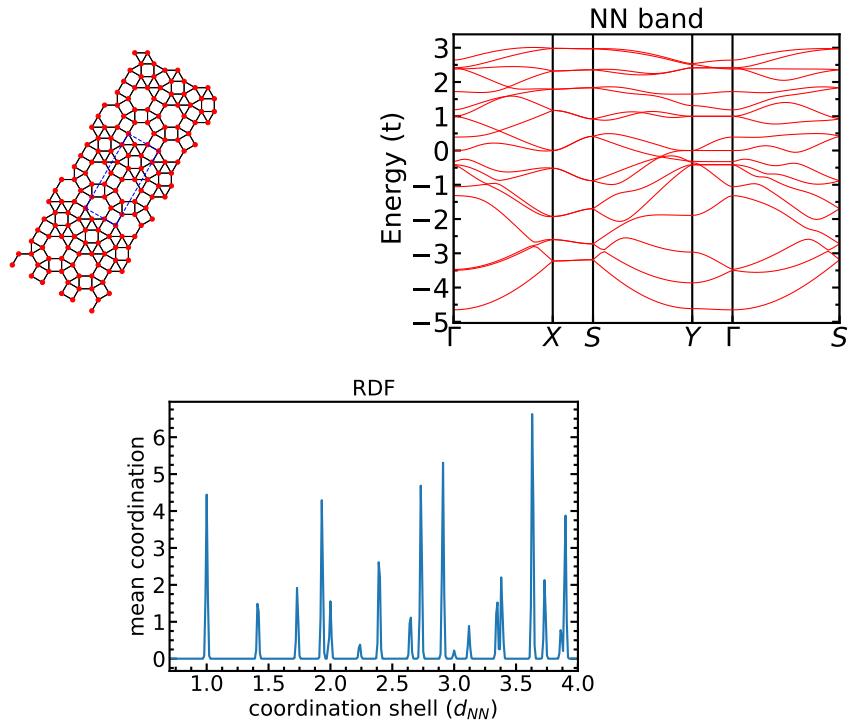


FIG. S479. t6479 lattice framework, nearest neighbors band structure and radial distribution function.

## t6480

Tiling reference number t6480 with space-group ' $Pm'$  (6) and 31 sites in the unit cell, with vertex type indicated in Tab. S480. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S480.

TABLE S480. Tiling t6480 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	6	0	0	6	6	12	0	0	0

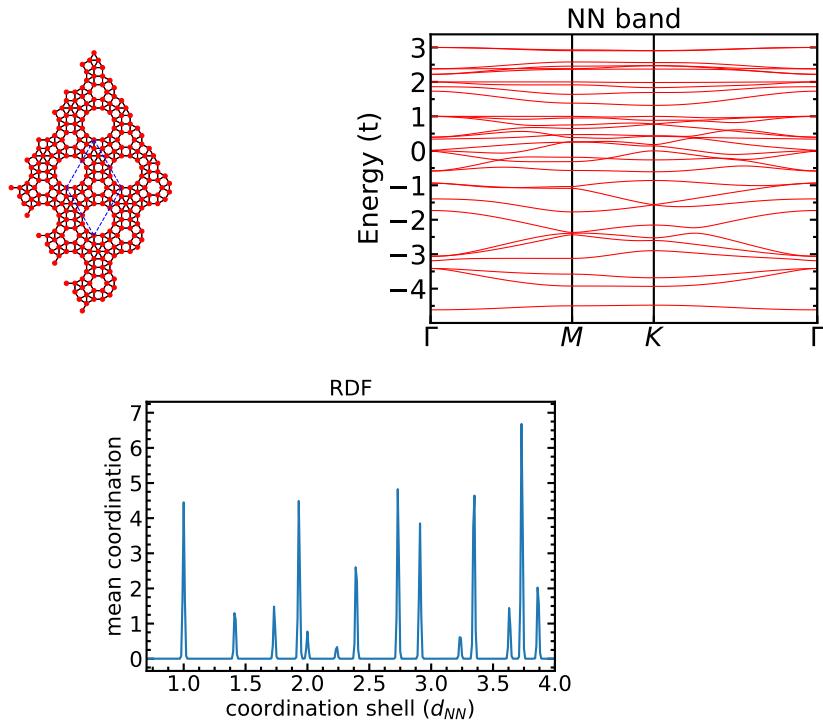


FIG. S480. t6480 lattice framework, nearest neighbors band structure and radial distribution function.

## t6481

Tiling reference number t6481 with space-group ' $Pm'$  (6) and 30 sites in the unit cell, with vertex type indicated in Tab. S481. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S481.

TABLE S481. Tiling t6481 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	12	0	0	6	0	6	6	0	0

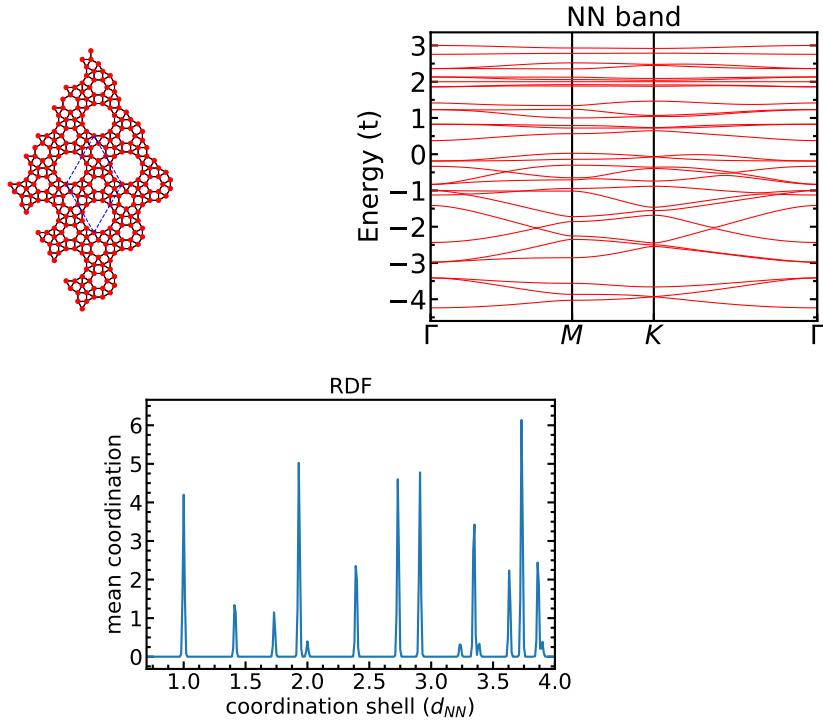


FIG. S481. t6481 lattice framework, nearest neighbors band structure and radial distribution function.

## t6482

Tiling reference number t6482 with space-group ' $Pm'$  (6) and 54 sites in the unit cell, with vertex type indicated in Tab. S482. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S482.

TABLE S482. Tiling t6482 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	6	0	12	0	30	0	0	0	0

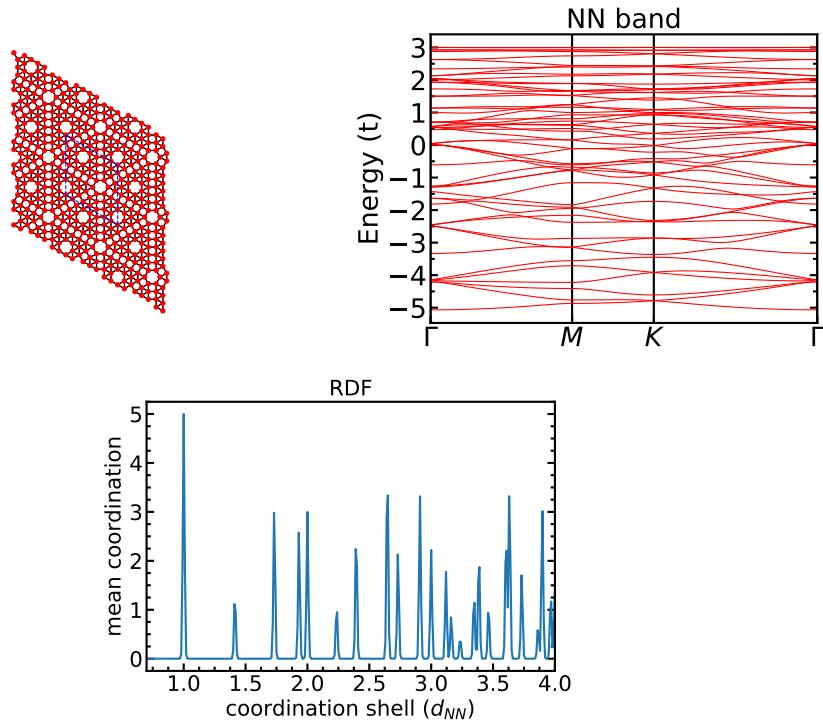


FIG. S482. t6482 lattice framework, nearest neighbors band structure and radial distribution function.

### t6483

Tiling reference number t6483 with space-group '*Amm2'* (38) and 48 sites in the unit cell, with vertex type indicated in Tab. S483. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S483.

TABLE S483. Tiling t6483 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
12	0	0	0	0	0	6	0	0	6	24	0	0	0	0

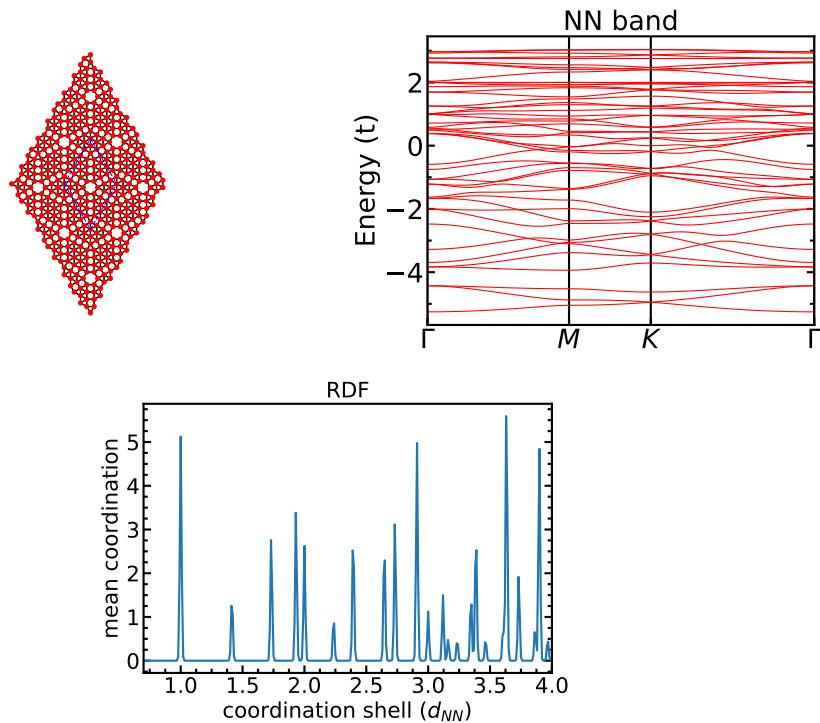


FIG. S483. t6483 lattice framework, nearest neighbors band structure and radial distribution function.

## t6484

Tiling reference number t6484 with space-group ' $Pm'$  (6) and 60 sites in the unit cell, with vertex type indicated in Tab. S484. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S484.

TABLE S484. Tiling t6484 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	18	0	0	12	24	0	0	0	0

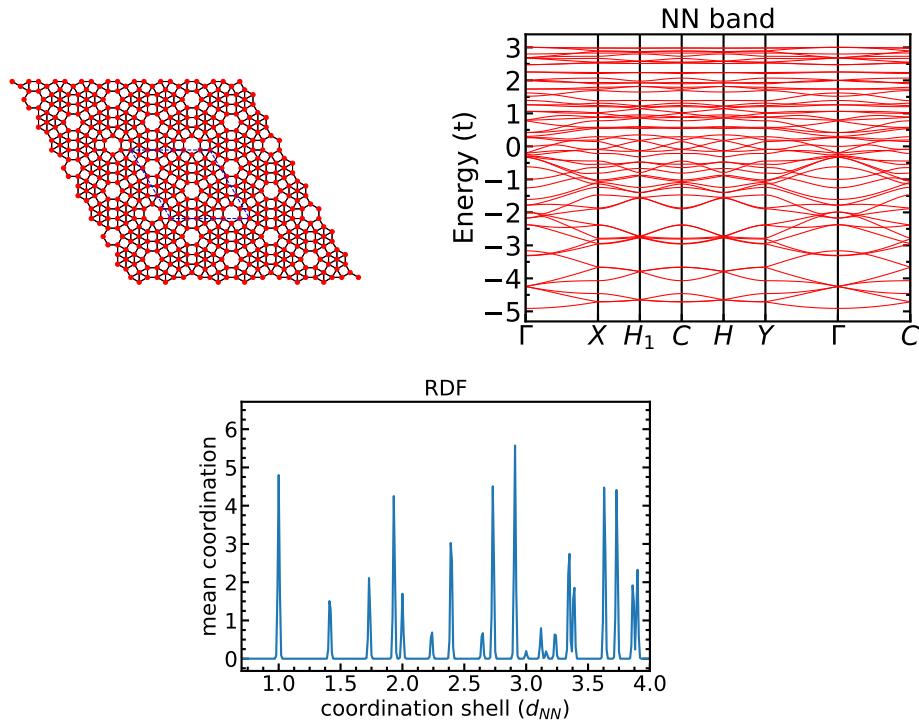


FIG. S484. t6484 lattice framework, nearest neighbors band structure and radial distribution function.

## t6485

Tiling reference number t6485 with space-group '*Amm2'* (38) and 48 sites in the unit cell, with vertex type indicated in Tab. S485. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S485.

TABLE S485. Tiling t6485 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	24	0	0	12	12	0	0	0	0

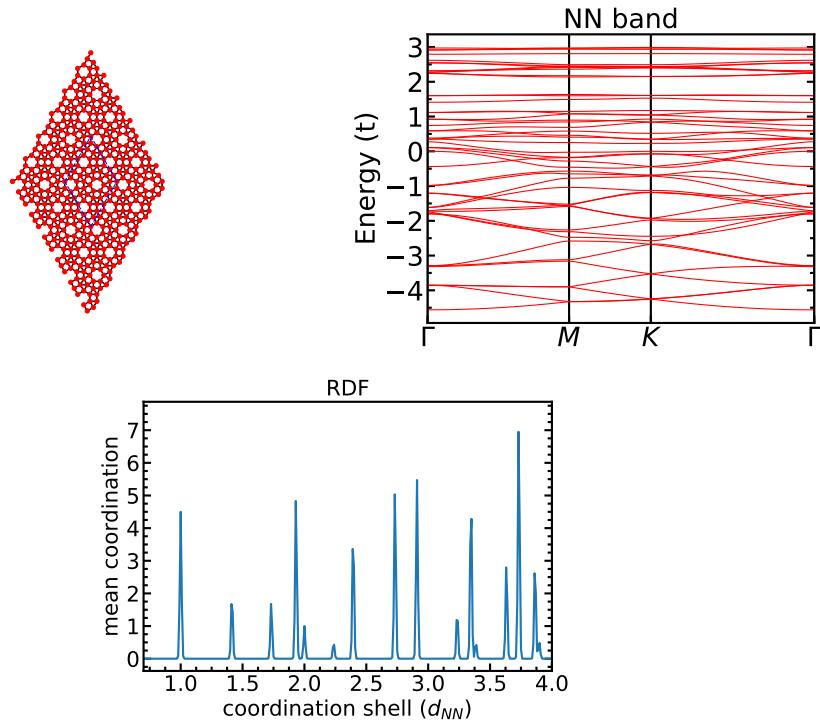


FIG. S485. t6485 lattice framework, nearest neighbors band structure and radial distribution function.

## t6486

Tiling reference number t6486 with space-group ' $Pm'$  (6) and 54 sites in the unit cell, with vertex type indicated in Tab. S486. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S486.

TABLE S486. Tiling t6486 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	6	0	12	12	18	0	0	0	0

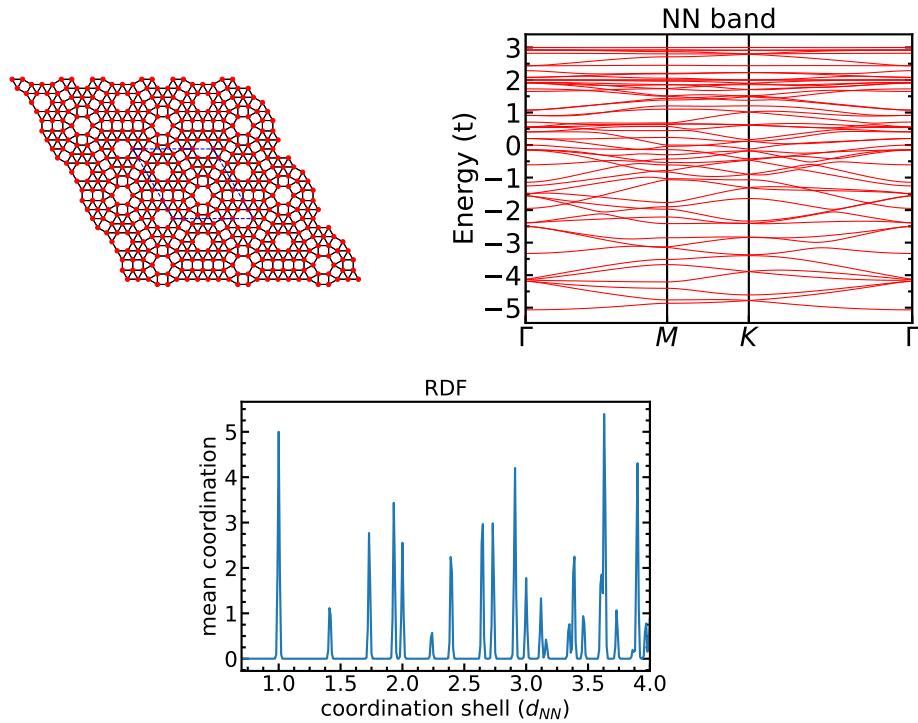


FIG. S486. t6486 lattice framework, nearest neighbors band structure and radial distribution function.

## t6487

Tiling reference number t6487 with space-group ' $Pm'$  (6) and 48 sites in the unit cell, with vertex type indicated in Tab. S487. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S487.

TABLE S487. Tiling t6487 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
12	0	0	0	0	0	6	0	0	18	12	0	0	0	0

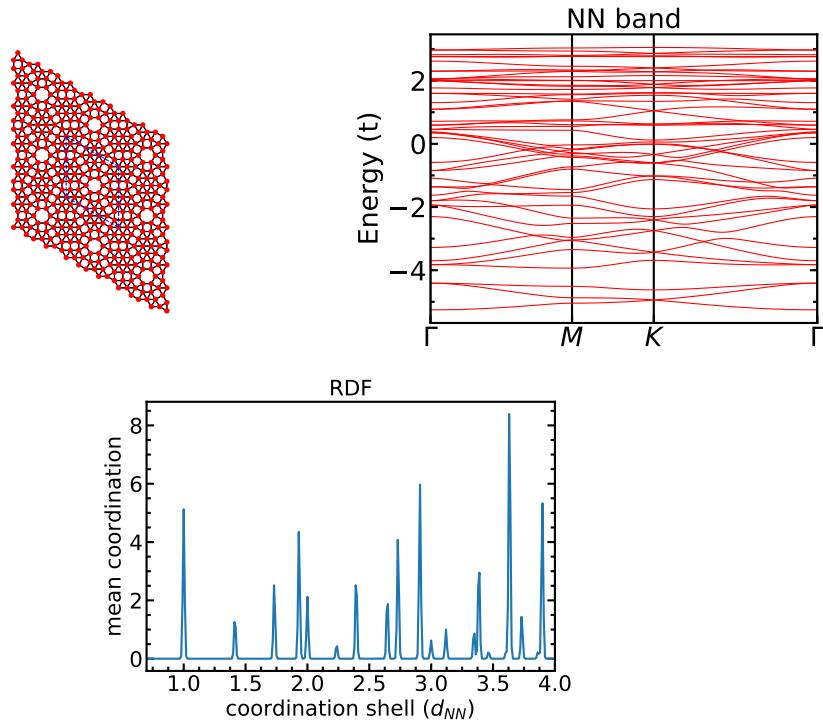


FIG. S487. t6487 lattice framework, nearest neighbors band structure and radial distribution function.

## t6488

Tiling reference number t6488 with space-group ' $Pm'$  (6) and 48 sites in the unit cell, with vertex type indicated in Tab. S488. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S488.

TABLE S488. Tiling t6488 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	24	0	0	24	0	0	0	0	0

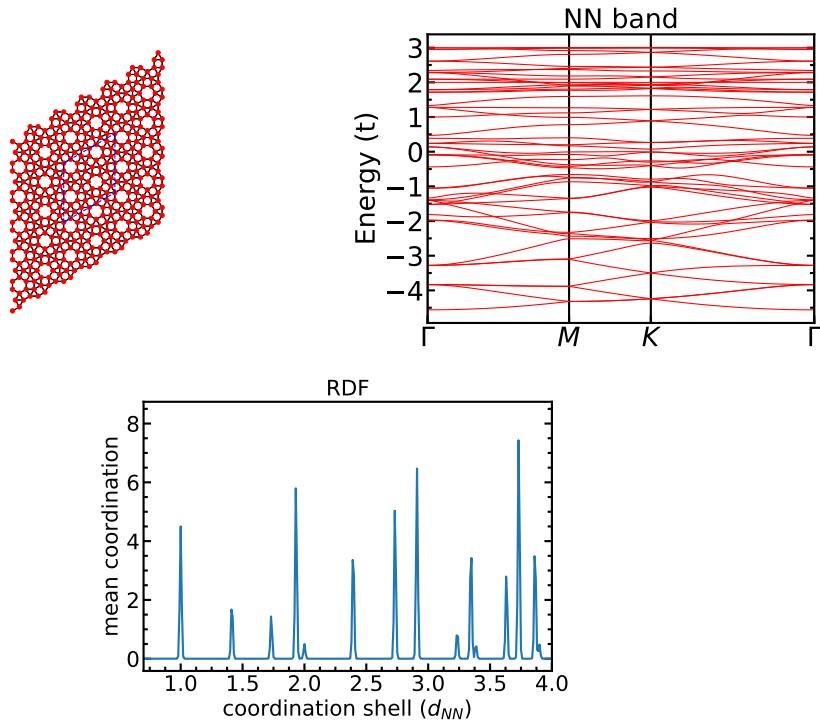


FIG. S488. t6488 lattice framework, nearest neighbors band structure and radial distribution function.

## t6489

Tiling reference number t6489 with space-group '*Amm2'* (38) and 38 sites in the unit cell, with vertex type indicated in Tab. S489. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S489.

TABLE S489. Tiling t6489 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	6	0	0	30	0	0	0	0	0

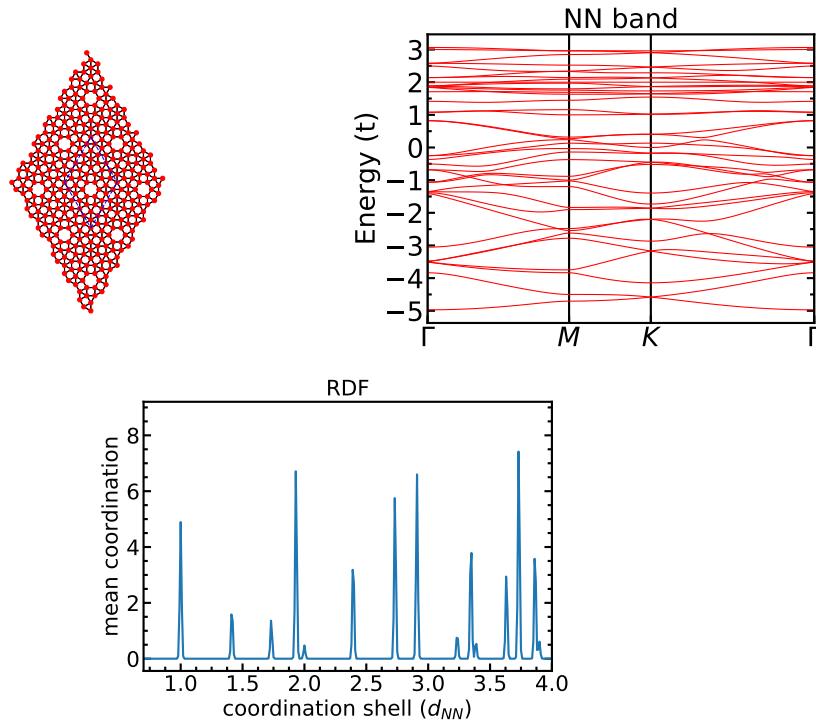


FIG. S489. t6489 lattice framework, nearest neighbors band structure and radial distribution function.

## t6490

Tiling reference number t6490 with space-group ' $Pm'$  (6) and 38 sites in the unit cell, with vertex type indicated in Tab. S490. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S490.

TABLE S490. Tiling t6490 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	6	0	0	30	0	0	0	0	0

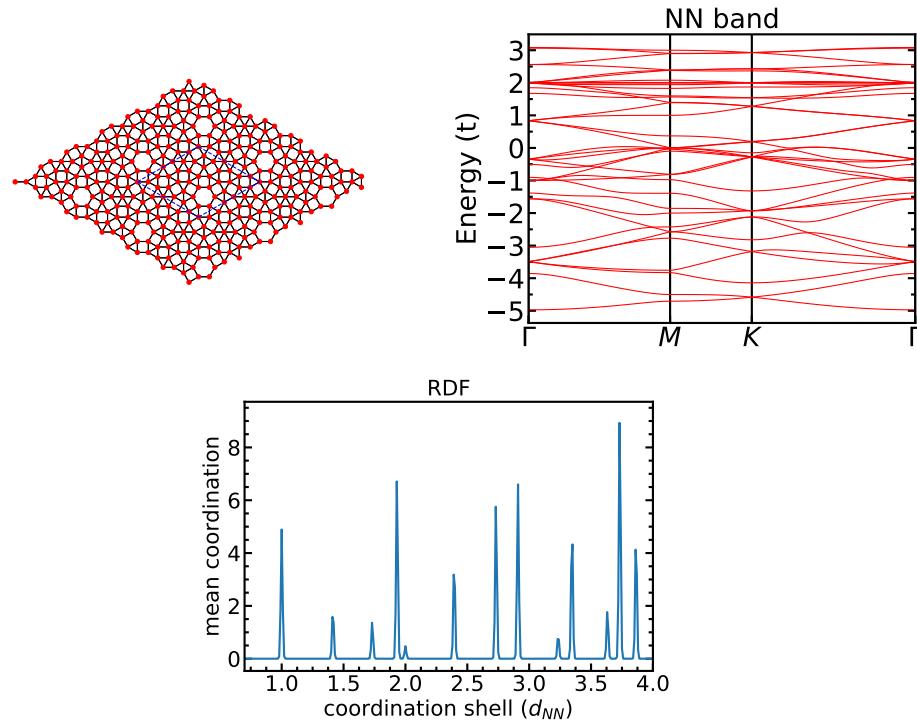


FIG. S490. t6490 lattice framework, nearest neighbors band structure and radial distribution function.

## t6491

Tiling reference number t6491 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S491. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S491.

TABLE S491. Tiling t6491 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	6	0	0	6	2	0	0	0	0

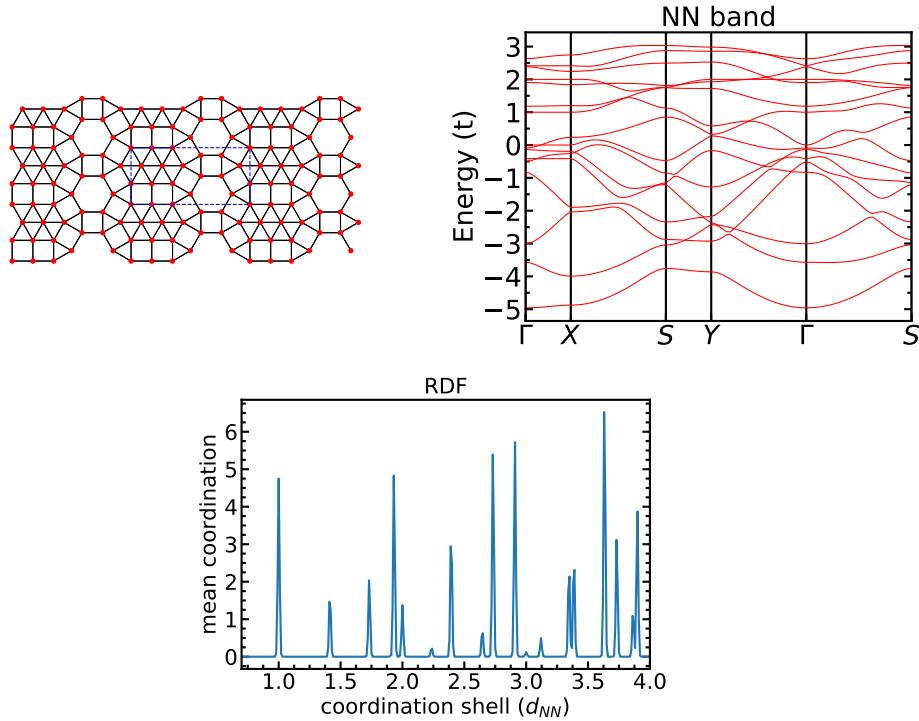


FIG. S491. t6491 lattice framework, nearest neighbors band structure and radial distribution function.

## t6492

Tiling reference number t6492 with space-group ' $Pm'$  (6) and 22 sites in the unit cell, with vertex type indicated in Tab. S492. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S492.

TABLE S492. Tiling t6492 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	0	0	4	0	4	8	0	0

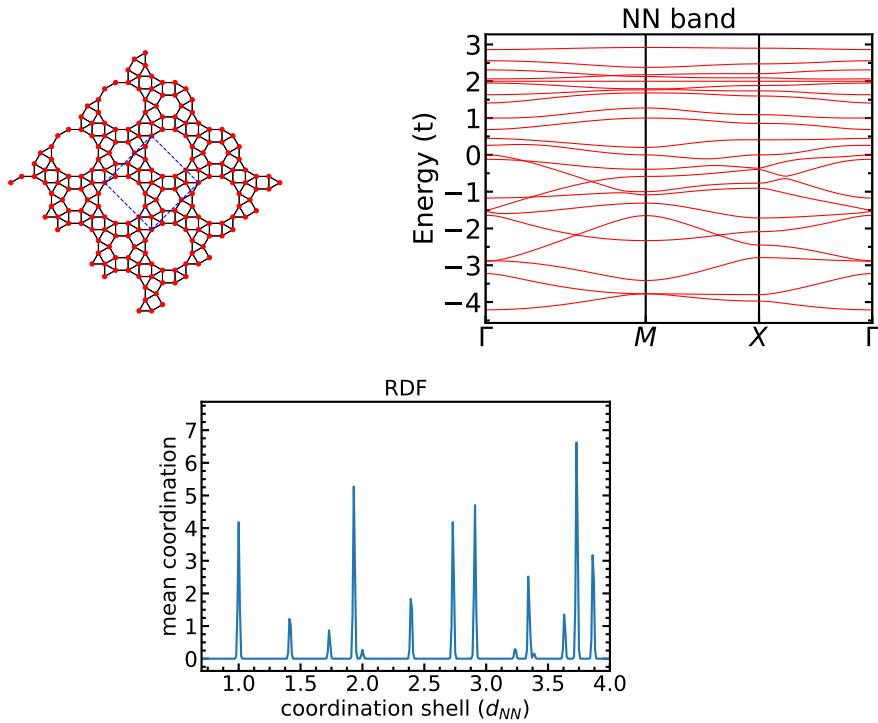


FIG. S492. t6492 lattice framework, nearest neighbors band structure and radial distribution function.

### t6493

Tiling reference number t6493 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S493. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S493.

TABLE S493. Tiling t6493 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	0	0	8	4	0	0	0	0

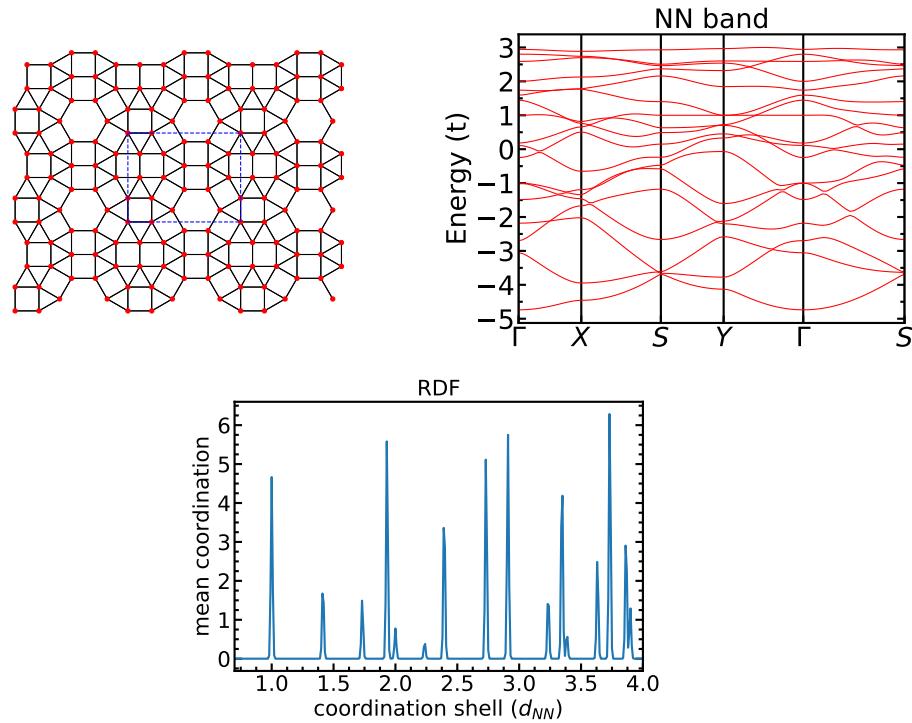


FIG. S493. t6493 lattice framework, nearest neighbors band structure and radial distribution function.

## t6494

Tiling reference number t6494 with space-group ' $Pm'$  (6) and 20 sites in the unit cell, with vertex type indicated in Tab. S494. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S494.

TABLE S494. Tiling t6494 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	0	0	8	6	0	0	0	0

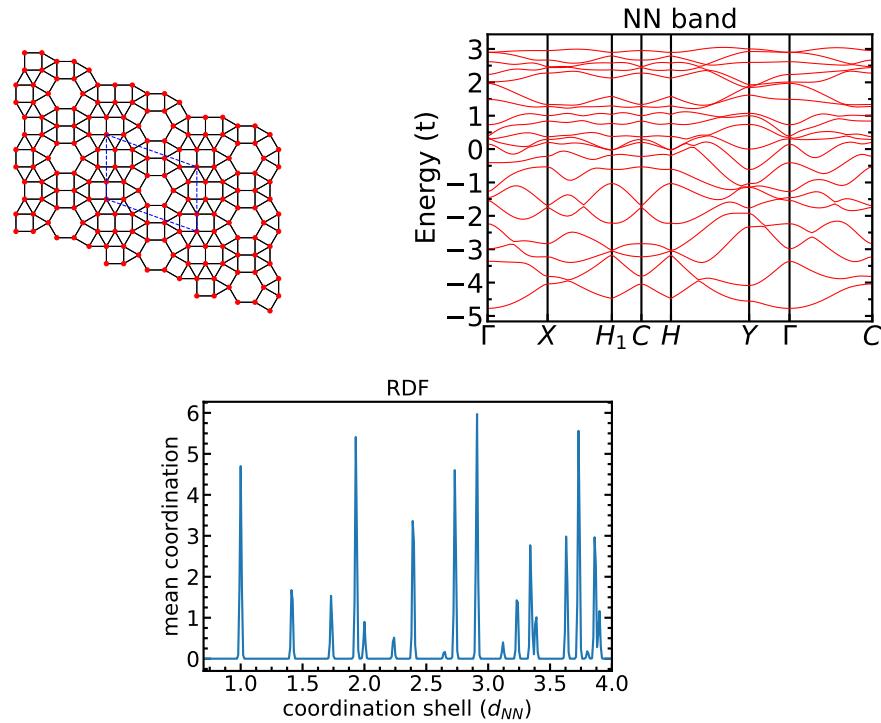


FIG. S494. t6494 lattice framework, nearest neighbors band structure and radial distribution function.

## t6495

Tiling reference number t6495 with space-group ' $Pmm2'$  (25) and 18 sites in the unit cell, with vertex type indicated in Tab. S495. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S495.

TABLE S495. Tiling t6495 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	0	0	6	6	0	0	0	0

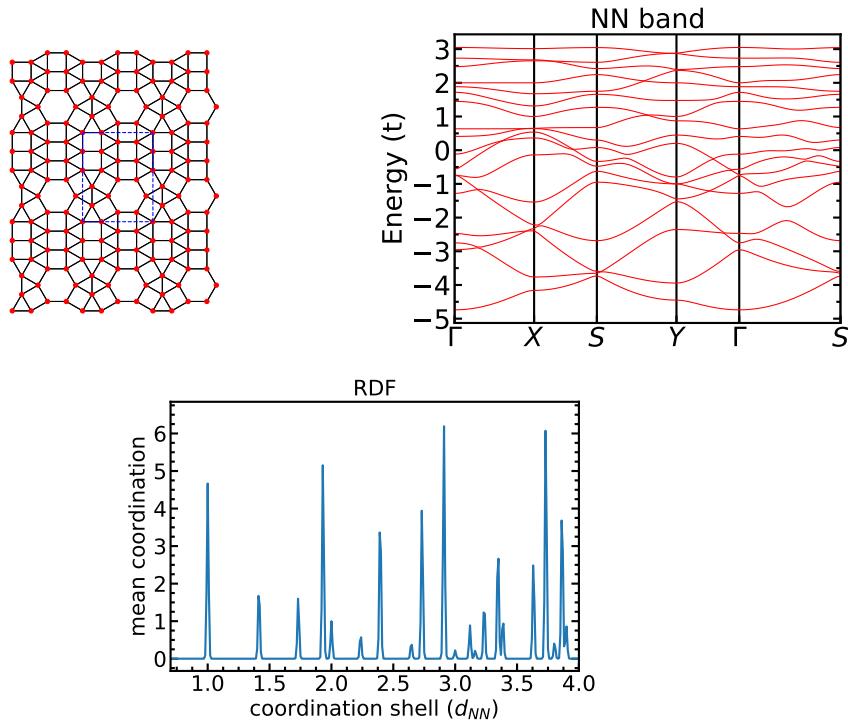


FIG. S495. t6495 lattice framework, nearest neighbors band structure and radial distribution function.

## t6496

Tiling reference number t6496 with space-group '*Amm2'* (38) and 20 sites in the unit cell, with vertex type indicated in Tab. S496. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S496.

TABLE S496. Tiling t6496 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	6	0	0	6	8	0	0	0	0

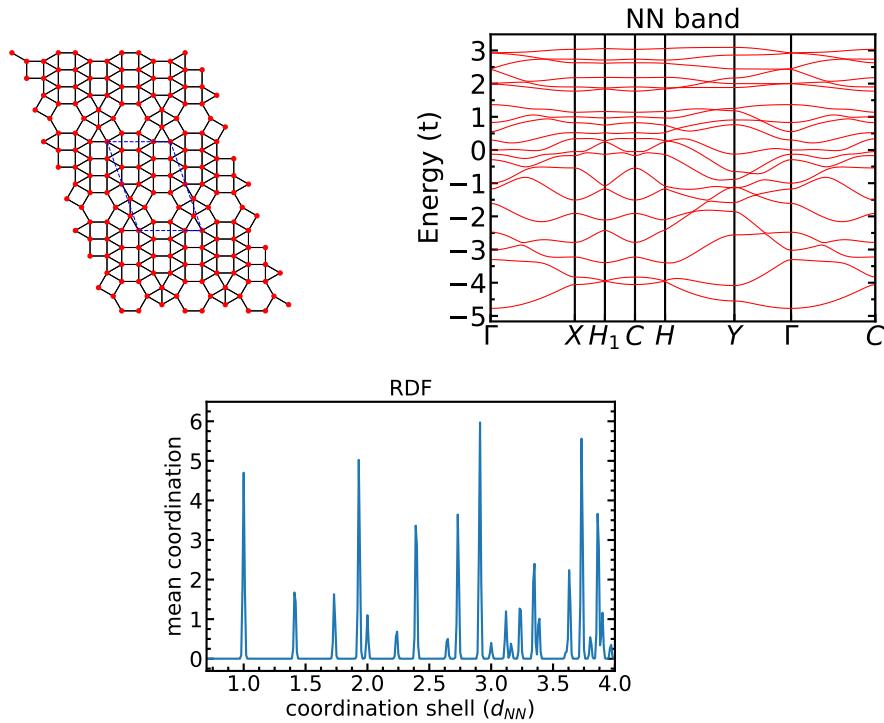


FIG. S496. t6496 lattice framework, nearest neighbors band structure and radial distribution function.

## t6497

Tiling reference number t6497 with space-group '*Amm2'* (38) and 16 sites in the unit cell, with vertex type indicated in Tab. S497. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S497.

TABLE S497. Tiling t6497 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	12	0	0	4	0	0	0	0	0

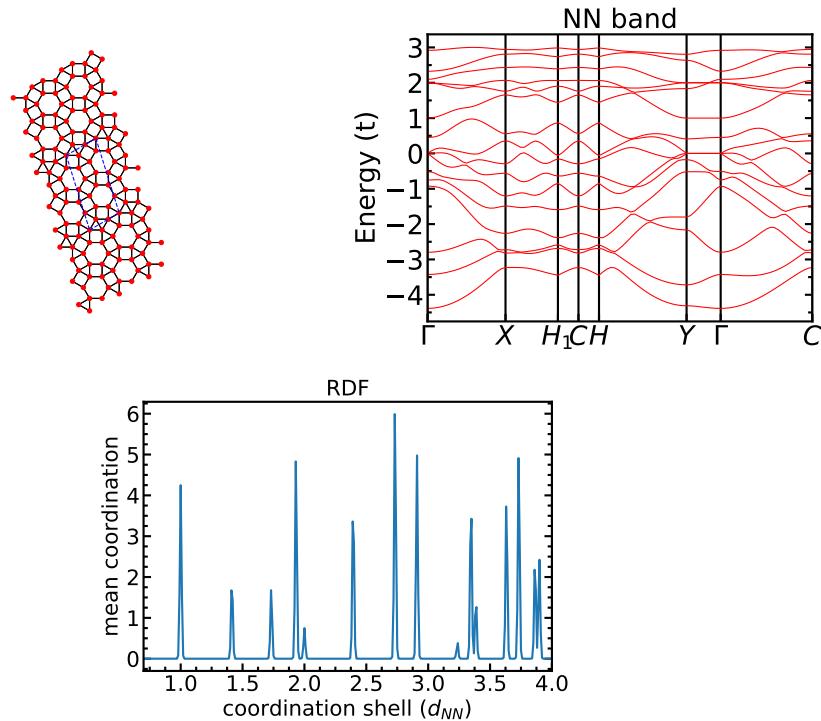


FIG. S497. t6497 lattice framework, nearest neighbors band structure and radial distribution function.

## t6498

Tiling reference number t6498 with space-group ' $Pm'$  (6) and 54 sites in the unit cell, with vertex type indicated in Tab. S498. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S498.

TABLE S498. Tiling t6498 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	12	0	0	24	0	12	0	0	0

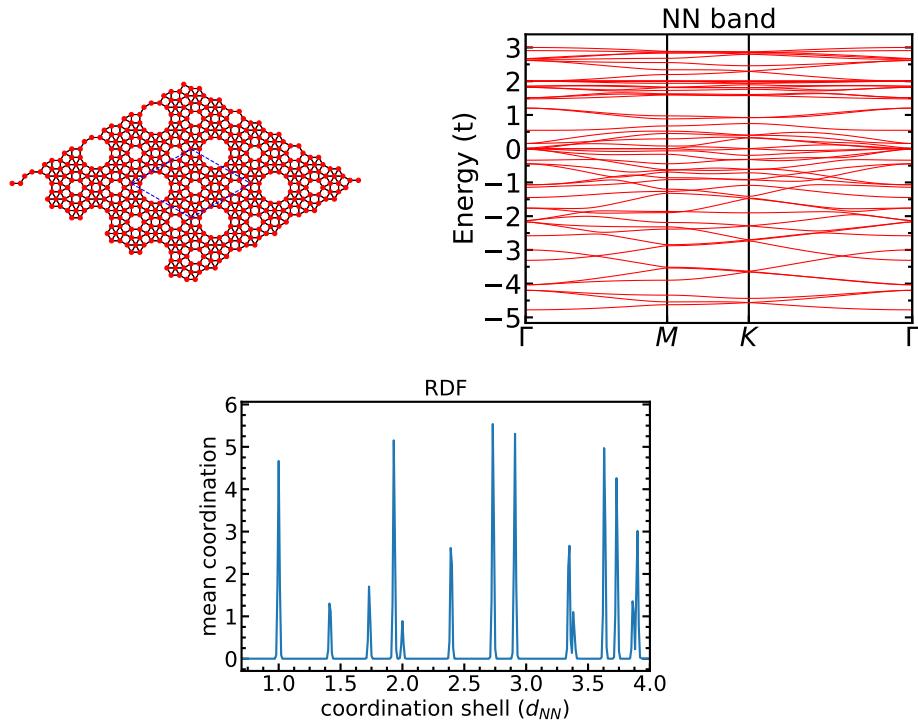


FIG. S498. t6498 lattice framework, nearest neighbors band structure and radial distribution function.

## t6499

Tiling reference number t6499 with space-group '*Amm2'* (38) and 37 sites in the unit cell, with vertex type indicated in Tab. S499. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S499.

TABLE S499. Tiling t6499 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	12	0	0	24	0	0	0	0	0

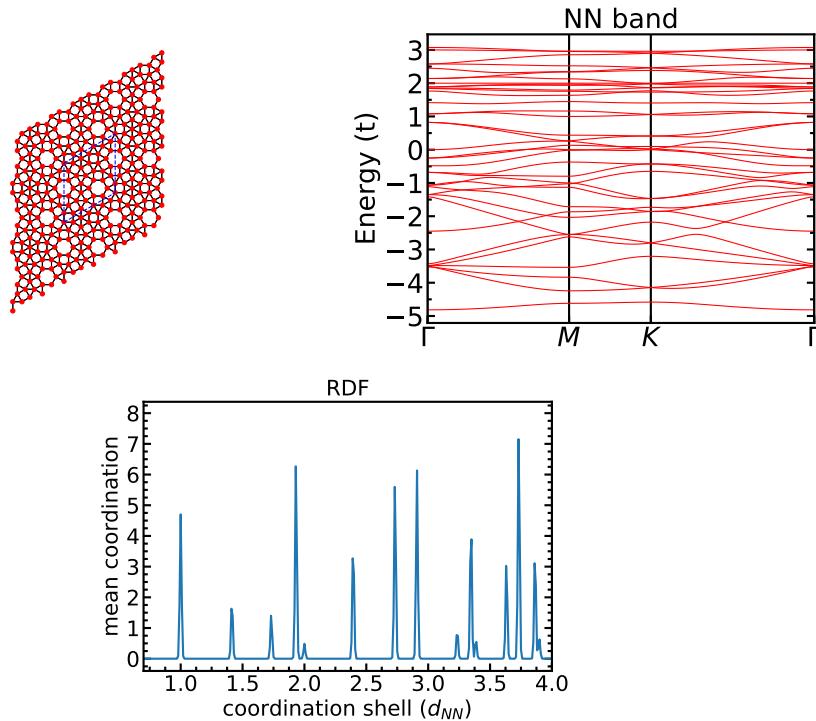


FIG. S499. t6499 lattice framework, nearest neighbors band structure and radial distribution function.

## t6500

Tiling reference number t6500 with space-group '*Amm2'* (38) and 37 sites in the unit cell, with vertex type indicated in Tab. S500. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S500.

TABLE S500. Tiling t6500 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	12	0	0	24	0	0	0	0	0

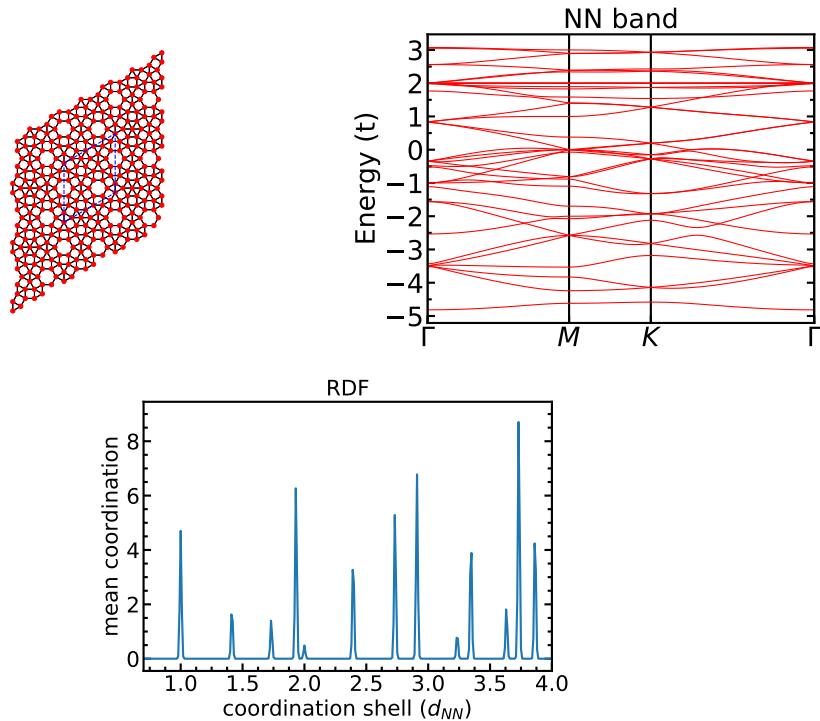


FIG. S500. t6500 lattice framework, nearest neighbors band structure and radial distribution function.

## t6501

Tiling reference number t6501 with space-group ' $Cmmm$ ' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S501. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S501.

TABLE S501. Tiling t6501 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	4	0	0	0	0	0	10

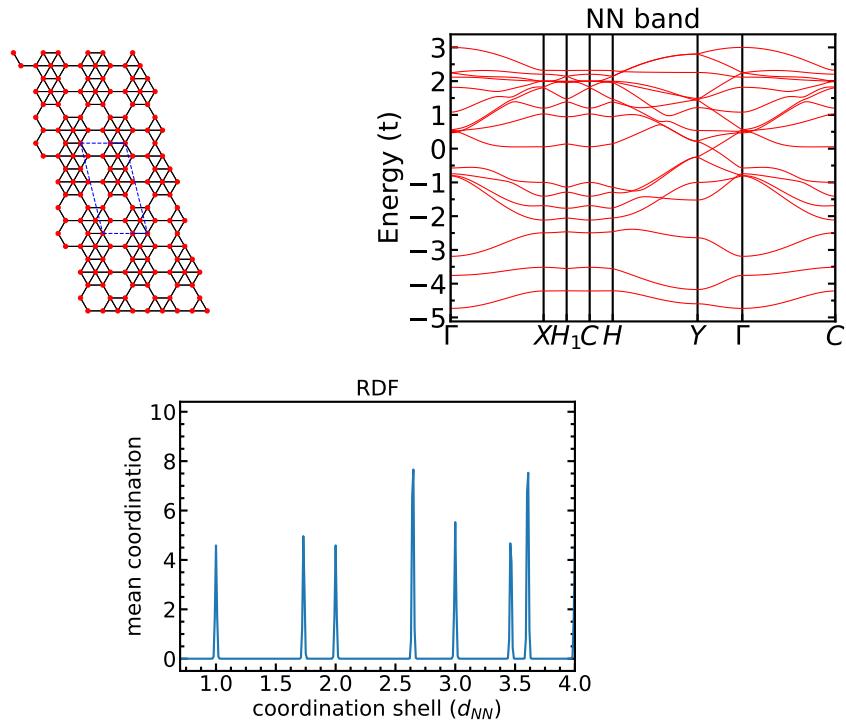


FIG. S501. t6501 lattice framework, nearest neighbors band structure and radial distribution function.

## t6502

Tiling reference number t6502 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S502. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S502.

TABLE S502. Tiling t6502 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	8	0	0	0	0	0	8

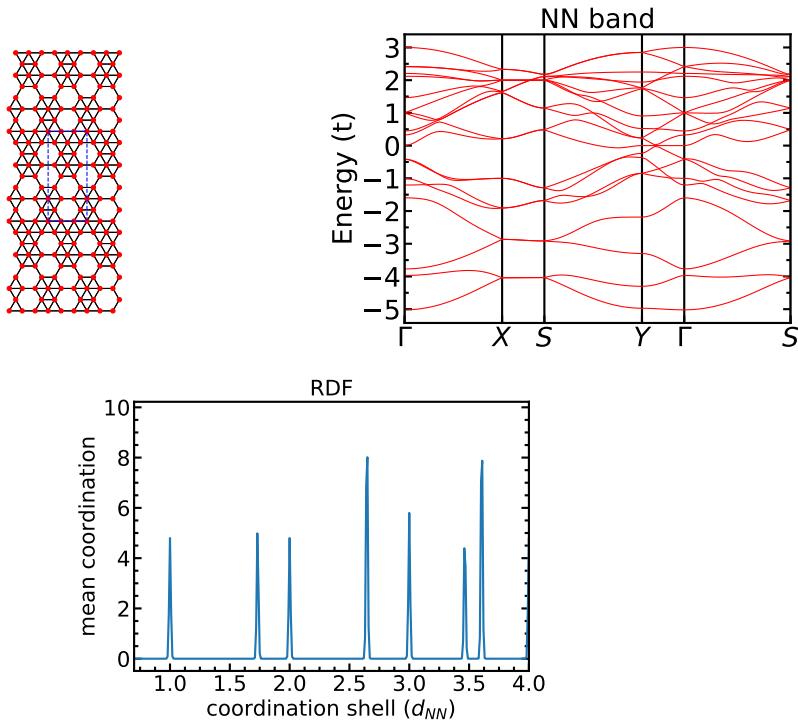


FIG. S502. t6502 lattice framework, nearest neighbors band structure and radial distribution function.

### t6503

Tiling reference number t6503 with space-group ' $Cmmm$ ' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S503. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S503.

TABLE S503. Tiling t6503 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	10	0	0	0	0	0	4

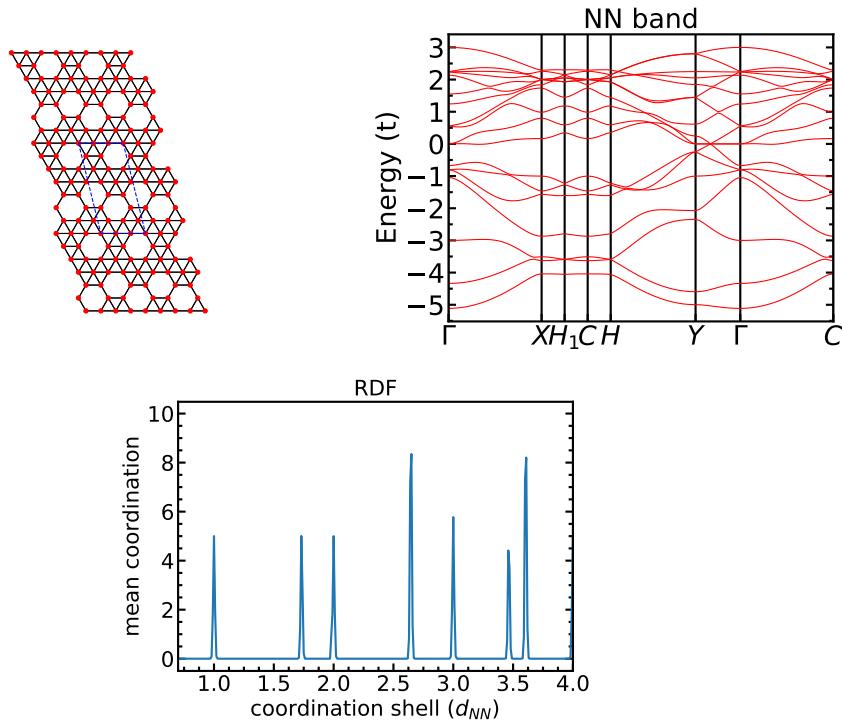


FIG. S503. t6503 lattice framework, nearest neighbors band structure and radial distribution function.

## t6504

Tiling reference number t6504 with space-group '*Amm2'* (38) and 37 sites in the unit cell, with vertex type indicated in Tab. S504. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S504.

TABLE S504. Tiling t6504 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	6	6	0	0	0	0	0	24

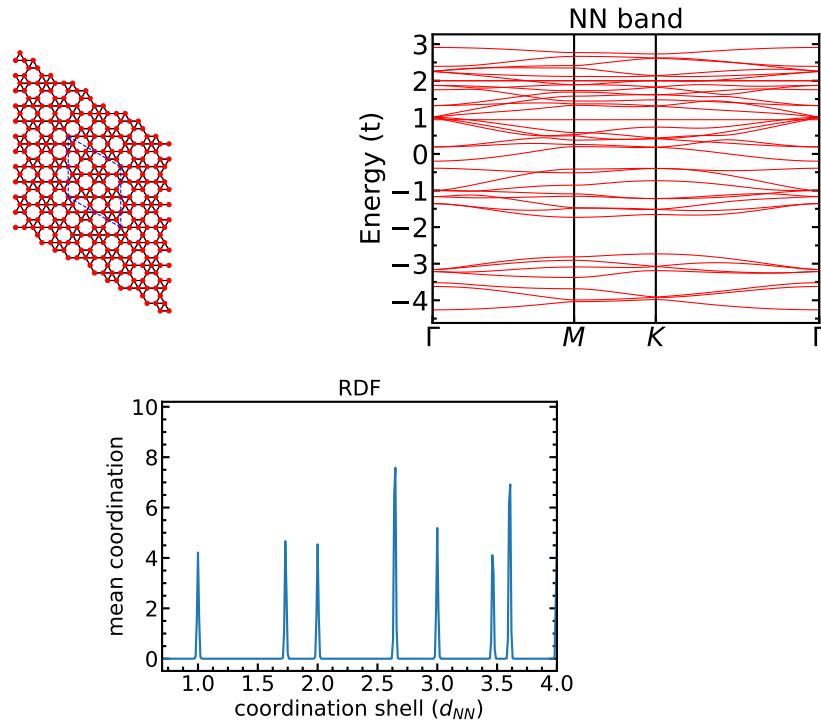


FIG. S504. t6504 lattice framework, nearest neighbors band structure and radial distribution function.

## t6505

Tiling reference number t6505 with space-group '*Amm2'* (38) and 37 sites in the unit cell, with vertex type indicated in Tab. S505. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S505.

TABLE S505. Tiling t6505 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	18	0	0	0	0	0	0	18

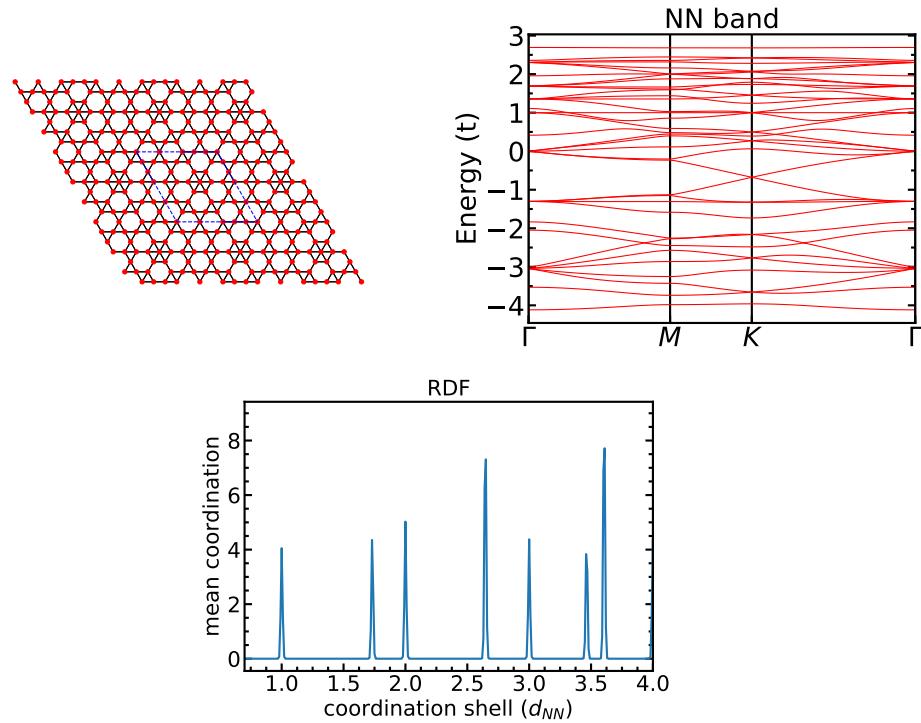


FIG. S505. t6505 lattice framework, nearest neighbors band structure and radial distribution function.

## t6506

Tiling reference number t6506 with space-group ' $P6/m$ ' (175) and 31 sites in the unit cell, with vertex type indicated in Tab. S506. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S506.

TABLE S506. Tiling t6506 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	6	12	0	0	0	0	0	12

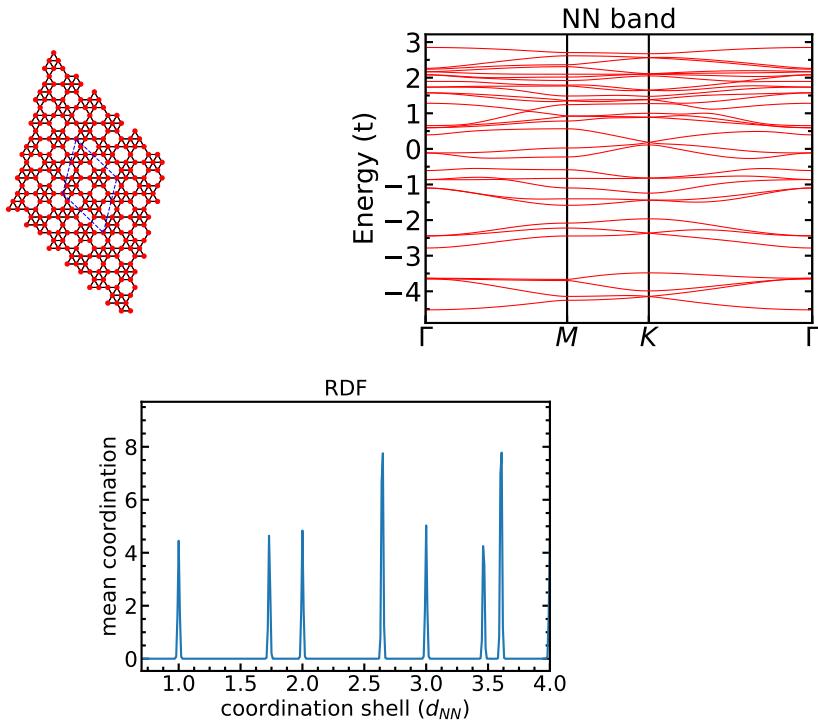


FIG. S506. t6506 lattice framework, nearest neighbors band structure and radial distribution function.

## t6507

Tiling reference number t6507 with space-group ' $P6/mmm$ ' (191) and 30 sites in the unit cell, with vertex type indicated in Tab. S507. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S507.

TABLE S507. Tiling t6507 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	0	12	0	0	0	0	0	12

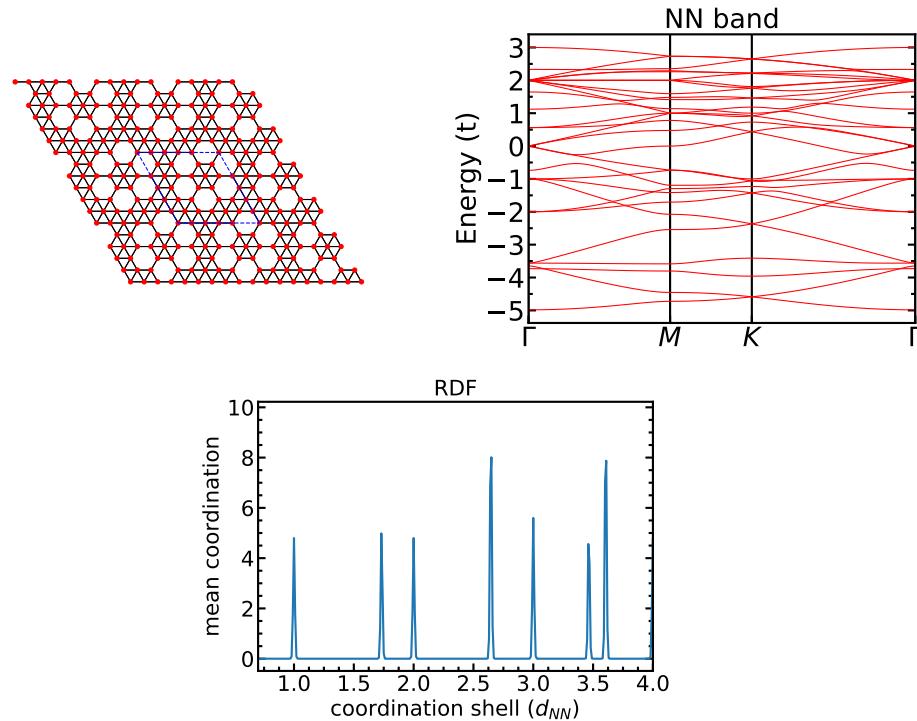


FIG. S507. t6507 lattice framework, nearest neighbors band structure and radial distribution function.

## t6508

Tiling reference number t6508 with space-group ' $P6/m$ ' (175) and 31 sites in the unit cell, with vertex type indicated in Tab. S508. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S508.

TABLE S508. Tiling t6508 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	12	0	0	0	0	0	12

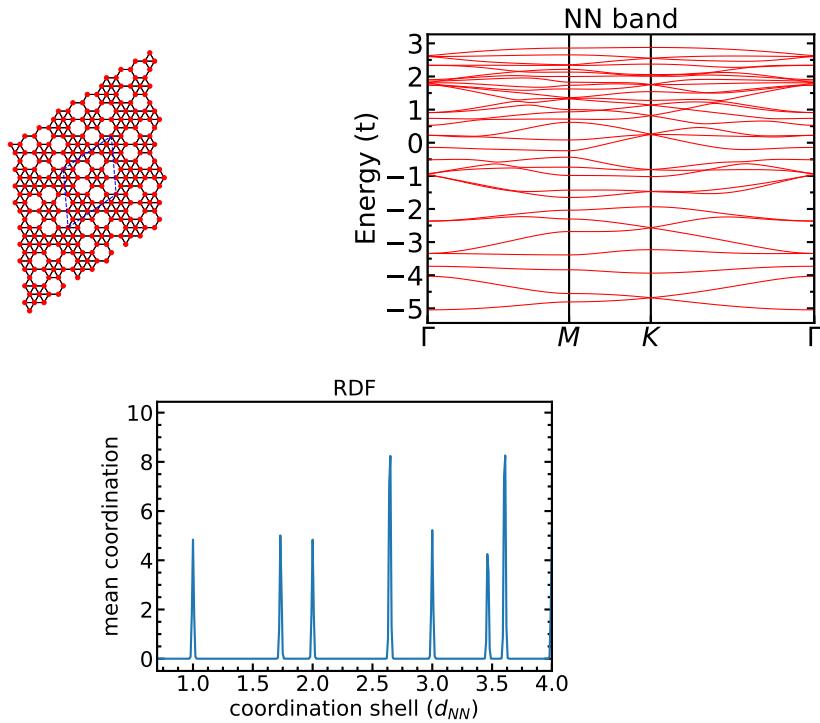


FIG. S508. t6508 lattice framework, nearest neighbors band structure and radial distribution function.

## t6509

Tiling reference number t6509 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S509. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S509.

TABLE S509. Tiling t6509 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	4	0	0	0	0	0	10

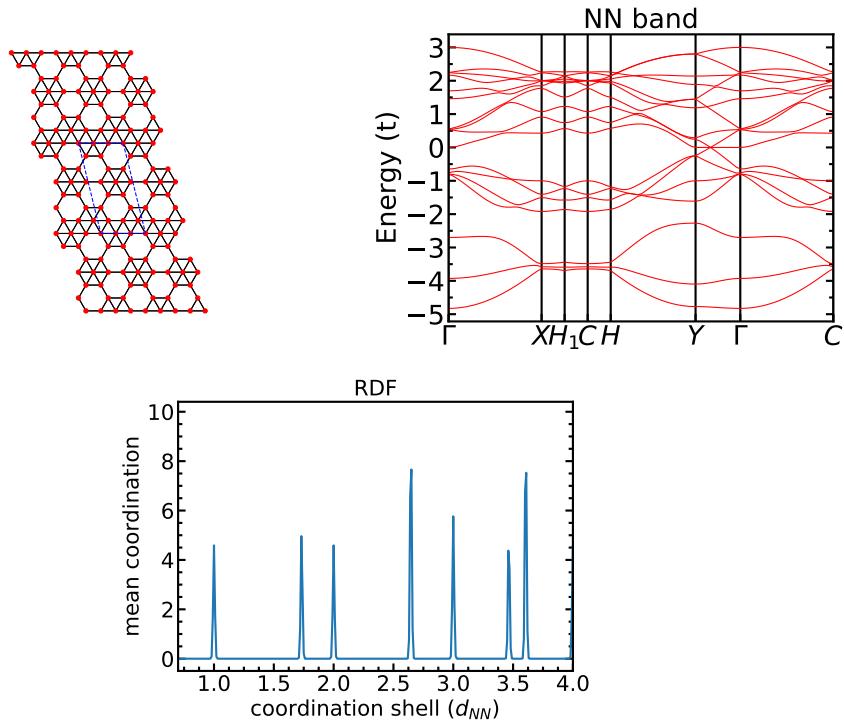


FIG. S509. t6509 lattice framework, nearest neighbors band structure and radial distribution function.

## t6510

Tiling reference number t6510 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S510. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S510.

TABLE S510. Tiling t6510 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	8	0	0	0	0	0	8

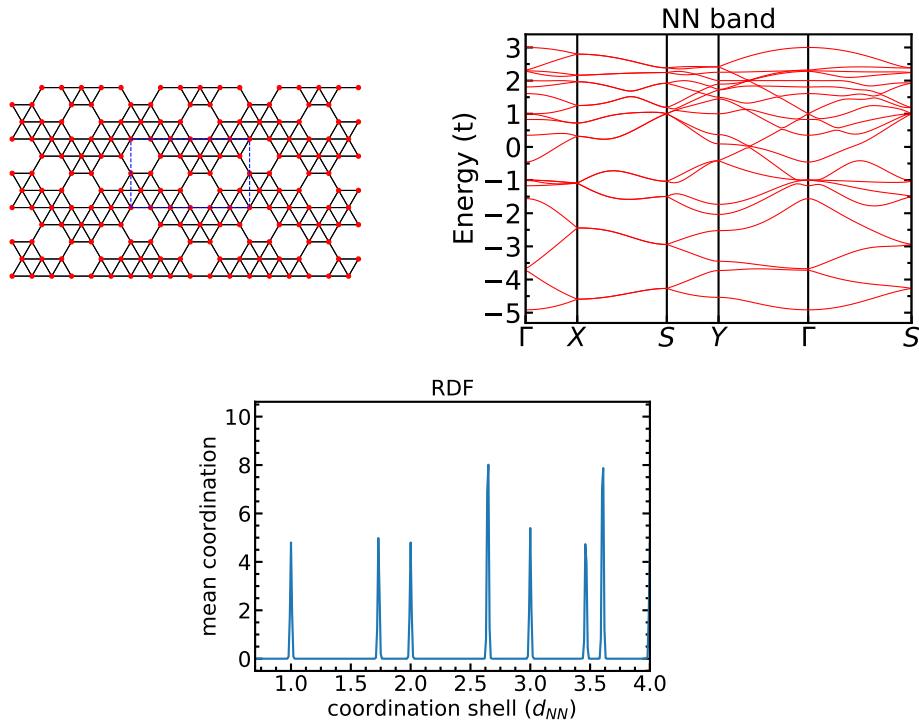


FIG. S510. t6510 lattice framework, nearest neighbors band structure and radial distribution function.

## t6511

Tiling reference number t6511 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S511. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S511.

TABLE S511. Tiling t6511 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	2	0	0	0	0	0	8

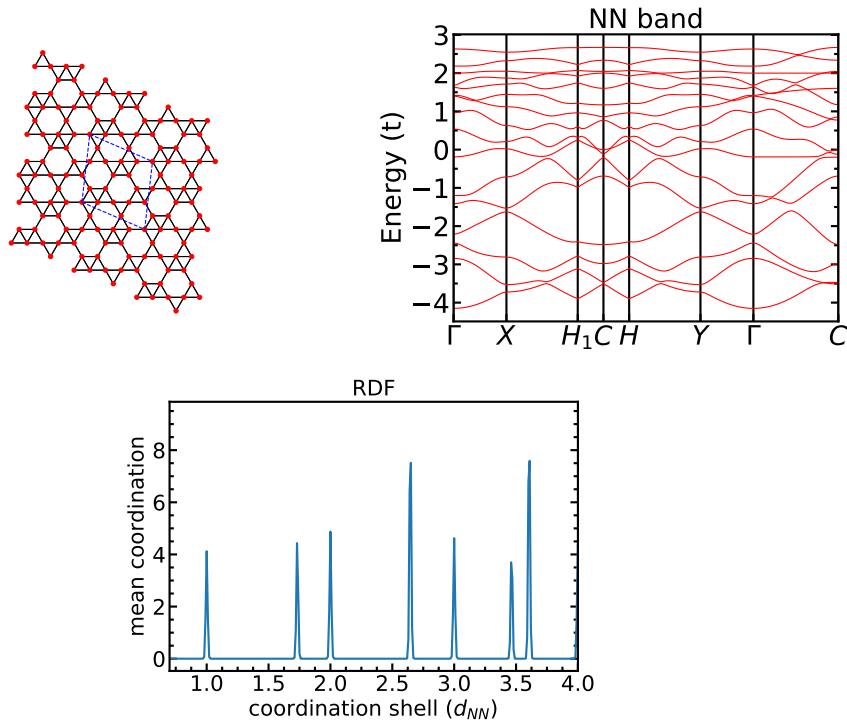


FIG. S511. t6511 lattice framework, nearest neighbors band structure and radial distribution function.

## t6512

Tiling reference number t6512 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S512. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S512.

TABLE S512. Tiling t6512 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	6	0	0	0	0	0	4

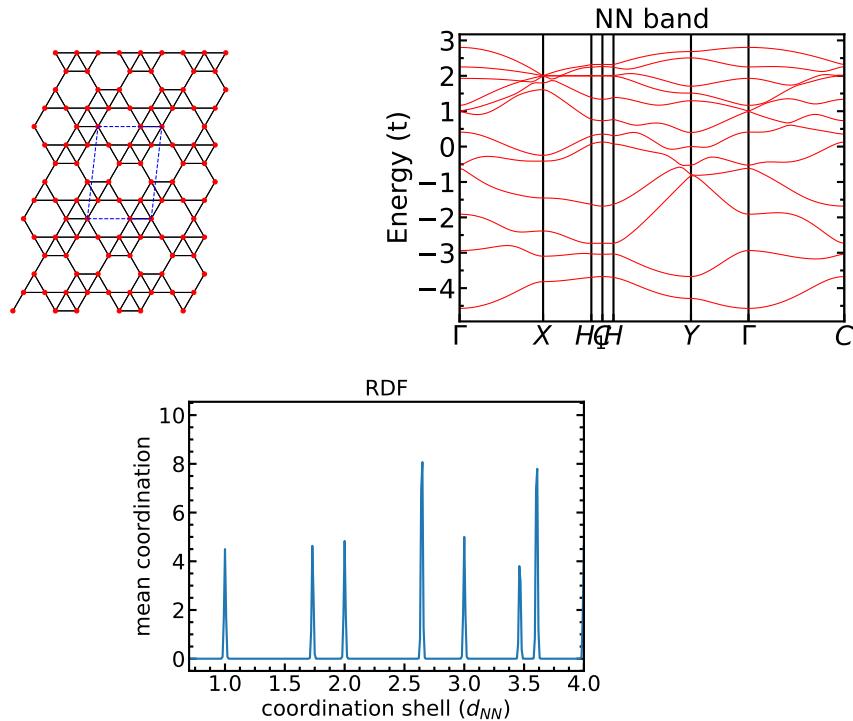


FIG. S512. t6512 lattice framework, nearest neighbors band structure and radial distribution function.

### t6513

Tiling reference number t6513 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S513. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S513.

TABLE S513. Tiling t6513 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	1	4	0	0	0	0	0	6

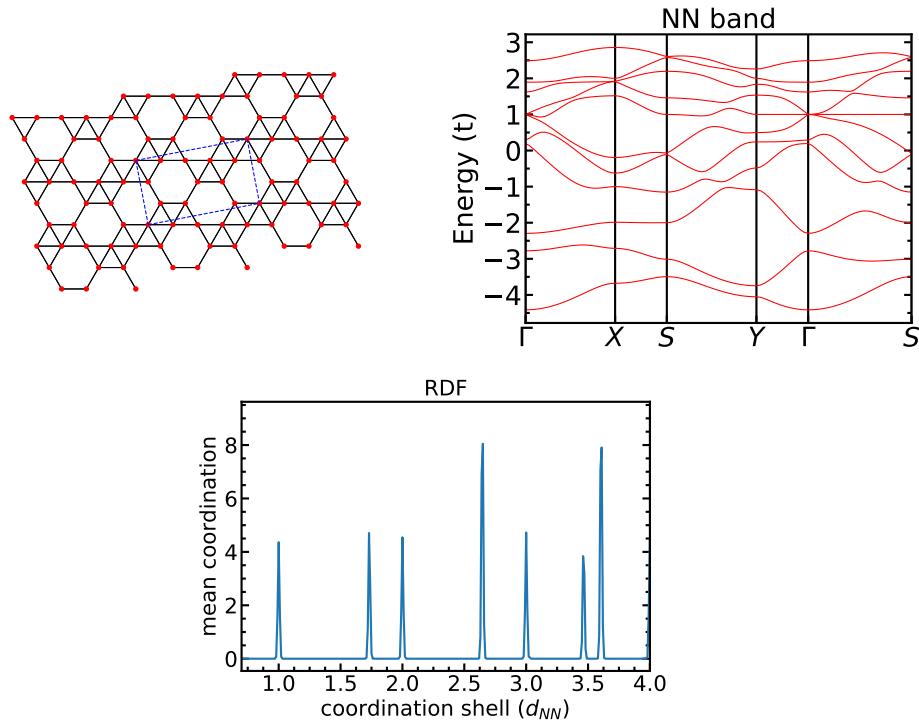


FIG. S513. t6513 lattice framework, nearest neighbors band structure and radial distribution function.

## t6514

Tiling reference number t6514 with space-group ' $Pm'$  (6) and 31 sites in the unit cell, with vertex type indicated in Tab. S514. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S514.

TABLE S514. Tiling t6514 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	6	12	0	0	0	0	0	12

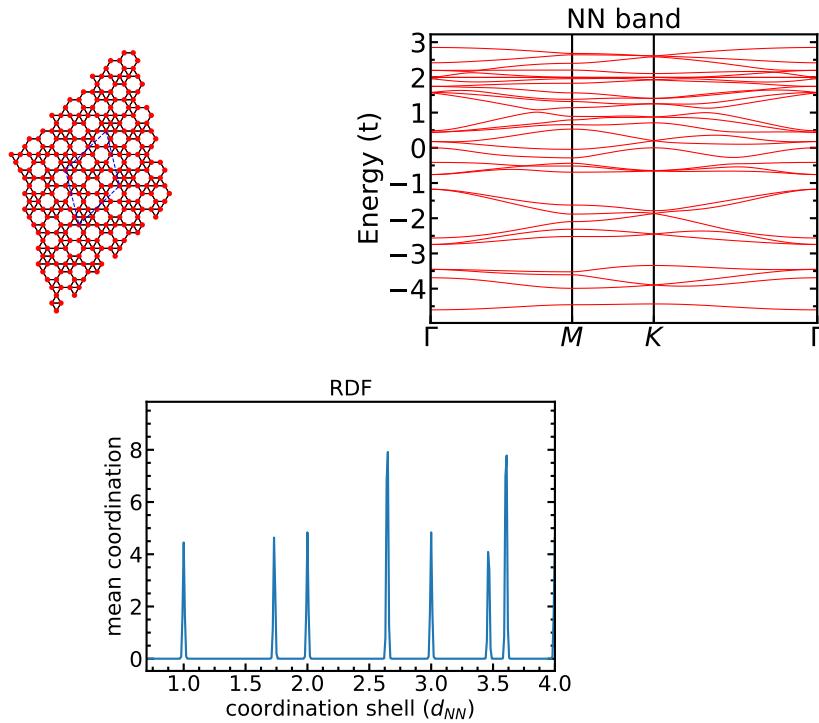


FIG. S514. t6514 lattice framework, nearest neighbors band structure and radial distribution function.

## t6515

Tiling reference number t6515 with space-group ' $Pmc2_1'$  (26) and 24 sites in the unit cell, with vertex type indicated in Tab. S515. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S515.

TABLE S515. Tiling t6515 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	12	0	0	0	0	0	8

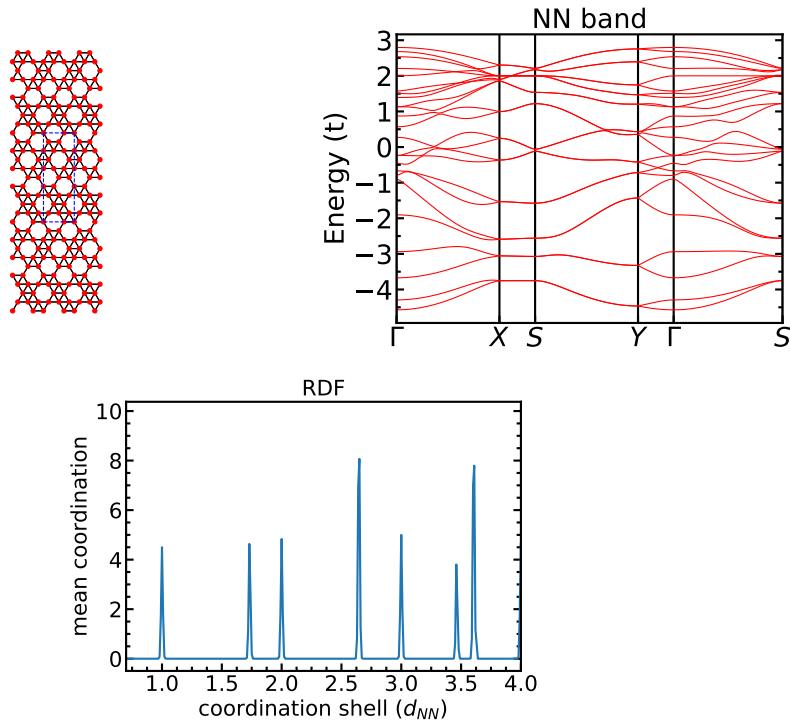


FIG. S515. t6515 lattice framework, nearest neighbors band structure and radial distribution function.

## t6516

Tiling reference number t6516 with space-group ' $Pmmm$ ' (47) and 15 sites in the unit cell, with vertex type indicated in Tab. S516. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S516.

TABLE S516. Tiling t6516 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	9	0	0	0	0	0	0	6

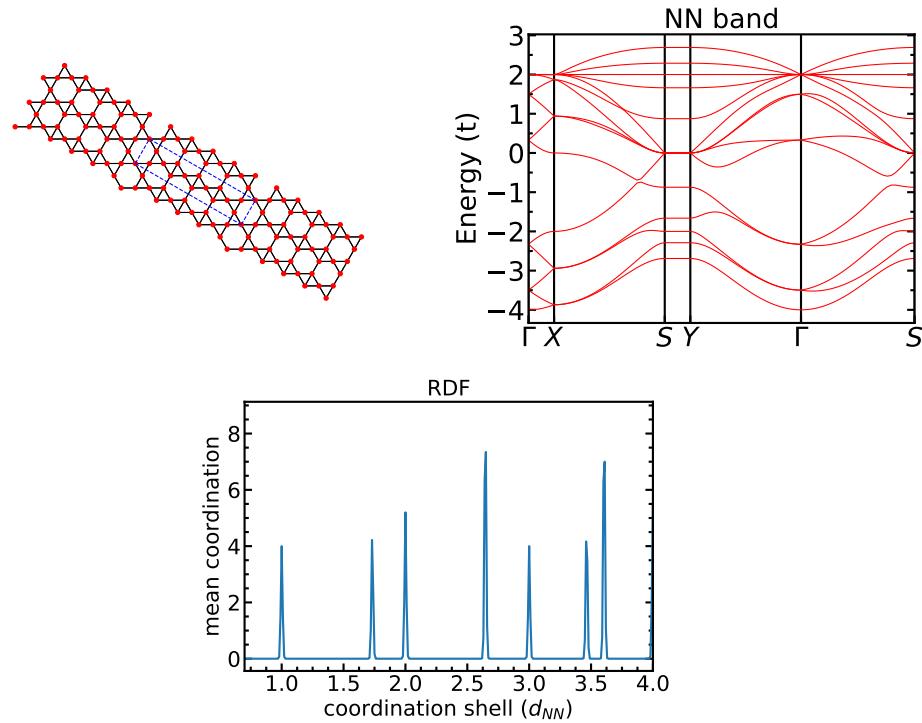


FIG. S516. t6516 lattice framework, nearest neighbors band structure and radial distribution function.

**t6517**

Tiling reference number t6517 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S517. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S517.

TABLE S517. Tiling t6517 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	4	4	0	0	0	0	0	6

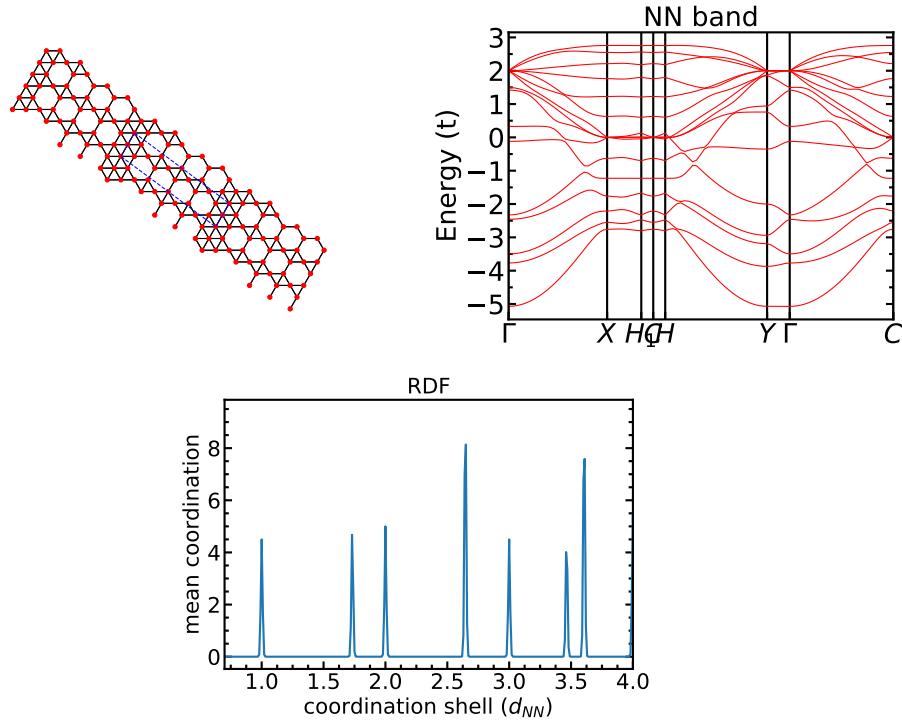


FIG. S517. t6517 lattice framework, nearest neighbors band structure and radial distribution function.

## t6518

Tiling reference number t6518 with space-group '*Cmmm*' (65) and 19 sites in the unit cell, with vertex type indicated in Tab. S518. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S518.

TABLE S518. Tiling t6518 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	4	6	0	0	0	0	0	8

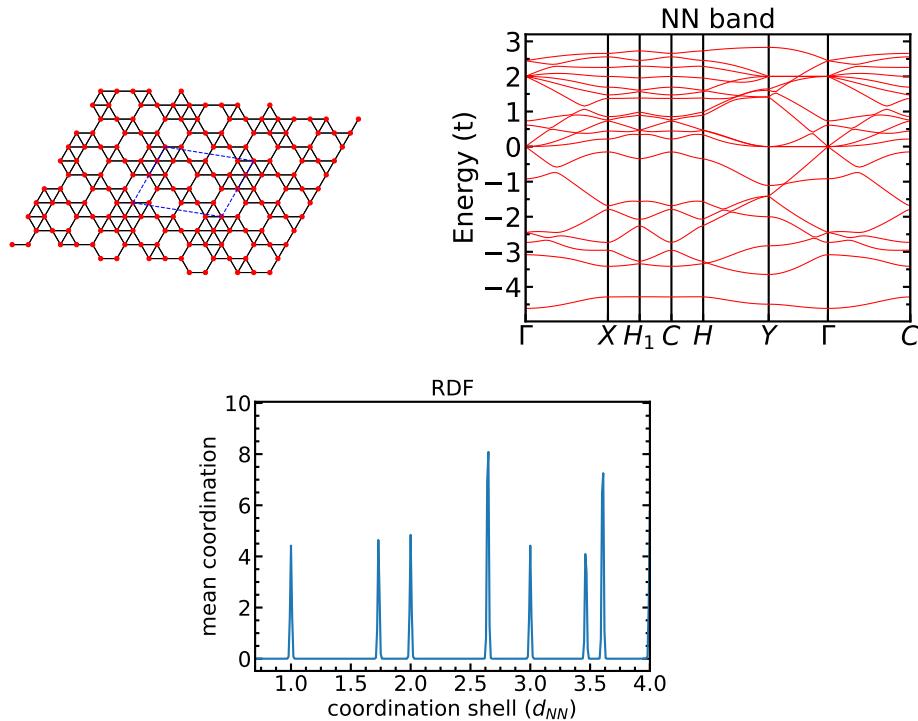


FIG. S518. t6518 lattice framework, nearest neighbors band structure and radial distribution function.

## t6519

Tiling reference number t6519 with space-group ' $Pmmm$ ' (47) and 15 sites in the unit cell, with vertex type indicated in Tab. S519. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S519.

TABLE S519. Tiling t6519 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	9	0	0	0	0	0	0	6

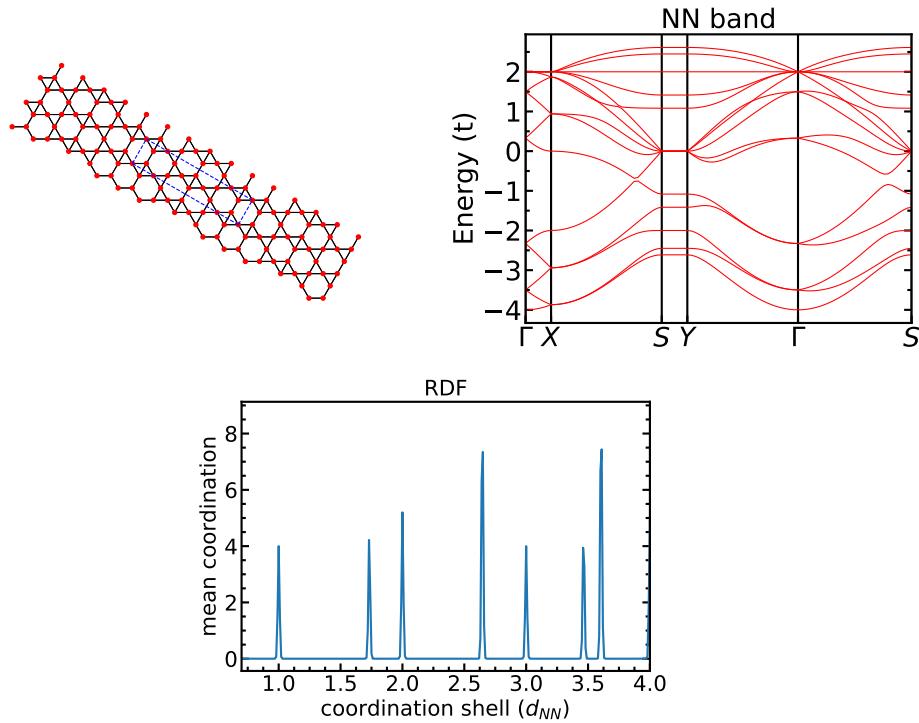


FIG. S519. t6519 lattice framework, nearest neighbors band structure and radial distribution function.

## t6520

Tiling reference number t6520 with space-group ' $Pmmm$ ' (47) and 15 sites in the unit cell, with vertex type indicated in Tab. S520. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S520.

TABLE S520. Tiling t6520 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	13	0	0	0	0	0	0	2

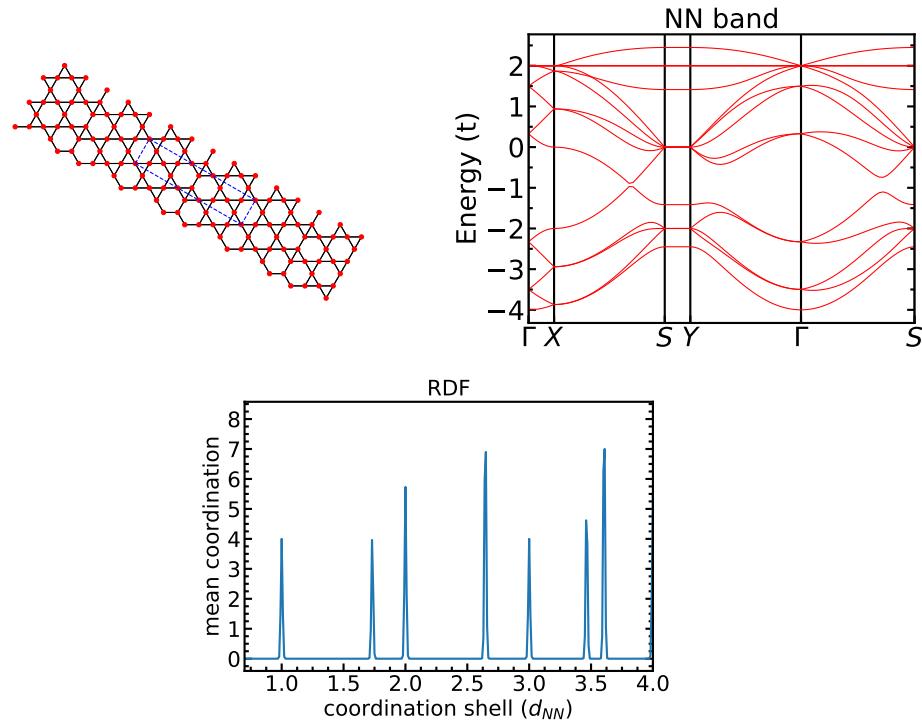


FIG. S520. t6520 lattice framework, nearest neighbors band structure and radial distribution function.

## t6521

Tiling reference number t6521 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S521. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S521.

TABLE S521. Tiling t6521 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	8	4	0	0	0	0	0	2

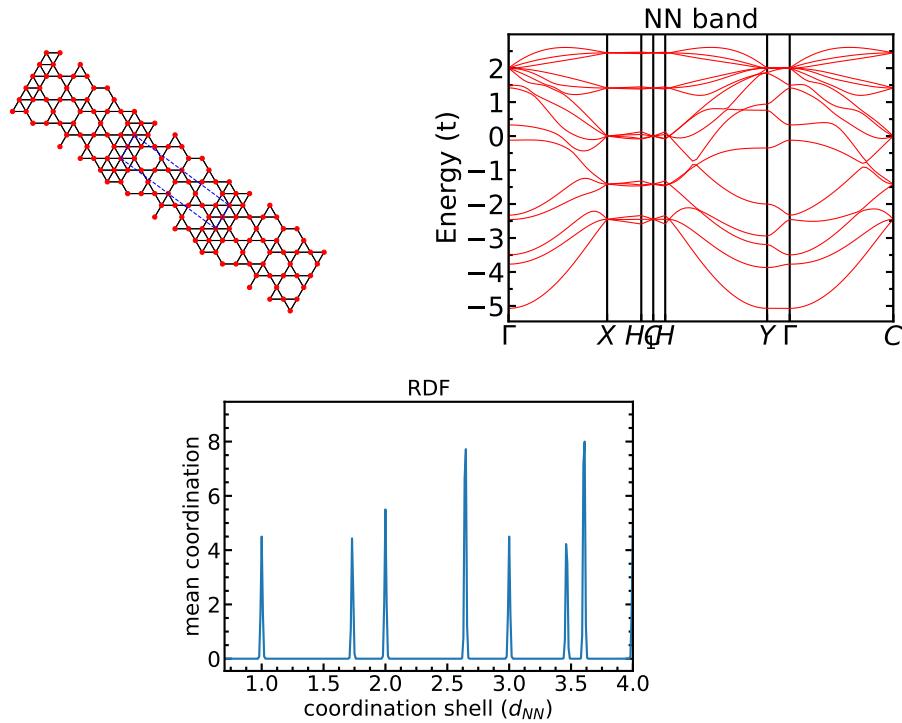


FIG. S521. t6521 lattice framework, nearest neighbors band structure and radial distribution function.

## t6522

Tiling reference number t6522 with space-group ' $P2/m$ ' (10) and 16 sites in the unit cell, with vertex type indicated in Tab. S522. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S522.

TABLE S522. Tiling t6522 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	4	0	0	0	2

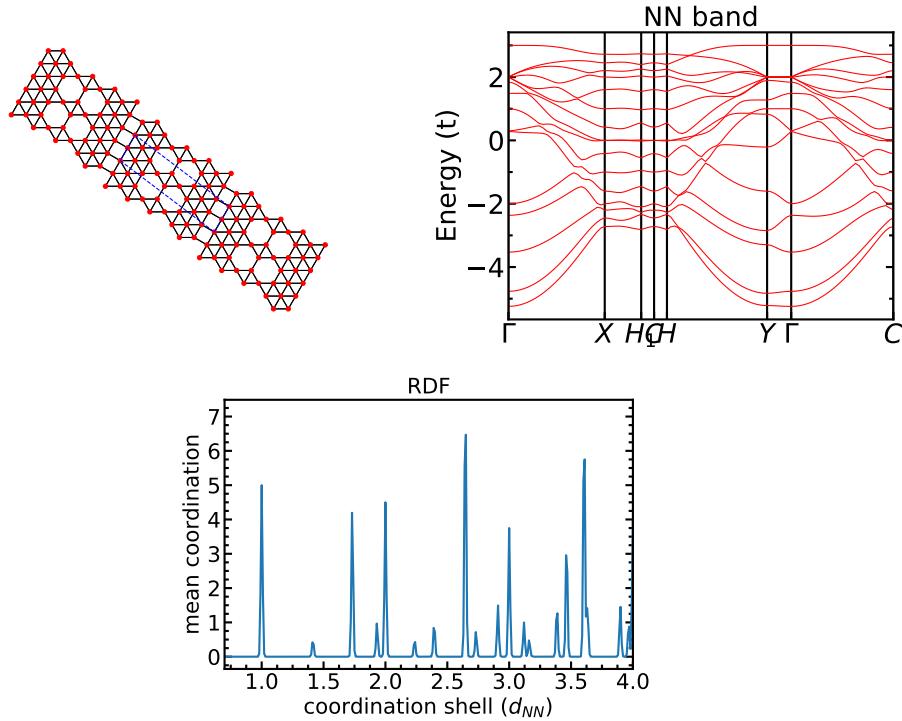


FIG. S522. t6522 lattice framework, nearest neighbors band structure and radial distribution function.

## t6523

Tiling reference number t6523 with space-group ' $Pmmm$ ' (47) and 16 sites in the unit cell, with vertex type indicated in Tab. S523. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S523.

TABLE S523. Tiling t6523 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	4	0	0	0	2

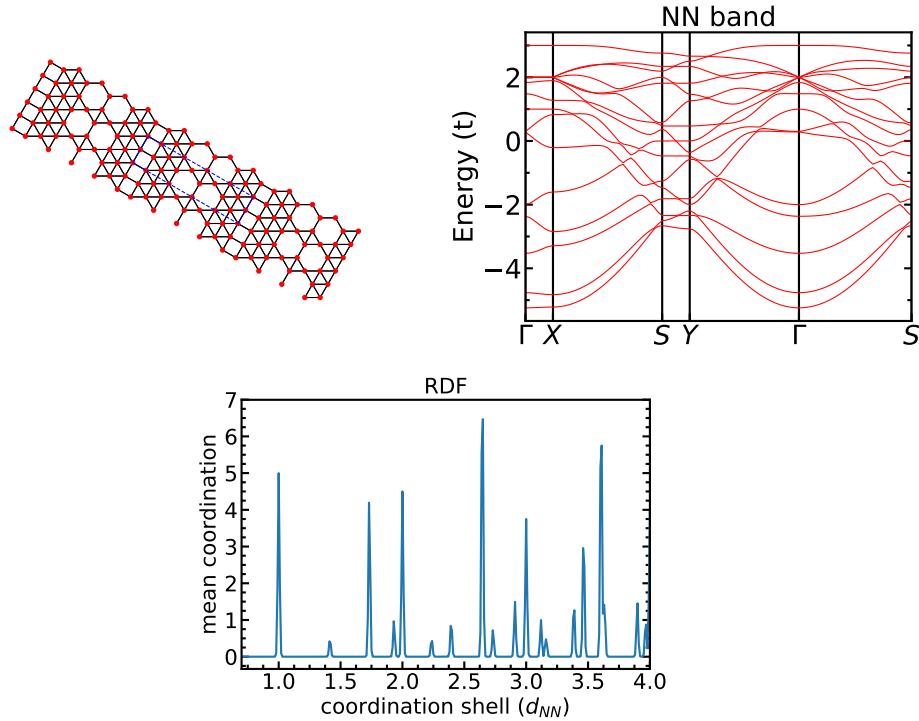


FIG. S523. t6523 lattice framework, nearest neighbors band structure and radial distribution function.

## t6524

Tiling reference number t6524 with space-group ' $Cmmm$ ' (65) and 14 sites in the unit cell, with vertex type indicated in Tab. S524. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S524.

TABLE S524. Tiling t6524 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	2	4	0	0	0	0	0	2

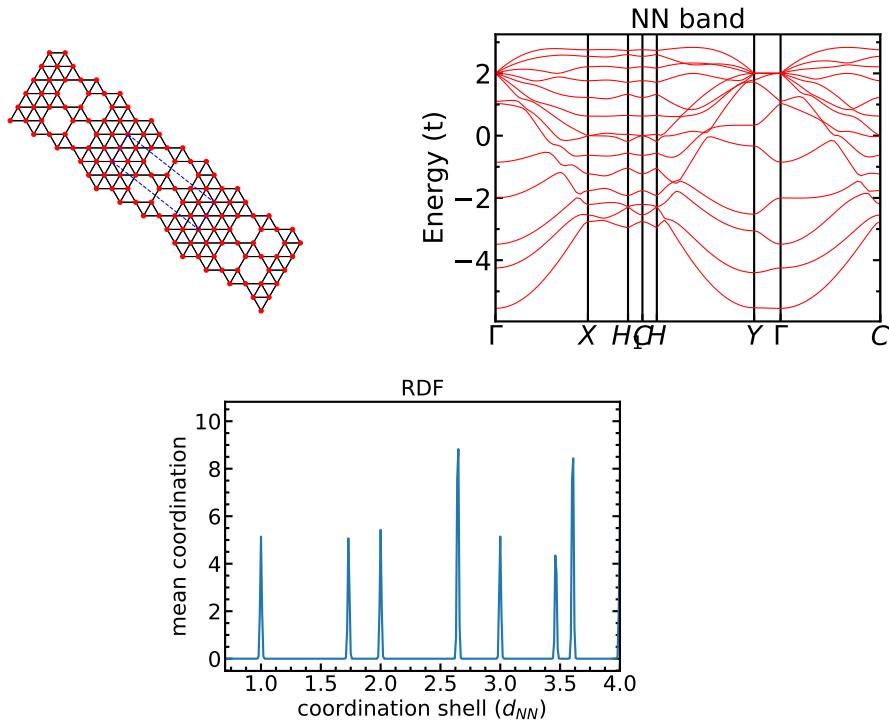


FIG. S524. t6524 lattice framework, nearest neighbors band structure and radial distribution function.

## t6525

Tiling reference number t6525 with space-group ' $Pmmm$ ' (47) and 14 sites in the unit cell, with vertex type indicated in Tab. S525. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S525.

TABLE S525. Tiling t6525 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	2	4	0	0	0	0	0	2

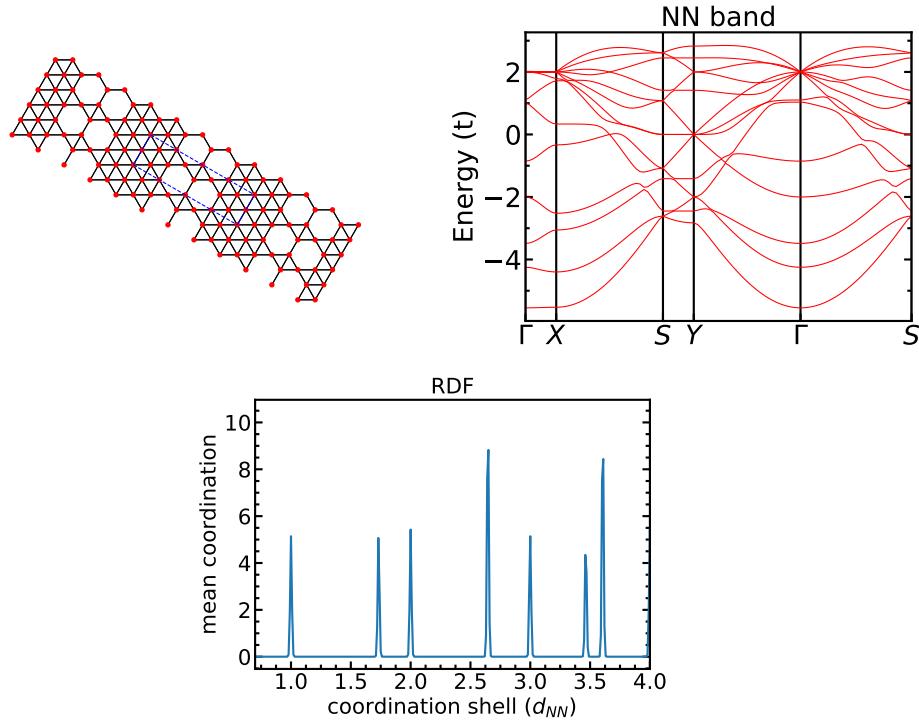


FIG. S525. t6525 lattice framework, nearest neighbors band structure and radial distribution function.

## t6526

Tiling reference number t6526 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S526. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S526.

TABLE S526. Tiling t6526 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	4	0	0	0	0	0	2

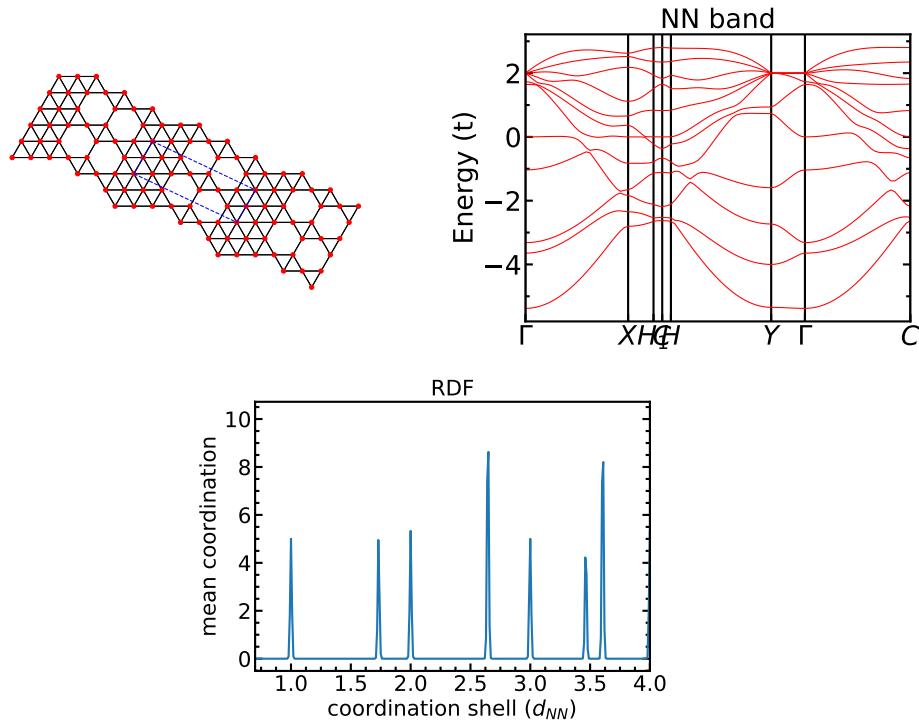


FIG. S526. t6526 lattice framework, nearest neighbors band structure and radial distribution function.

## t6527

Tiling reference number t6527 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S527. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S527.

TABLE S527. Tiling t6527 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	2	2	0	0	0	0	0	6

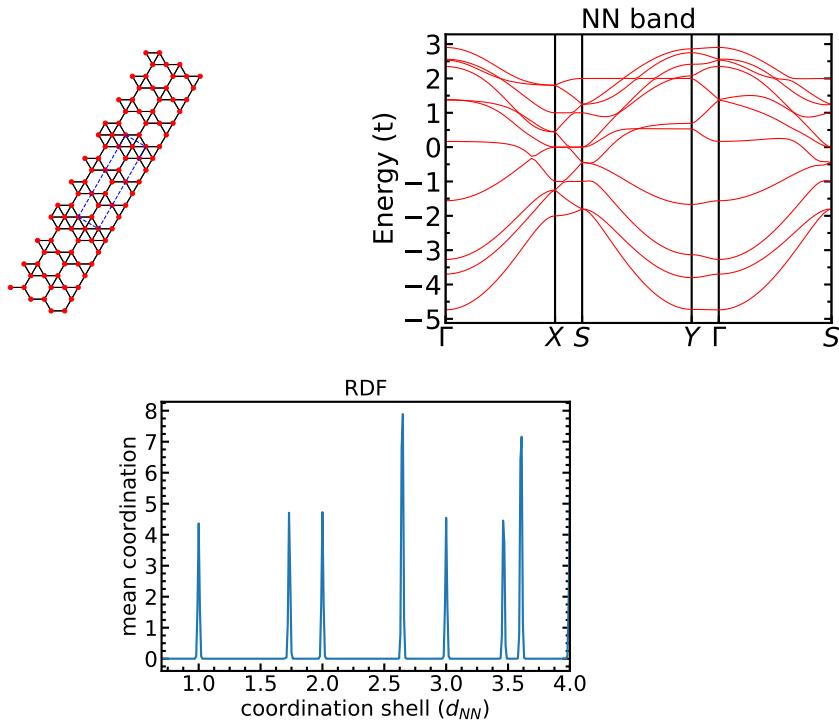


FIG. S527. t6527 lattice framework, nearest neighbors band structure and radial distribution function.

## t6528

Tiling reference number t6528 with space-group '*Cmmm*' (65) and 12 sites in the unit cell, with vertex type indicated in Tab. S528. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S528.

TABLE S528. Tiling t6528 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	2	0	0	0	0	0	6

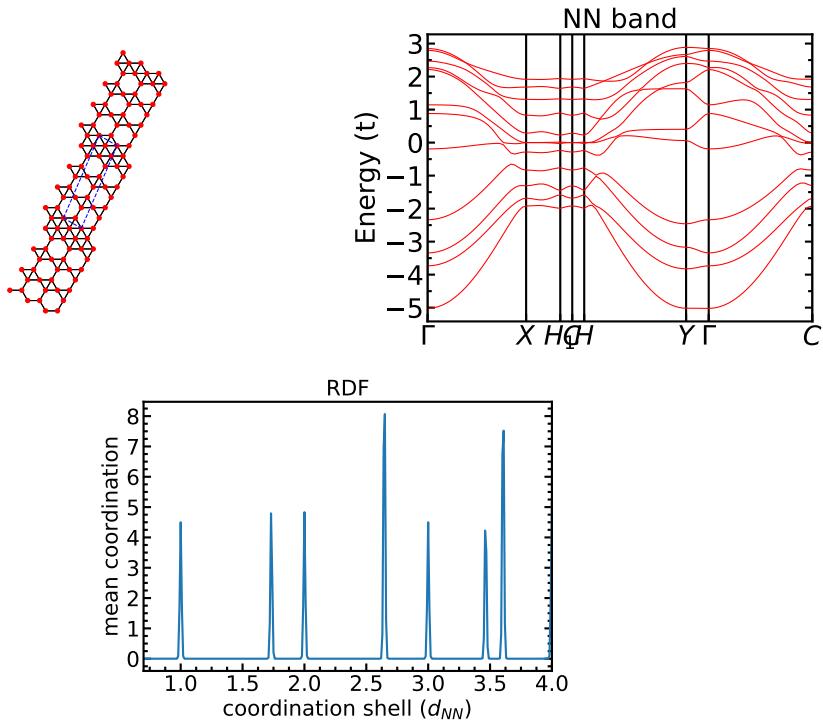


FIG. S528. t6528 lattice framework, nearest neighbors band structure and radial distribution function.

## t6529

Tiling reference number t6529 with space-group ' $Cmmm$ ' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S529. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S529.

TABLE S529. Tiling t6529 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	7	0	0	0	0	0	0	8

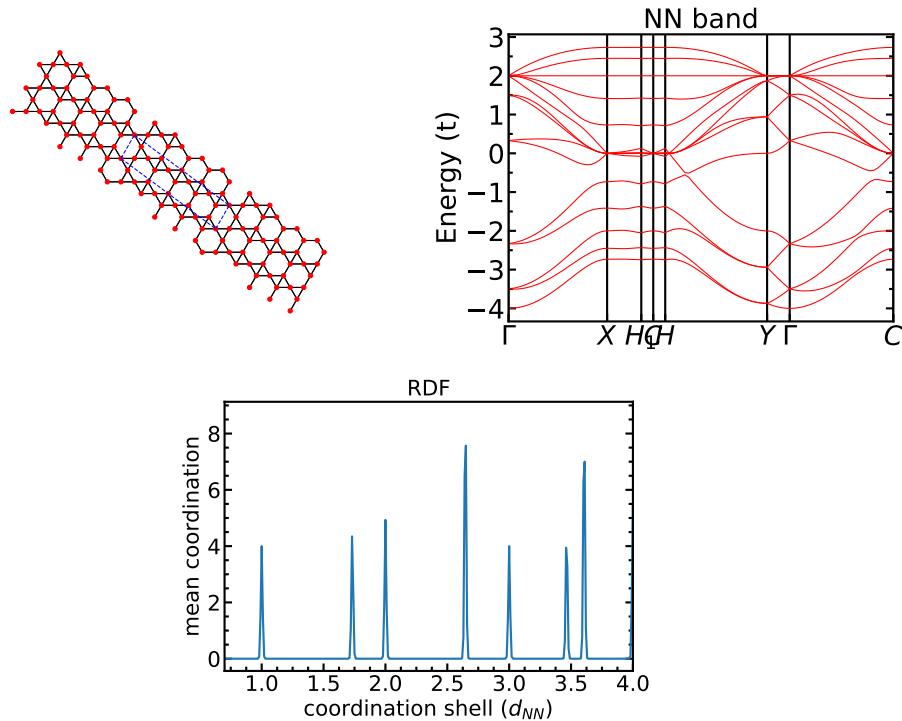


FIG. S529. t6529 lattice framework, nearest neighbors band structure and radial distribution function.

## t6530

Tiling reference number t6530 with space-group '*Cmmm*' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S530. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S530.

TABLE S530. Tiling t6530 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	11	0	0	0	0	0	0	4

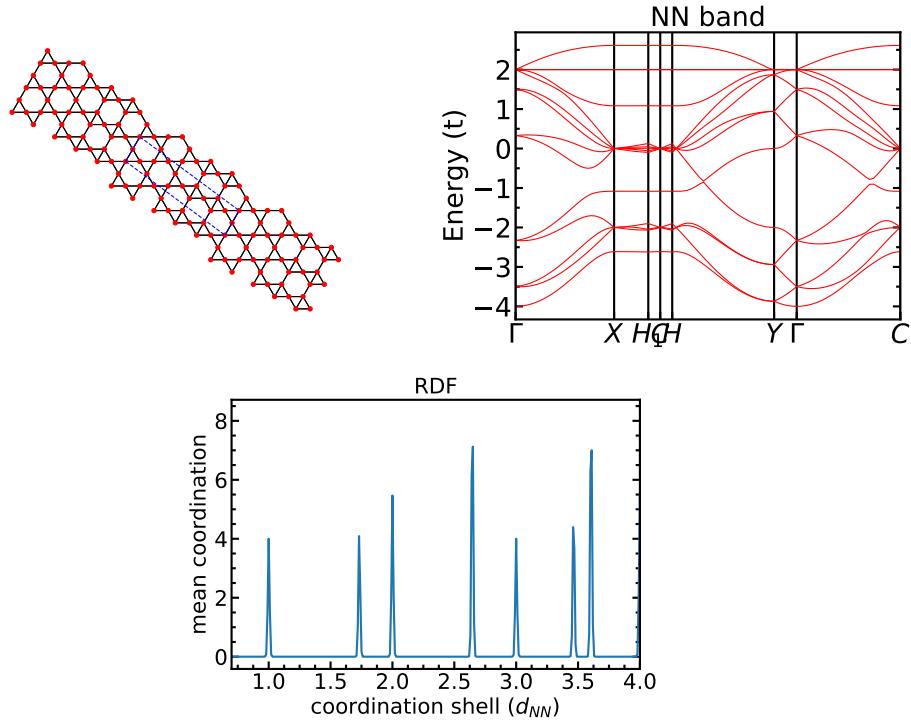


FIG. S530. t6530 lattice framework, nearest neighbors band structure and radial distribution function.

## t6531

Tiling reference number t6531 with space-group ' $Pmm2'$  (25) and 15 sites in the unit cell, with vertex type indicated in Tab. S531. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S531.

TABLE S531. Tiling t6531 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	3	4	0	4	0	0	0	4

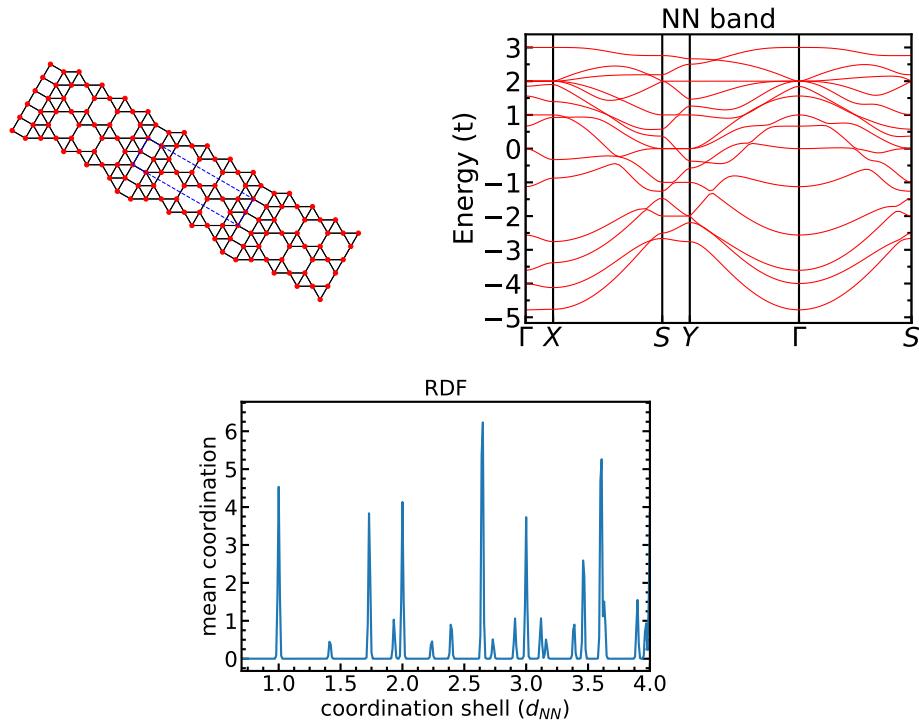


FIG. S531. t6531 lattice framework, nearest neighbors band structure and radial distribution function.

## t6532

Tiling reference number t6532 with space-group ' $P2/m$ ' (10) and 15 sites in the unit cell, with vertex type indicated in Tab. S532. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S532.

TABLE S532. Tiling t6532 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	3	4	0	4	0	0	0	4

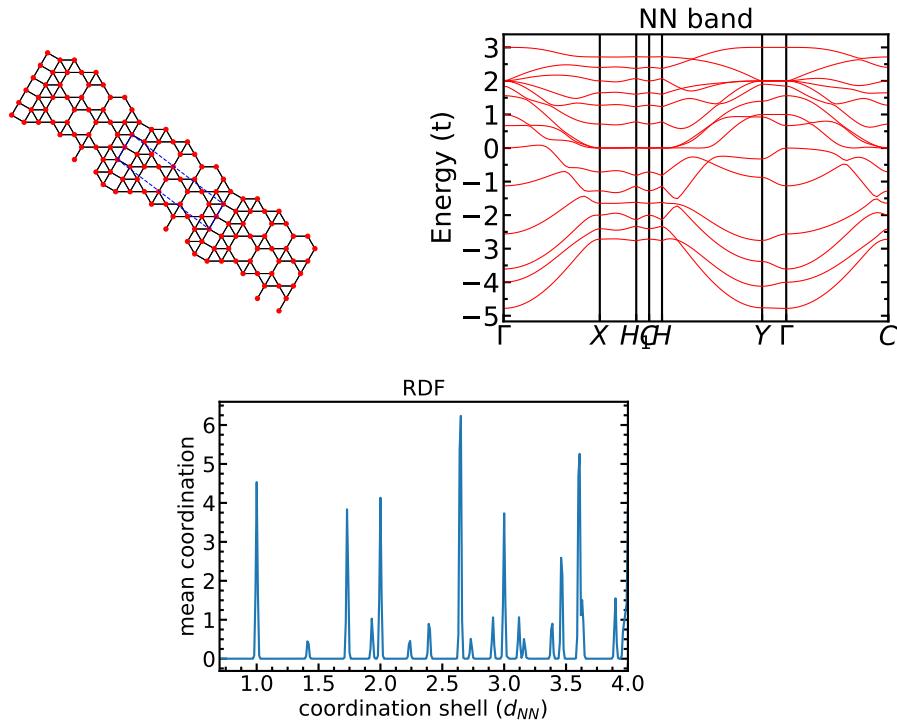


FIG. S532. t6532 lattice framework, nearest neighbors band structure and radial distribution function.

### t6533

Tiling reference number t6533 with space-group ' $Pmmm$ ' (47) and 13 sites in the unit cell, with vertex type indicated in Tab. S533. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S533.

TABLE S533. Tiling t6533 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	3	4	0	0	0	0	0	4

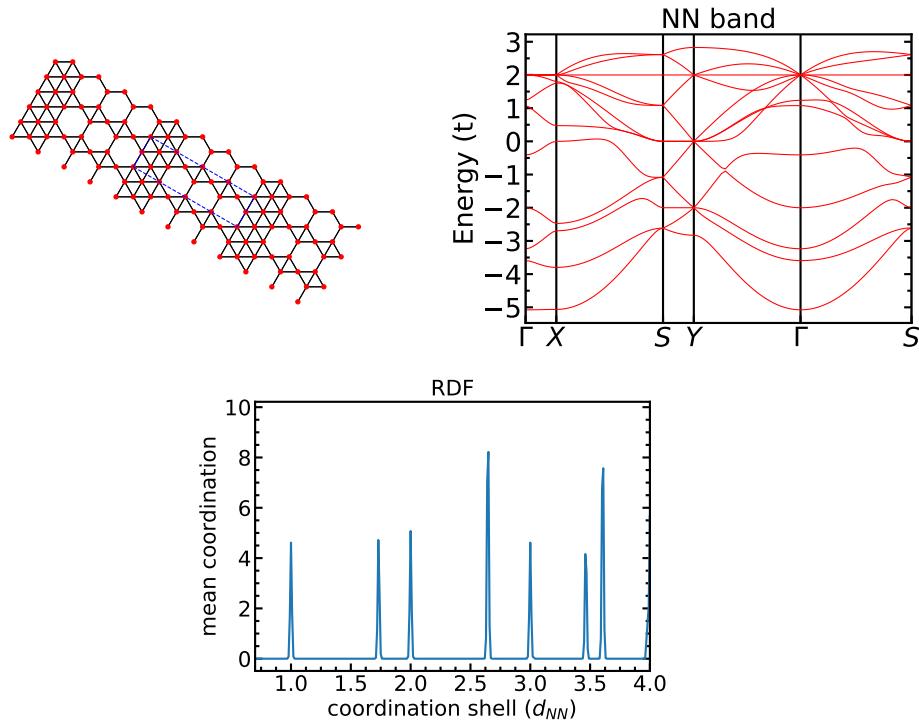


FIG. S533. t6533 lattice framework, nearest neighbors band structure and radial distribution function.

## t6534

Tiling reference number t6534 with space-group '*Cmmm*' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S534. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S534.

TABLE S534. Tiling t6534 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	11	0	0	0	0	0	0	4

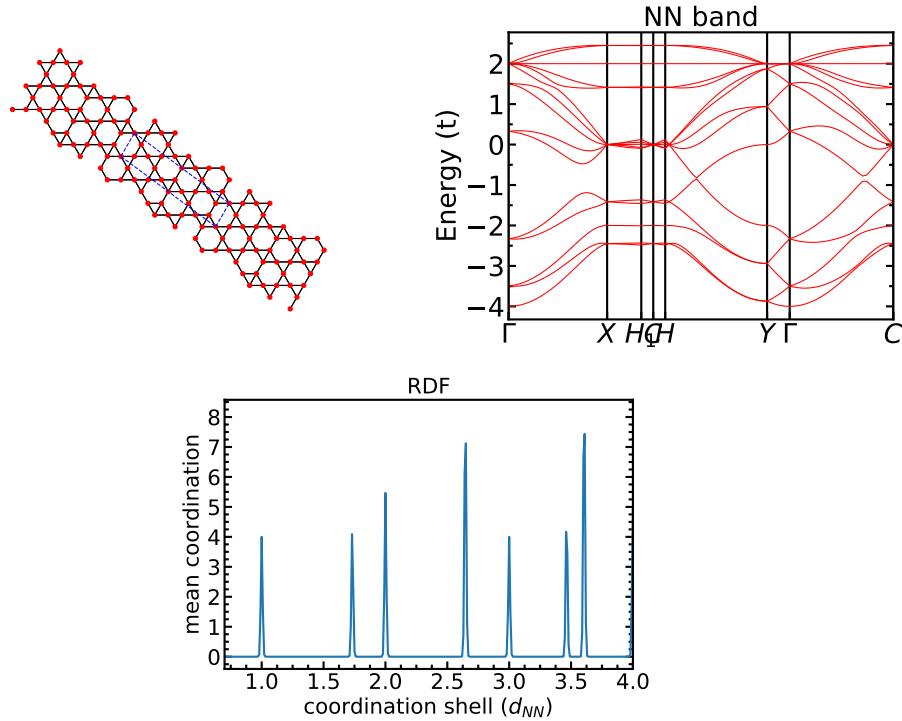


FIG. S534. t6534 lattice framework, nearest neighbors band structure and radial distribution function.

## t6535

Tiling reference number t6535 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S535. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S535.

TABLE S535. Tiling t6535 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	6	4	0	0	0	0	0	4

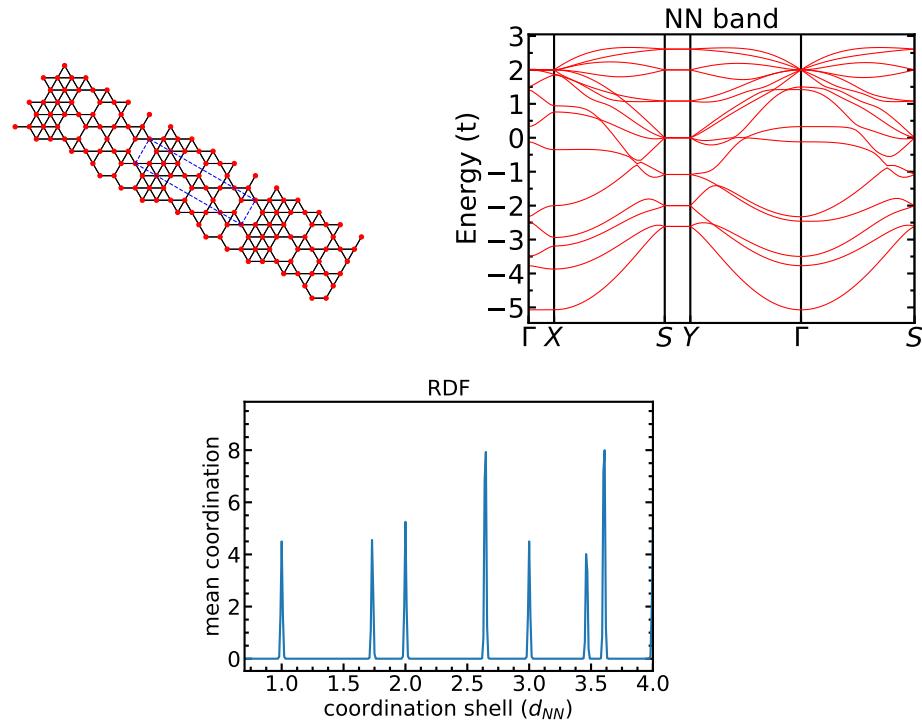


FIG. S535. t6535 lattice framework, nearest neighbors band structure and radial distribution function.

## t6536

Tiling reference number t6536 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S536. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S536.

TABLE S536. Tiling t6536 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	8	0	0	0	0	0	4

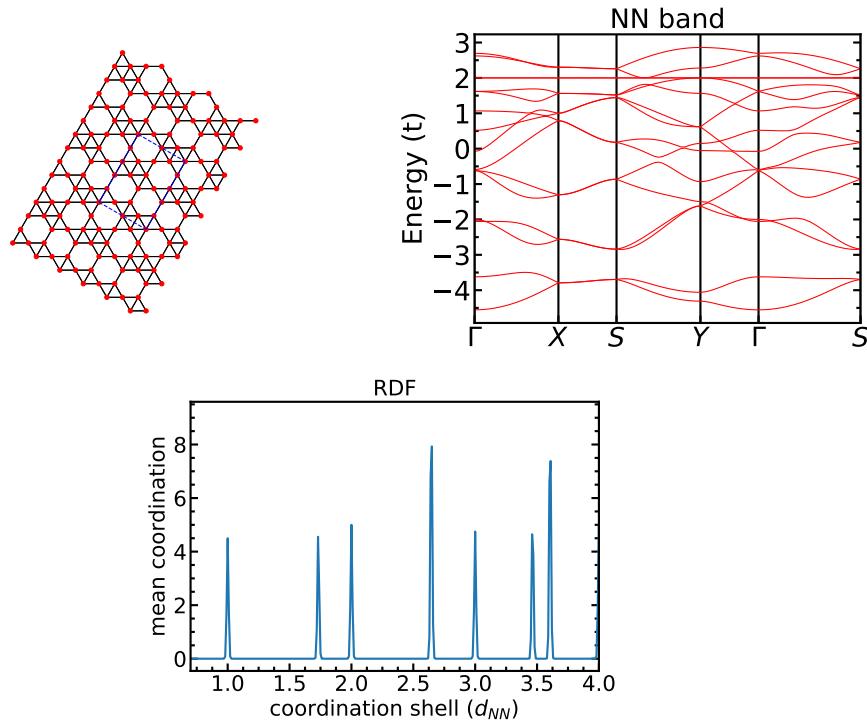


FIG. S536. t6536 lattice framework, nearest neighbors band structure and radial distribution function.

## t6537

Tiling reference number t6537 with space-group ' $Cmmm$ ' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S537. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S537.

TABLE S537. Tiling t6537 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	8	0	0	0	0	0	4

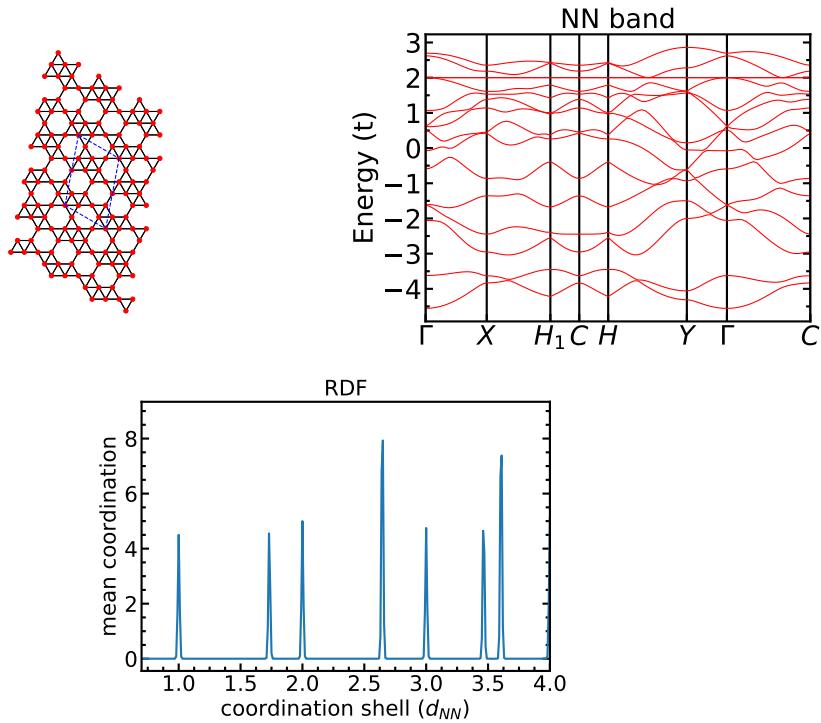


FIG. S537. t6537 lattice framework, nearest neighbors band structure and radial distribution function.

## t6538

Tiling reference number t6538 with space-group '*Cmmm*' (65) and 19 sites in the unit cell, with vertex type indicated in Tab. S538. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S538.

TABLE S538. Tiling t6538 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	7	8	0	0	0	0	0	4

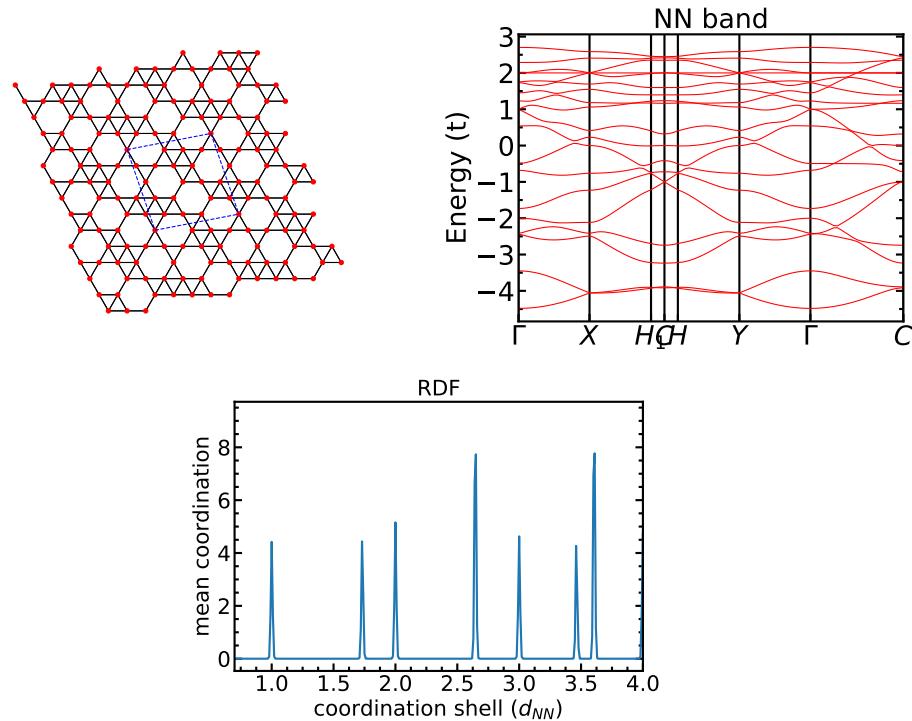


FIG. S538. t6538 lattice framework, nearest neighbors band structure and radial distribution function.

## t6539

Tiling reference number t6539 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S539. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S539.

TABLE S539. Tiling t6539 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	12	0	0	0	0	0	4

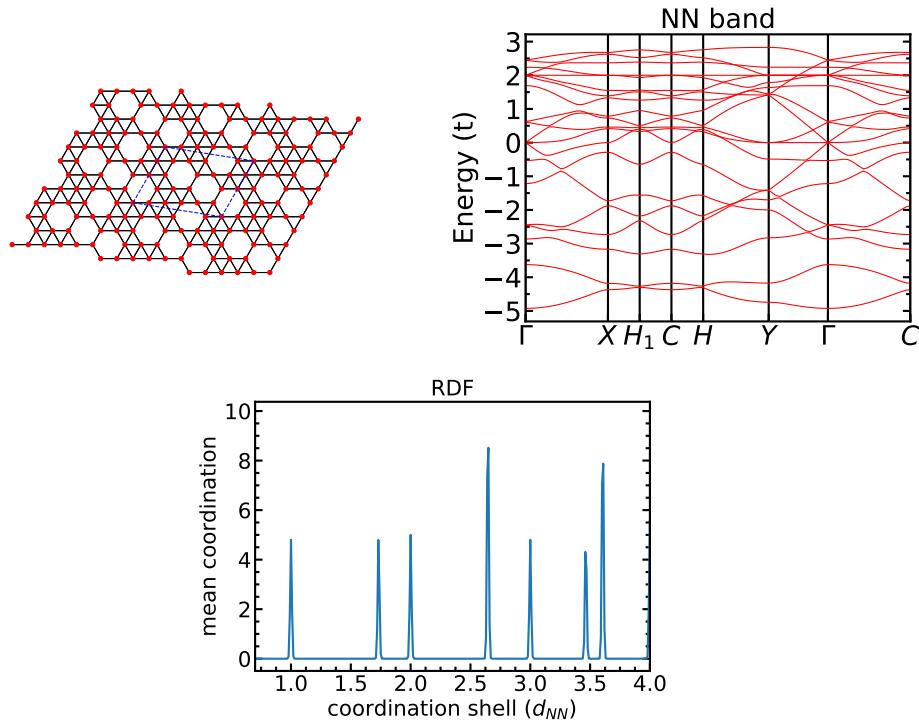


FIG. S539. t6539 lattice framework, nearest neighbors band structure and radial distribution function.

## t6540

Tiling reference number t6540 with space-group ' $P6/m$ ' (175) and 31 sites in the unit cell, with vertex type indicated in Tab. S540. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S540.

TABLE S540. Tiling t6540 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	6	12	0	0	0	0	0	6

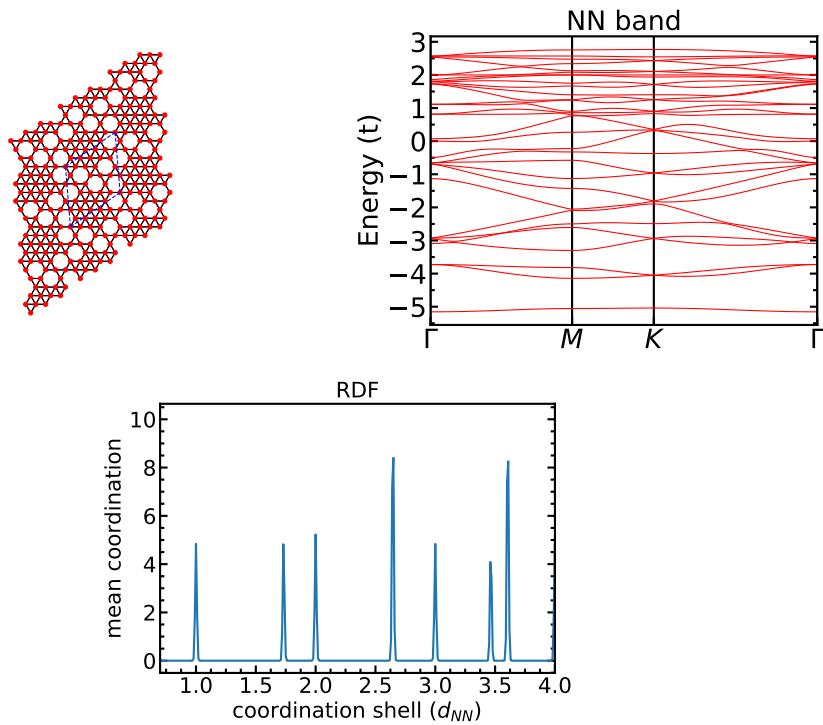


FIG. S540. t6540 lattice framework, nearest neighbors band structure and radial distribution function.

## t6541

Tiling reference number t6541 with space-group ' $P2/m$ ' (10) and 10 sites in the unit cell, with vertex type indicated in Tab. S541. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S541.

TABLE S541. Tiling t6541 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	1	6	0	0	0	0	0	2

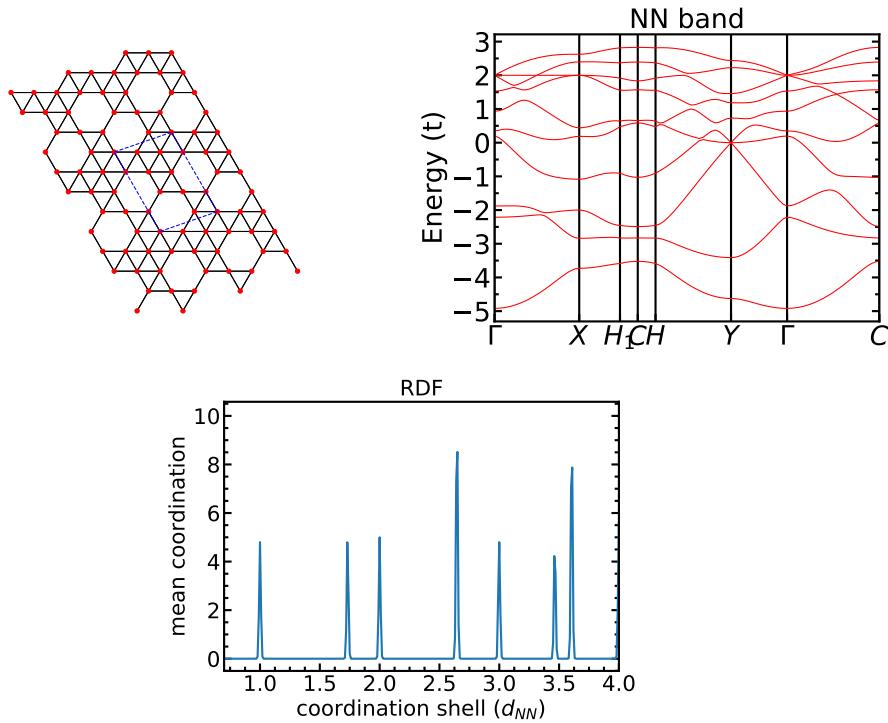


FIG. S541. t6541 lattice framework, nearest neighbors band structure and radial distribution function.

## t6542

Tiling reference number t6542 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S542. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S542.

TABLE S542. Tiling t6542 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	1	6	0	0	0	0	0	2

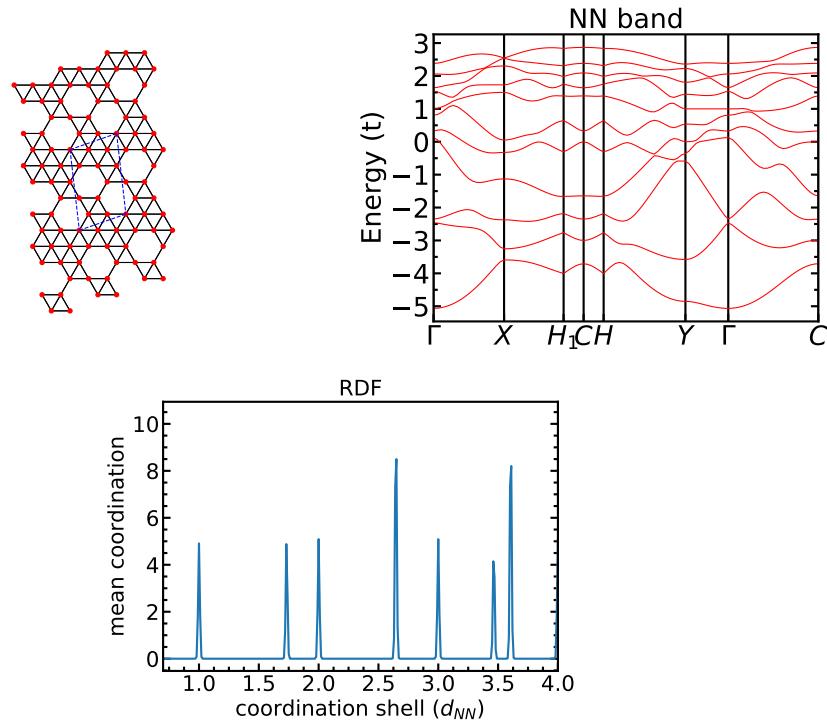


FIG. S542. t6542 lattice framework, nearest neighbors band structure and radial distribution function.

### t6543

Tiling reference number t6543 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S543. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S543.

TABLE S543. Tiling t6543 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	12	0	0	0	0	0	4

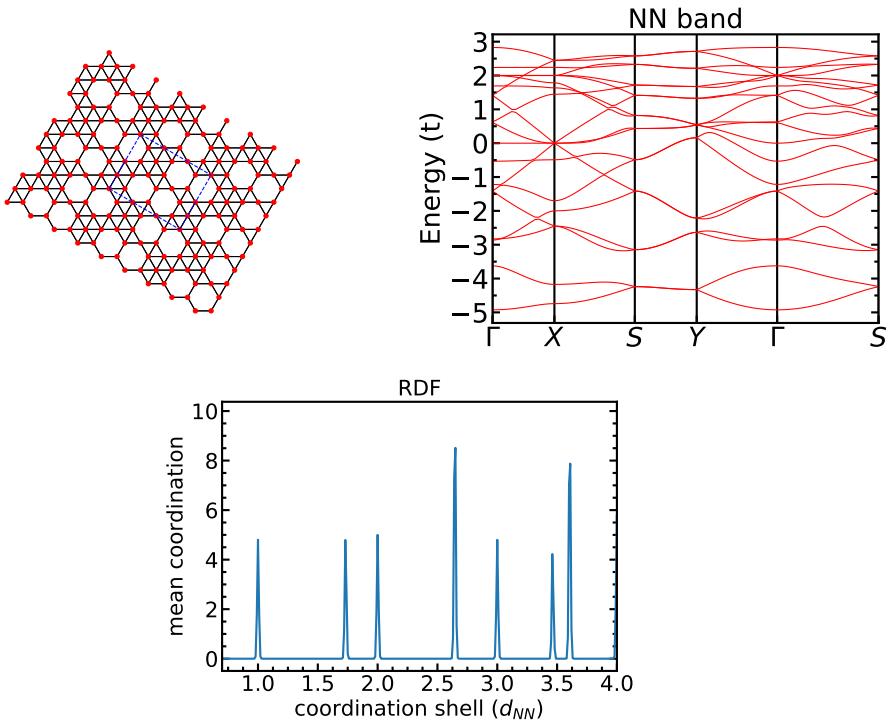


FIG. S543. t6543 lattice framework, nearest neighbors band structure and radial distribution function.

## t6544

Tiling reference number t6544 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S544. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S544.

TABLE S544. Tiling t6544 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	10	8	0	0	0	0	0	4

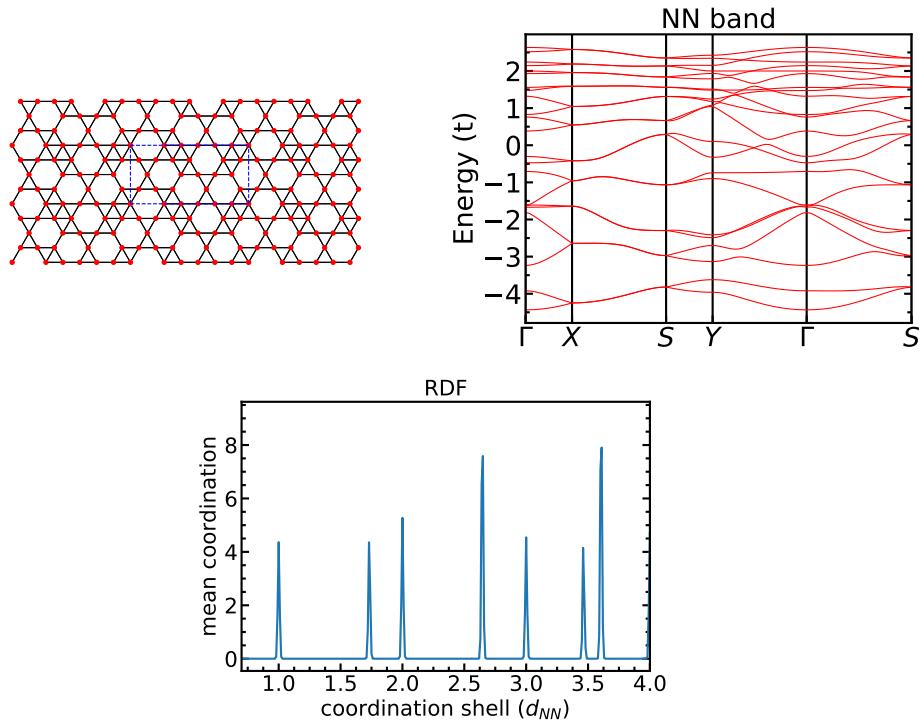


FIG. S544. t6544 lattice framework, nearest neighbors band structure and radial distribution function.

## t6545

Tiling reference number t6545 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S545. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S545.

TABLE S545. Tiling t6545 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	5	4	0	0	0	0	0	2

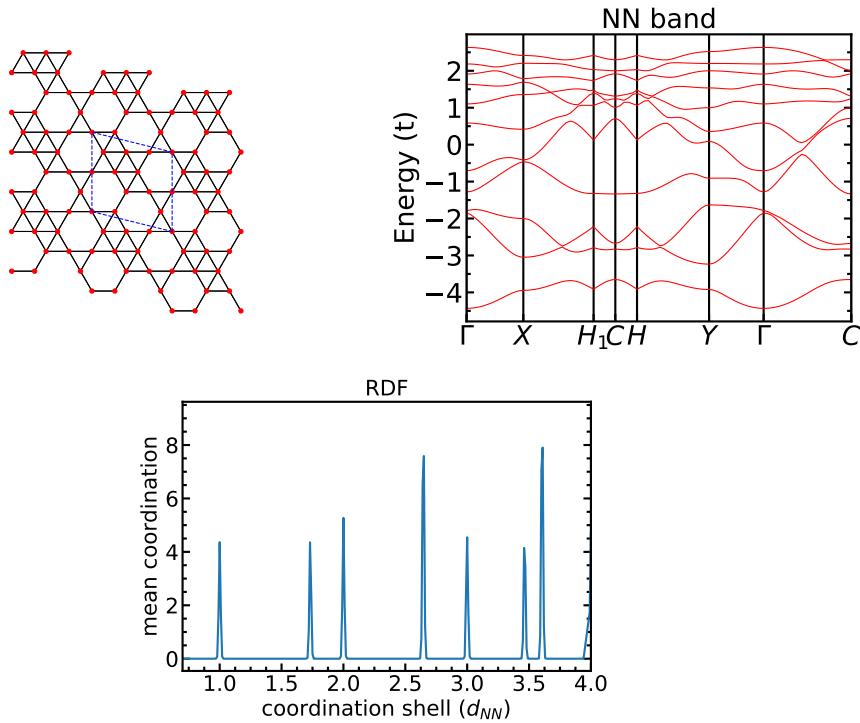


FIG. S545. t6545 lattice framework, nearest neighbors band structure and radial distribution function.

## t6546

Tiling reference number t6546 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S546. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S546.

TABLE S546. Tiling t6546 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	1	4	0	0	0	0	0	6

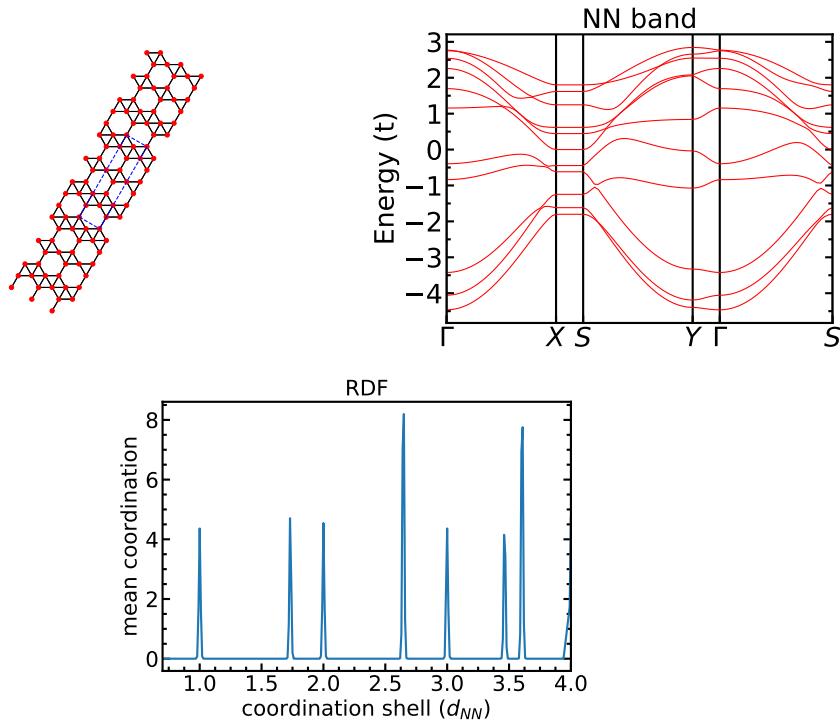


FIG. S546. t6546 lattice framework, nearest neighbors band structure and radial distribution function.

**t6547**

Tiling reference number t6547 with space-group ' $Pmmm$ ' (47) and 10 sites in the unit cell, with vertex type indicated in Tab. S547. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S547.

TABLE S547. Tiling t6547 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	1	2	0	0	0	0	0	4

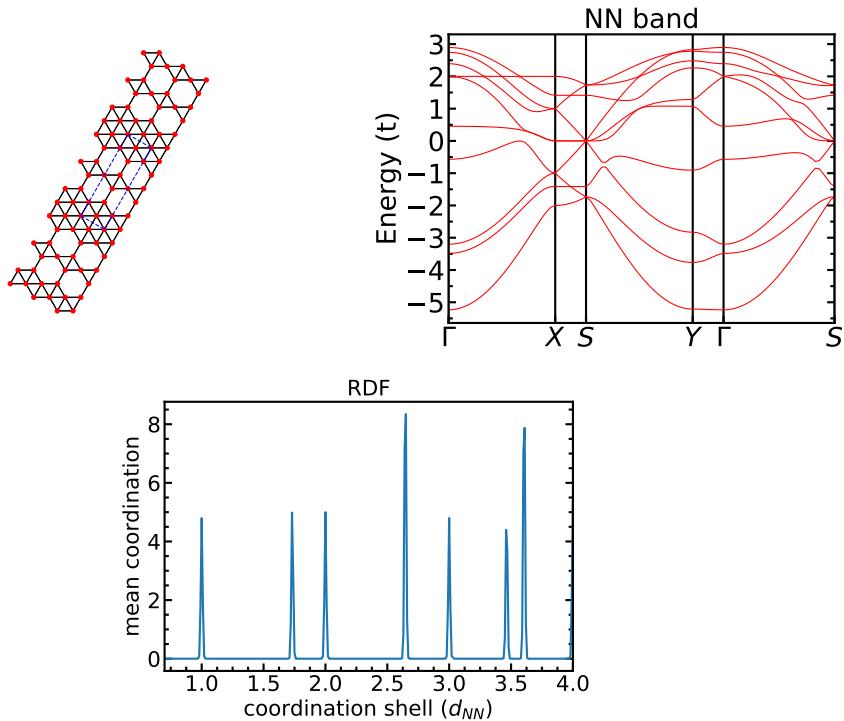


FIG. S547. t6547 lattice framework, nearest neighbors band structure and radial distribution function.

## t6548

Tiling reference number t6548 with space-group ' $Cmmm$ ' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S548. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S548.

TABLE S548. Tiling t6548 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	1	2	0	0	0	0	0	4

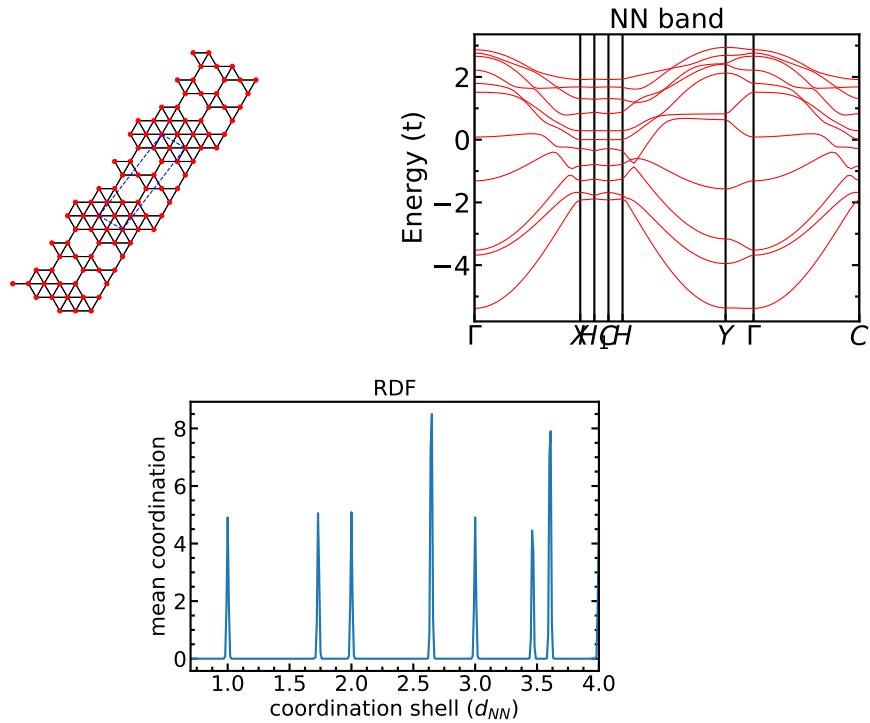


FIG. S548. t6548 lattice framework, nearest neighbors band structure and radial distribution function.

## t6549

Tiling reference number t6549 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S549. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S549.

TABLE S549. Tiling t6549 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	3	4	0	0	0	0	0	4

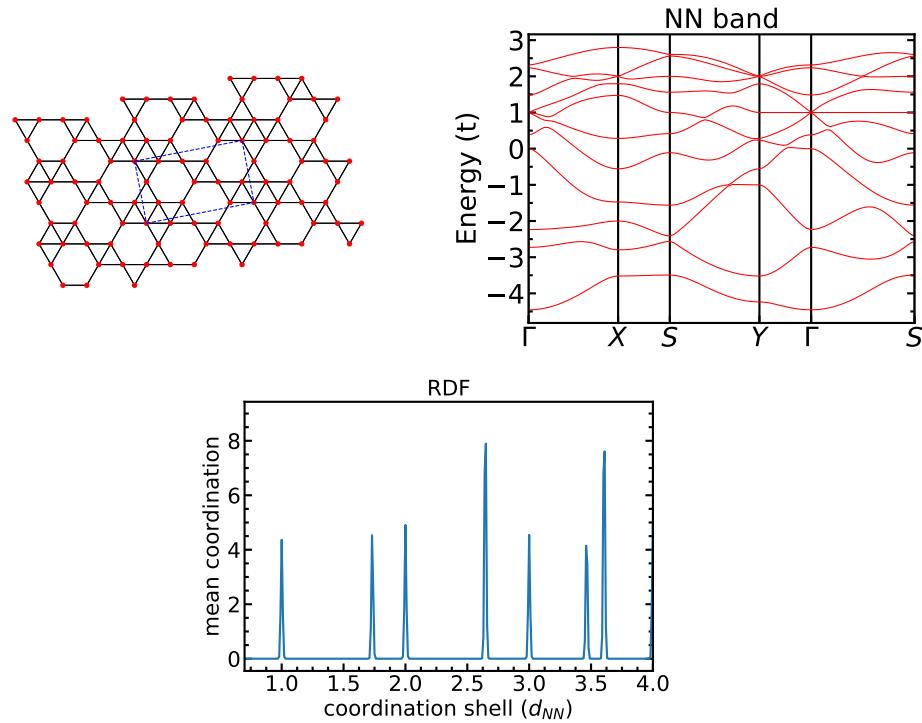


FIG. S549. t6549 lattice framework, nearest neighbors band structure and radial distribution function.

## t6550

Tiling reference number t6550 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S550. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S550.

TABLE S550. Tiling t6550 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	2	6	0	0	0	0	0	4

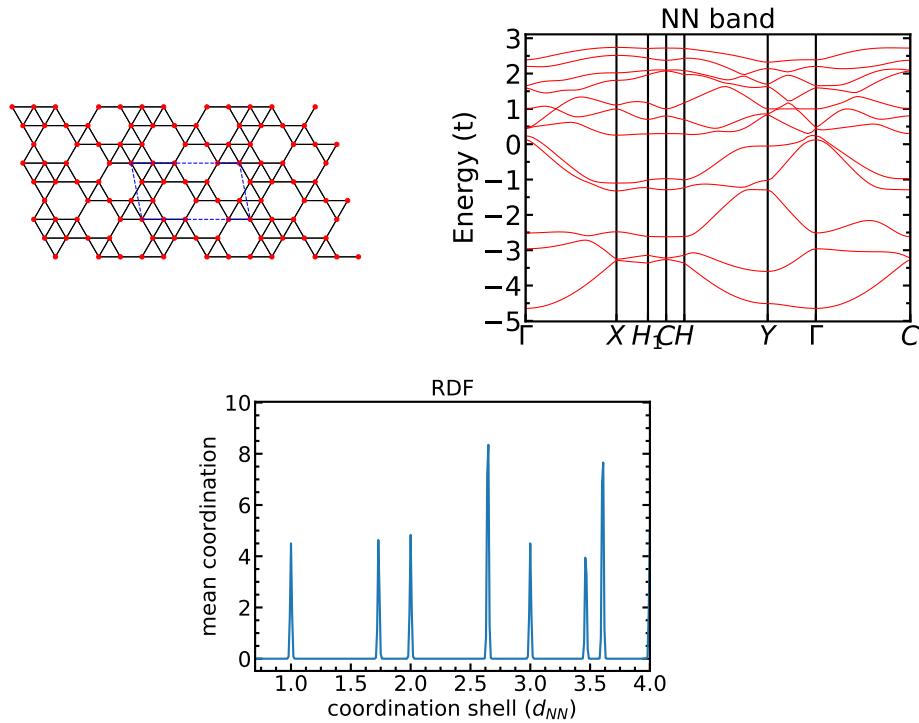


FIG. S550. t6550 lattice framework, nearest neighbors band structure and radial distribution function.

## t6551

Tiling reference number t6551 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S551. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S551.

TABLE S551. Tiling t6551 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	8	0	0	0	0	0	8

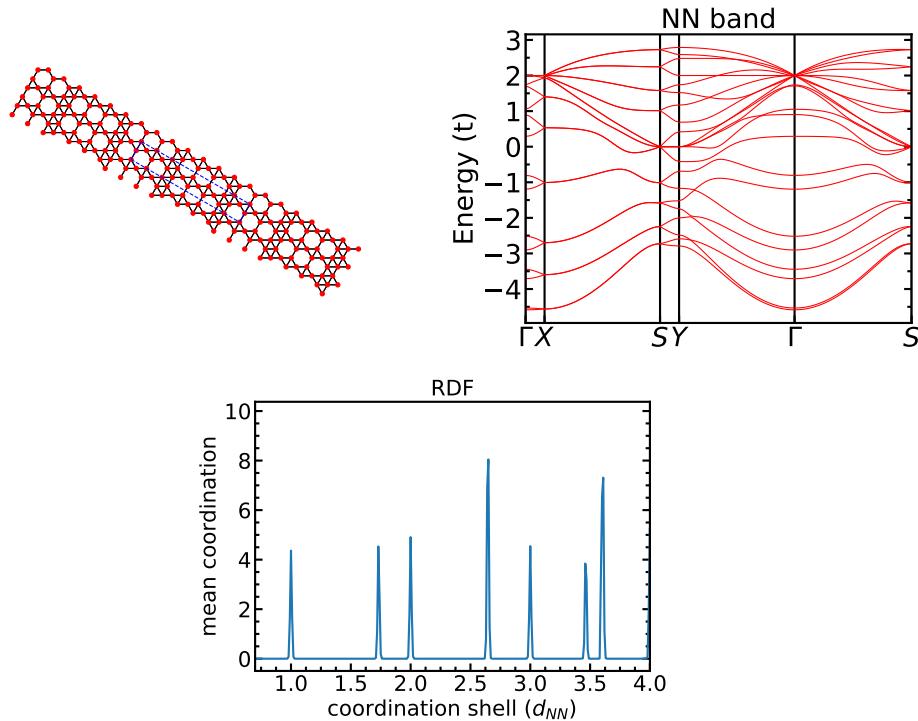


FIG. S551. t6551 lattice framework, nearest neighbors band structure and radial distribution function.

## t6552

Tiling reference number t6552 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S552. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S552.

TABLE S552. Tiling t6552 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	3	4	0	0	0	0	0	4

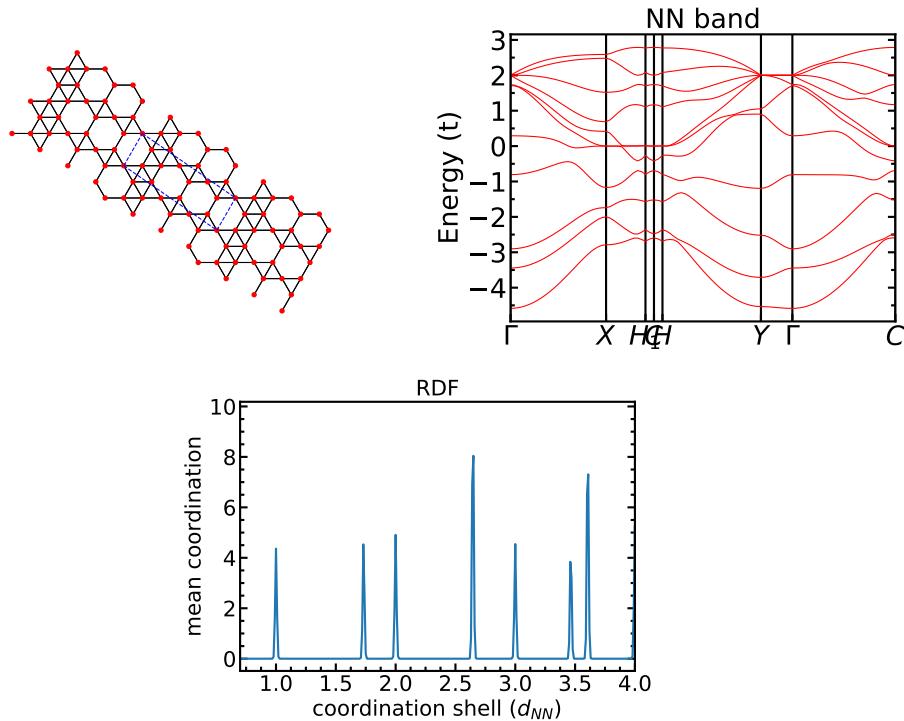


FIG. S552. t6552 lattice framework, nearest neighbors band structure and radial distribution function.

### t6553

Tiling reference number t6553 with space-group '*Pbam*' (55) and 24 sites in the unit cell, with vertex type indicated in Tab. S553. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S553.

TABLE S553. Tiling t6553 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	12	0	0	0	0	0	8

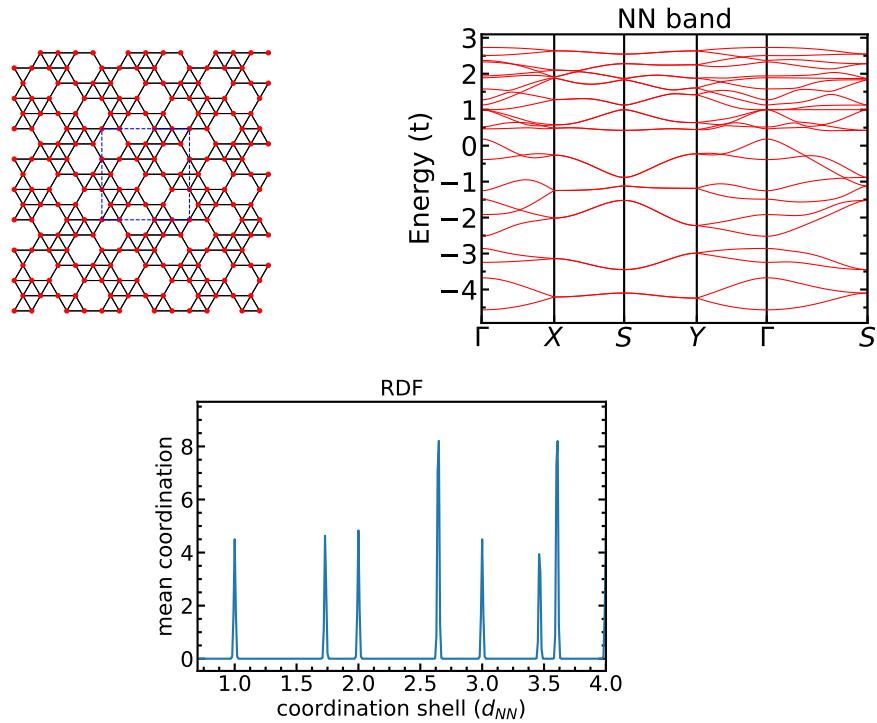


FIG. S553. t6553 lattice framework, nearest neighbors band structure and radial distribution function.

## t6554

Tiling reference number t6554 with space-group '*Cmmm*' (65) and 17 sites in the unit cell, with vertex type indicated in Tab. S554. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S554.

TABLE S554. Tiling t6554 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	5	10	0	0	0	0	0	2

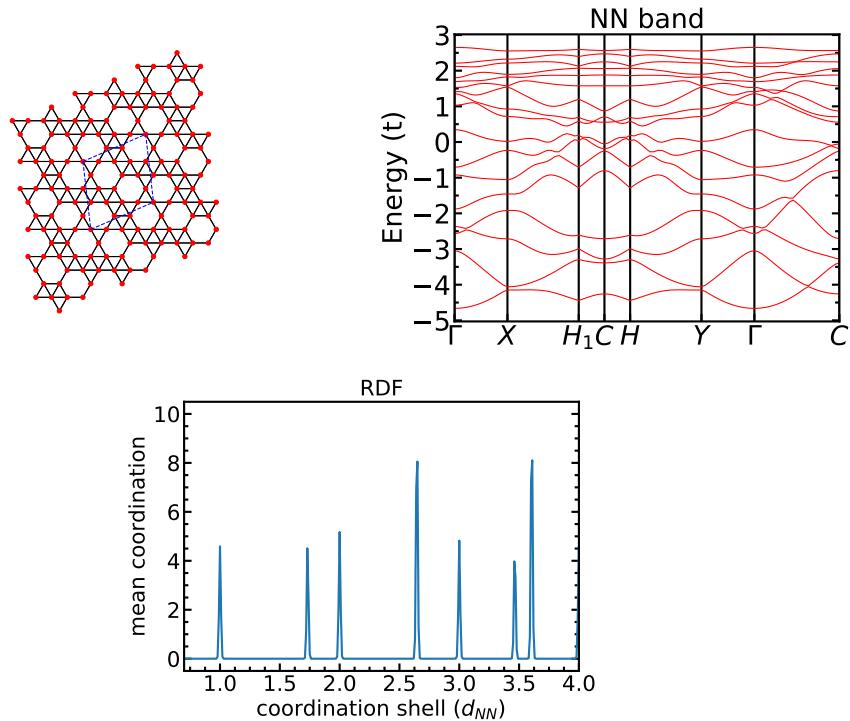


FIG. S554. t6554 lattice framework, nearest neighbors band structure and radial distribution function.

## t6555

Tiling reference number t6555 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S555. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S555.

TABLE S555. Tiling t6555 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	2	0	0	0	0	0	2

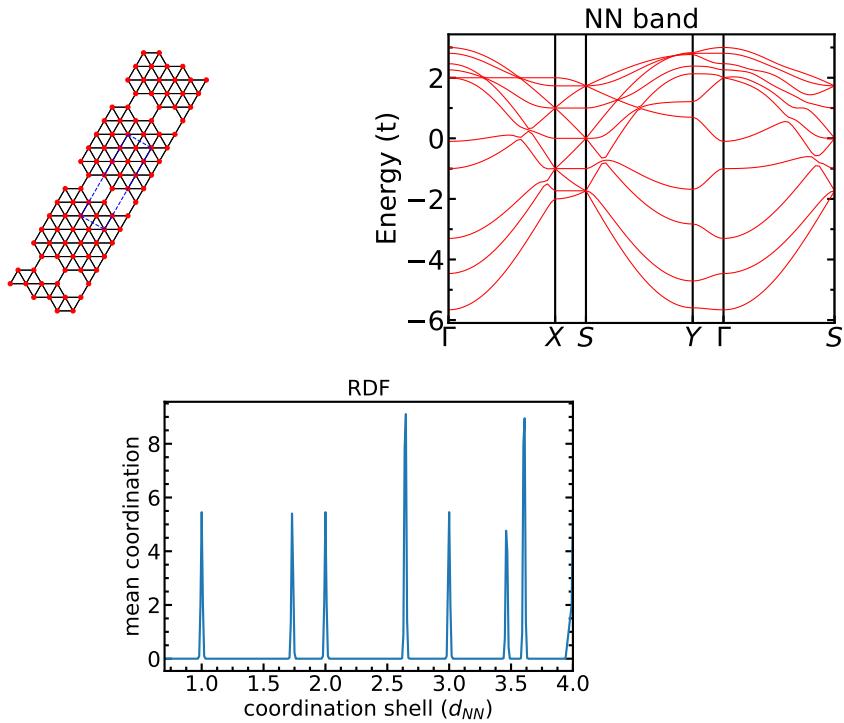


FIG. S555. t6555 lattice framework, nearest neighbors band structure and radial distribution function.

## t6556

Tiling reference number t6556 with space-group ' $Cmmm$ ' (65) and 12 sites in the unit cell, with vertex type indicated in Tab. S556. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S556.

TABLE S556. Tiling t6556 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	0	0	0	0	0	0	2	0	0	0	0	0	2

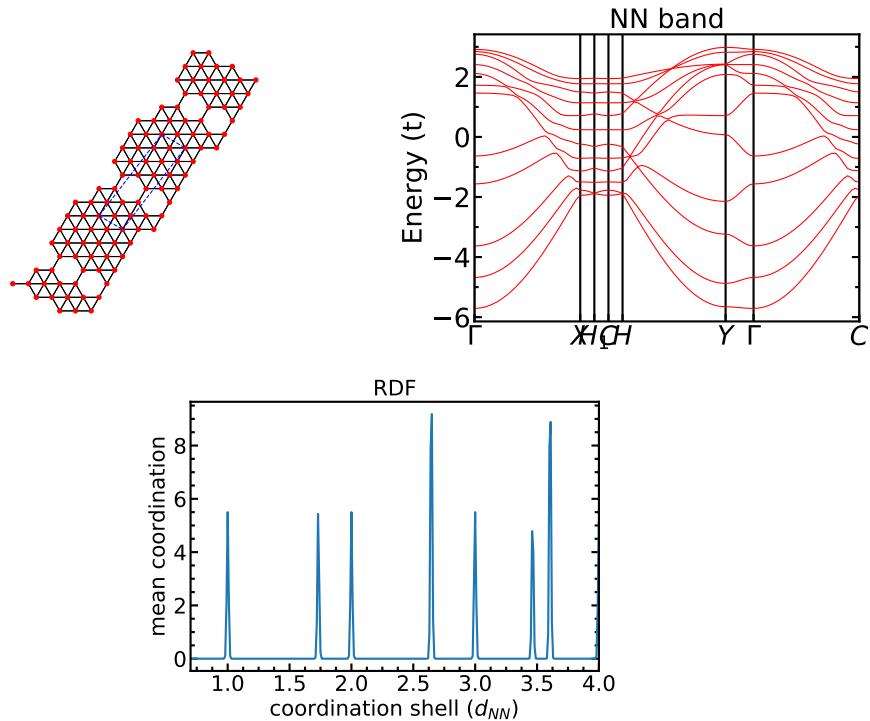


FIG. S556. t6556 lattice framework, nearest neighbors band structure and radial distribution function.

## t6557

Tiling reference number t6557 with space-group ' $P6/mmm$ ' (191) and 42 sites in the unit cell, with vertex type indicated in Tab. S557. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S557.

TABLE S557. Tiling t6557 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
12	0	0	0	0	0	0	6	18	0	0	0	0	0	6

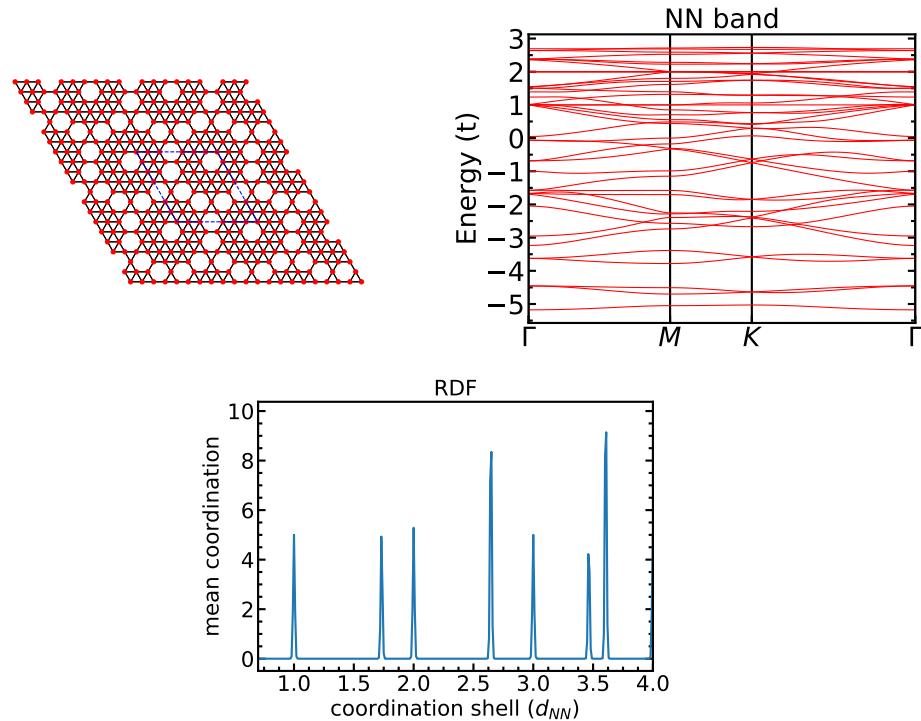


FIG. S557. t6557 lattice framework, nearest neighbors band structure and radial distribution function.

## t6558

Tiling reference number t6558 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S558. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S558.

TABLE S558. Tiling t6558 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	8	0	0	0	0	0	2

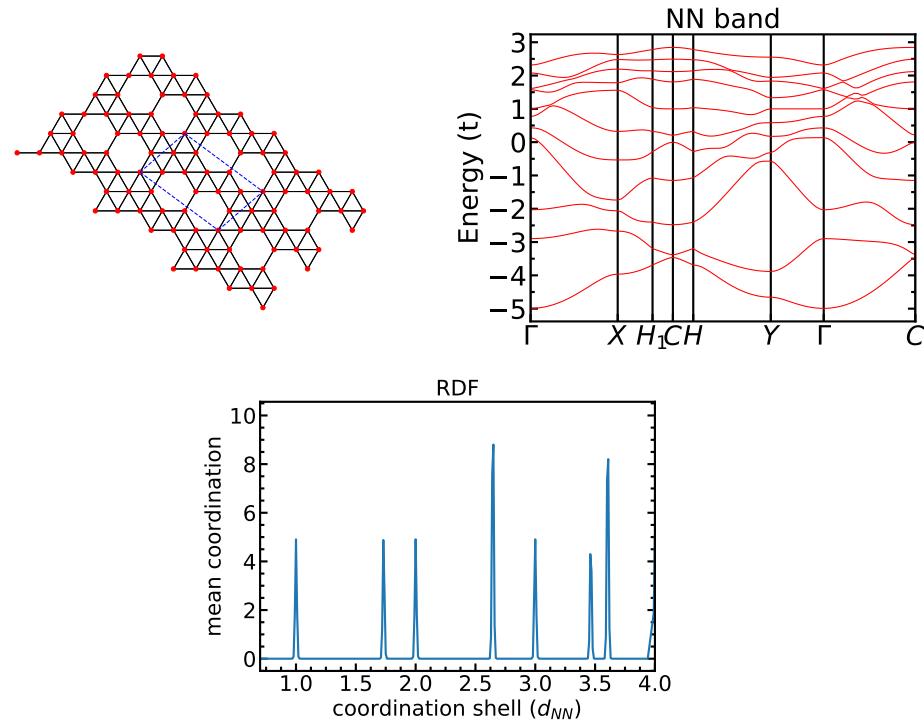


FIG. S558. t6558 lattice framework, nearest neighbors band structure and radial distribution function.

## t6559

Tiling reference number t6559 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S559. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S559.

TABLE S559. Tiling t6559 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	8	0	0	0	0	0	2

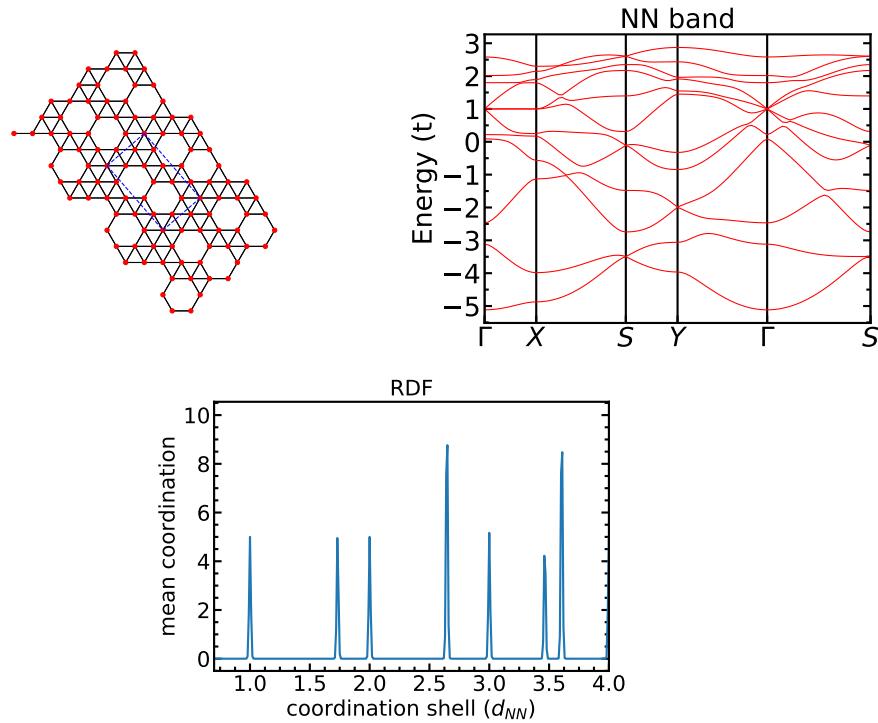


FIG. S559. t6559 lattice framework, nearest neighbors band structure and radial distribution function.

## t6560

Tiling reference number t6560 with space-group ' $P6/m$ ' (175) and 36 sites in the unit cell, with vertex type indicated in Tab. S560. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S560.

TABLE S560. Tiling t6560 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	30	0	0	0	0	0	6

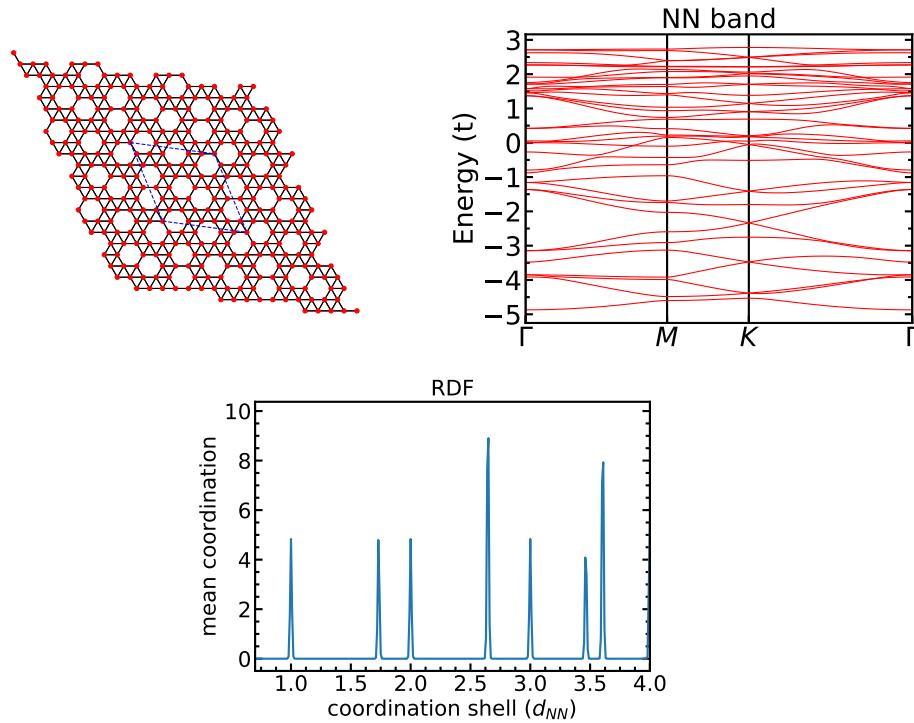


FIG. S560. t6560 lattice framework, nearest neighbors band structure and radial distribution function.

## t6561

Tiling reference number t6561 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S561. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S561.

TABLE S561. Tiling t6561 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	10	0	0	0	0	0	4

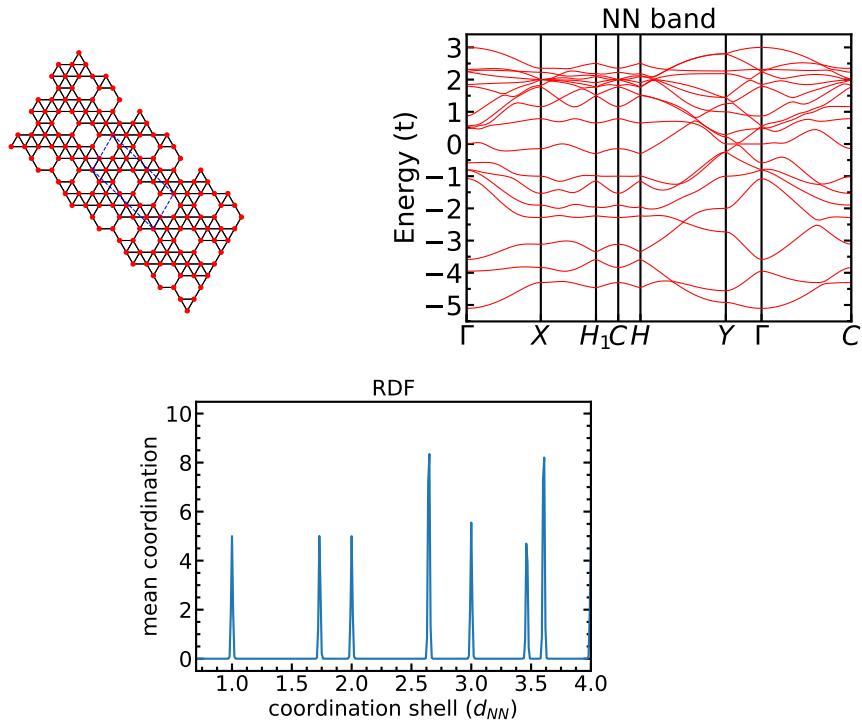


FIG. S561. t6561 lattice framework, nearest neighbors band structure and radial distribution function.

## t6562

Tiling reference number t6562 with space-group ' $P2/m$ ' (10) and 10 sites in the unit cell, with vertex type indicated in Tab. S562. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S562.

TABLE S562. Tiling t6562 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	1	6	0	0	0	0	0	2

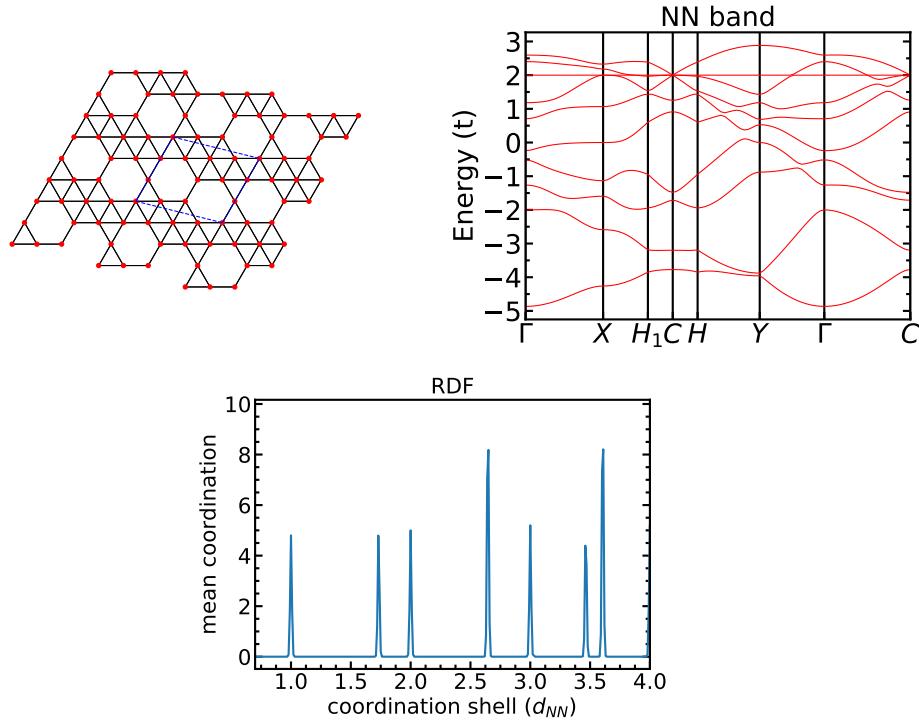


FIG. S562. t6562 lattice framework, nearest neighbors band structure and radial distribution function.

### t6563

Tiling reference number t6563 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S563. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S563.

TABLE S563. Tiling t6563 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	1	6	0	0	0	0	0	2

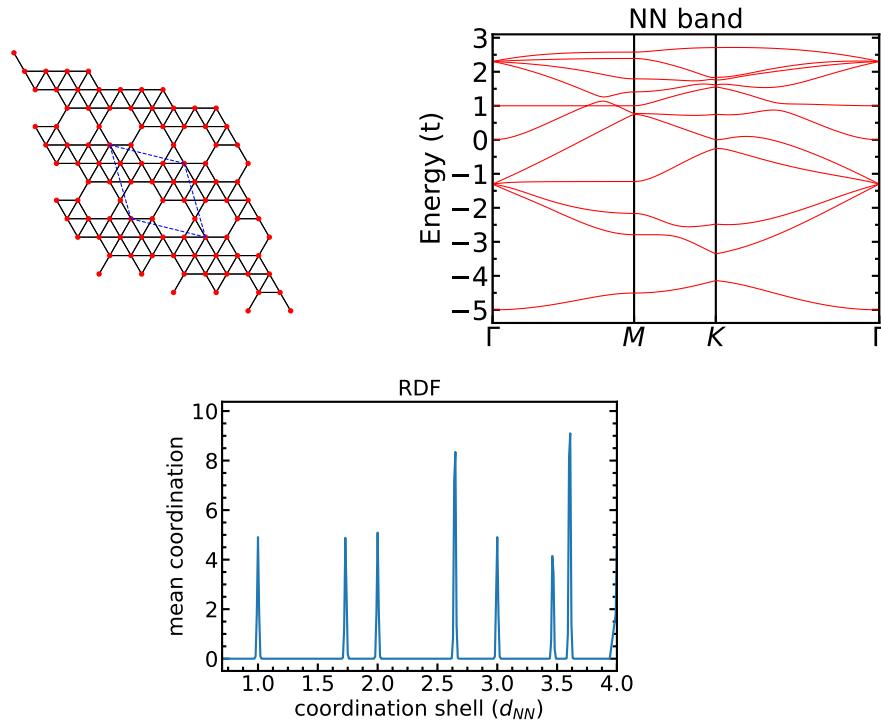


FIG. S563. t6563 lattice framework, nearest neighbors band structure and radial distribution function.

## t6564

Tiling reference number t6564 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S564. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S564.

TABLE S564. Tiling t6564 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	8	0	0	0	0	0	2

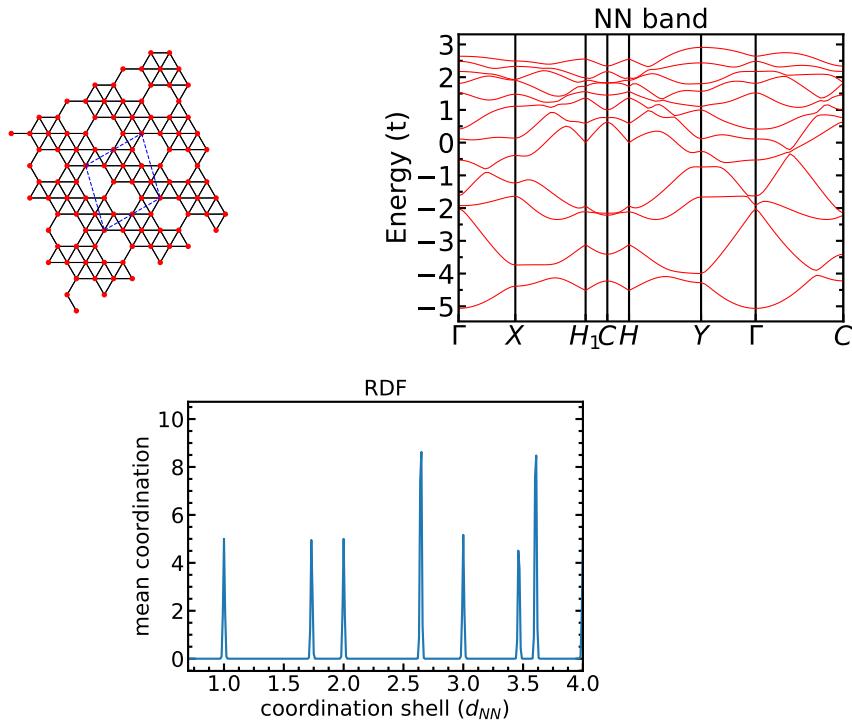


FIG. S564. t6564 lattice framework, nearest neighbors band structure and radial distribution function.

## t6565

Tiling reference number t6565 with space-group '*Pbam*' (55) and 24 sites in the unit cell, with vertex type indicated in Tab. S565. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S565.

TABLE S565. Tiling t6565 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	16	0	0	0	0	0	4

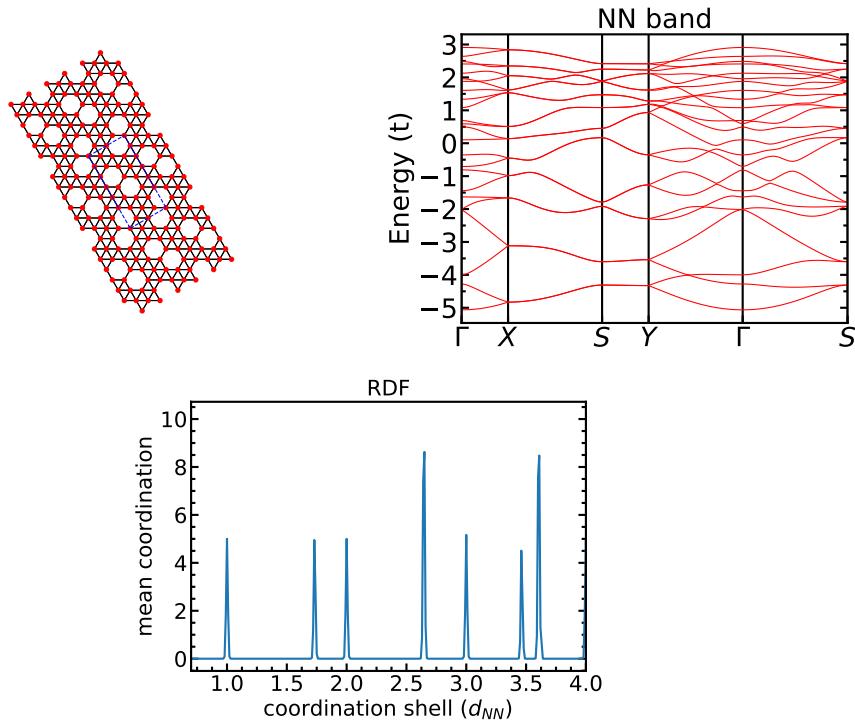


FIG. S565. t6565 lattice framework, nearest neighbors band structure and radial distribution function.

## t6566

Tiling reference number t6566 with space-group '*Cmmm*' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S566. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S566.

TABLE S566. Tiling t6566 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	4	0	0	0	0	0	4

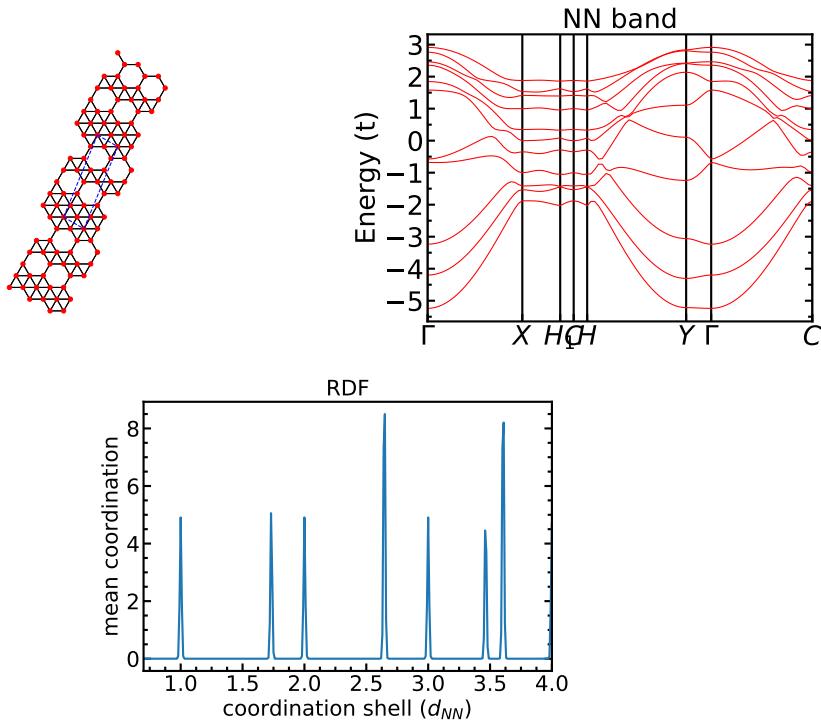


FIG. S566. t6566 lattice framework, nearest neighbors band structure and radial distribution function.

## t6567

Tiling reference number t6567 with space-group '*Pmma*' (51) and 12 sites in the unit cell, with vertex type indicated in Tab. S567. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S567.

TABLE S567. Tiling t6567 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	4	0	0	0	0	0	4

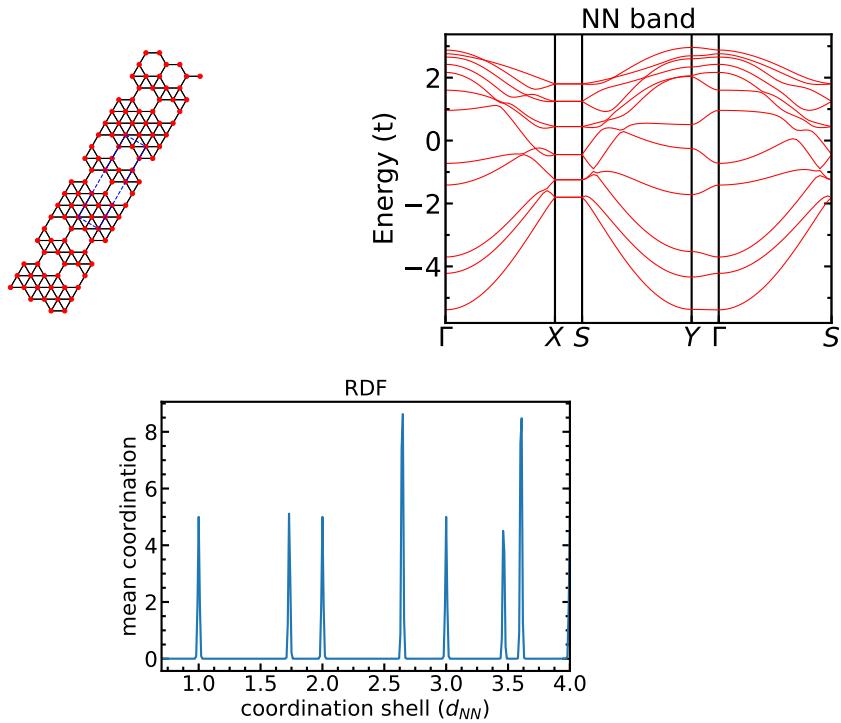


FIG. S567. t6567 lattice framework, nearest neighbors band structure and radial distribution function.

## t6568

Tiling reference number t6568 with space-group '*Cmmm*' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S568. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S568.

TABLE S568. Tiling t6568 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	4	0	0	0	0	0	4

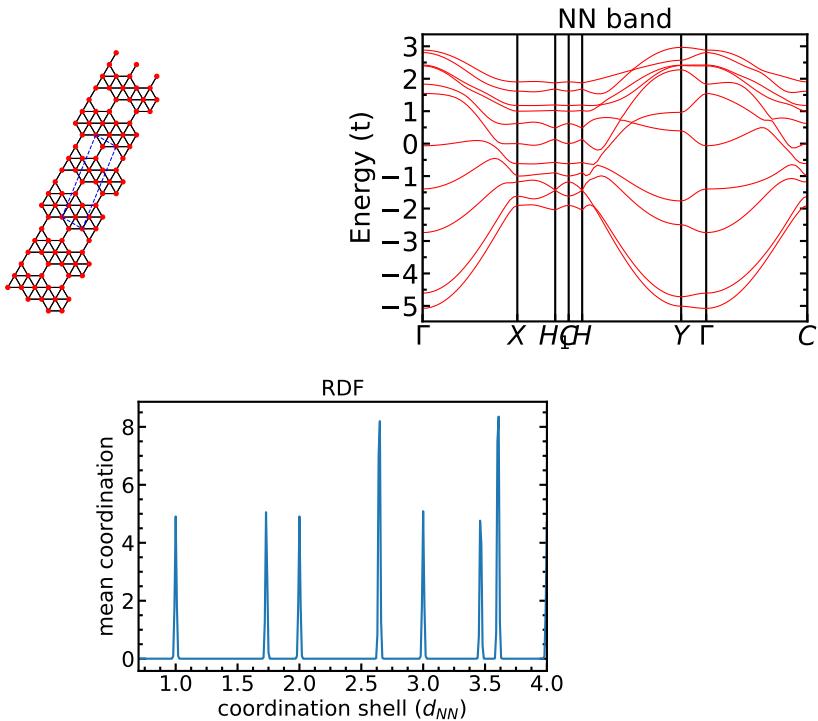


FIG. S568. t6568 lattice framework, nearest neighbors band structure and radial distribution function.

## t6569

Tiling reference number t6569 with space-group ' $P6/mmm$ ' (191) and 38 sites in the unit cell, with vertex type indicated in Tab. S569. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S569.

TABLE S569. Tiling t6569 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	24	12	0	0	0	0	0	0

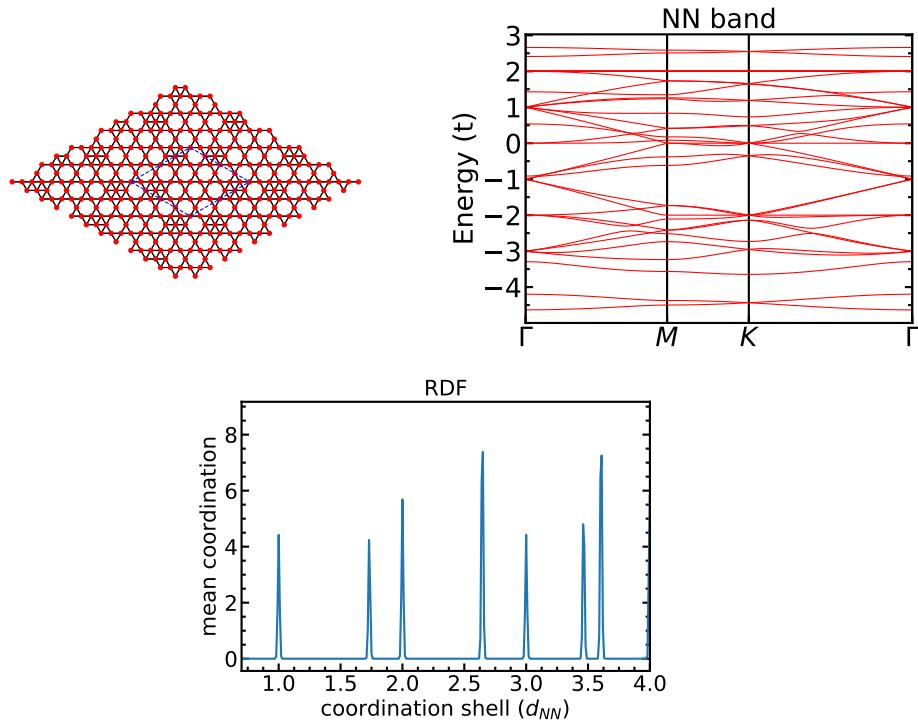


FIG. S569. t6569 lattice framework, nearest neighbors band structure and radial distribution function.

## t6570

Tiling reference number t6570 with space-group ' $Pm'$  (6) and 39 sites in the unit cell, with vertex type indicated in Tab. S570. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S570.

TABLE S570. Tiling t6570 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	18	18	0	0	0	0	0	0

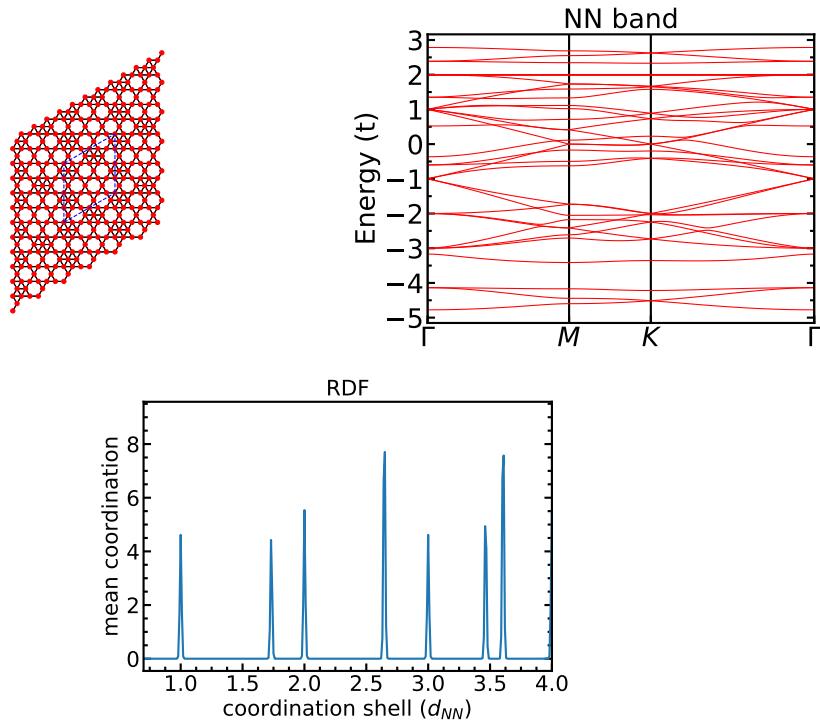


FIG. S570. t6570 lattice framework, nearest neighbors band structure and radial distribution function.

## t6571

Tiling reference number t6571 with space-group ' $P6/mmm$ ' (191) and 42 sites in the unit cell, with vertex type indicated in Tab. S571. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S571.

TABLE S571. Tiling t6571 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
12	0	0	0	0	0	0	12	18	0	0	0	0	0	0

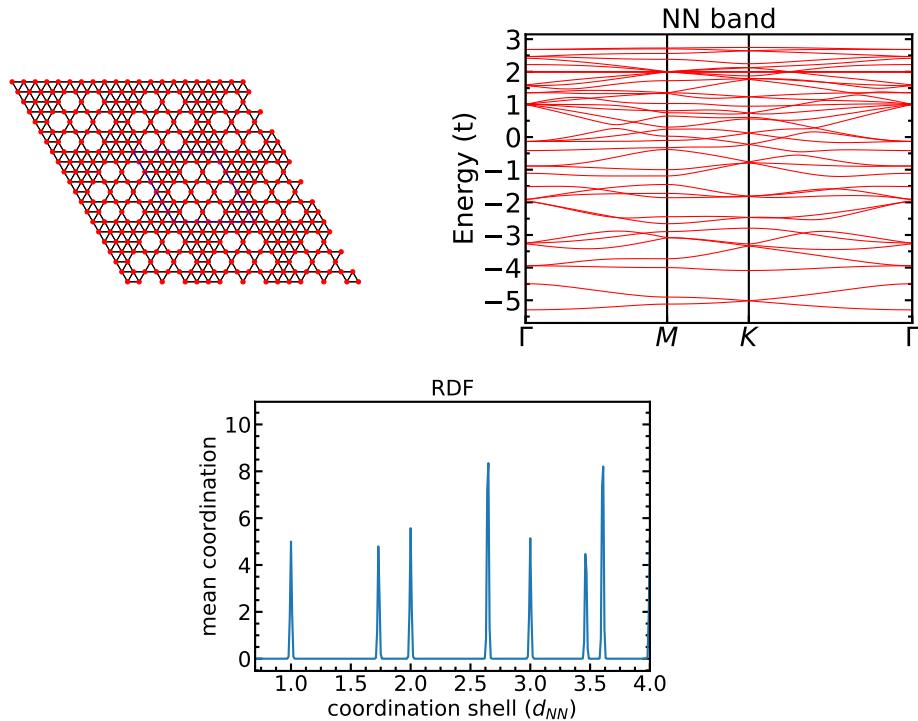


FIG. S571. t6571 lattice framework, nearest neighbors band structure and radial distribution function.

## t6572

Tiling reference number t6572 with space-group ' $P6/m$ ' (175) and 32 sites in the unit cell, with vertex type indicated in Tab. S572. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S572.

TABLE S572. Tiling t6572 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	12	18	0	0	0	0	0	0

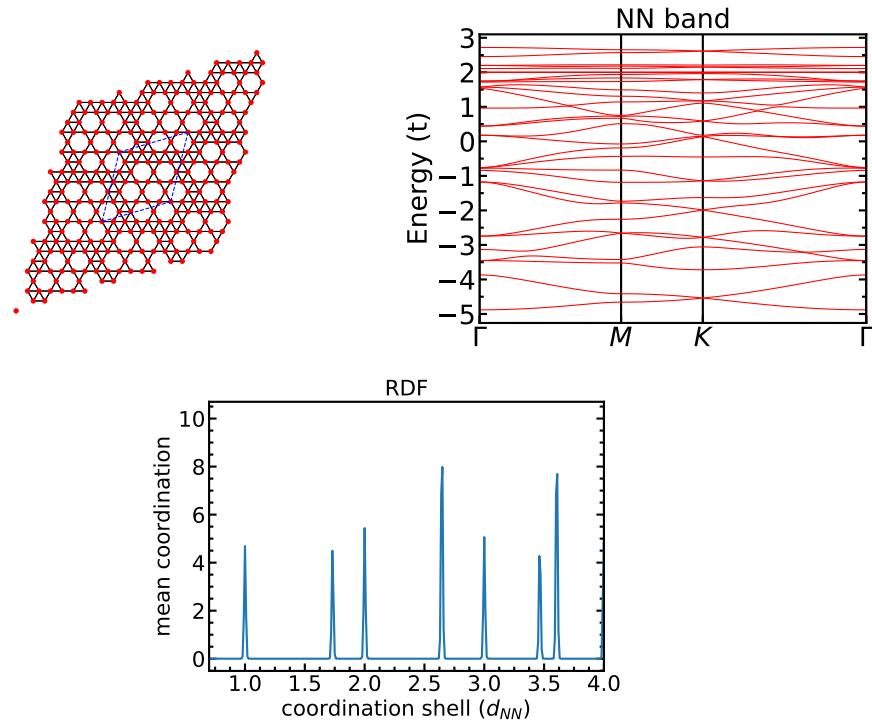


FIG. S572. t6572 lattice framework, nearest neighbors band structure and radial distribution function.

### t6573

Tiling reference number t6573 with space-group ' $P6/m$ ' (175) and 36 sites in the unit cell, with vertex type indicated in Tab. S573. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S573.

TABLE S573. Tiling t6573 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	12	18	0	0	0	0	0	0

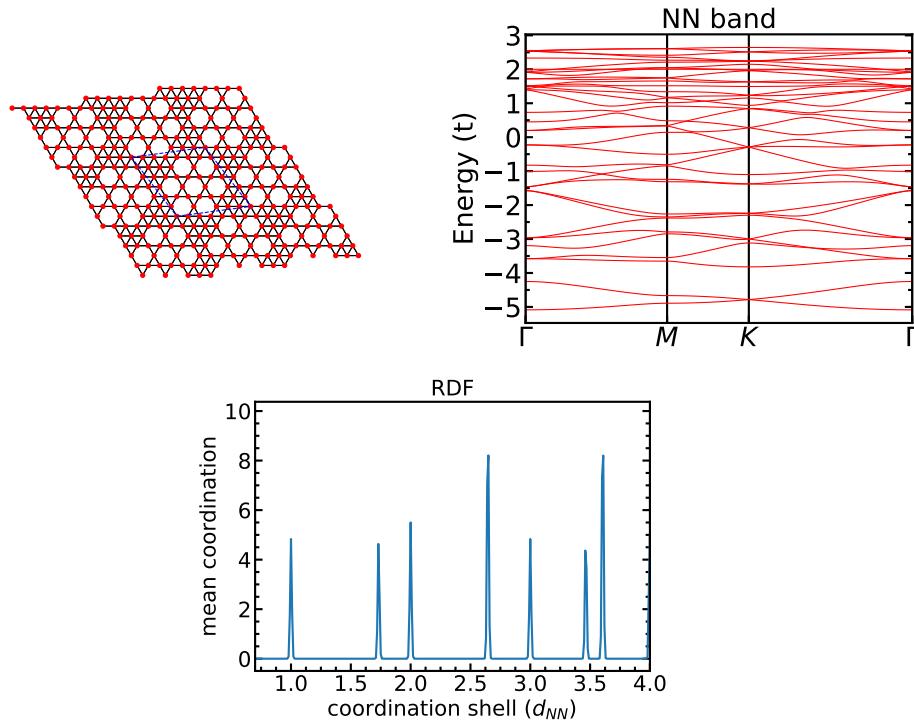


FIG. S573. t6573 lattice framework, nearest neighbors band structure and radial distribution function.

**t6574**

Tiling reference number t6574 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S574. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S574.

TABLE S574. Tiling t6574 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	10	4	0	0	0	0	0	0

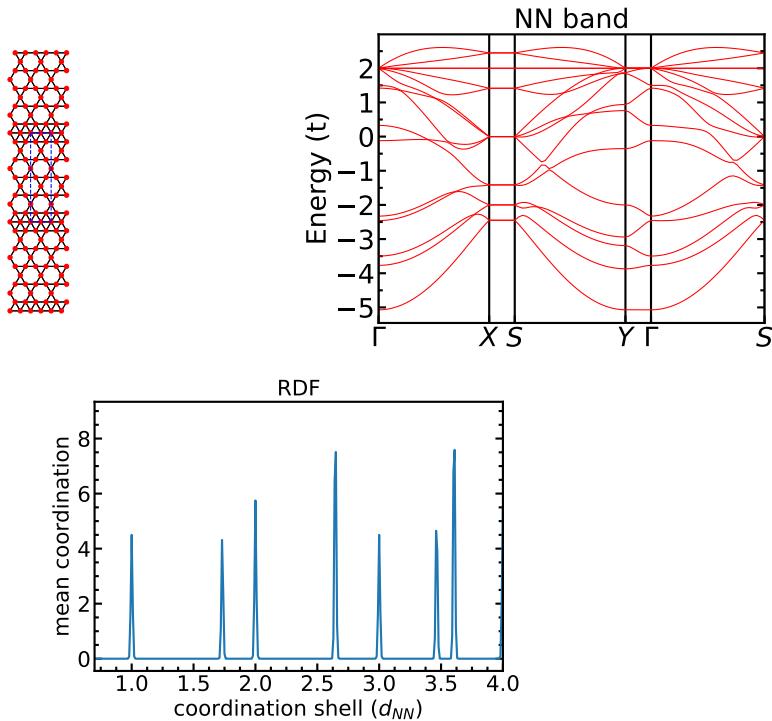


FIG. S574. t6574 lattice framework, nearest neighbors band structure and radial distribution function.

## t6575

Tiling reference number t6575 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S575. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S575.

TABLE S575. Tiling t6575 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	4	4	0	4	0	0	0	0

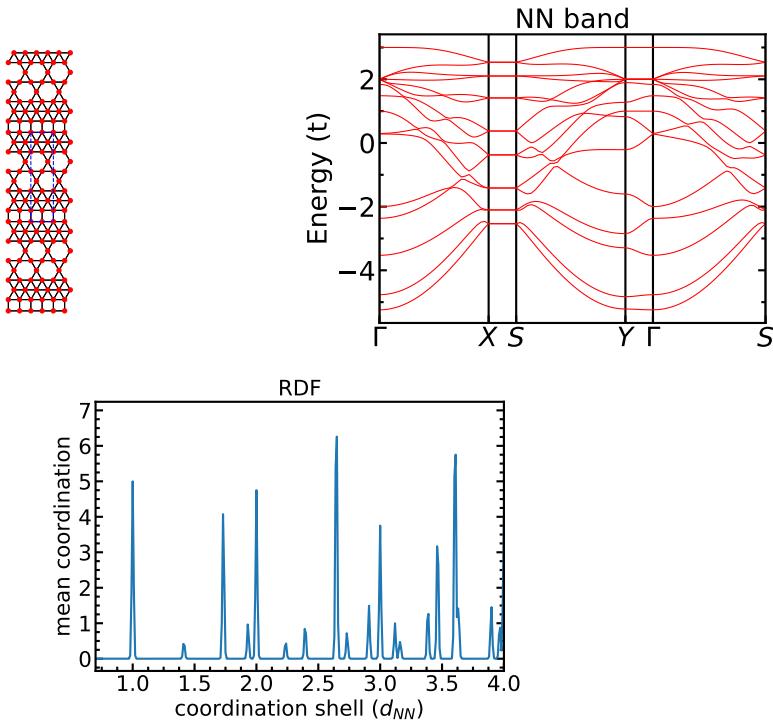


FIG. S575. t6575 lattice framework, nearest neighbors band structure and radial distribution function.

## t6576

Tiling reference number t6576 with space-group ' $Cmmm$ ' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S576. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S576.

TABLE S576. Tiling t6576 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	4	4	0	4	0	0	0	0

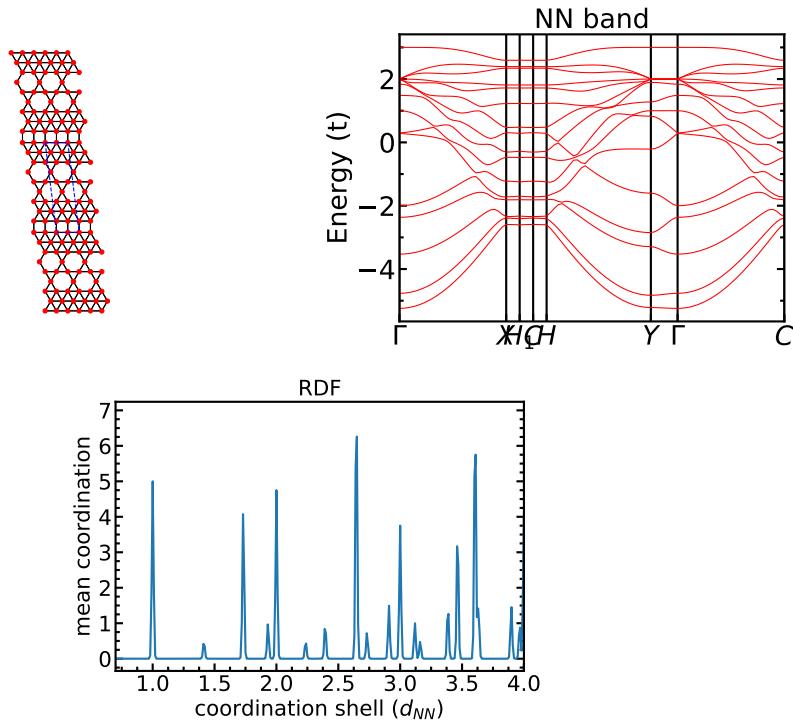


FIG. S576. t6576 lattice framework, nearest neighbors band structure and radial distribution function.

## t6577

Tiling reference number t6577 with space-group '*Pmma*' (51) and 14 sites in the unit cell, with vertex type indicated in Tab. S577. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S577.

TABLE S577. Tiling t6577 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	4	4	0	0	0	0	0	0

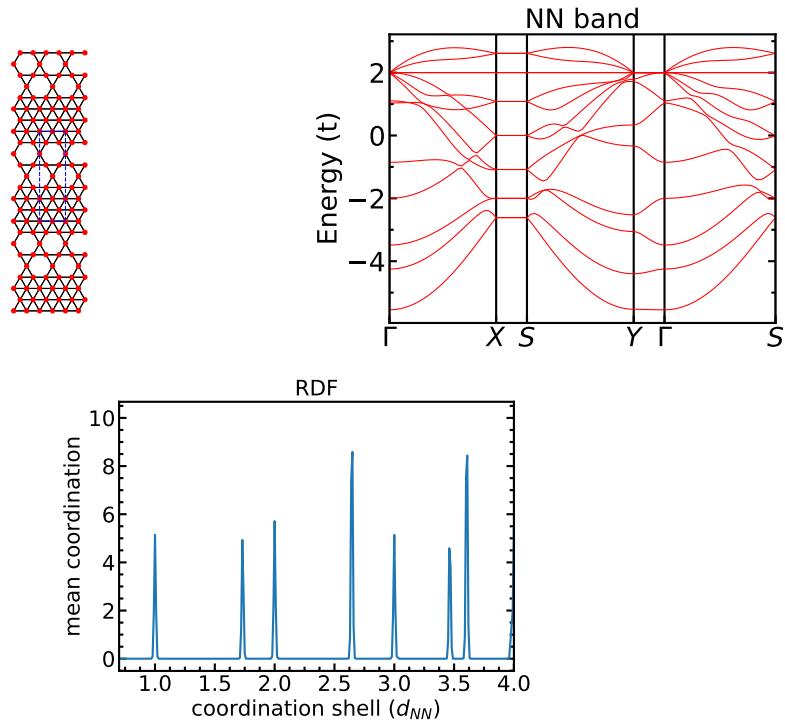


FIG. S577. t6577 lattice framework, nearest neighbors band structure and radial distribution function.

## t6578

Tiling reference number t6578 with space-group '*Cmmm*' (65) and 14 sites in the unit cell, with vertex type indicated in Tab. S578. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S578.

TABLE S578. Tiling t6578 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	4	4	0	0	0	0	0	0

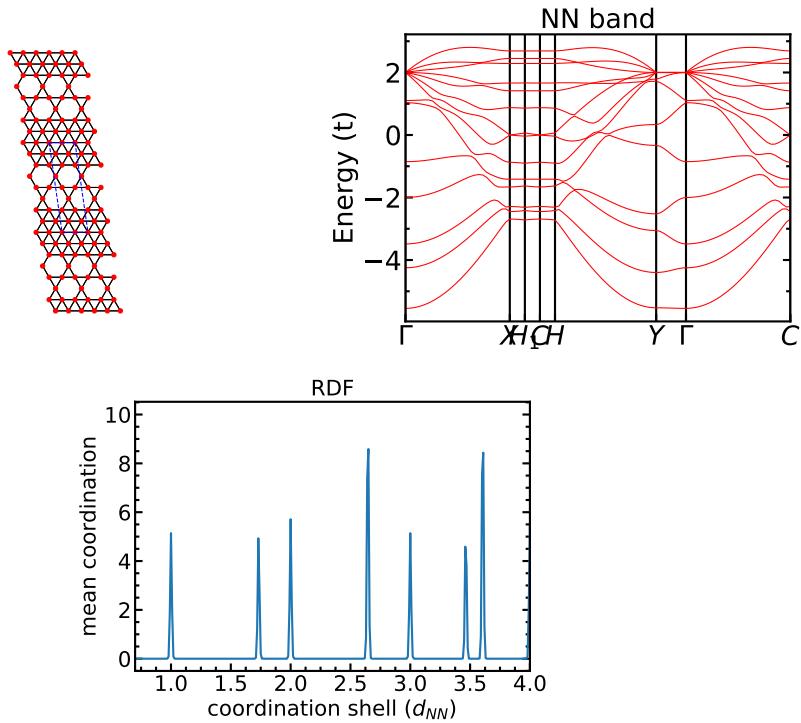


FIG. S578. t6578 lattice framework, nearest neighbors band structure and radial distribution function.

## t6579

Tiling reference number t6579 with space-group ' $Pm'$  (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S579. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S579.

TABLE S579. Tiling t6579 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	0	0	0	0	0	5	8	0	0	0	0	0	2

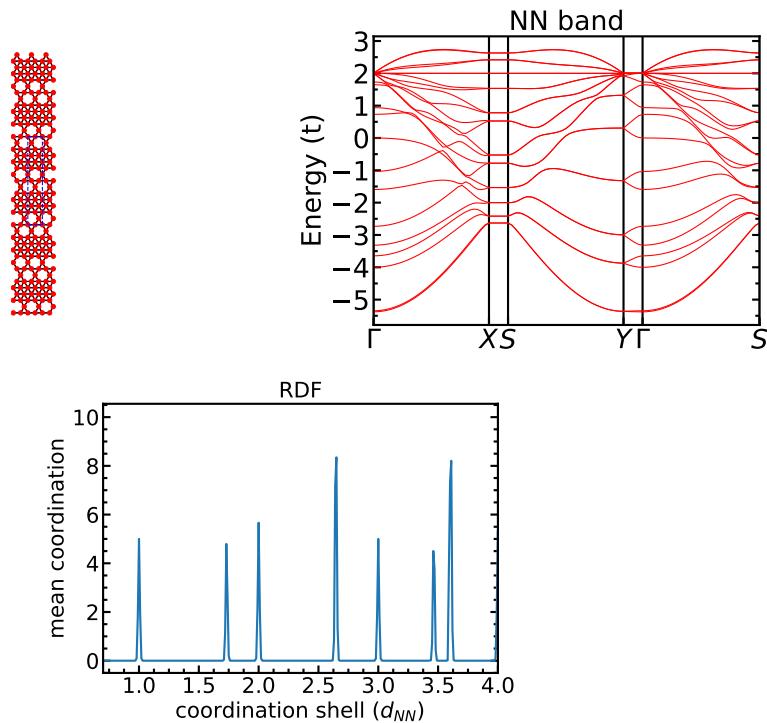


FIG. S579. t6579 lattice framework, nearest neighbors band structure and radial distribution function.

## t6580

Tiling reference number t6580 with space-group ' $Pmmm$ ' (47) and 15 sites in the unit cell, with vertex type indicated in Tab. S580. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S580.

TABLE S580. Tiling t6580 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	7	4	0	4	0	0	0	0

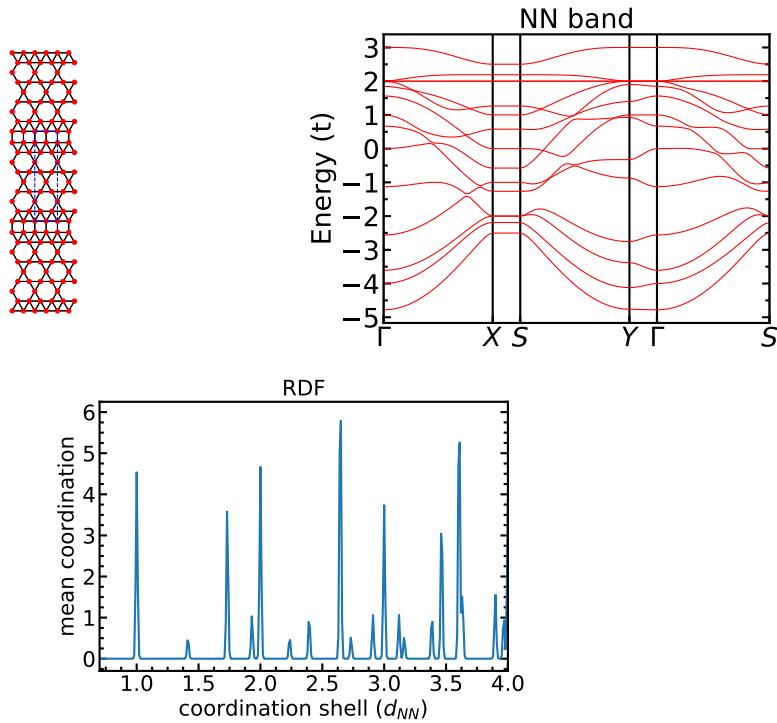


FIG. S580. t6580 lattice framework, nearest neighbors band structure and radial distribution function.

## t6581

Tiling reference number t6581 with space-group '*Cmmm*' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S581. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S581.

TABLE S581. Tiling t6581 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	7	4	0	4	0	0	0	0

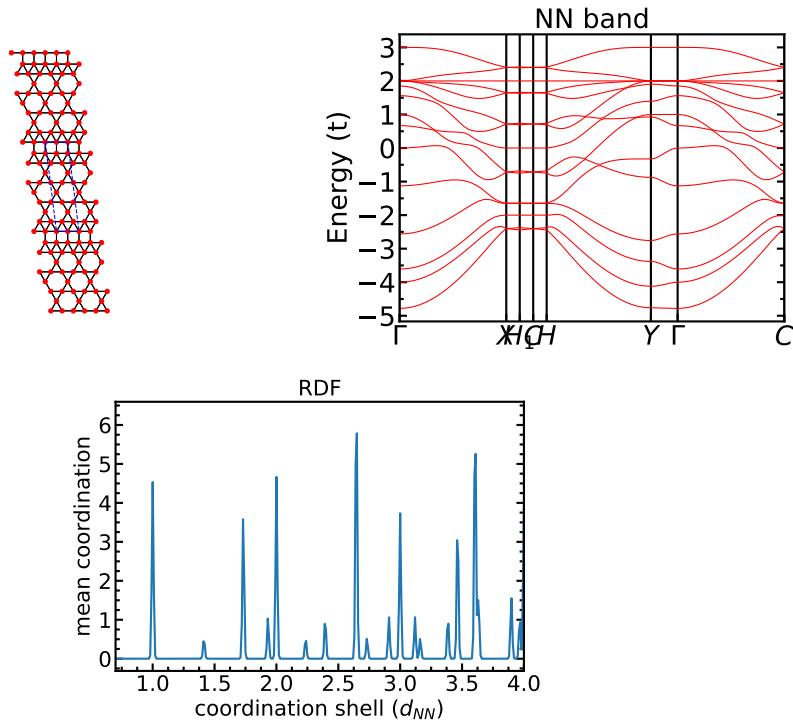


FIG. S581. t6581 lattice framework, nearest neighbors band structure and radial distribution function.

## t6582

Tiling reference number t6582 with space-group ' $Pmmm$ ' (47) and 13 sites in the unit cell, with vertex type indicated in Tab. S582. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S582.

TABLE S582. Tiling t6582 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	7	4	0	0	0	0	0	0

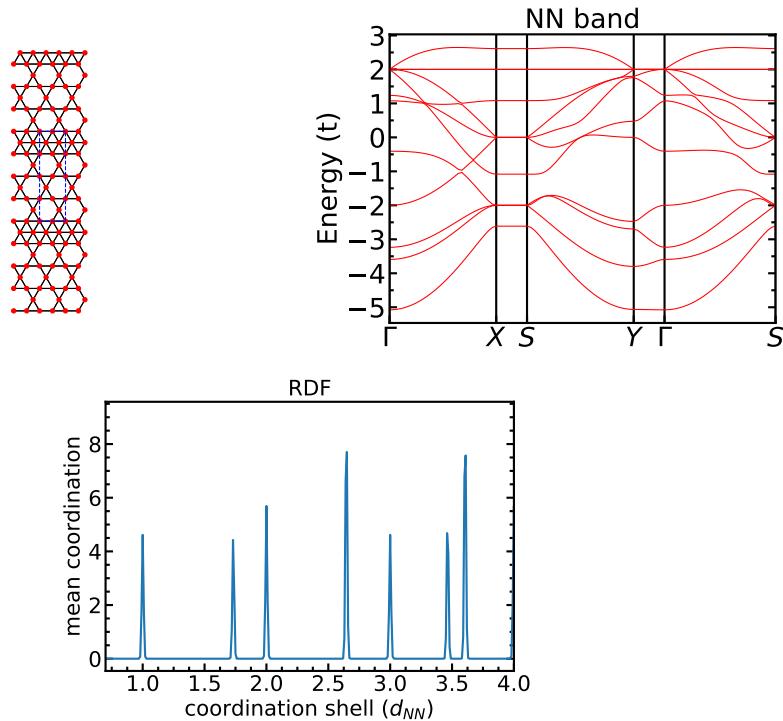


FIG. S582. t6582 lattice framework, nearest neighbors band structure and radial distribution function.

### t6583

Tiling reference number t6583 with space-group ' $Pm'$  (6) and 37 sites in the unit cell, with vertex type indicated in Tab. S583. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S583.

TABLE S583. Tiling t6583 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	30	6	0	0	0	0	0	0

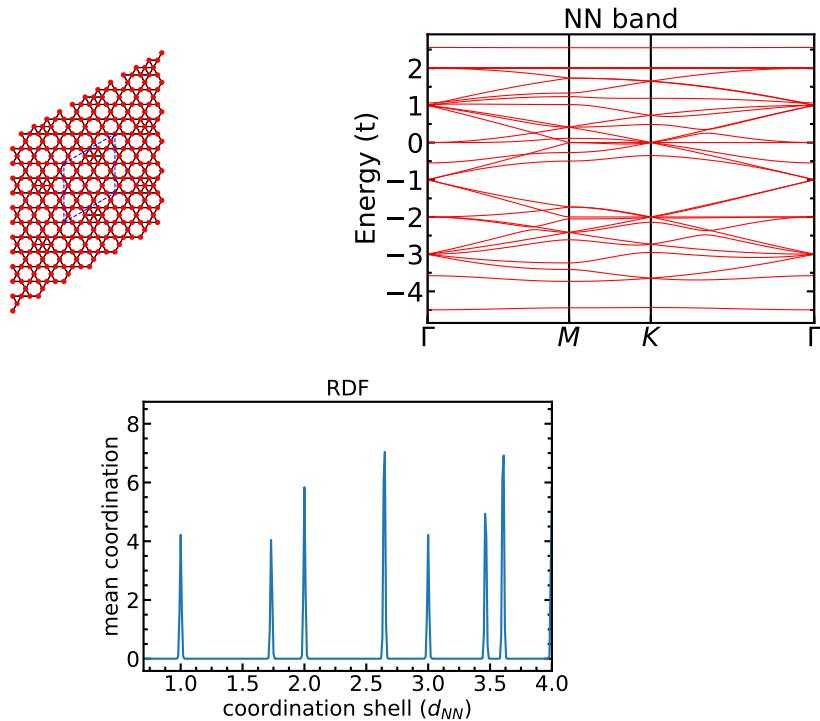


FIG. S583. t6583 lattice framework, nearest neighbors band structure and radial distribution function.

## t6584

Tiling reference number t6584 with space-group ' $P - 6m2'$  (187) and 22 sites in the unit cell, with vertex type indicated in Tab. S584. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S584.

TABLE S584. Tiling t6584 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	3	12	0	0	0	0	0	0

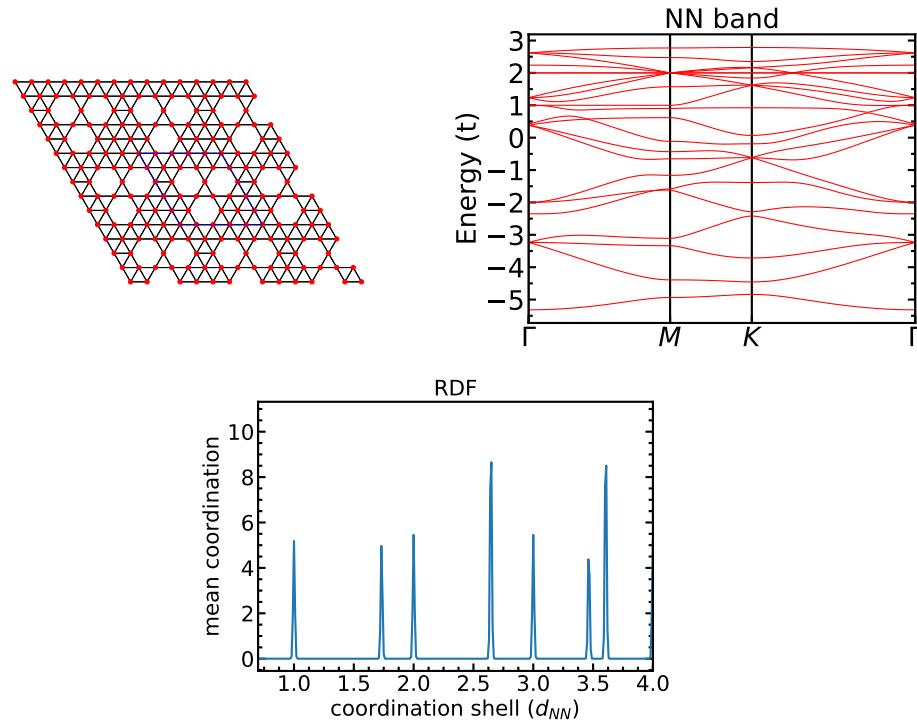


FIG. S584. t6584 lattice framework, nearest neighbors band structure and radial distribution function.

## t6585

Tiling reference number t6585 with space-group ' $P6/m$ ' (175) and 36 sites in the unit cell, with vertex type indicated in Tab. S585. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S585.

TABLE S585. Tiling t6585 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	6	30	0	0	0	0	0	0

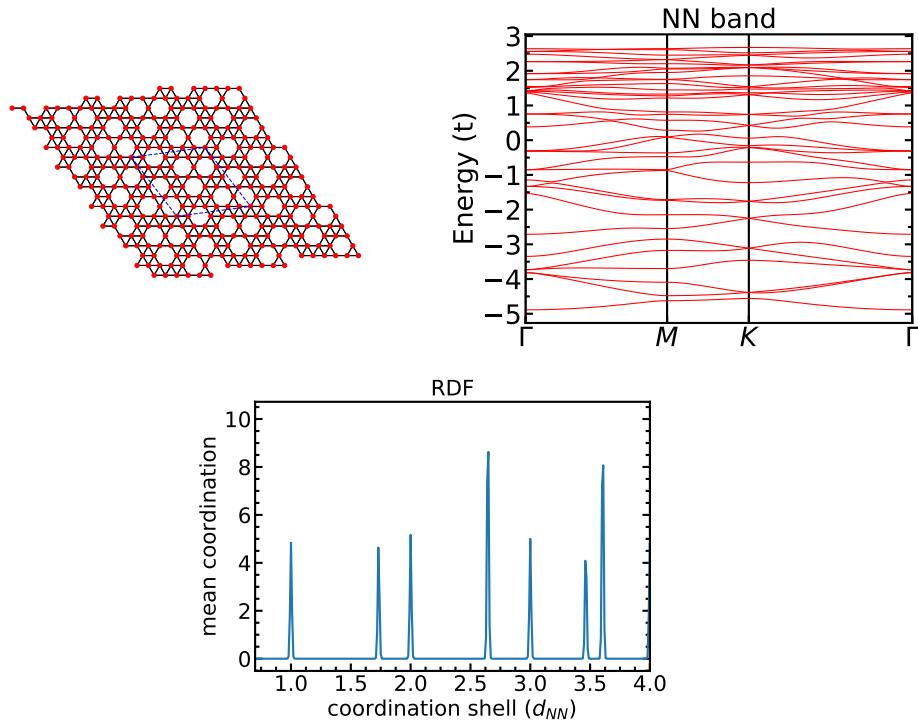


FIG. S585. t6585 lattice framework, nearest neighbors band structure and radial distribution function.

## t6586

Tiling reference number t6586 with space-group ' $P - 6'$  (174) and 16 sites in the unit cell, with vertex type indicated in Tab. S586. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S586.

TABLE S586. Tiling t6586 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	3	12	0	0	0	0	0	0

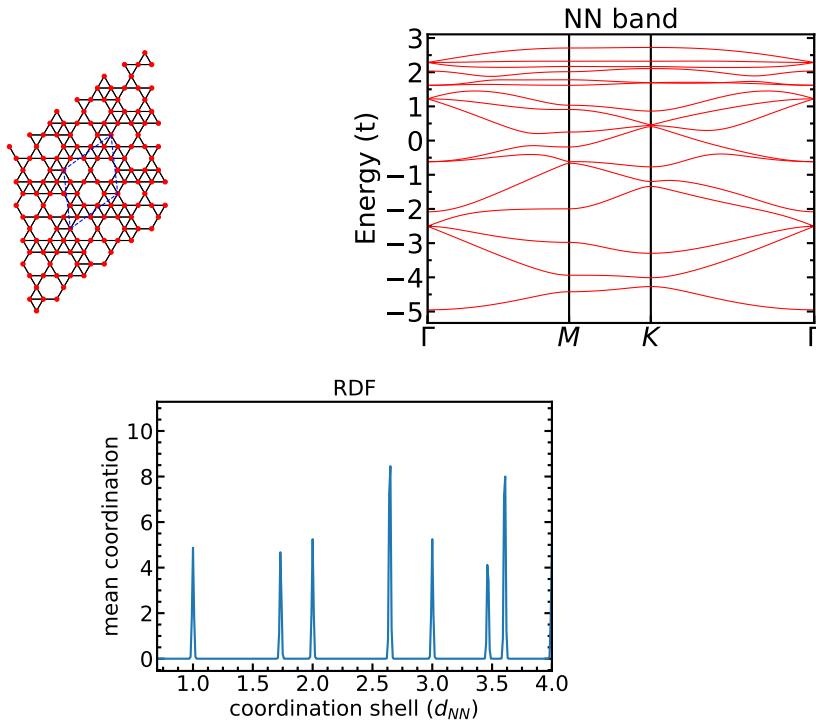


FIG. S586. t6586 lattice framework, nearest neighbors band structure and radial distribution function.

## t6587

Tiling reference number t6587 with space-group ' $P - 6'$  (174) and 18 sites in the unit cell, with vertex type indicated in Tab. S587. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S587.

TABLE S587. Tiling t6587 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	3	12	0	0	0	0	0	0

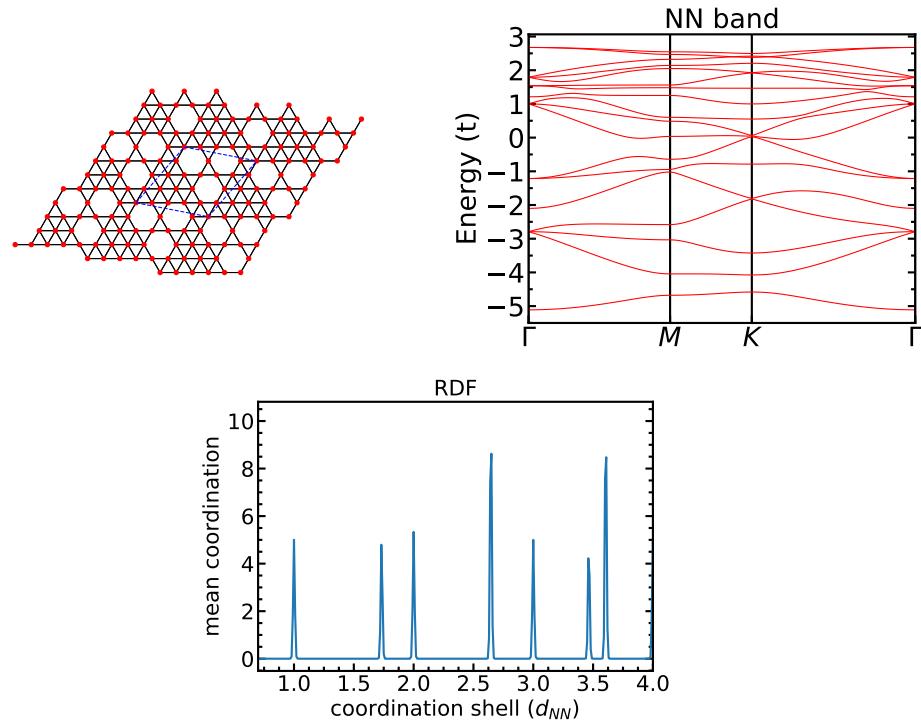


FIG. S587. t6587 lattice framework, nearest neighbors band structure and radial distribution function.

## t6588

Tiling reference number t6588 with space-group ' $Pmmm$ ' (47) and 13 sites in the unit cell, with vertex type indicated in Tab. S588. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S588.

TABLE S588. Tiling t6588 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	6	6	0	0	0	0	0	0

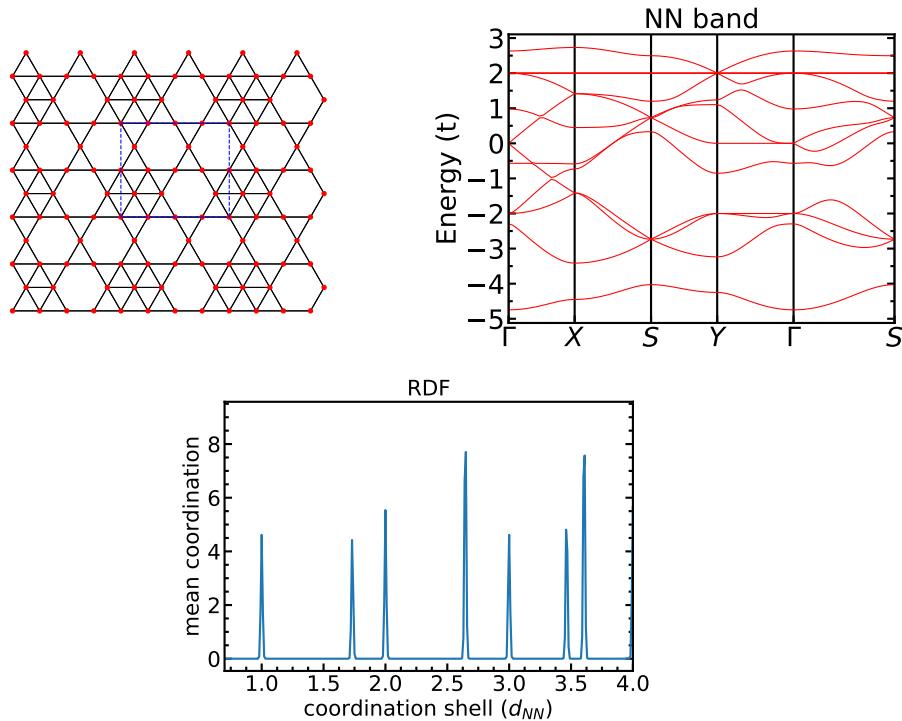


FIG. S588. t6588 lattice framework, nearest neighbors band structure and radial distribution function.

## t6589

Tiling reference number t6589 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S589. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S589.

TABLE S589. Tiling t6589 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	6	12	0	0	0	0	0	0

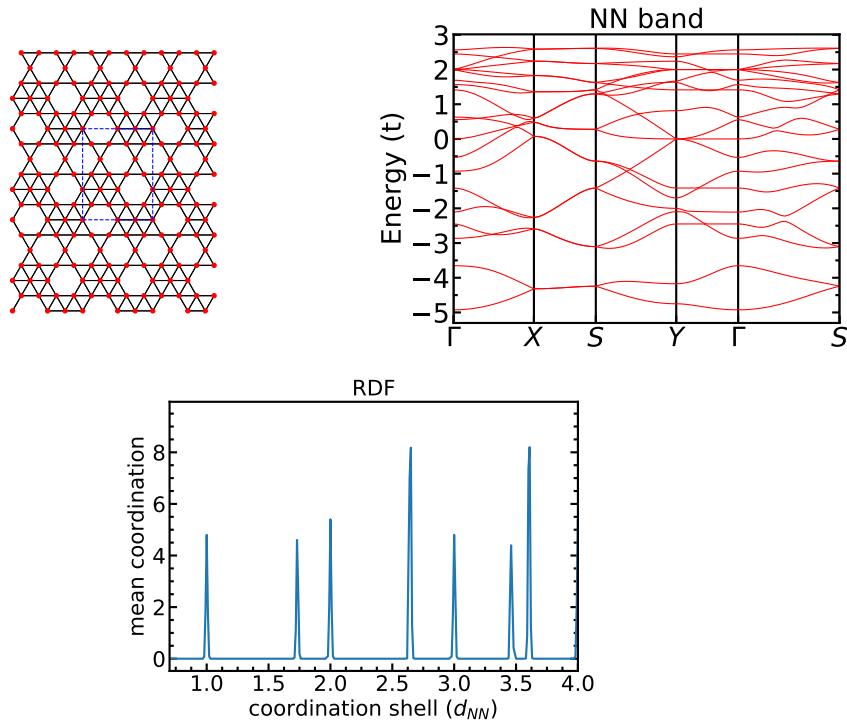


FIG. S589. t6589 lattice framework, nearest neighbors band structure and radial distribution function.

## t6590

Tiling reference number t6590 with space-group '*Pmma*' (51) and 16 sites in the unit cell, with vertex type indicated in Tab. S590. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S590.

TABLE S590. Tiling t6590 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	8	8	0	0	0	0	0	0

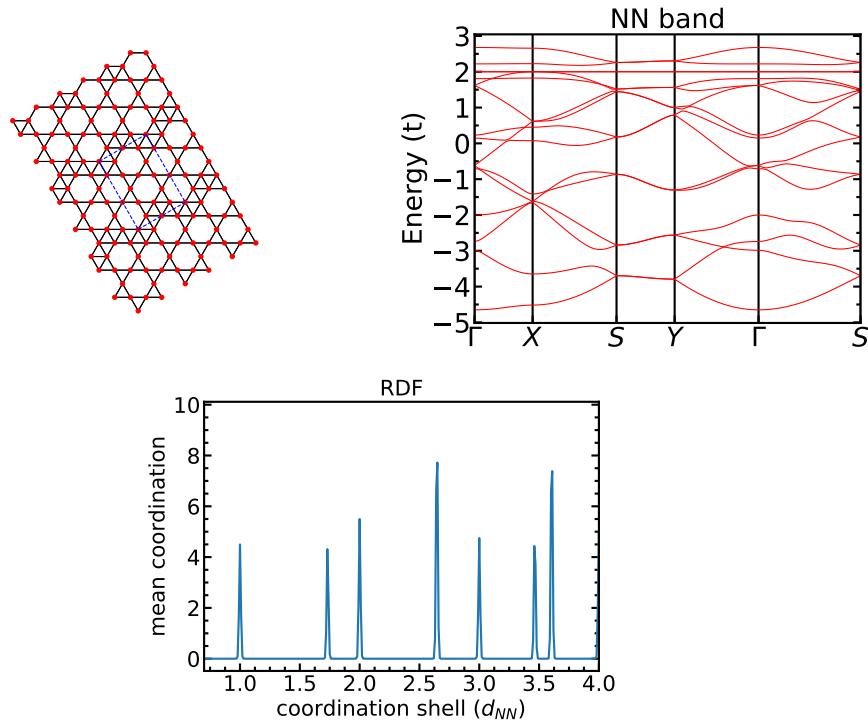


FIG. S590. t6590 lattice framework, nearest neighbors band structure and radial distribution function.

## t6591

Tiling reference number t6591 with space-group '*Pmma*' (51) and 22 sites in the unit cell, with vertex type indicated in Tab. S591. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S591.

TABLE S591. Tiling t6591 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	14	8	0	0	0	0	0	0

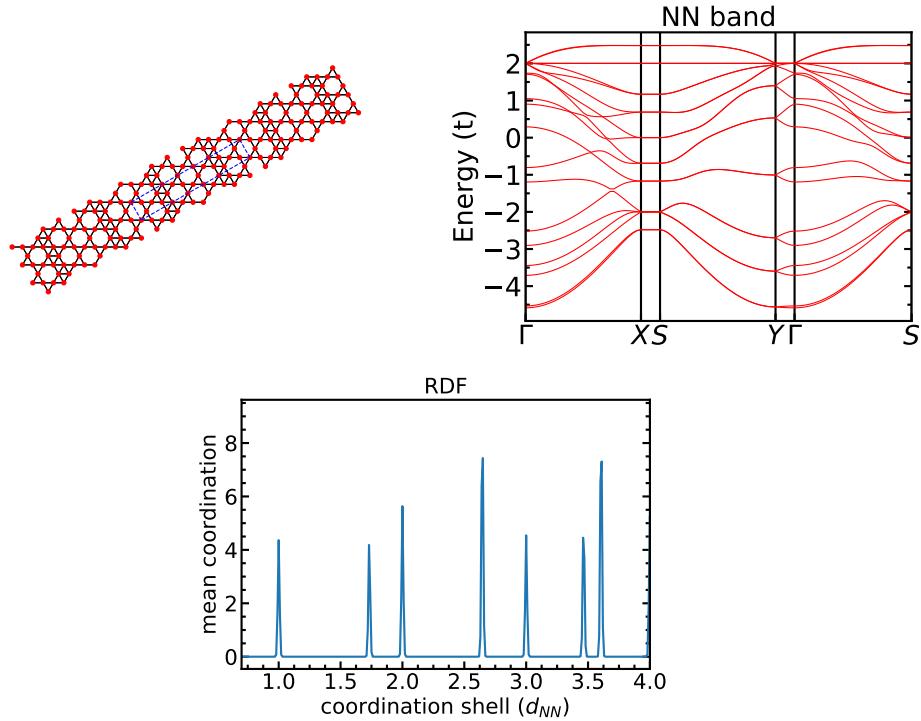


FIG. S591. t6591 lattice framework, nearest neighbors band structure and radial distribution function.

## t6592

Tiling reference number t6592 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S592. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S592.

TABLE S592. Tiling t6592 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	7	4	0	0	0	0	0	0

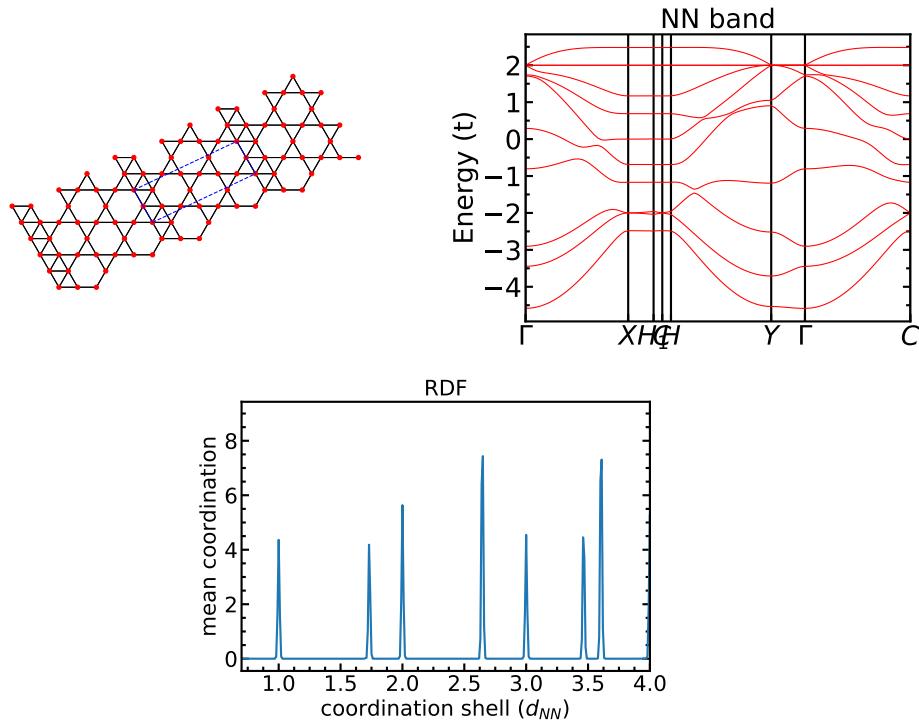


FIG. S592. t6592 lattice framework, nearest neighbors band structure and radial distribution function.

### t6593

Tiling reference number t6593 with space-group '*Cmmm*' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S593. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S593.

TABLE S593. Tiling t6593 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
10	0	0	0	0	0	0	1	4	0	0	0	0	0	0

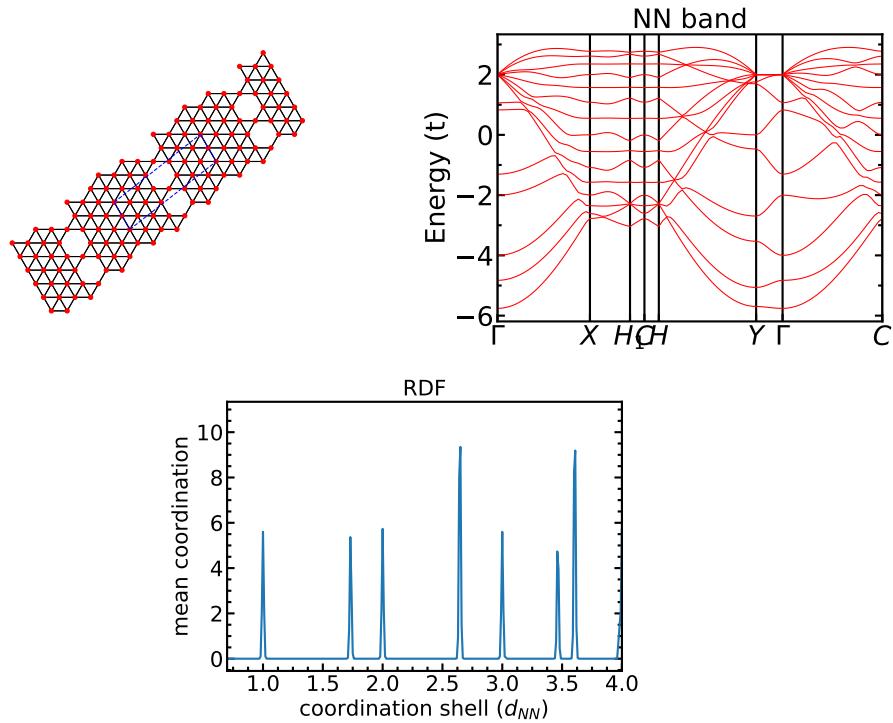


FIG. S593. t6593 lattice framework, nearest neighbors band structure and radial distribution function.

## t6594

Tiling reference number t6594 with space-group '*Cmmm*' (65) and 14 sites in the unit cell, with vertex type indicated in Tab. S594. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S594.

TABLE S594. Tiling t6594 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	1	10	0	0	0	0	0	0

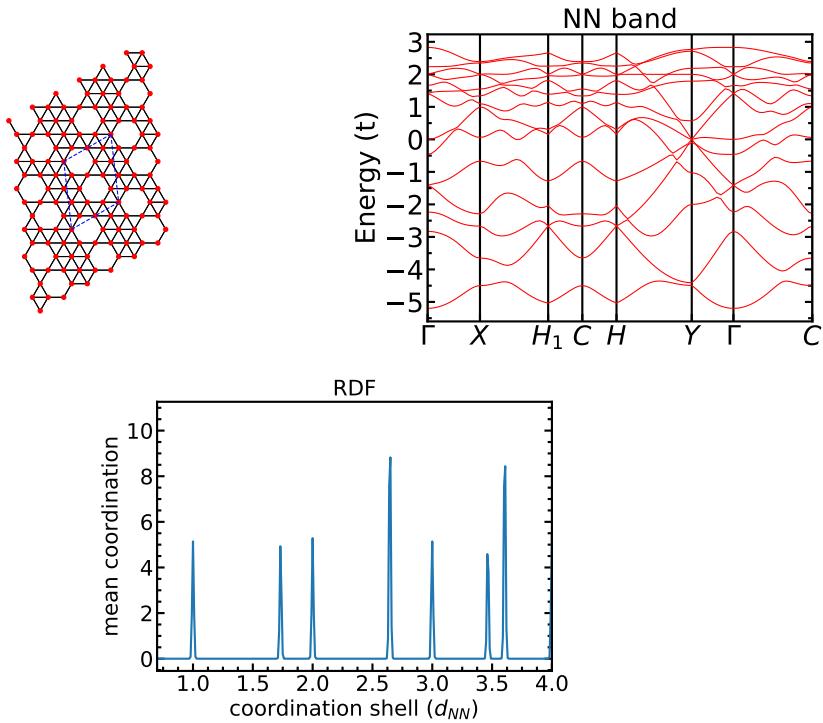


FIG. S594. t6594 lattice framework, nearest neighbors band structure and radial distribution function.

## t6595

Tiling reference number t6595 with space-group ' $Pm'$  (6) and 42 sites in the unit cell, with vertex type indicated in Tab. S595. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S595.

TABLE S595. Tiling t6595 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
12	0	0	0	0	0	0	6	24	0	0	0	0	0	0

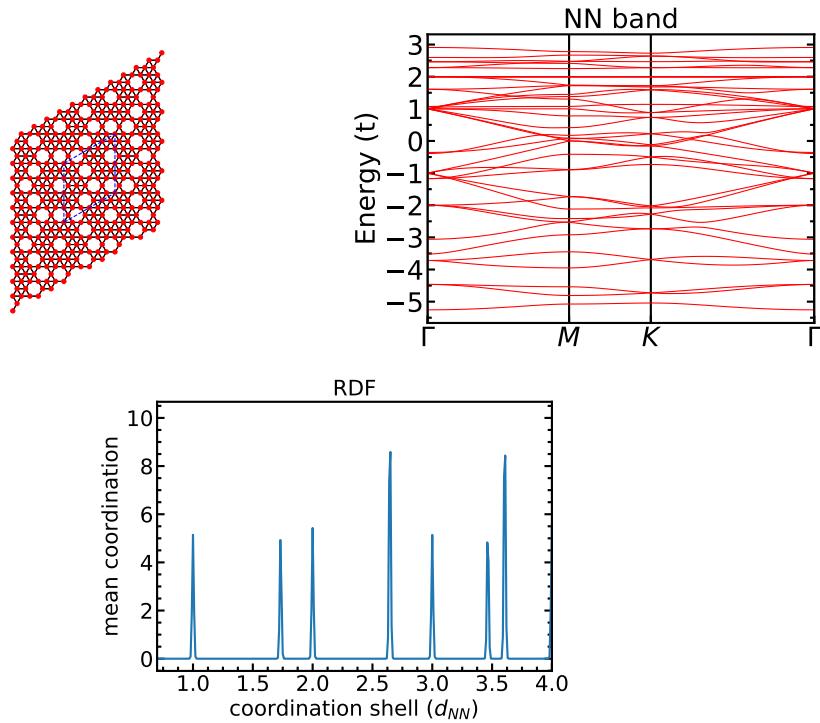


FIG. S595. t6595 lattice framework, nearest neighbors band structure and radial distribution function.

## t6596

Tiling reference number t6596 with space-group '*Cmmm*' (65) and 18 sites in the unit cell, with vertex type indicated in Tab. S596. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S596.

TABLE S596. Tiling t6596 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	14	0	0	0	0	0	0

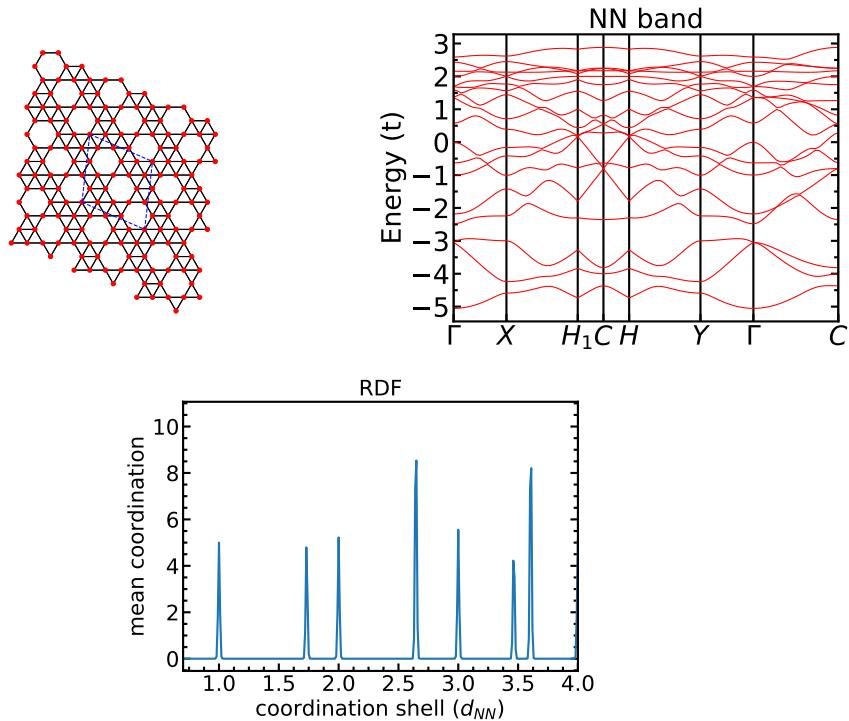


FIG. S596. t6596 lattice framework, nearest neighbors band structure and radial distribution function.

## t6597

Tiling reference number t6597 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S597. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S597.

TABLE S597. Tiling t6597 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	16	0	0	0	0	0	0

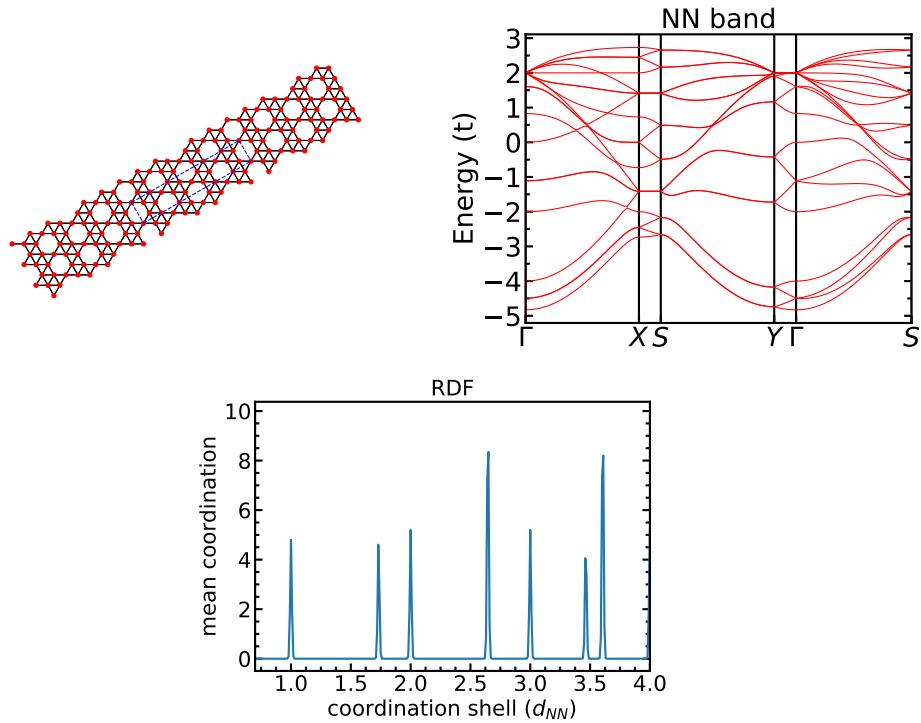


FIG. S597. t6597 lattice framework, nearest neighbors band structure and radial distribution function.

## t6598

Tiling reference number t6598 with space-group ' $Cmmm$ ' (65) and 14 sites in the unit cell, with vertex type indicated in Tab. S598. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S598.

TABLE S598. Tiling t6598 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	8	0	0	0	0	0	0

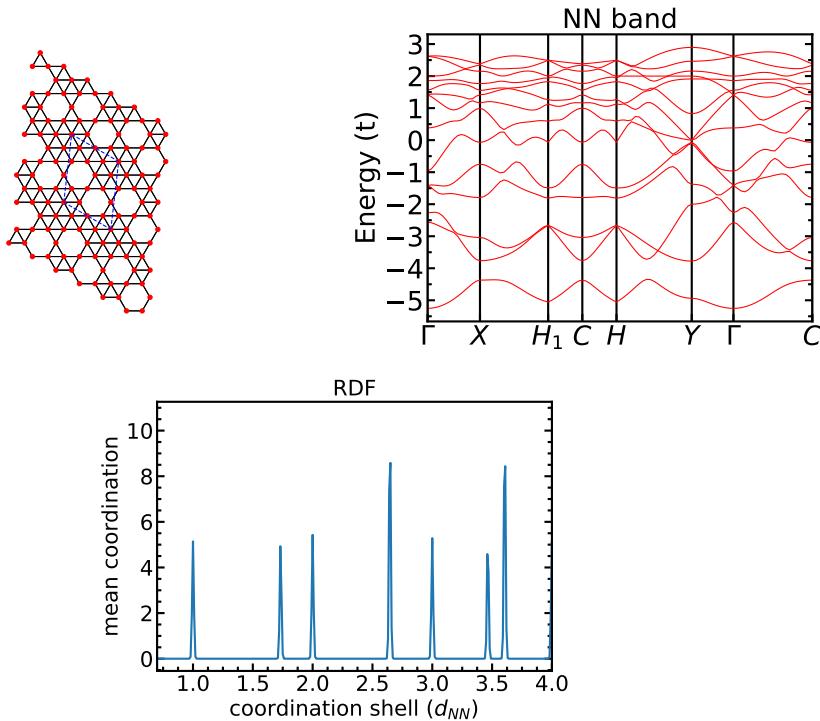


FIG. S598. t6598 lattice framework, nearest neighbors band structure and radial distribution function.

## t6599

Tiling reference number t6599 with space-group '*Pmma*' (51) and 14 sites in the unit cell, with vertex type indicated in Tab. S599. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S599.

TABLE S599. Tiling t6599 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	8	0	0	0	0	0	0

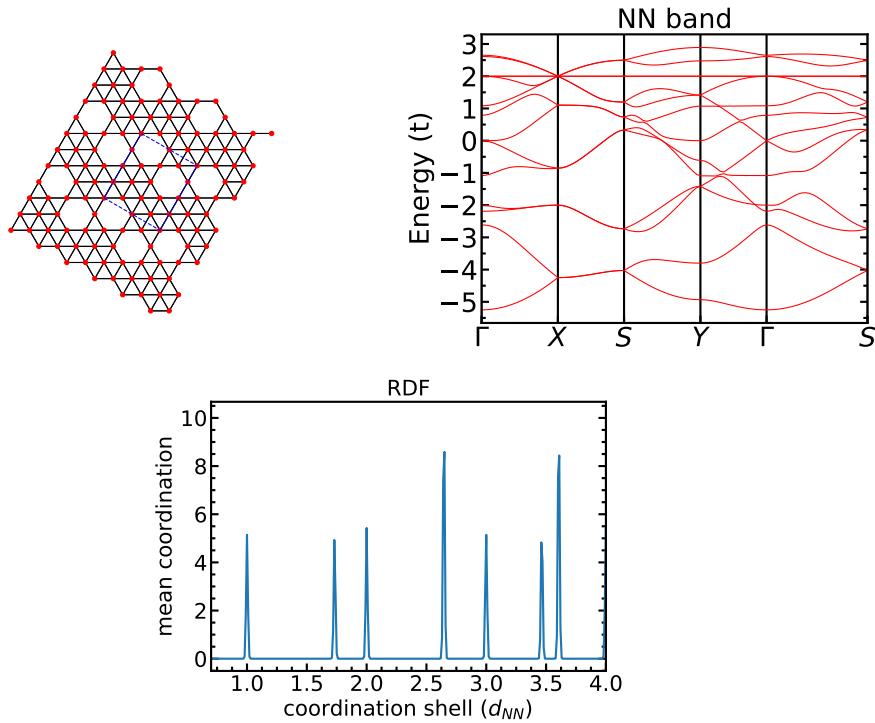


FIG. S599. t6599 lattice framework, nearest neighbors band structure and radial distribution function.

## t6600

Tiling reference number t6600 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S600. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S600.

TABLE S600. Tiling t6600 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	1	10	0	0	0	0	0	0

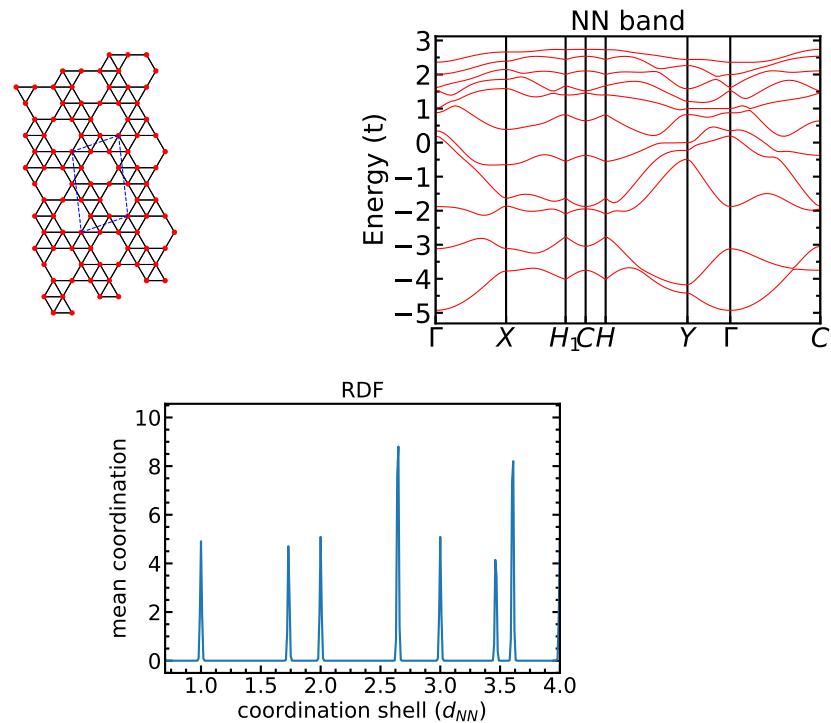


FIG. S600. t6600 lattice framework, nearest neighbors band structure and radial distribution function.

## t6601

Tiling reference number t6601 with space-group '*Pbam*' (55) and 24 sites in the unit cell, with vertex type indicated in Tab. S601. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S601.

TABLE S601. Tiling t6601 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	4	16	0	0	0	0	0	0

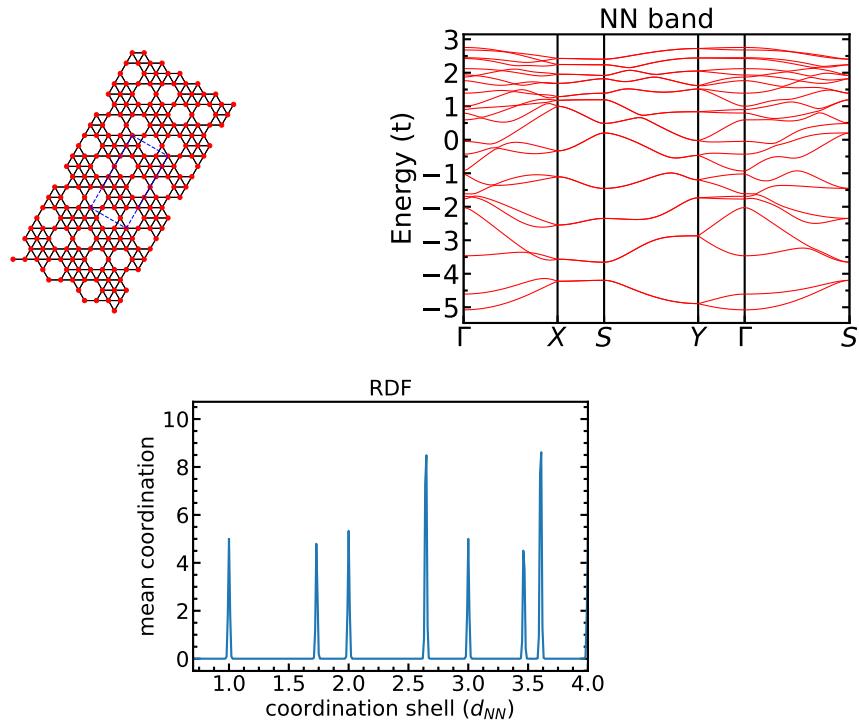


FIG. S601. t6601 lattice framework, nearest neighbors band structure and radial distribution function.

## t6602

Tiling reference number t6602 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S602. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S602.

TABLE S602. Tiling t6602 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	8	0	4	0	0	0	0

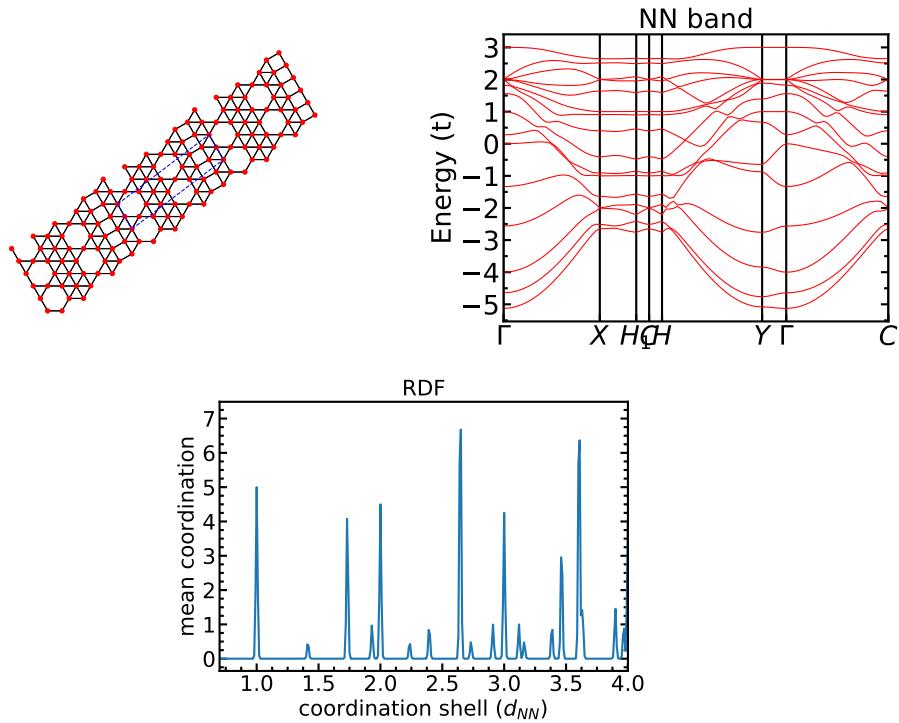


FIG. S602. t6602 lattice framework, nearest neighbors band structure and radial distribution function.

### t6603

Tiling reference number t6603 with space-group ' $P2/m$ ' (10) and 16 sites in the unit cell, with vertex type indicated in Tab. S603. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S603.

TABLE S603. Tiling t6603 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	8	0	4	0	0	0	0

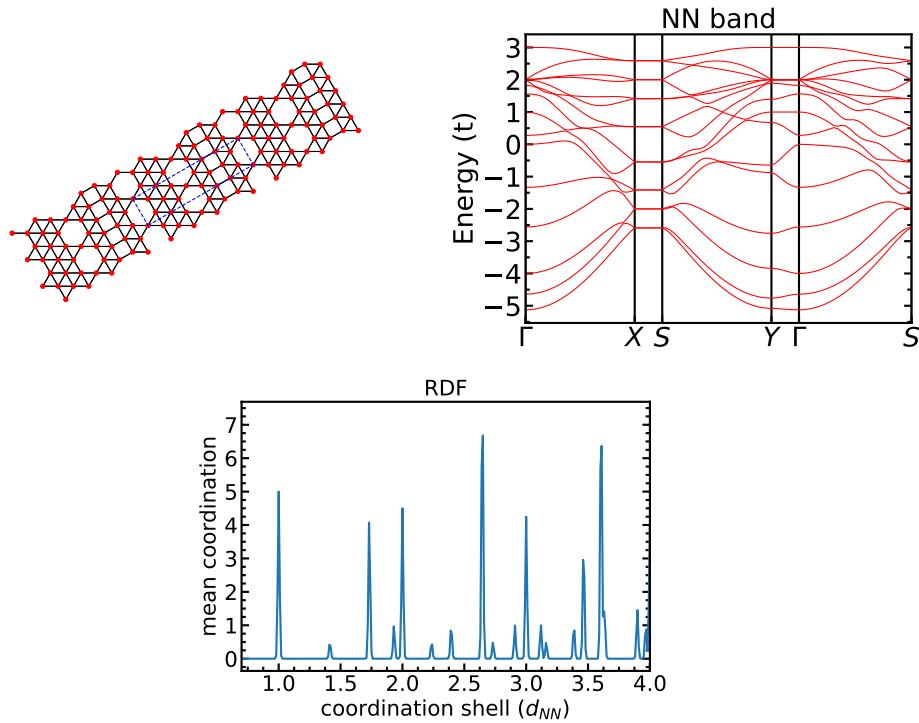


FIG. S603. t6603 lattice framework, nearest neighbors band structure and radial distribution function.

## t6604

Tiling reference number t6604 with space-group ' $P2/m$ ' (10) and 14 sites in the unit cell, with vertex type indicated in Tab. S604. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S604.

TABLE S604. Tiling t6604 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	2	8	0	0	0	0	0	0

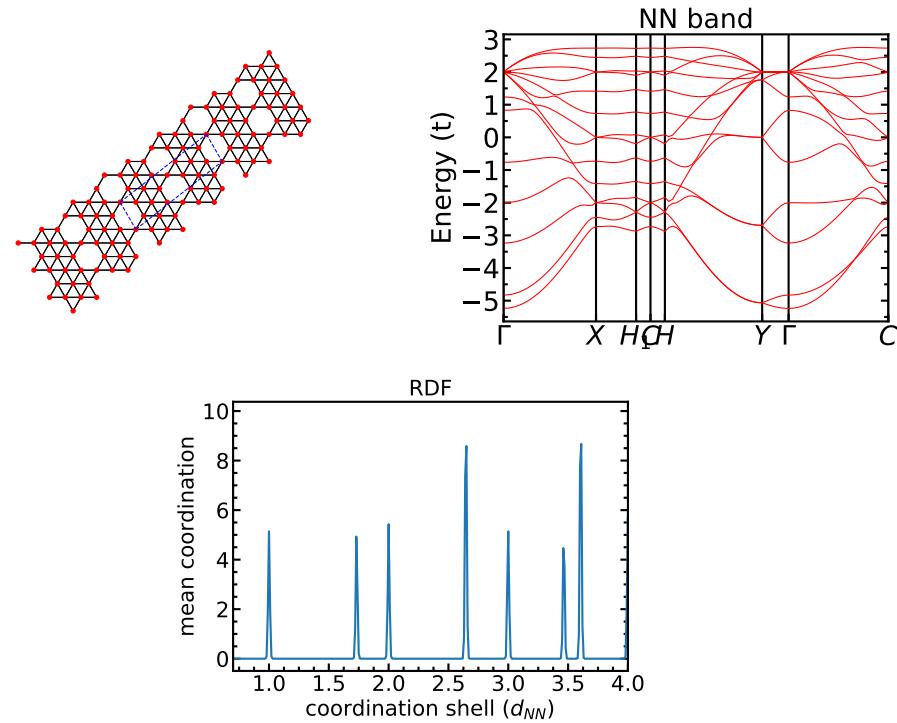


FIG. S604. t6604 lattice framework, nearest neighbors band structure and radial distribution function.

## t6605

Tiling reference number t6605 with space-group ' $P6/m$ ' (175) and 31 sites in the unit cell, with vertex type indicated in Tab. S605. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S605.

TABLE S605. Tiling t6605 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	6	24	0	0	0	0	0	0

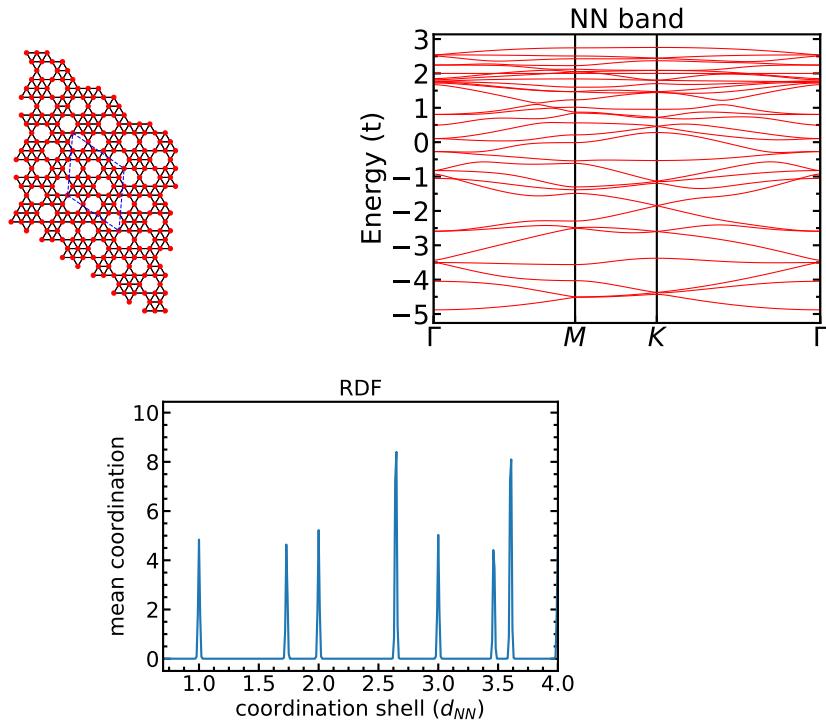


FIG. S605. t6605 lattice framework, nearest neighbors band structure and radial distribution function.

## t6606

Tiling reference number t6606 with space-group '*Pmma*' (51) and 20 sites in the unit cell, with vertex type indicated in Tab. S606. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S606.

TABLE S606. Tiling t6606 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	4	16	0	0	0	0	0	0

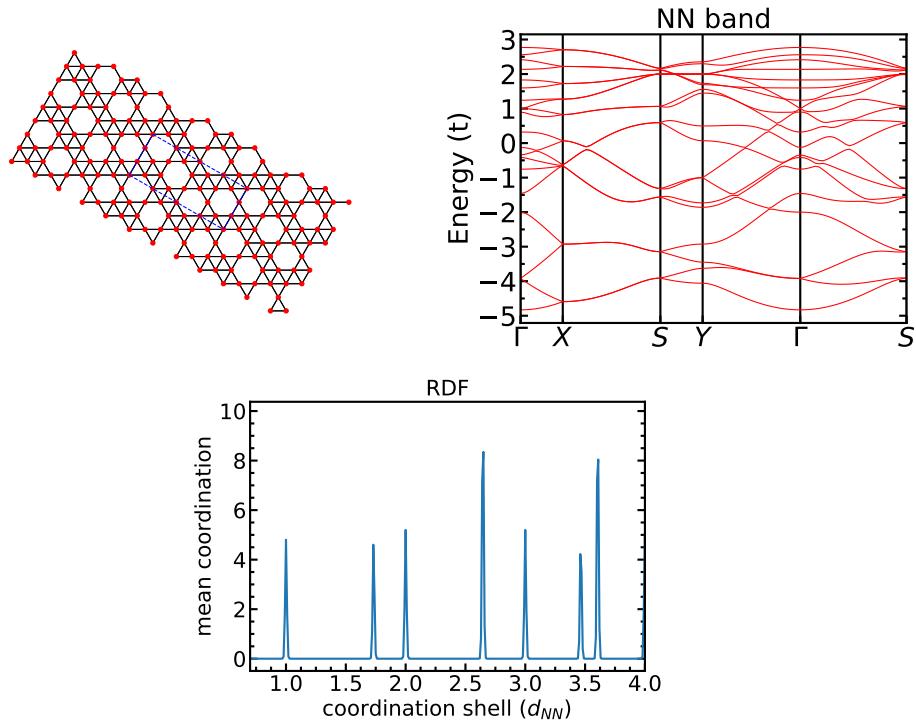


FIG. S606. t6606 lattice framework, nearest neighbors band structure and radial distribution function.

## t6607

Tiling reference number t6607 with space-group '*Pbam*' (55) and 24 sites in the unit cell, with vertex type indicated in Tab. S607. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S607.

TABLE S607. Tiling t6607 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	4	16	0	0	0	0	0	0

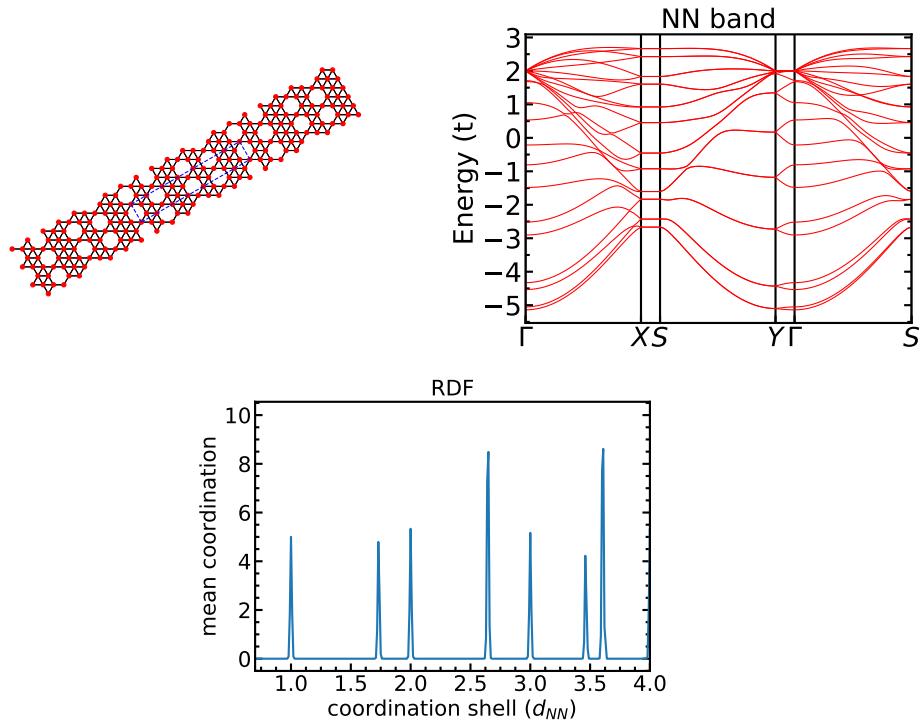


FIG. S607. t6607 lattice framework, nearest neighbors band structure and radial distribution function.

## t6608

Tiling reference number t6608 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S608. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S608.

TABLE S608. Tiling t6608 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	2	8	0	0	0	0	0	0

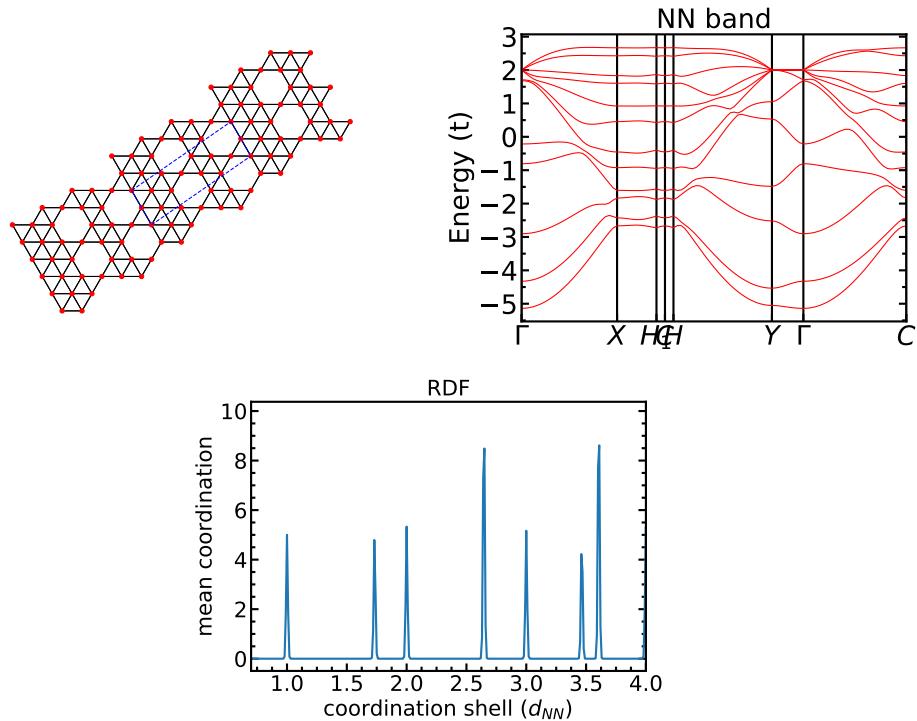


FIG. S608. t6608 lattice framework, nearest neighbors band structure and radial distribution function.

## t6609

Tiling reference number t6609 with space-group ' $Pm'$  (6) and 50 sites in the unit cell, with vertex type indicated in Tab. S609. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S609.

TABLE S609. Tiling t6609 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
20	0	0	0	0	0	0	0	0	0	18	12	0	0	0

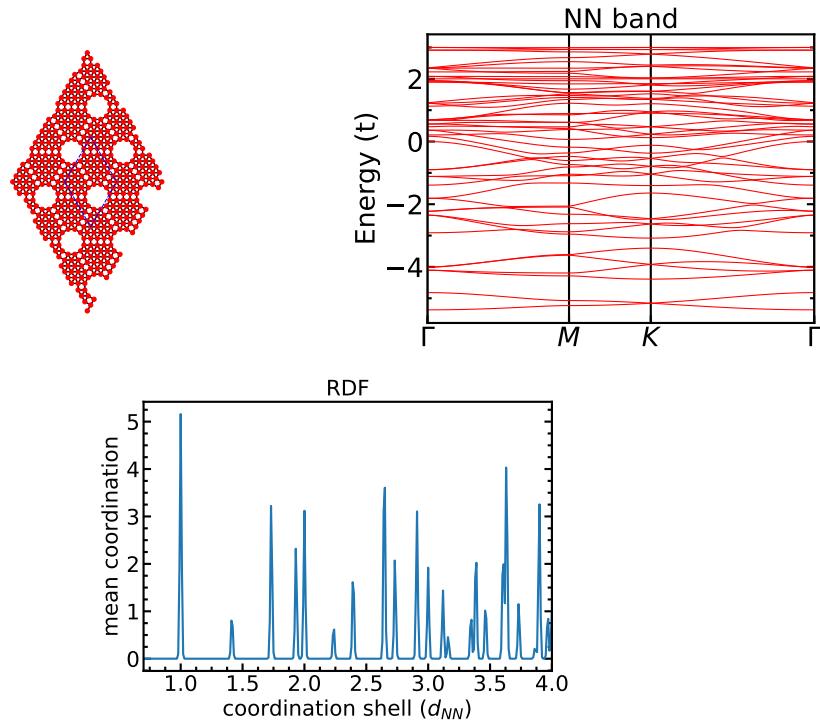


FIG. S609. t6609 lattice framework, nearest neighbors band structure and radial distribution function.

## t6610

Tiling reference number t6610 with space-group ' $Pm'$  (6) and 56 sites in the unit cell, with vertex type indicated in Tab. S610. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S610.

TABLE S610. Tiling t6610 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	0	0	0	0	0	0	0	14	22	12	0	0	0

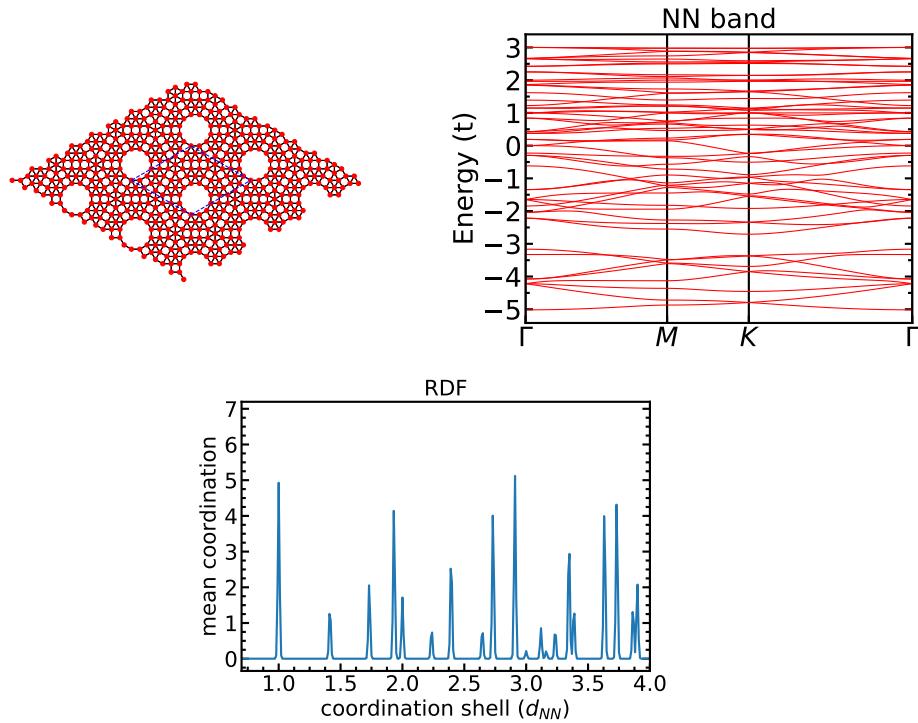


FIG. S610. t6610 lattice framework, nearest neighbors band structure and radial distribution function.

## t6611

Tiling reference number t6611 with space-group ' $Pm'$  (6) and 45 sites in the unit cell, with vertex type indicated in Tab. S611. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S611.

TABLE S611. Tiling t6611 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	0	18	12	12	0	0	0

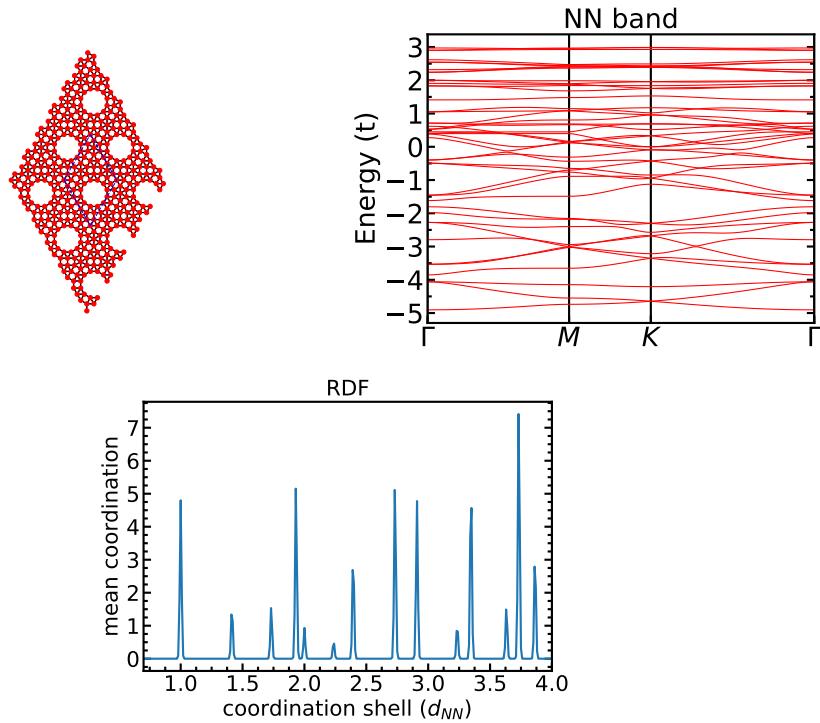


FIG. S611. t6611 lattice framework, nearest neighbors band structure and radial distribution function.

## t6612

Tiling reference number t6612 with space-group ' $Pm'$  (6) and 49 sites in the unit cell, with vertex type indicated in Tab. S612. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S612.

TABLE S612. Tiling t6612 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	0	7	11	24	0	0	0

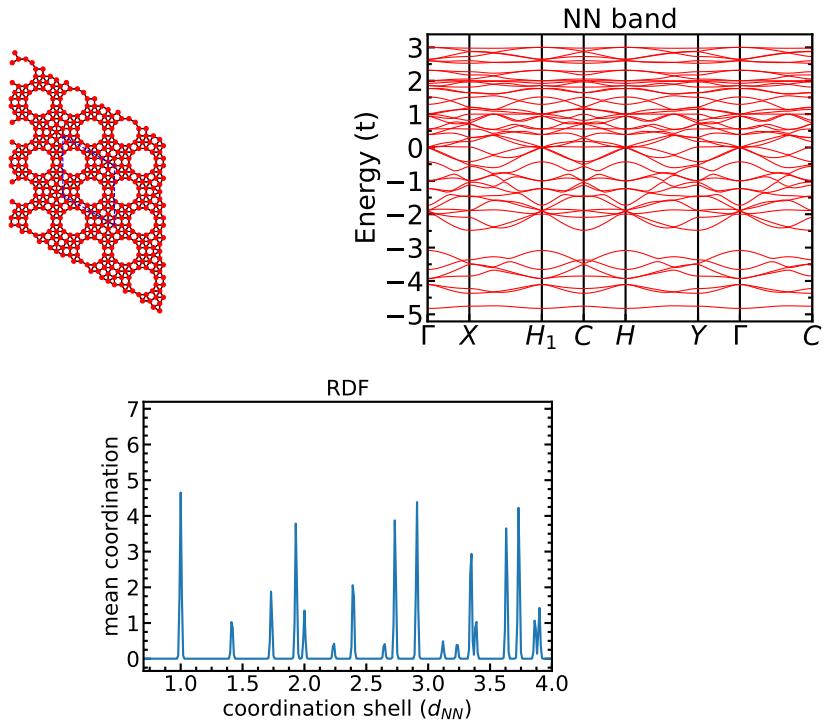


FIG. S612. t6612 lattice framework, nearest neighbors band structure and radial distribution function.

### t6613

Tiling reference number t6613 with space-group ' $Pm'$  (6) and 49 sites in the unit cell, with vertex type indicated in Tab. S613. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S613.

TABLE S613. Tiling t6613 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	0	18	0	24	0	0	0

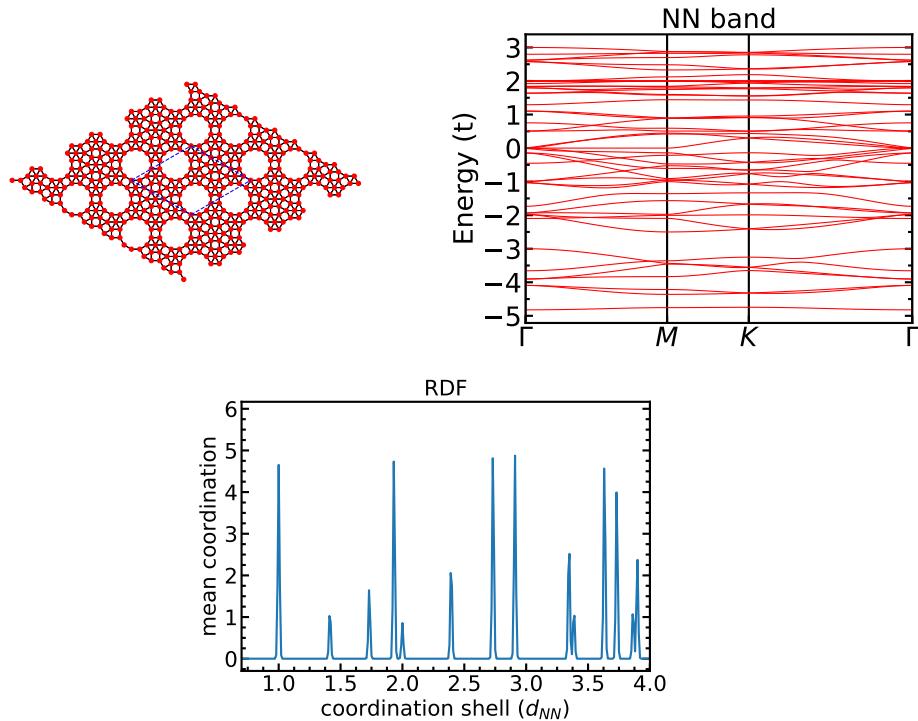


FIG. S613. t6613 lattice framework, nearest neighbors band structure and radial distribution function.

## t6614

Tiling reference number t6614 with space-group ' $Pm'$  (6) and 48 sites in the unit cell, with vertex type indicated in Tab. S614. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S614.

TABLE S614. Tiling t6614 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	6	7	11	12	12	0	0

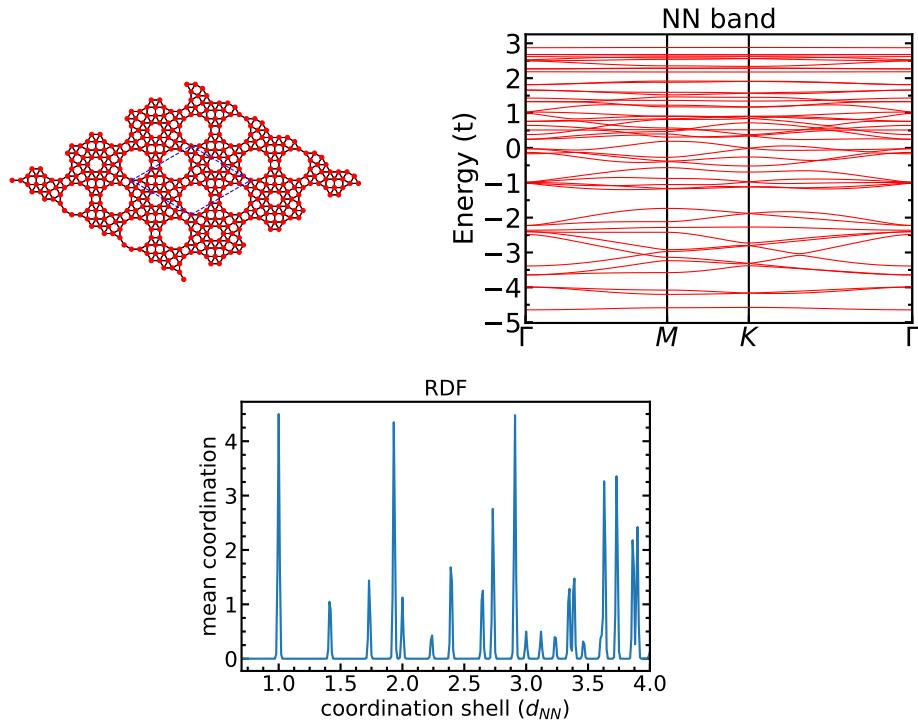


FIG. S614. t6614 lattice framework, nearest neighbors band structure and radial distribution function.

## t6615

Tiling reference number t6615 with space-group ' $Pm'$  (6) and 45 sites in the unit cell, with vertex type indicated in Tab. S615. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S615.

TABLE S615. Tiling t6615 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	0	30	0	0	12	0	0

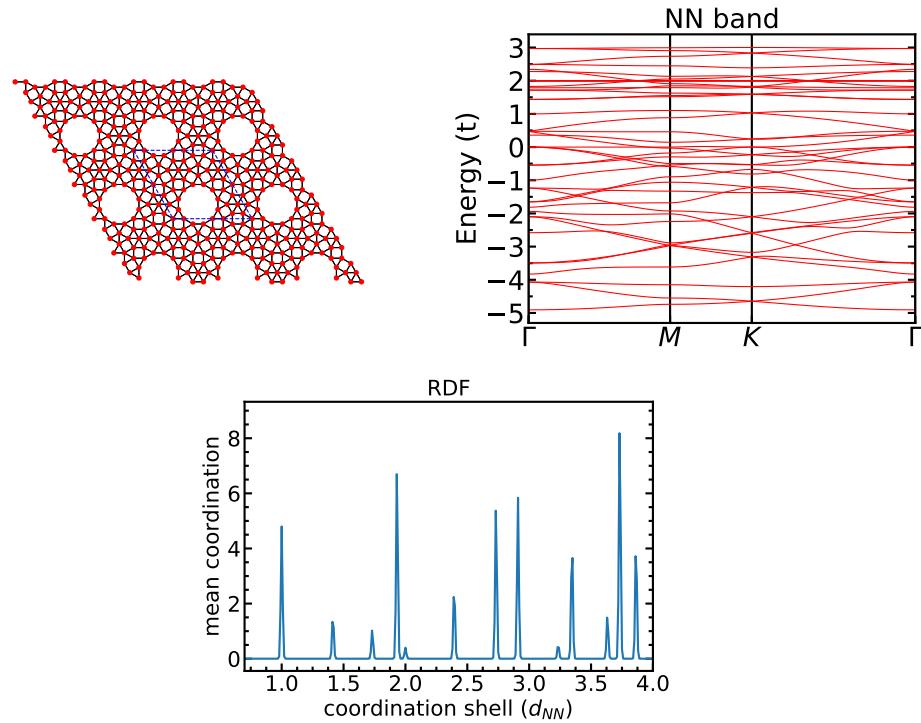


FIG. S615. t6615 lattice framework, nearest neighbors band structure and radial distribution function.

## t6616

Tiling reference number t6616 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S616. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S616.

TABLE S616. Tiling t6616 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	0	10	0	0	0	0

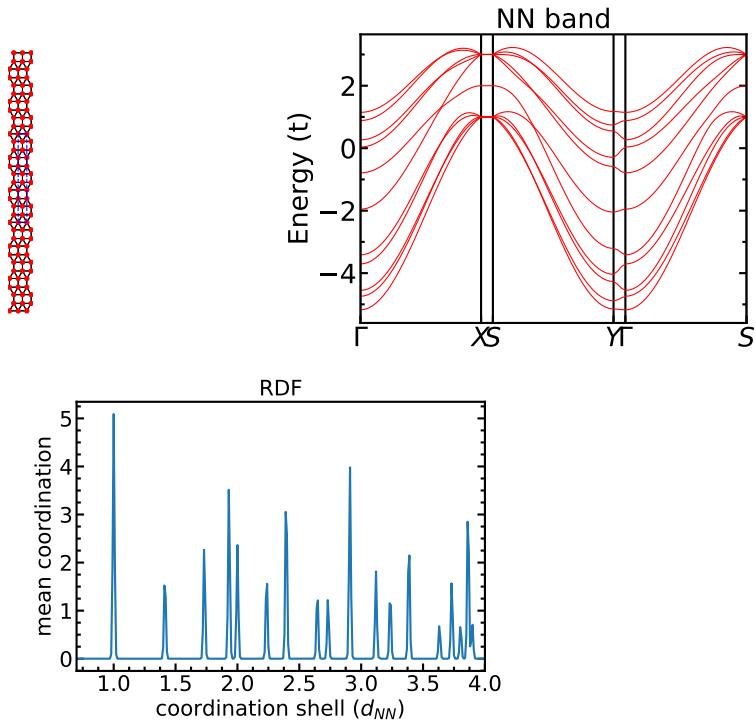


FIG. S616. t6616 lattice framework, nearest neighbors band structure and radial distribution function.

## t6617

Tiling reference number t6617 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S617. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S617.

TABLE S617. Tiling t6617 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	0	0	10	0	0	0	0

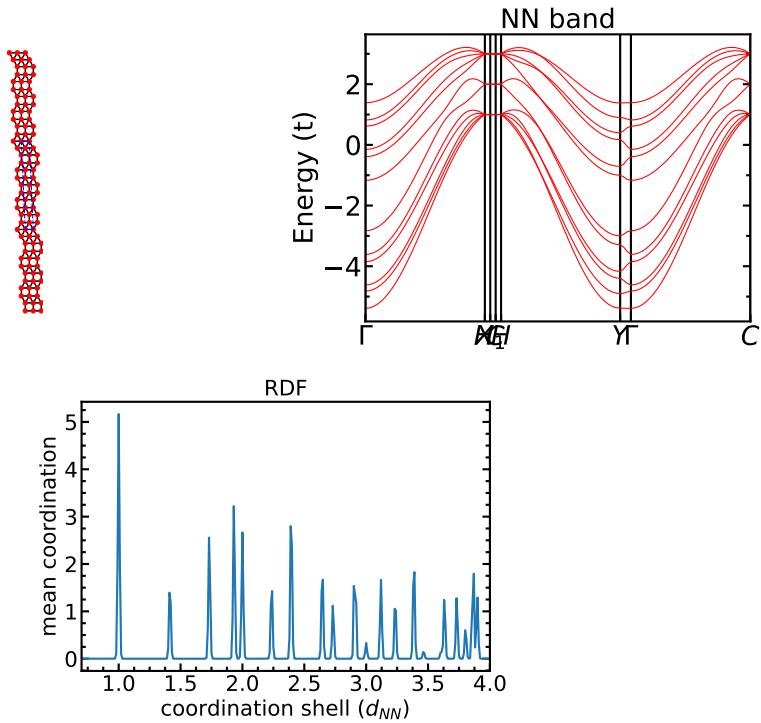


FIG. S617. t6617 lattice framework, nearest neighbors band structure and radial distribution function.

## t6618

Tiling reference number t6618 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S618. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S618.

TABLE S618. Tiling t6618 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	0	0	10	0	0	0	0

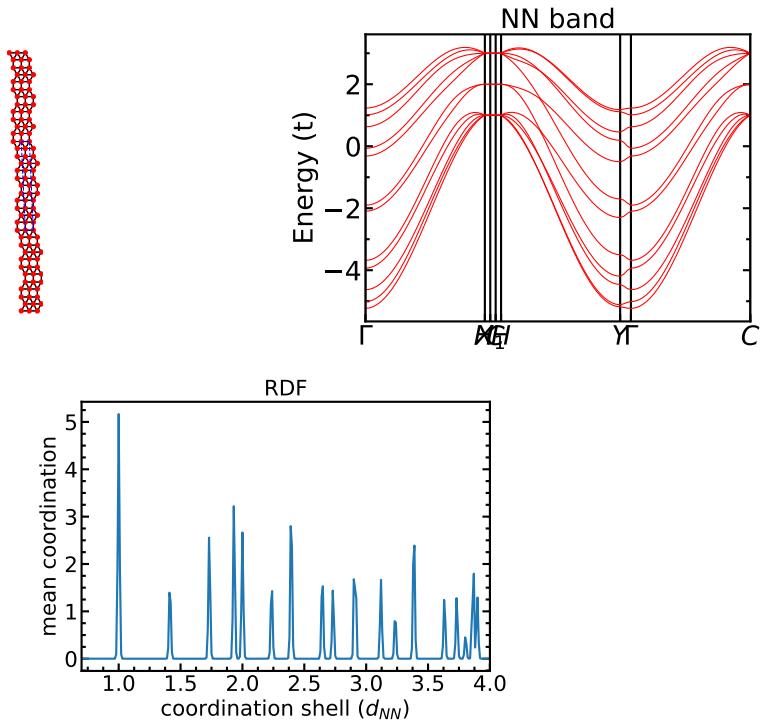


FIG. S618. t6618 lattice framework, nearest neighbors band structure and radial distribution function.

## t6619

Tiling reference number t6619 with space-group ' $Pmmm$ ' (47) and 12 sites in the unit cell, with vertex type indicated in Tab. S619. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S619.

TABLE S619. Tiling t6619 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	0	0	8	0	0	0	0

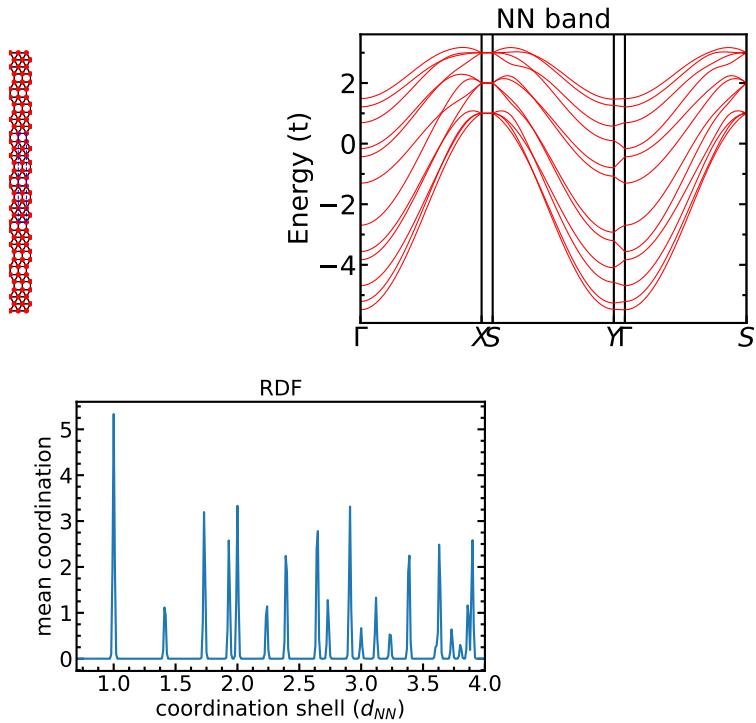


FIG. S619. t6619 lattice framework, nearest neighbors band structure and radial distribution function.

## t6620

Tiling reference number t6620 with space-group ' $Pmmm$ ' (47) and 11 sites in the unit cell, with vertex type indicated in Tab. S620. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S620.

TABLE S620. Tiling t6620 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	0	0	0	0	0	0	0	0	6	0	0	0	0

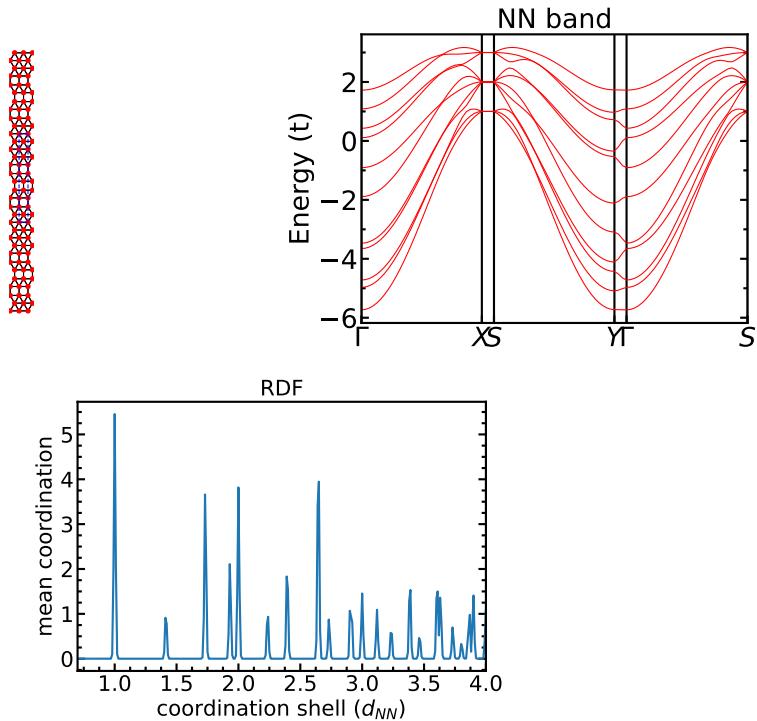


FIG. S620. t6620 lattice framework, nearest neighbors band structure and radial distribution function.

## t6621

Tiling reference number t6621 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S621. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S621.

TABLE S621. Tiling t6621 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	0	0	0	6	0	0	0	0

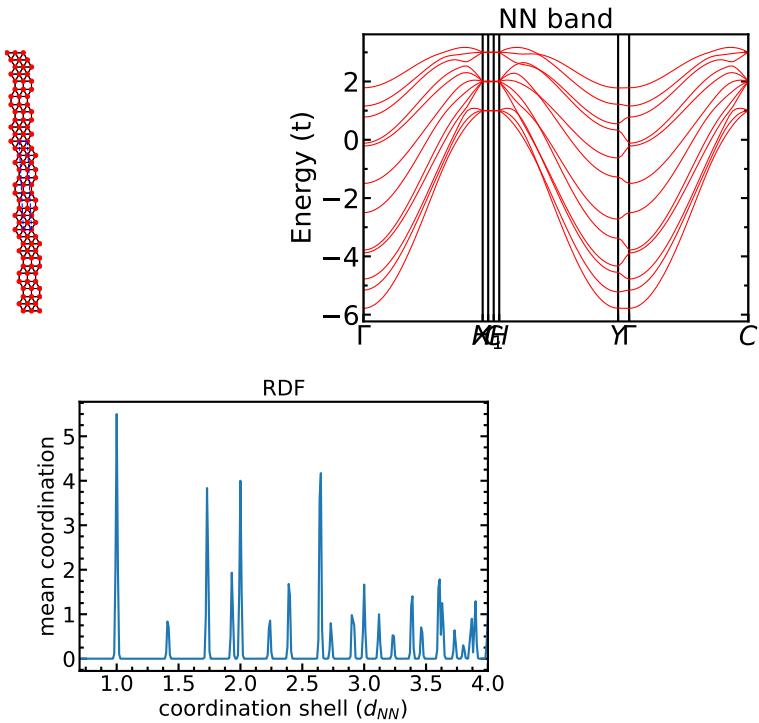


FIG. S621. t6621 lattice framework, nearest neighbors band structure and radial distribution function.

## t6622

Tiling reference number t6622 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S622. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S622.

TABLE S622. Tiling t6622 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	0	0	10	0	0	0	0

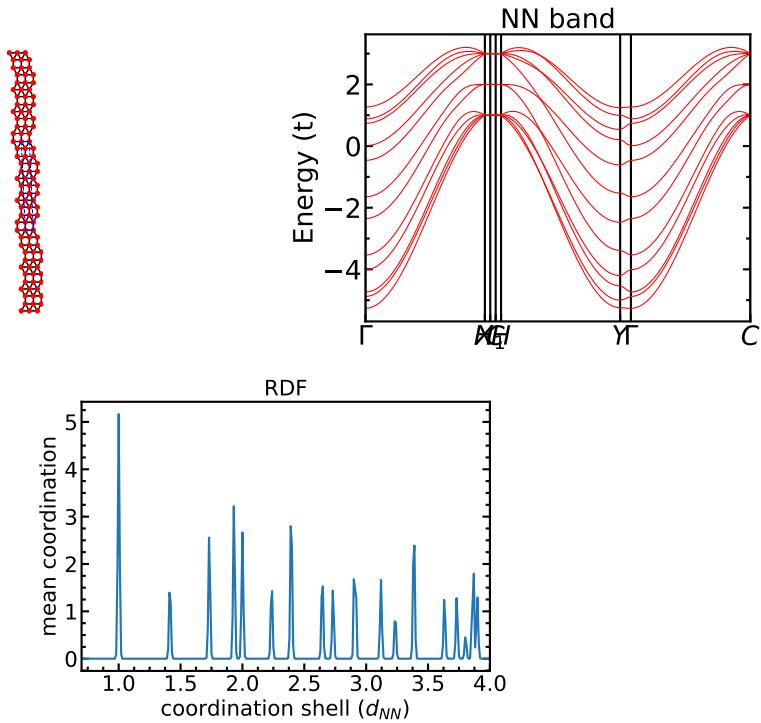


FIG. S622. t6622 lattice framework, nearest neighbors band structure and radial distribution function.

## t6623

Tiling reference number t6623 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S623. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S623.

TABLE S623. Tiling t6623 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	0	0	0	0	0	0	0	0	6	0	0	0	0

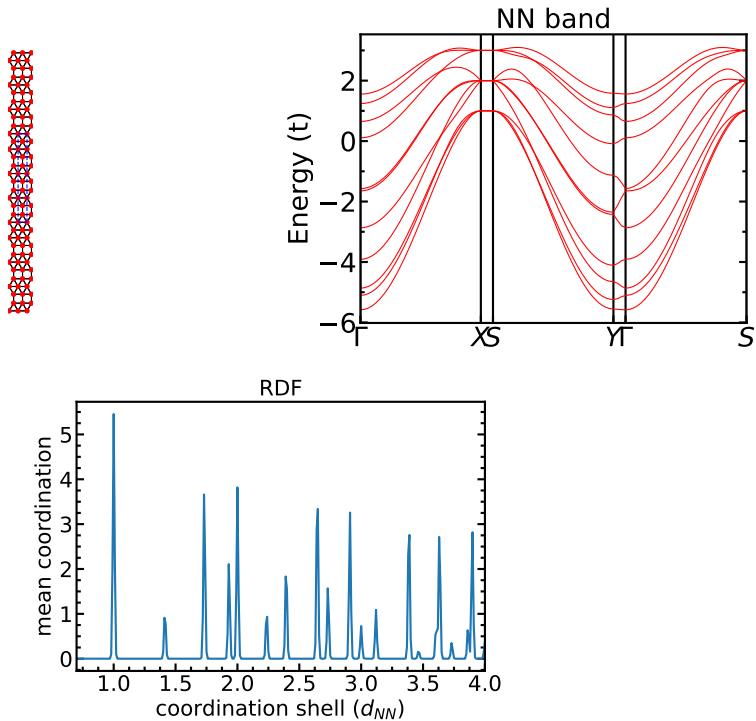


FIG. S623. t6623 lattice framework, nearest neighbors band structure and radial distribution function.

## t6624

Tiling reference number t6624 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S624. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S624.

TABLE S624. Tiling t6624 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	0	0	0	6	0	0	0	0

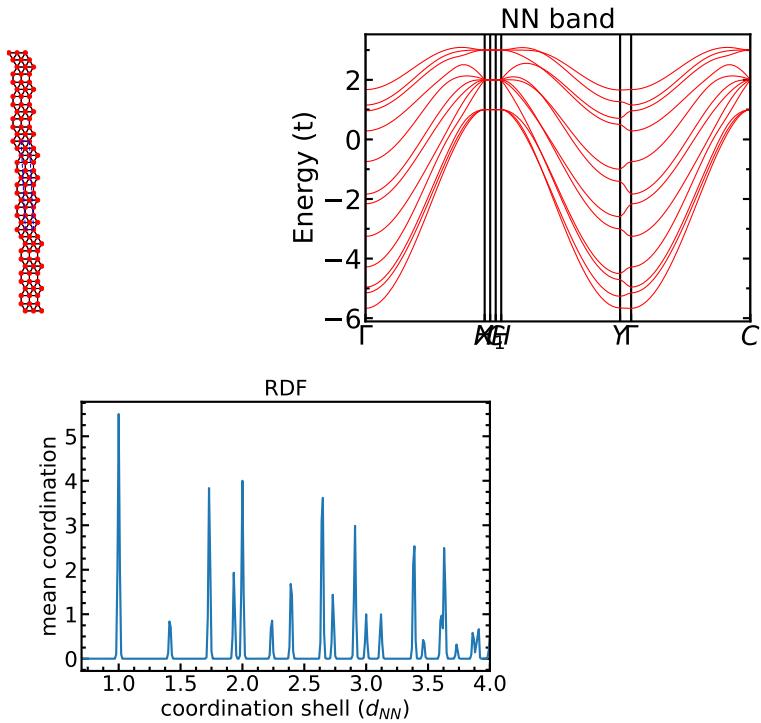


FIG. S624. t6624 lattice framework, nearest neighbors band structure and radial distribution function.

## t6625

Tiling reference number t6625 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S625. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S625.

TABLE S625. Tiling t6625 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	0	0	0	0	0	0	0	0	6	0	0	0	0

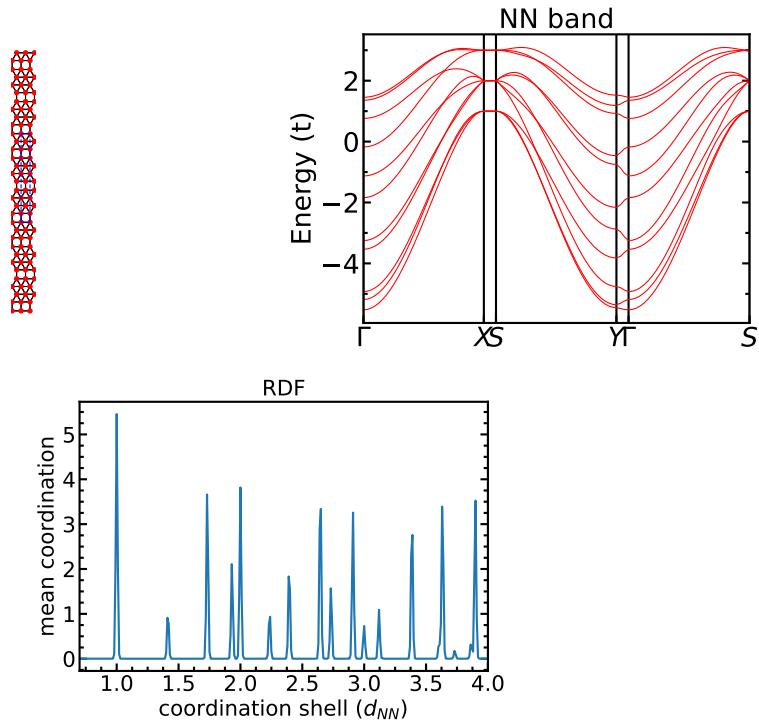


FIG. S625. t6625 lattice framework, nearest neighbors band structure and radial distribution function.

## t6626

Tiling reference number t6626 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S626. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S626.

TABLE S626. Tiling t6626 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	0	0	0	6	0	0	0	0

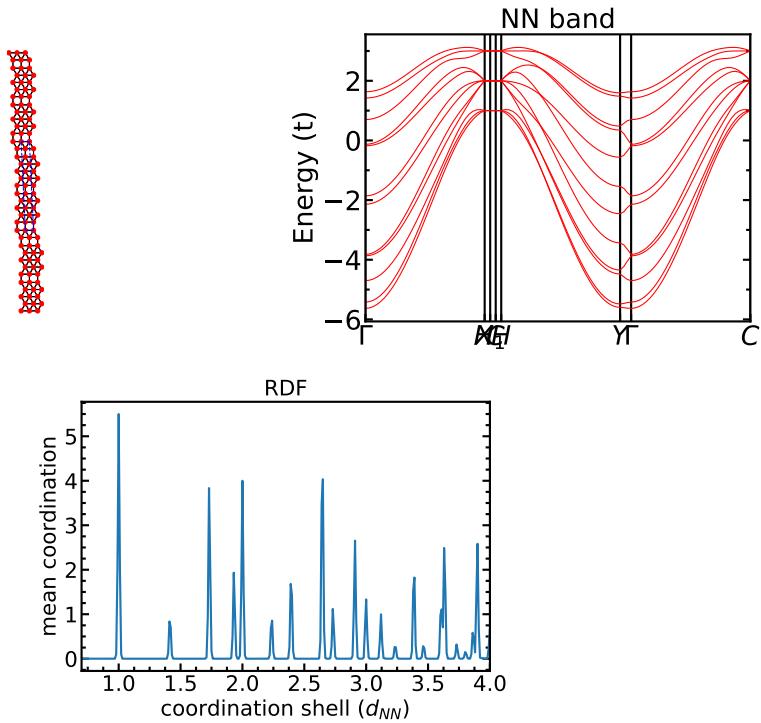


FIG. S626. t6626 lattice framework, nearest neighbors band structure and radial distribution function.

## t6627

Tiling reference number t6627 with space-group ' $Pmm2'$  (25) and 11 sites in the unit cell, with vertex type indicated in Tab. S627. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S627.

TABLE S627. Tiling t6627 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
9	0	0	0	0	0	0	0	0	0	2	0	0	0	0

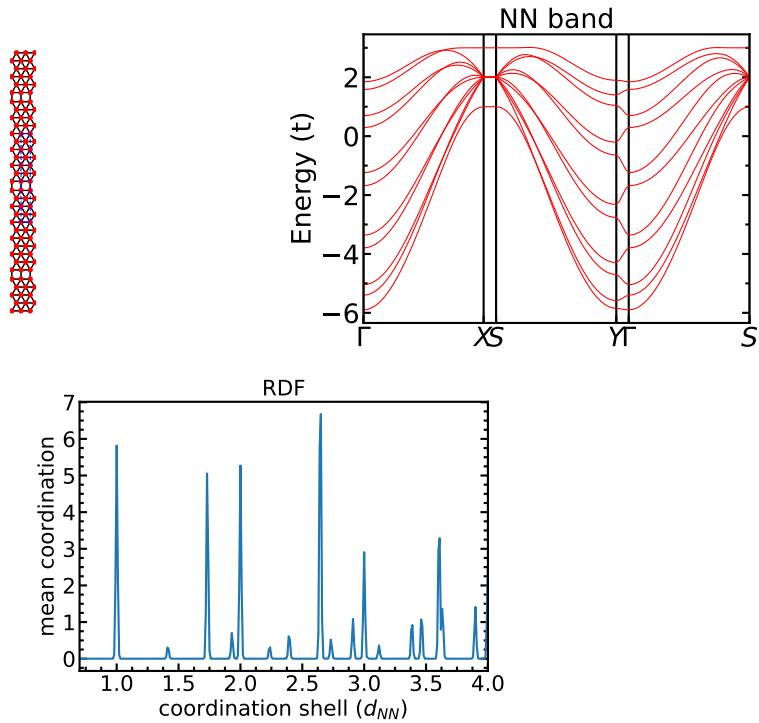


FIG. S627. t6627 lattice framework, nearest neighbors band structure and radial distribution function.

## t6628

Tiling reference number t6628 with space-group '*Amm2'* (38) and 12 sites in the unit cell, with vertex type indicated in Tab. S628. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S628.

TABLE S628. Tiling t6628 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
10	0	0	0	0	0	0	0	0	0	2	0	0	0	0

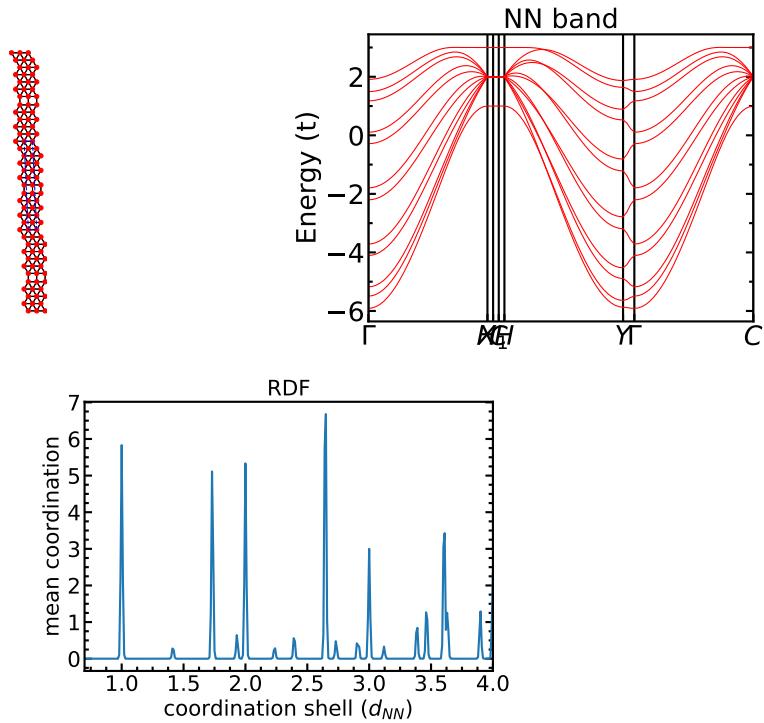


FIG. S628. t6628 lattice framework, nearest neighbors band structure and radial distribution function.

## t6629

Tiling reference number t6629 with space-group '*Amm2'* (38) and 43 sites in the unit cell, with vertex type indicated in Tab. S629. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S629.

TABLE S629. Tiling t6629 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
13	0	0	0	0	0	0	0	0	6	24	0	0	0	0

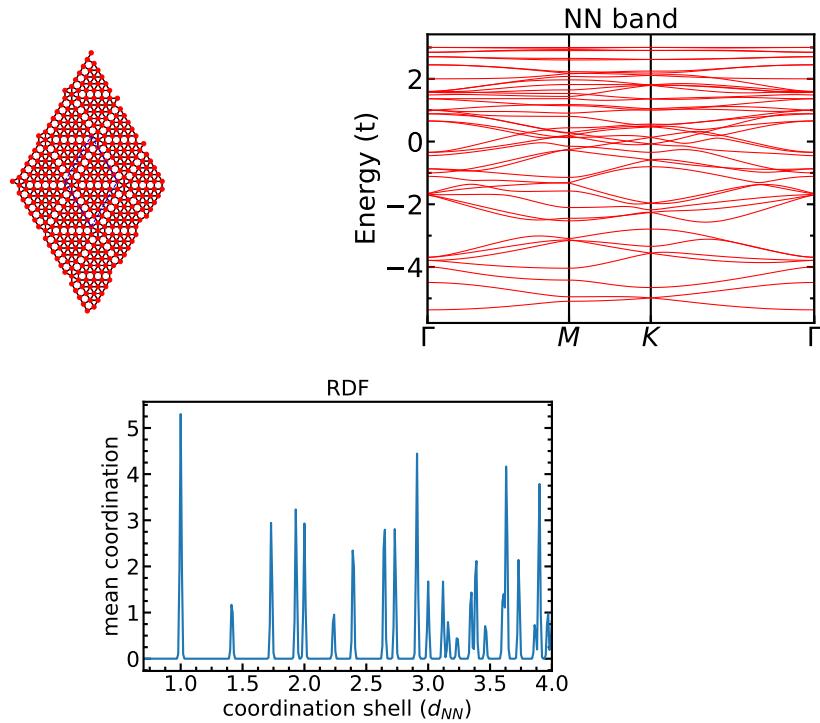


FIG. S629. t6629 lattice framework, nearest neighbors band structure and radial distribution function.

## t6630

Tiling reference number t6630 with space-group '*Cmmm*' (65) and 20 sites in the unit cell, with vertex type indicated in Tab. S630. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S630.

TABLE S630. Tiling t6630 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	0	8	10	0	0	0	0

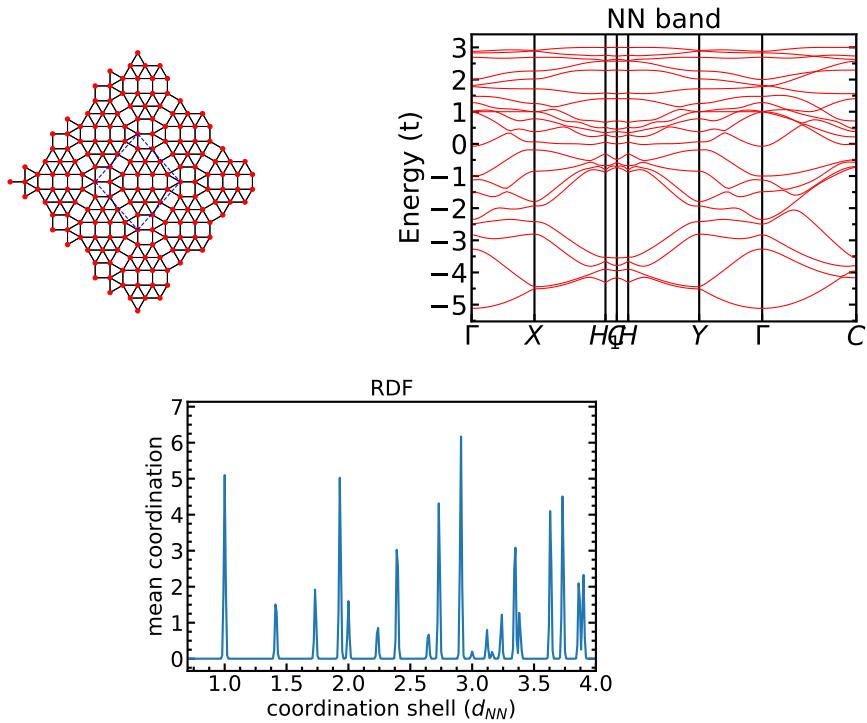


FIG. S630. t6630 lattice framework, nearest neighbors band structure and radial distribution function.

## t6631

Tiling reference number t6631 with space-group ' $Pm'$  (6) and 37 sites in the unit cell, with vertex type indicated in Tab. S631. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S631.

TABLE S631. Tiling t6631 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
19	0	0	0	0	0	0	0	0	6	12	0	0	0	0

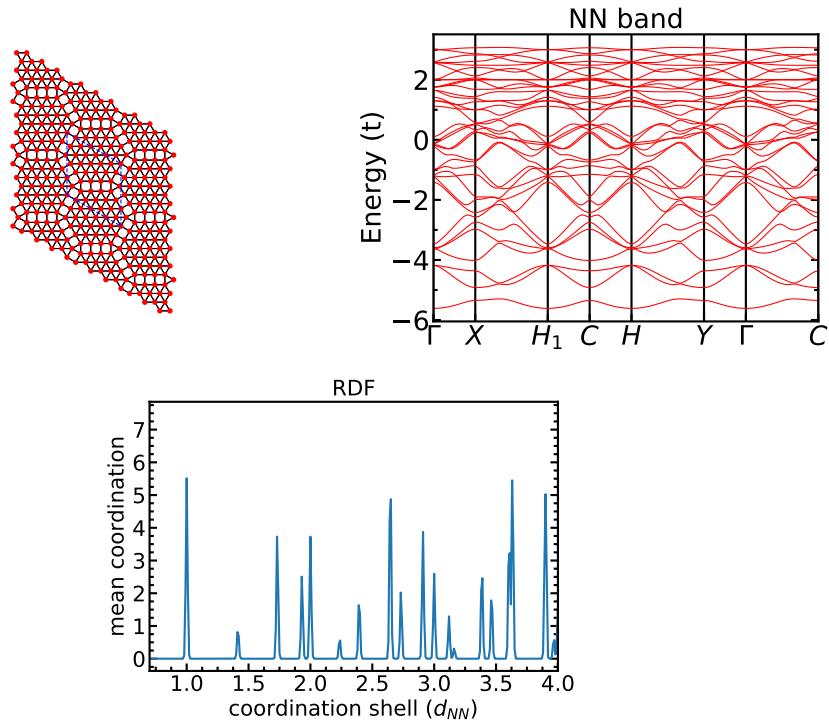


FIG. S631. t6631 lattice framework, nearest neighbors band structure and radial distribution function.

## t6632

Tiling reference number t6632 with space-group ' $Pm'$  (6) and 43 sites in the unit cell, with vertex type indicated in Tab. S632. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S632.

TABLE S632. Tiling t6632 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
13	0	0	0	0	0	0	0	0	18	12	0	0	0	0

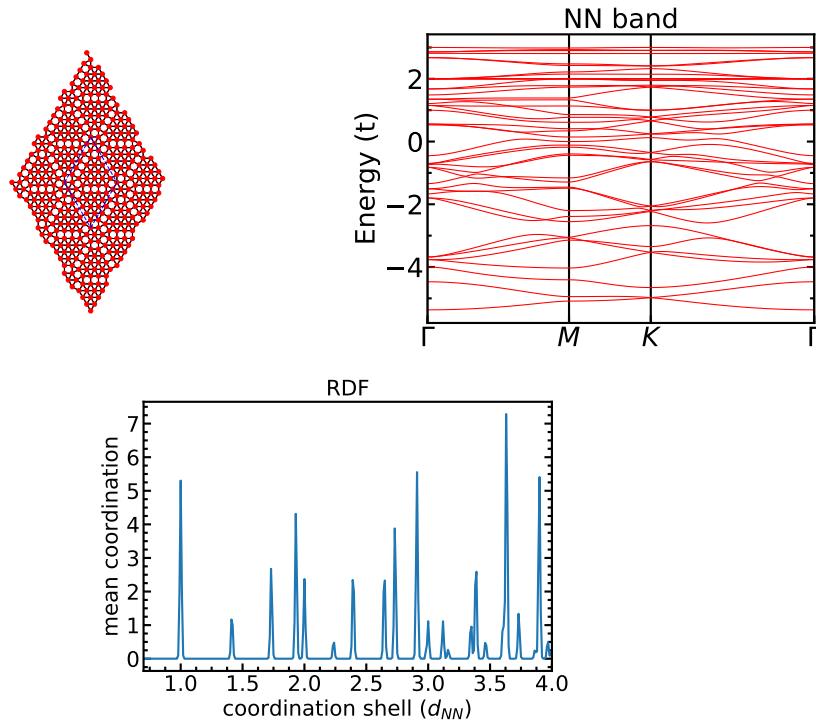


FIG. S632. t6632 lattice framework, nearest neighbors band structure and radial distribution function.

## t6633

Tiling reference number t6633 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S633. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S633.

TABLE S633. Tiling t6633 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	0	0	8	0	0	0	0

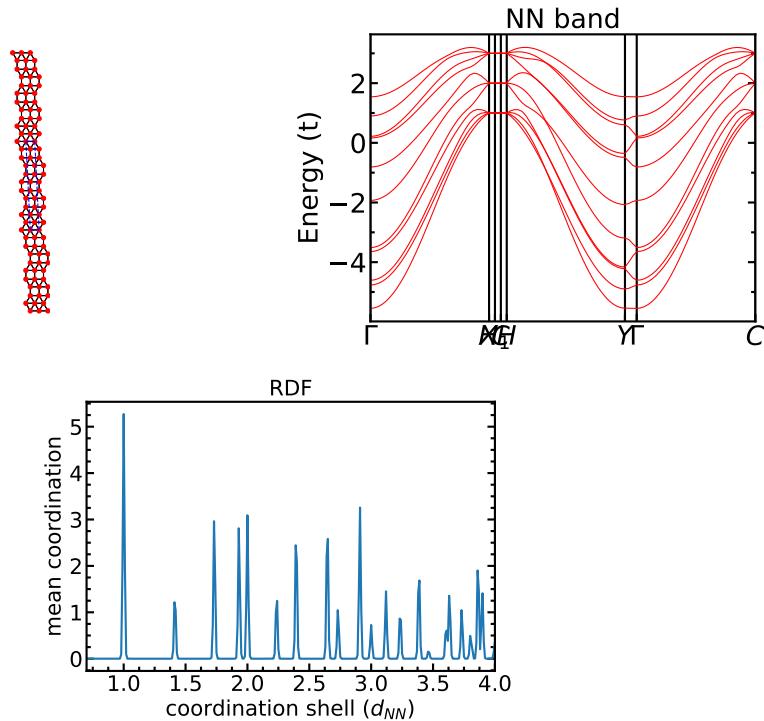


FIG. S633. t6633 lattice framework, nearest neighbors band structure and radial distribution function.

## t6634

Tiling reference number t6634 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S634. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S634.

TABLE S634. Tiling t6634 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	0	0	8	0	0	0	0

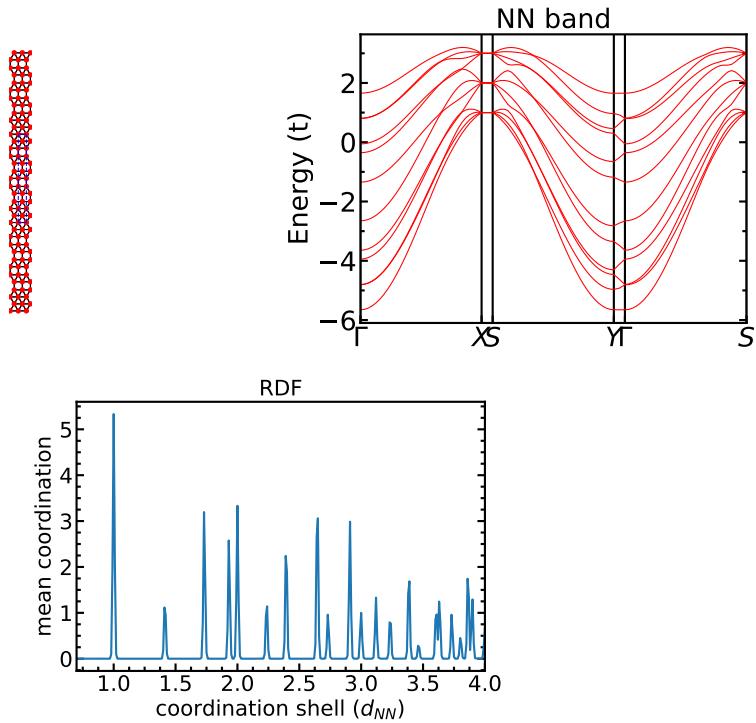


FIG. S634. t6634 lattice framework, nearest neighbors band structure and radial distribution function.

## t6635

Tiling reference number t6635 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S635. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S635.

TABLE S635. Tiling t6635 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	0	0	8	0	0	0	0

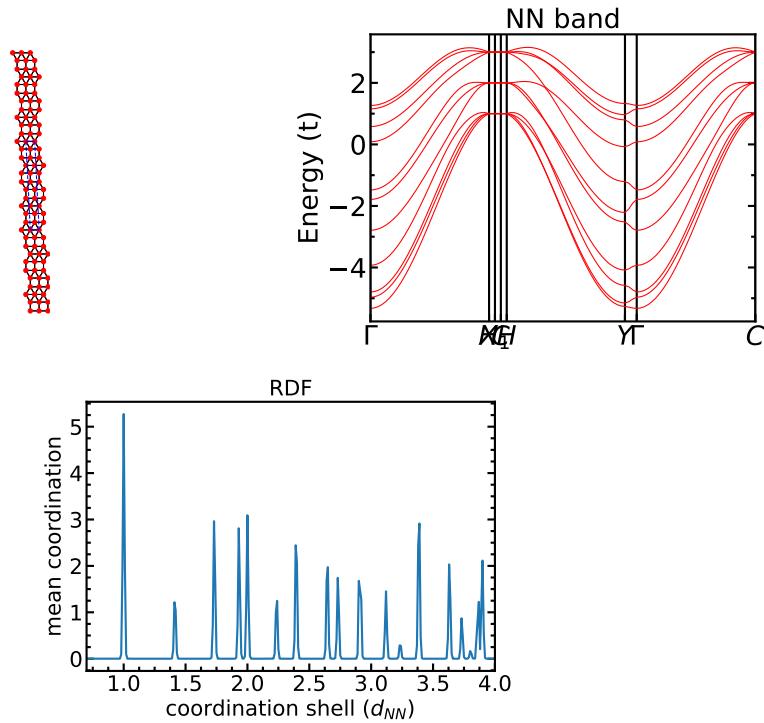


FIG. S635. t6635 lattice framework, nearest neighbors band structure and radial distribution function.

## t6636

Tiling reference number t6636 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S636. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S636.

TABLE S636. Tiling t6636 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	0	0	8	0	0	0	0

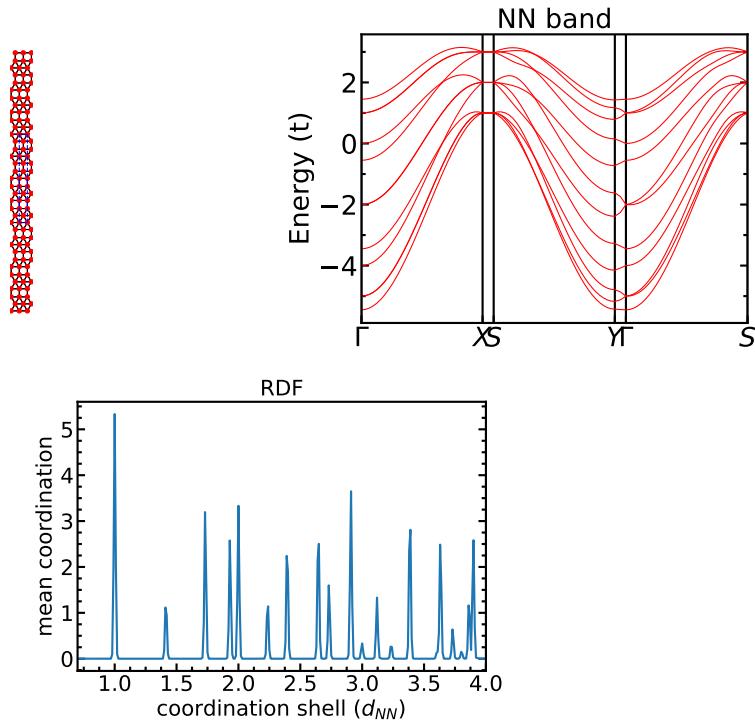


FIG. S636. t6636 lattice framework, nearest neighbors band structure and radial distribution function.

## t6637

Tiling reference number t6637 with space-group ' $Cmmm$ ' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S637. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S637.

TABLE S637. Tiling t6637 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	0	0	4	0	0	0	0

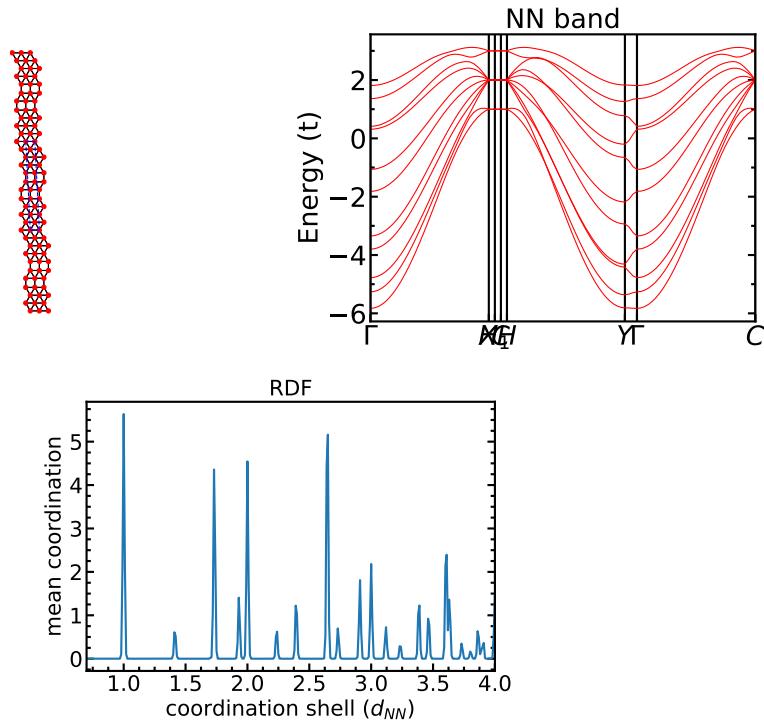


FIG. S637. t6637 lattice framework, nearest neighbors band structure and radial distribution function.

## t6638

Tiling reference number t6638 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S638. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S638.

TABLE S638. Tiling t6638 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	0	0	0	0	0	0	0	0	4	0	0	0	0

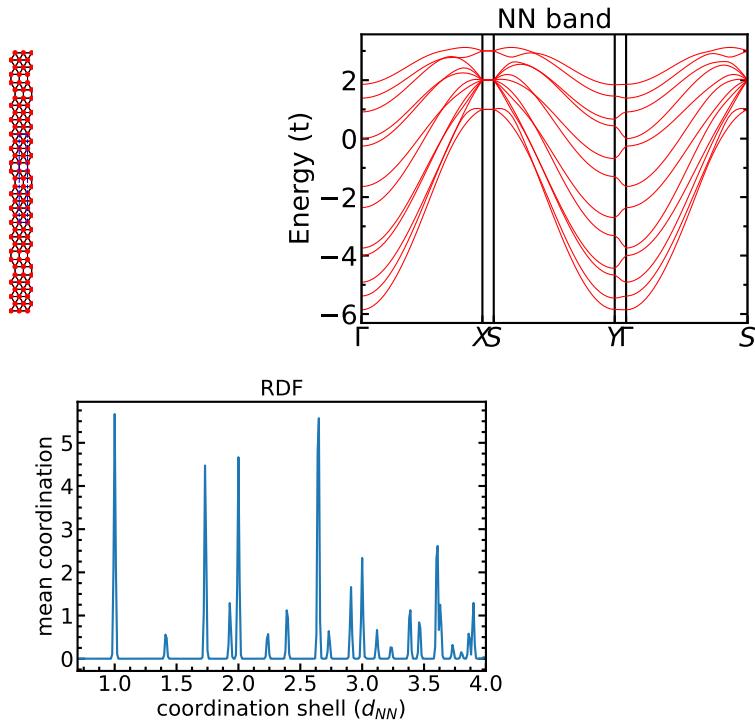


FIG. S638. t6638 lattice framework, nearest neighbors band structure and radial distribution function.

## t6639

Tiling reference number t6639 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S639. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S639.

TABLE S639. Tiling t6639 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	0	0	8	0	0	0	0

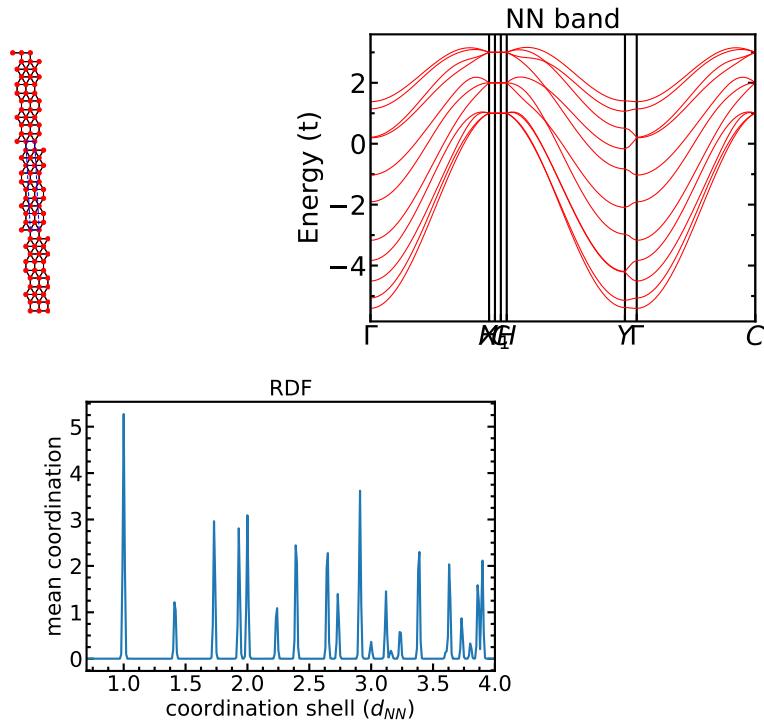


FIG. S639. t6639 lattice framework, nearest neighbors band structure and radial distribution function.

## t6640

Tiling reference number t6640 with space-group ' $Pmm2'$  (25) and 10 sites in the unit cell, with vertex type indicated in Tab. S640. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S640.

TABLE S640. Tiling t6640 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	0	0	0	4	0	0	0	0

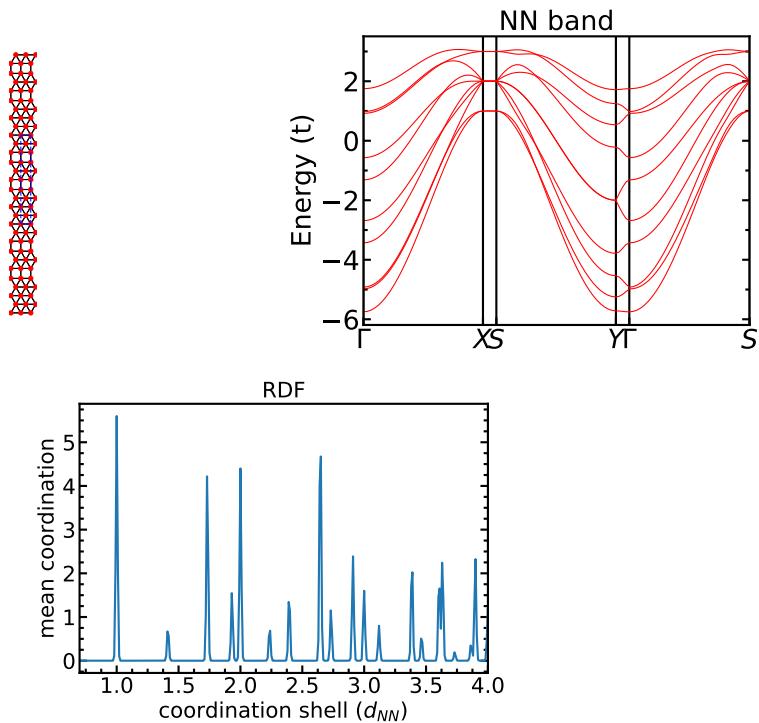


FIG. S640. t6640 lattice framework, nearest neighbors band structure and radial distribution function.

## t6641

Tiling reference number t6641 with space-group ' $Cmmm$ ' (65) and 11 sites in the unit cell, with vertex type indicated in Tab. S641. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S641.

TABLE S641. Tiling t6641 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	0	0	4	0	0	0	0

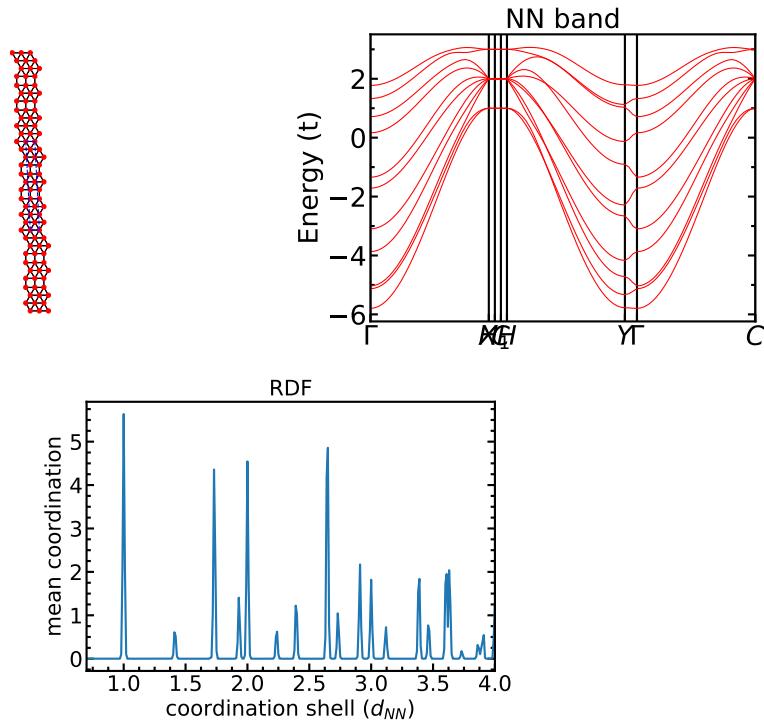


FIG. S641. t6641 lattice framework, nearest neighbors band structure and radial distribution function.

## t6642

Tiling reference number t6642 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S642. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S642.

TABLE S642. Tiling t6642 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	0	0	4	0	0	0	0

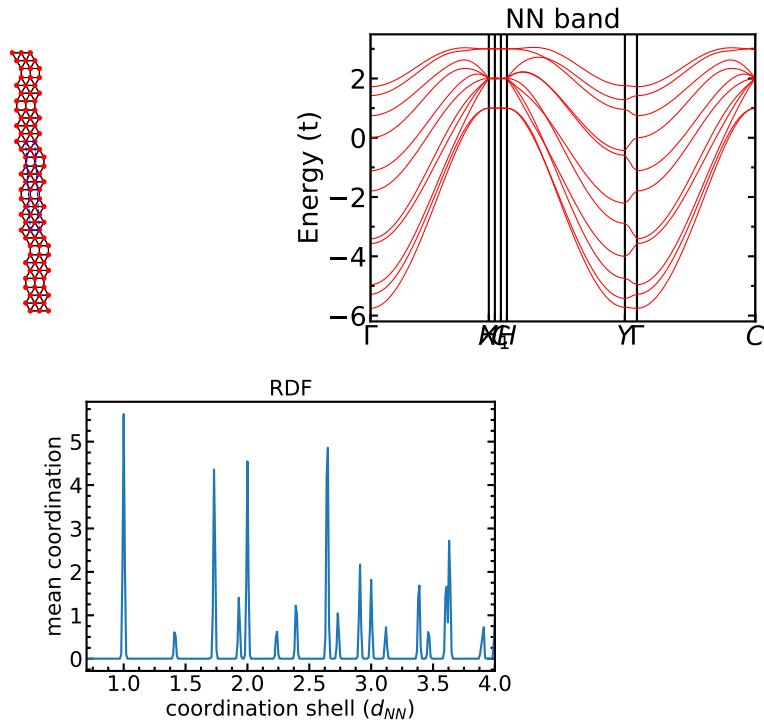


FIG. S642. t6642 lattice framework, nearest neighbors band structure and radial distribution function.

### t6643

Tiling reference number t6643 with space-group ' $Pmm2'$  (25) and 12 sites in the unit cell, with vertex type indicated in Tab. S643. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S643.

TABLE S643. Tiling t6643 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
8	0	0	0	0	0	0	0	0	0	4	0	0	0	0

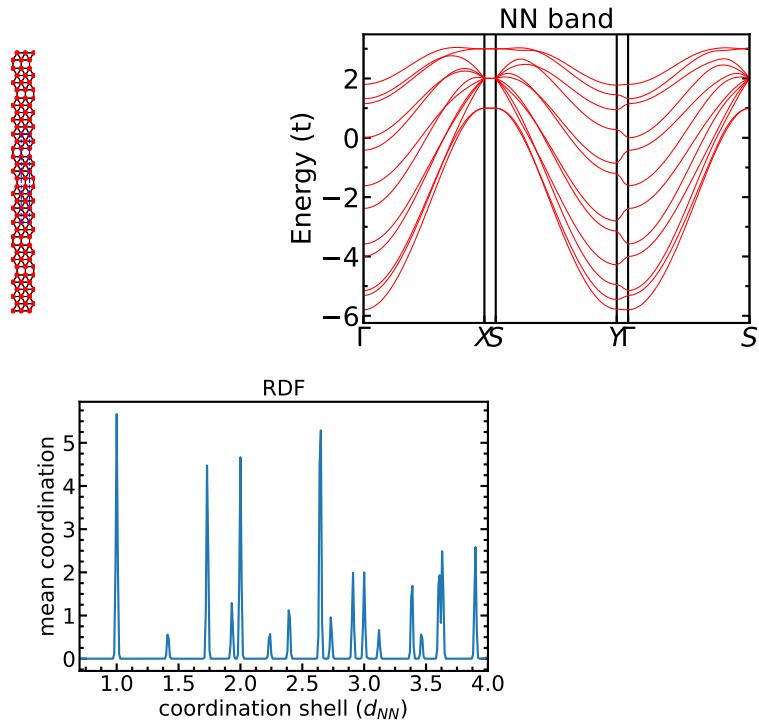


FIG. S643. t6643 lattice framework, nearest neighbors band structure and radial distribution function.

## t6644

Tiling reference number t6644 with space-group '*Amm2'* (38) and 11 sites in the unit cell, with vertex type indicated in Tab. S644. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S644.

TABLE S644. Tiling t6644 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	0	0	4	0	0	0	0

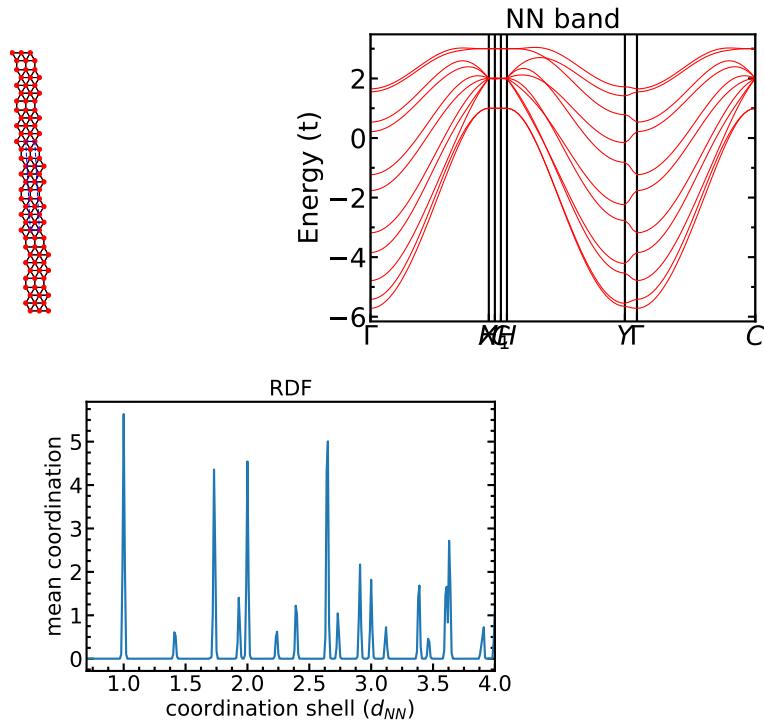


FIG. S644. t6644 lattice framework, nearest neighbors band structure and radial distribution function.

## t6645

Tiling reference number t6645 with space-group ' $Pm'$  (6) and 16 sites in the unit cell, with vertex type indicated in Tab. S645. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S645.

TABLE S645. Tiling t6645 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	0	6	6	0	0	0	0

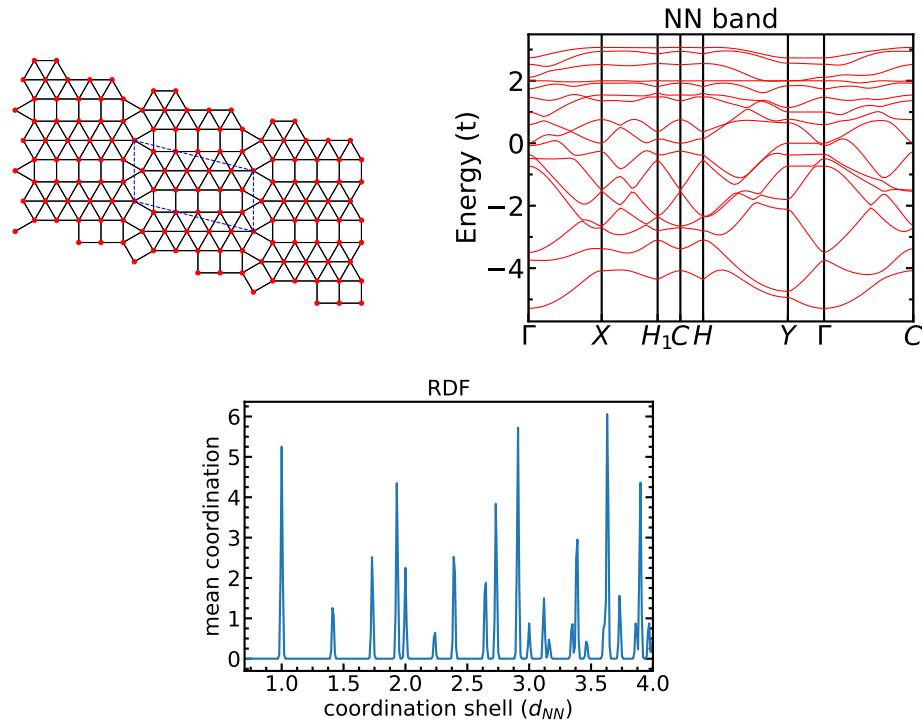


FIG. S645. t6645 lattice framework, nearest neighbors band structure and radial distribution function.

## t6646

Tiling reference number t6646 with space-group ' $Pm'$  (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S646. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S646.

TABLE S646. Tiling t6646 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	8	16	0	0	0	0

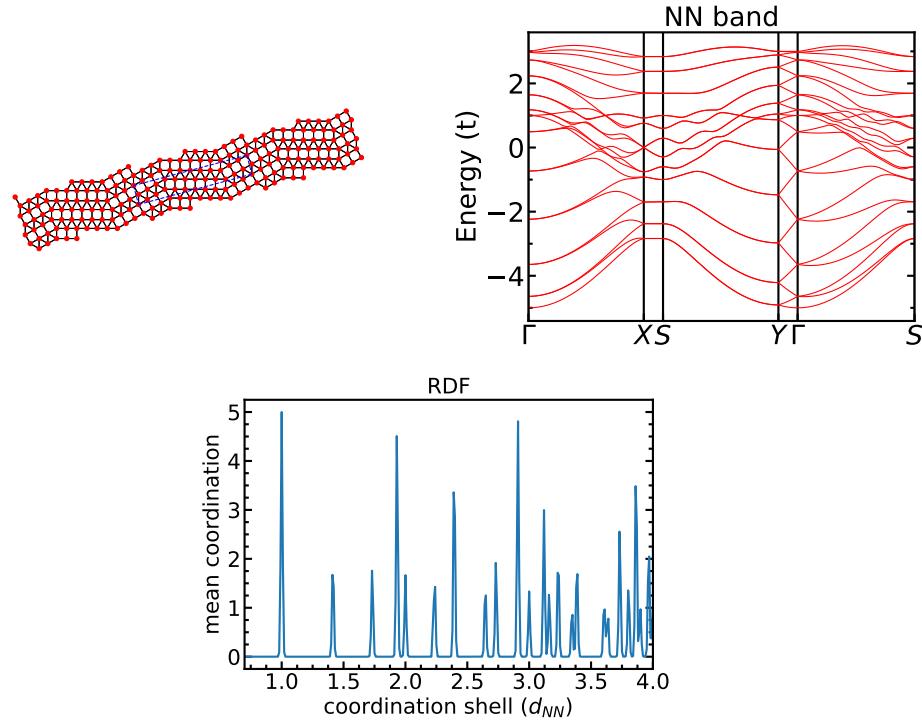


FIG. S646. t6646 lattice framework, nearest neighbors band structure and radial distribution function.

## t6647

Tiling reference number t6647 with space-group ' $Pm'$  (6) and 12 sites in the unit cell, with vertex type indicated in Tab. S647. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S647.

TABLE S647. Tiling t6647 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	4	8	0	0	0	0

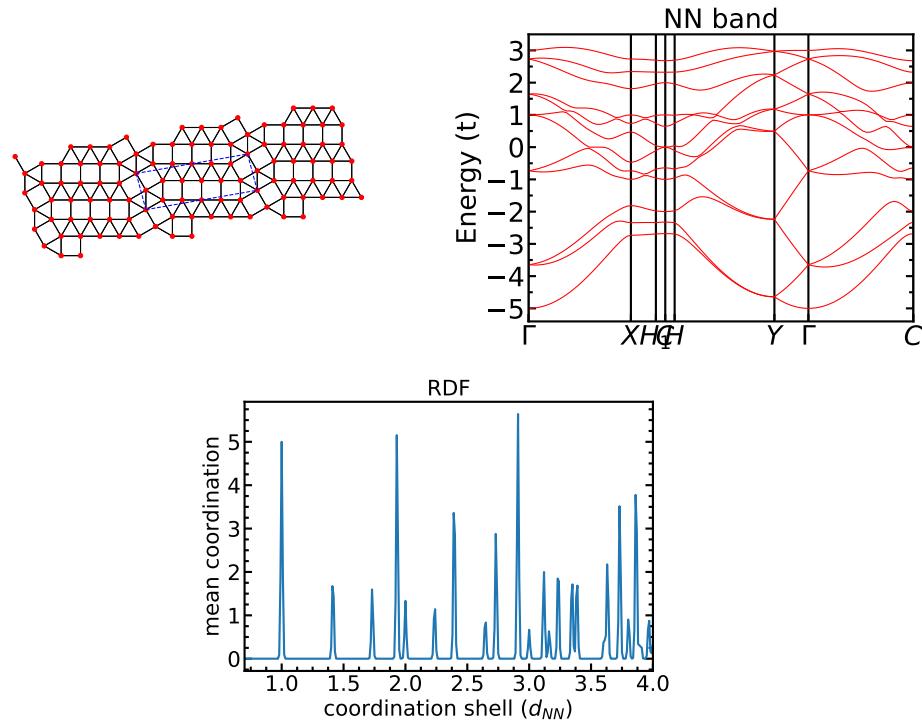


FIG. S647. t6647 lattice framework, nearest neighbors band structure and radial distribution function.

## t6648

Tiling reference number t6648 with space-group ' $Pm'$  (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S648. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S648.

TABLE S648. Tiling t6648 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	16	8	0	0	0	0

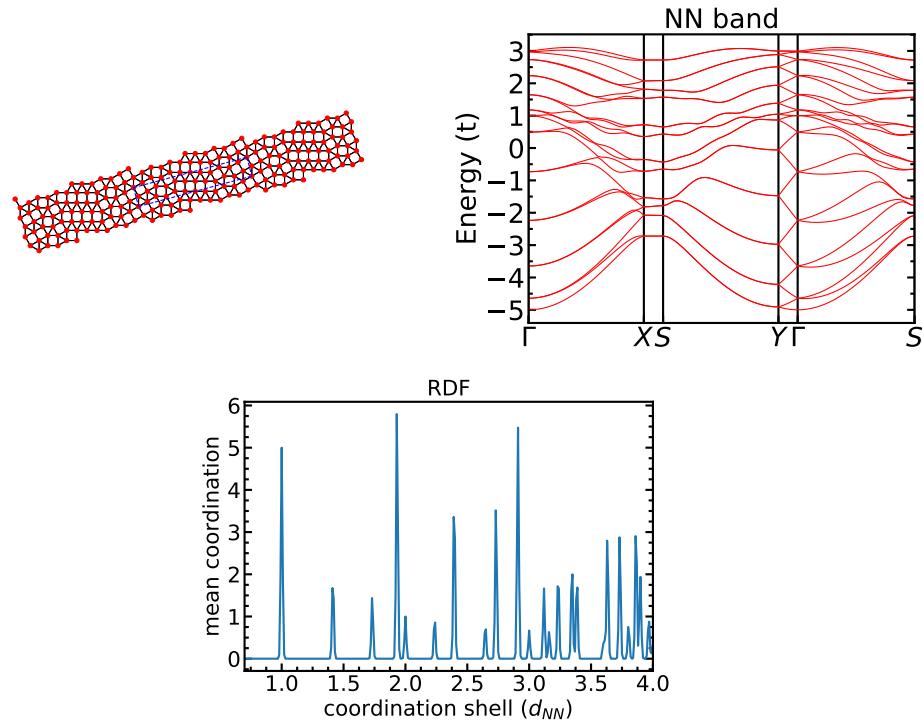


FIG. S648. t6648 lattice framework, nearest neighbors band structure and radial distribution function.

## t6649

Tiling reference number t6649 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S649. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S649.

TABLE S649. Tiling t6649 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	4	8	0	0	0	0

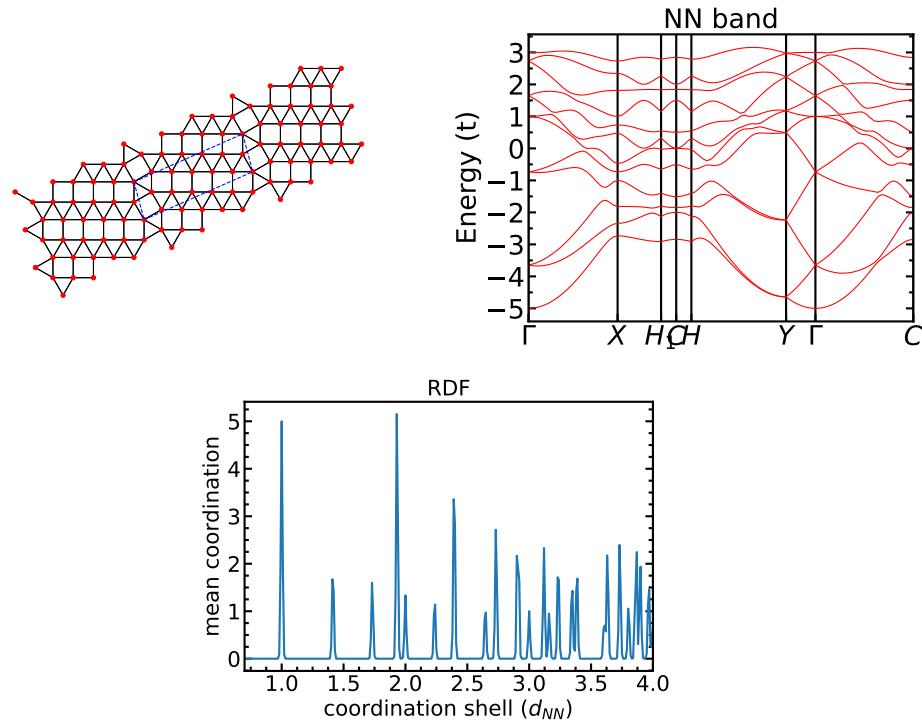


FIG. S649. t6649 lattice framework, nearest neighbors band structure and radial distribution function.

## t6650

Tiling reference number t6650 with space-group '*Cmmm*' (65) and 16 sites in the unit cell, with vertex type indicated in Tab. S650. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S650.

TABLE S650. Tiling t6650 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	0	4	8	0	0	0	0

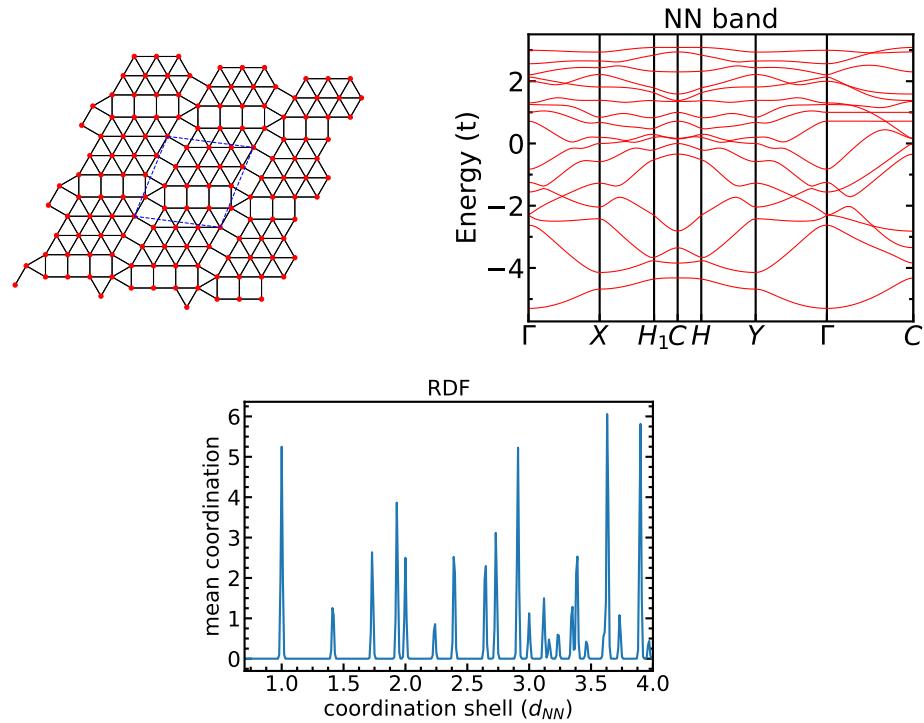


FIG. S650. t6650 lattice framework, nearest neighbors band structure and radial distribution function.

## t6651

Tiling reference number t6651 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S651. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S651.

TABLE S651. Tiling t6651 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	0	4	6	0	0	0	0

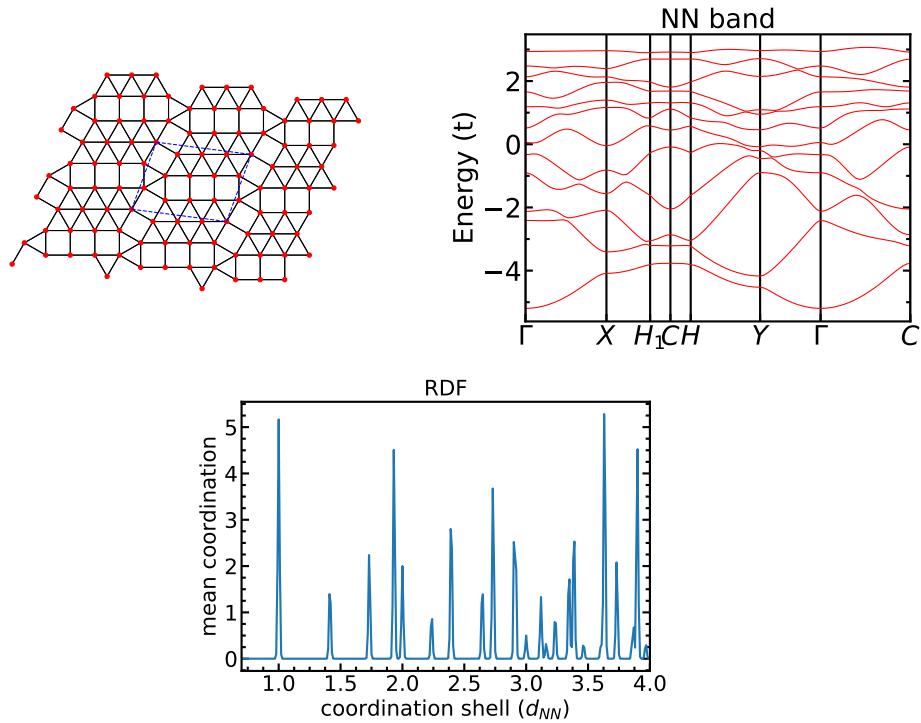


FIG. S651. t6651 lattice framework, nearest neighbors band structure and radial distribution function.

## t6652

Tiling reference number t6652 with space-group ' $Pm'$  (6) and 12 sites in the unit cell, with vertex type indicated in Tab. S652. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S652.

TABLE S652. Tiling t6652 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	8	4	0	0	0	0

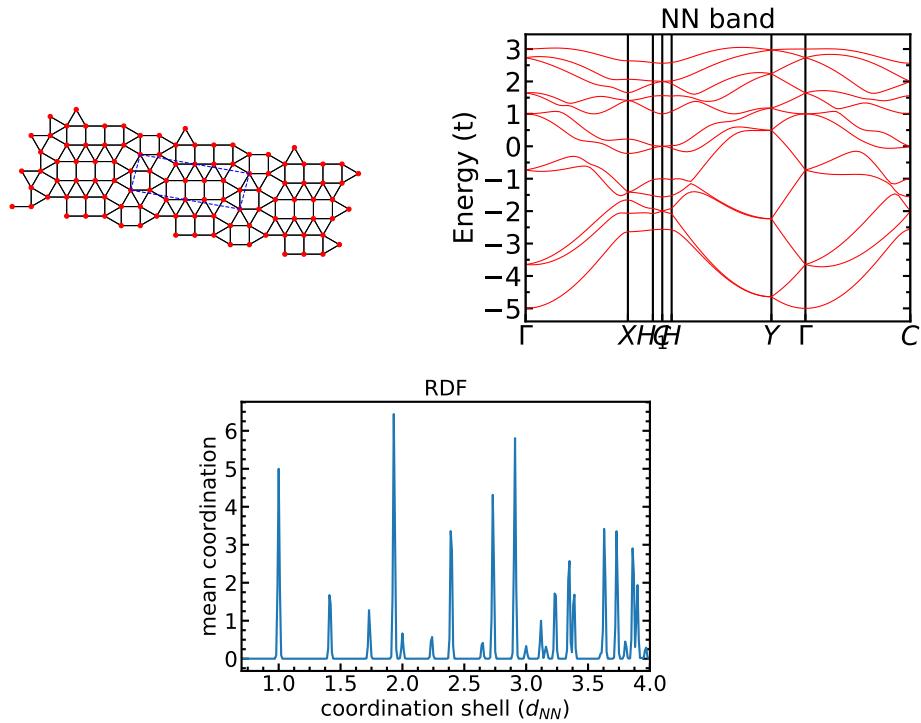


FIG. S652. t6652 lattice framework, nearest neighbors band structure and radial distribution function.

### t6653

Tiling reference number t6653 with space-group '*Amm2'* (38) and 39 sites in the unit cell, with vertex type indicated in Tab. S653. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S653.

TABLE S653. Tiling t6653 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	0	30	6	0	0	0	0

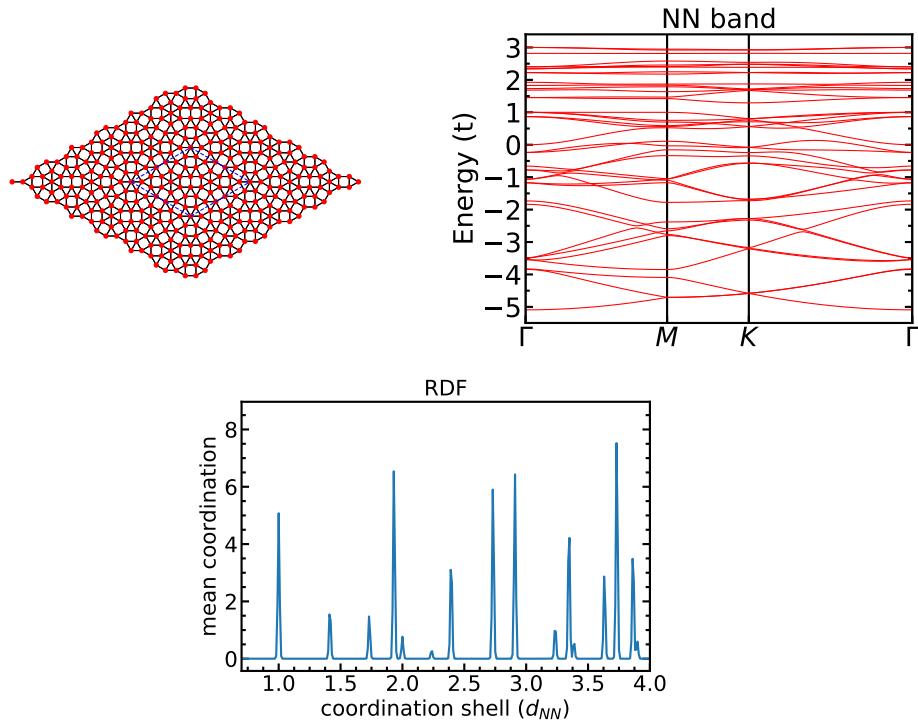


FIG. S653. t6653 lattice framework, nearest neighbors band structure and radial distribution function.

## t6654

Tiling reference number t6654 with space-group ' $Pm'$  (6) and 15 sites in the unit cell, with vertex type indicated in Tab. S654. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S654.

TABLE S654. Tiling t6654 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	12	2	0	0	0	0

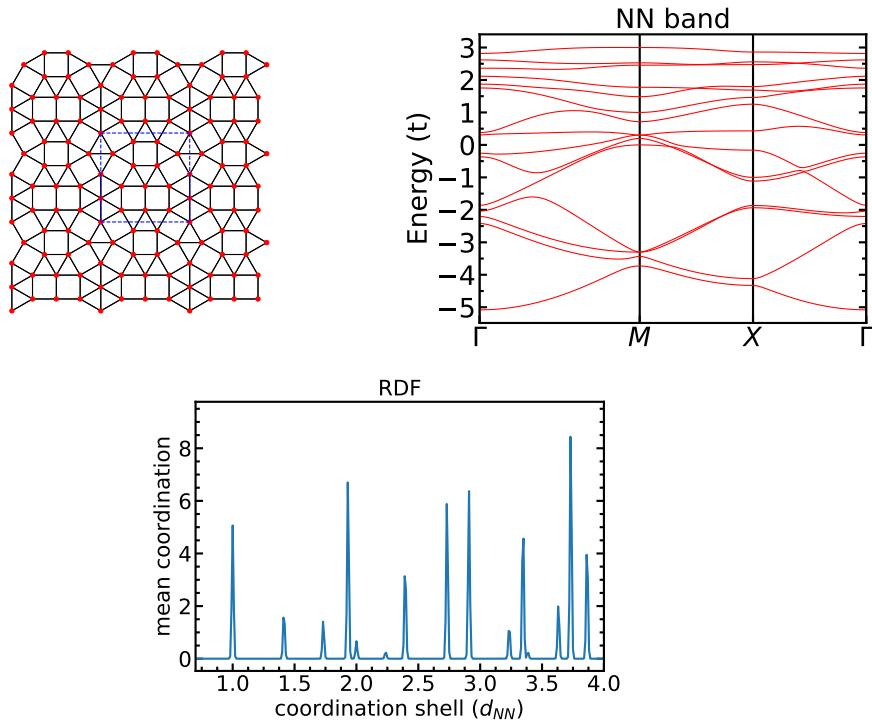


FIG. S654. t6654 lattice framework, nearest neighbors band structure and radial distribution function.

## t6655

Tiling reference number t6655 with space-group '*Amm2'* (38) and 17 sites in the unit cell, with vertex type indicated in Tab. S655. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S655.

TABLE S655. Tiling t6655 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	14	2	0	0	0	0

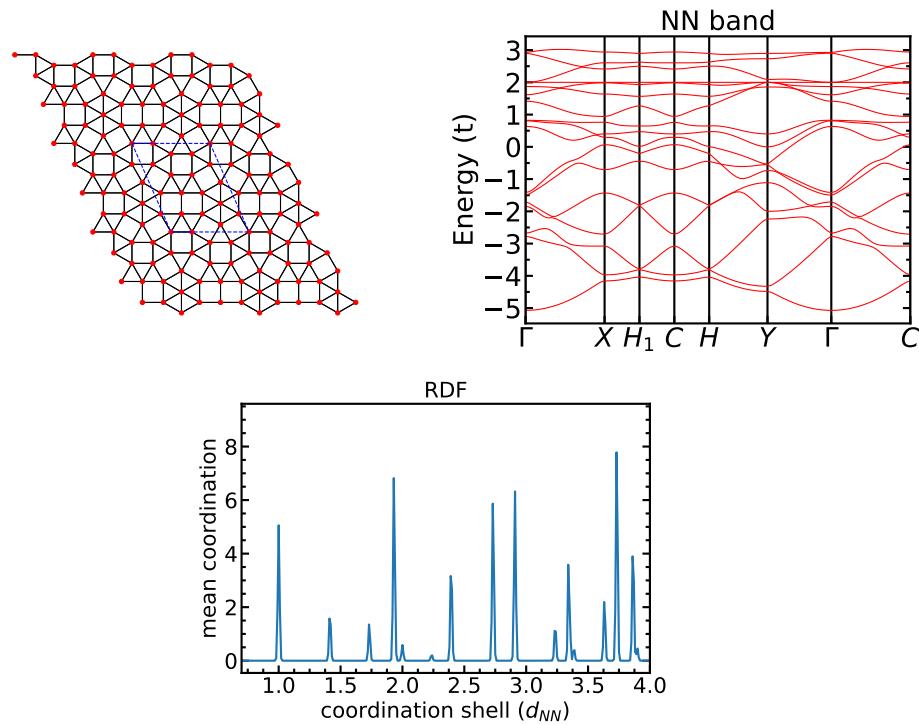


FIG. S655. t6655 lattice framework, nearest neighbors band structure and radial distribution function.

## t6656

Tiling reference number t6656 with space-group ' $Pm'$  (6) and 17 sites in the unit cell, with vertex type indicated in Tab. S656. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S656.

TABLE S656. Tiling t6656 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	12	4	0	0	0	0

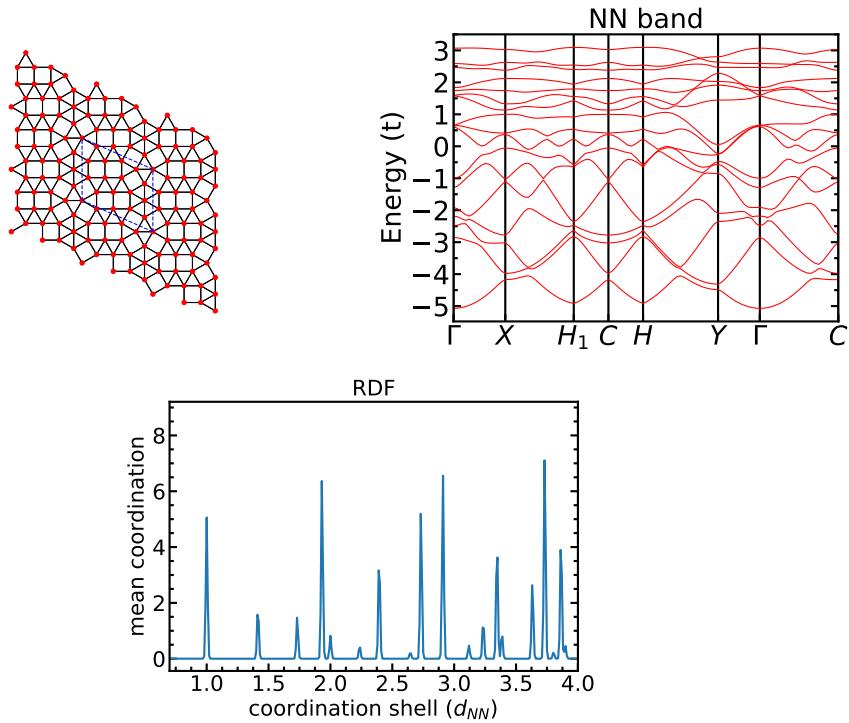


FIG. S656. t6656 lattice framework, nearest neighbors band structure and radial distribution function.

## t6657

Tiling reference number t6657 with space-group ' $Pm'$  (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S657. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S657.

TABLE S657. Tiling t6657 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	22	2	0	0	0	0

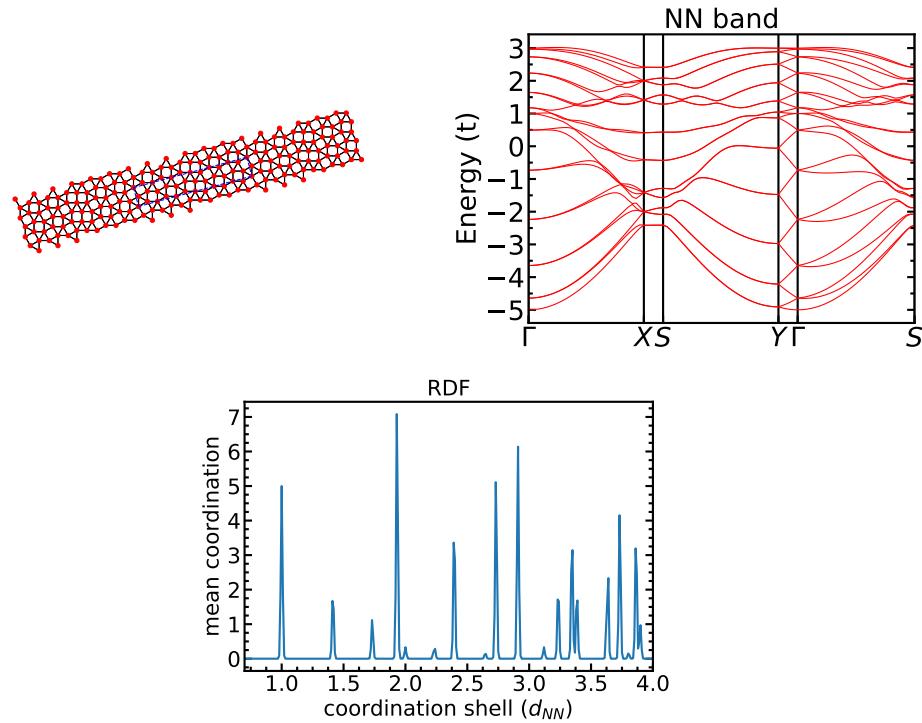


FIG. S657. t6657 lattice framework, nearest neighbors band structure and radial distribution function.

## t6658

Tiling reference number t6658 with space-group '*Amm2'* (38) and 31 sites in the unit cell, with vertex type indicated in Tab. S658. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S658.

TABLE S658. Tiling t6658 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	0	0	0	0	0	0	0	0	12	12	0	0	0	0

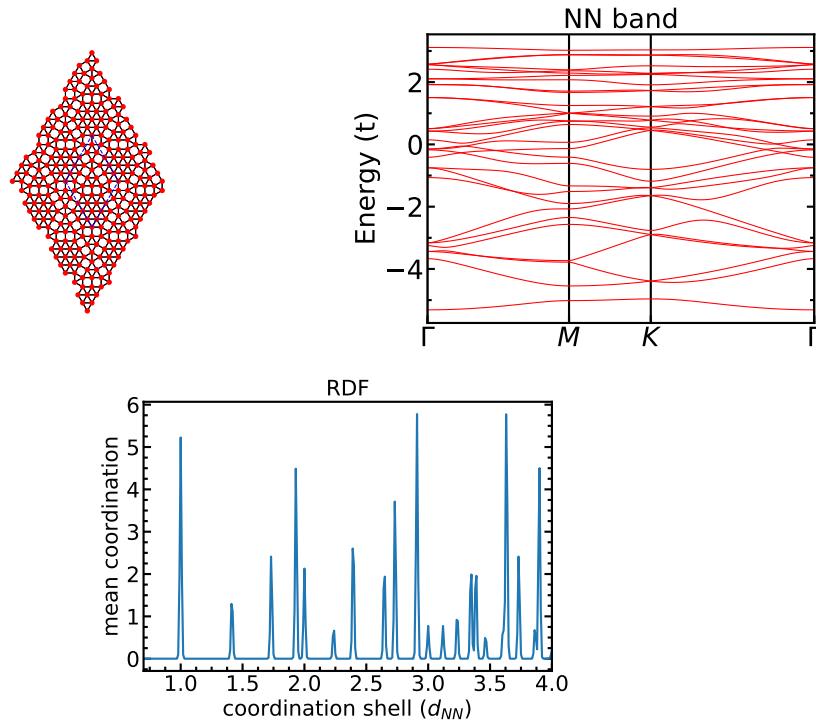


FIG. S658. t6658 lattice framework, nearest neighbors band structure and radial distribution function.

## t6659

Tiling reference number t6659 with space-group ' $P - 6m2'$  (187) and 21 sites in the unit cell, with vertex type indicated in Tab. S659. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S659.

TABLE S659. Tiling t6659 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
3	0	0	0	0	0	0	0	0	12	6	0	0	0	0

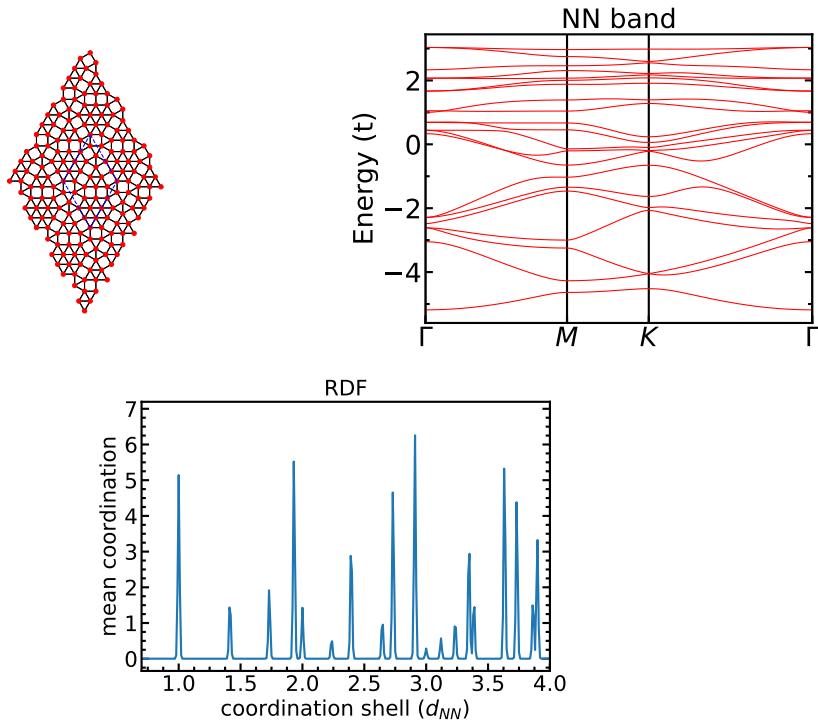


FIG. S659. t6659 lattice framework, nearest neighbors band structure and radial distribution function.

## t6660

Tiling reference number t6660 with space-group ' $Pm'$  (6) and 24 sites in the unit cell, with vertex type indicated in Tab. S660. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S660.

TABLE S660. Tiling t6660 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	16	8	0	0	0	0

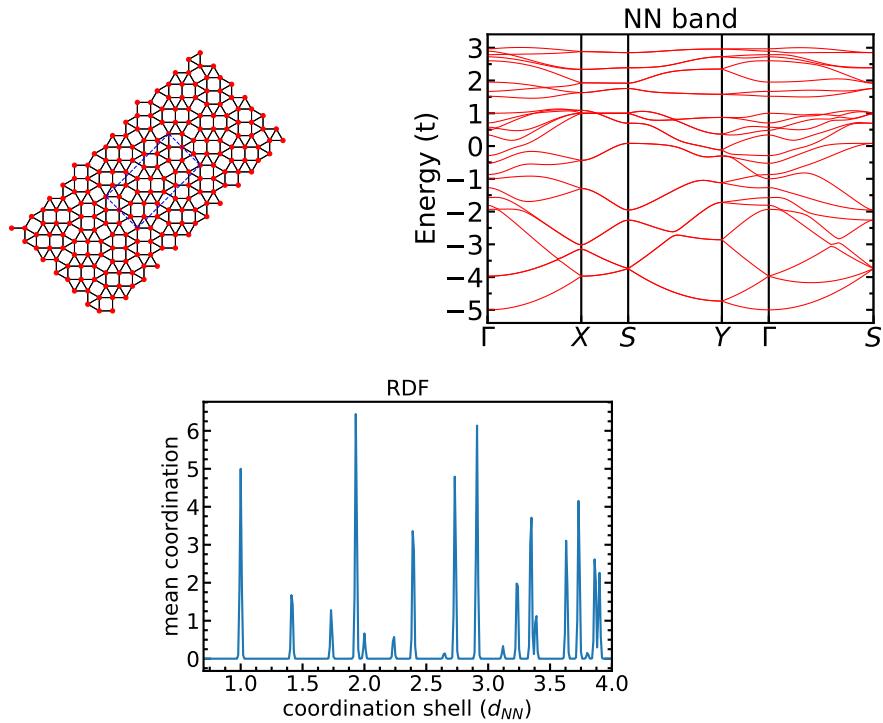


FIG. S660. t6660 lattice framework, nearest neighbors band structure and radial distribution function.

## t6661

Tiling reference number t6661 with space-group ' $Pmc2_1'$  (26) and 12 sites in the unit cell, with vertex type indicated in Tab. S661. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S661.

TABLE S661. Tiling t6661 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	0	0	0	8	4	0	0	0	0

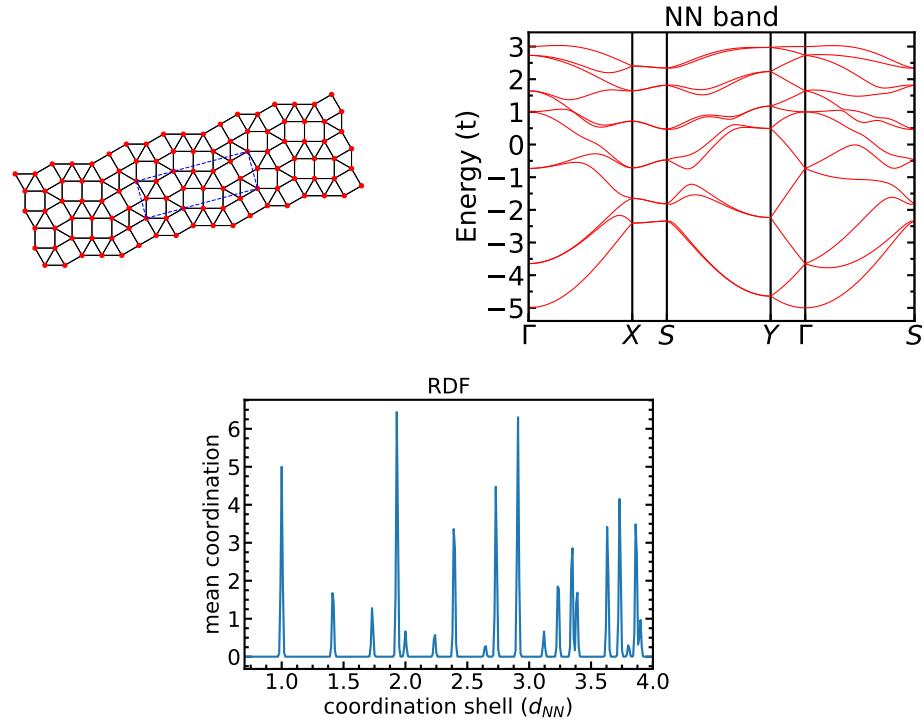


FIG. S661. t6661 lattice framework, nearest neighbors band structure and radial distribution function.

## t6662

Tiling reference number t6662 with space-group ' $Pmm2'$  (25) and 14 sites in the unit cell, with vertex type indicated in Tab. S662. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S662.

TABLE S662. Tiling t6662 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	0	0	10	2	0	0	0	0

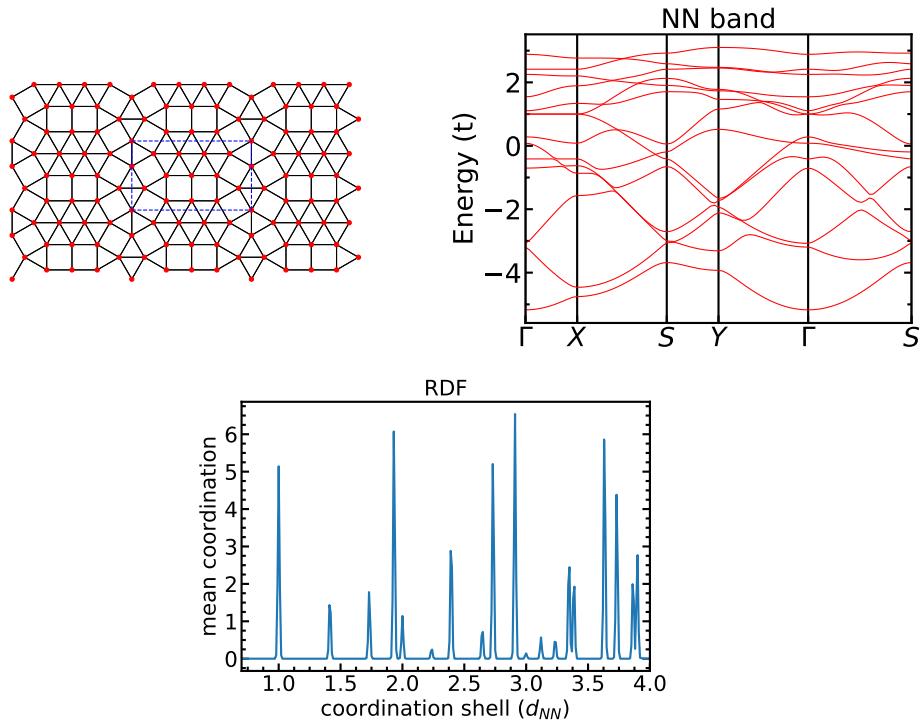


FIG. S662. t6662 lattice framework, nearest neighbors band structure and radial distribution function.

### t6663

Tiling reference number t6663 with space-group ' $Pm'$  (6) and 42 sites in the unit cell, with vertex type indicated in Tab. S663. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S663.

TABLE S663. Tiling t6663 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	0	6	18	12	0	0	0	0

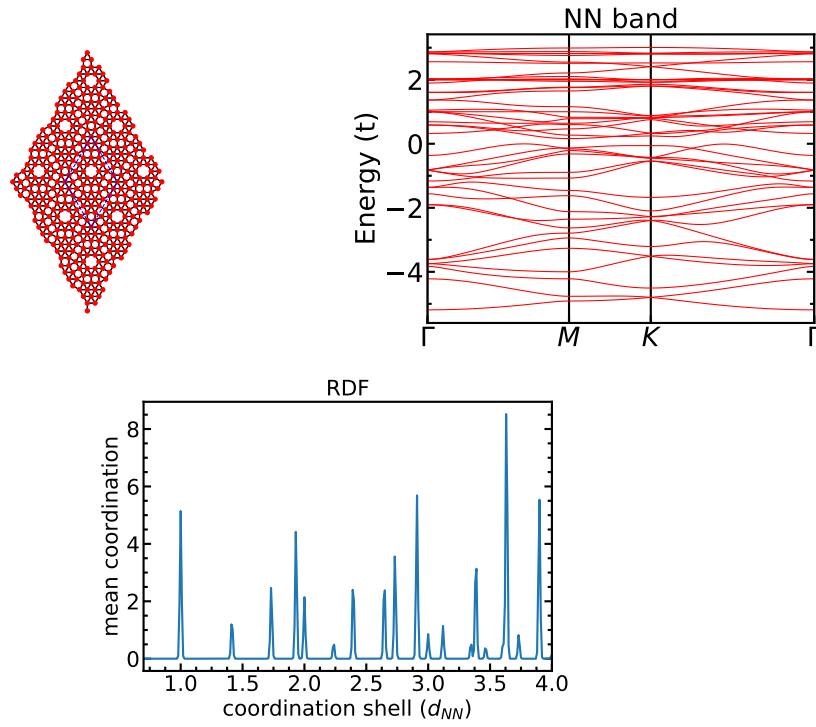


FIG. S663. t6663 lattice framework, nearest neighbors band structure and radial distribution function.

## t6664

Tiling reference number t6664 with space-group ' $Pm'$  (6) and 15 sites in the unit cell, with vertex type indicated in Tab. S664. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S664.

TABLE S664. Tiling t6664 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	0	0	14	0	0	0	0	0

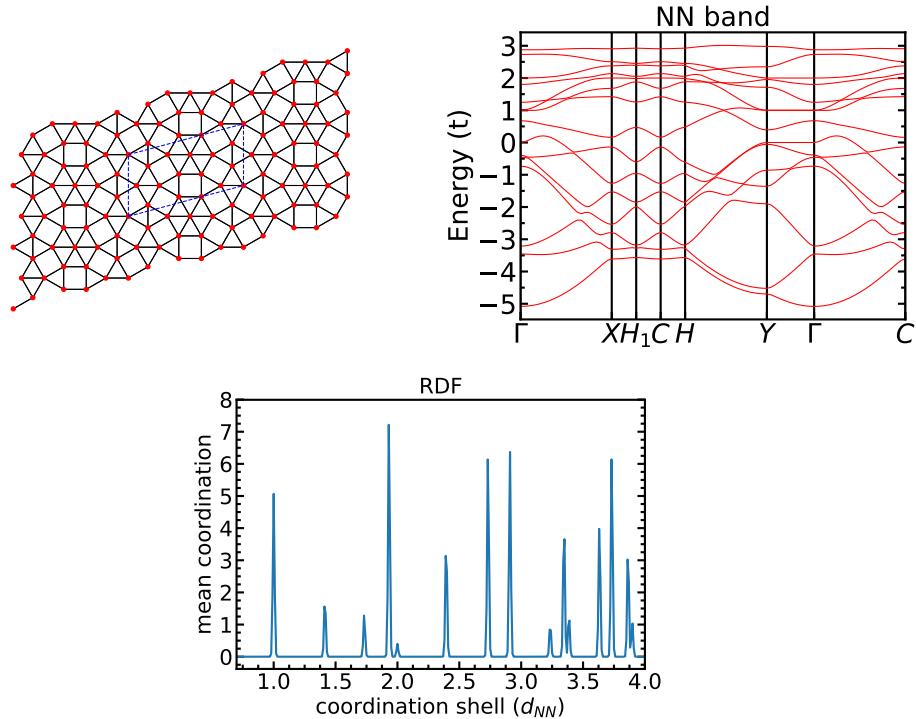


FIG. S664. t6664 lattice framework, nearest neighbors band structure and radial distribution function.

## t6665

Tiling reference number t6665 with space-group ' $P6/mmm$ ' (191) and 35 sites in the unit cell, with vertex type indicated in Tab. S665. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S665.

TABLE S665. Tiling t6665 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
29	0	0	0	0	0	0	0	6	0	0	0	0	0	0

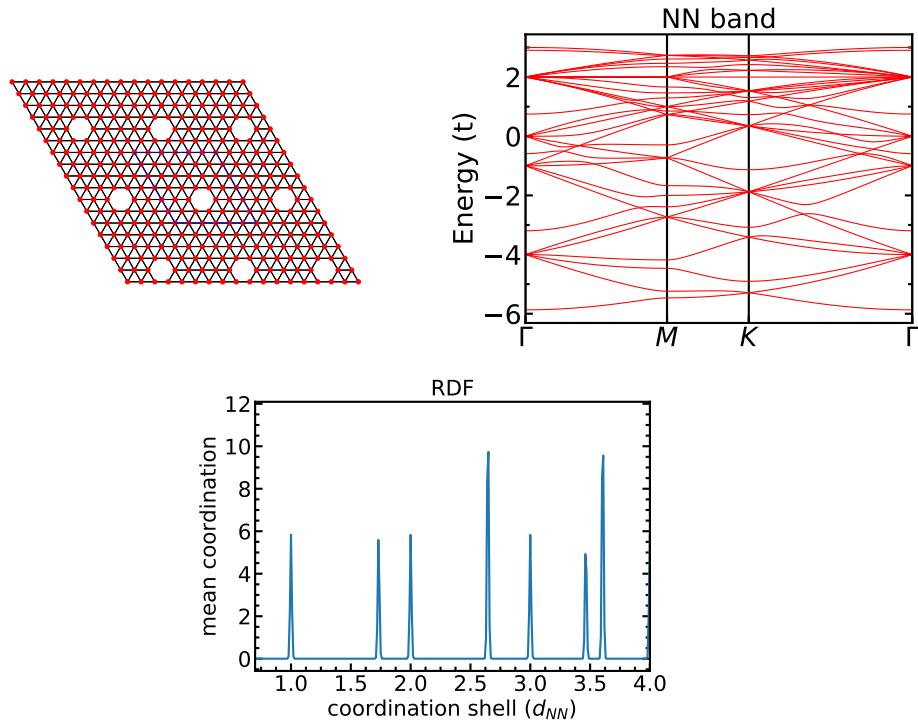


FIG. S665. t6665 lattice framework, nearest neighbors band structure and radial distribution function.

## t6666

Tiling reference number t6666 with space-group ' $Pm'$  (6) and 36 sites in the unit cell, with vertex type indicated in Tab. S666. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S666.

TABLE S666. Tiling t6666 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
30	0	0	0	0	0	0	0	6	0	0	0	0	0	0

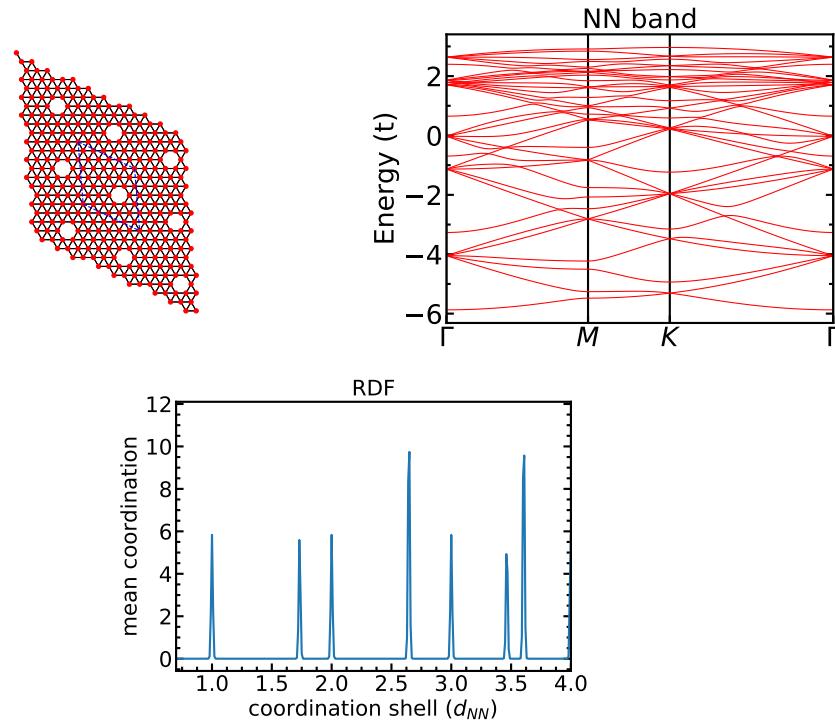


FIG. S666. t6666 lattice framework, nearest neighbors band structure and radial distribution function.

## t6667

Tiling reference number t6667 with space-group '*Amm2'* (38) and 34 sites in the unit cell, with vertex type indicated in Tab. S667. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S667.

TABLE S667. Tiling t6667 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
22	0	0	0	0	0	0	0	12	0	0	0	0	0	0

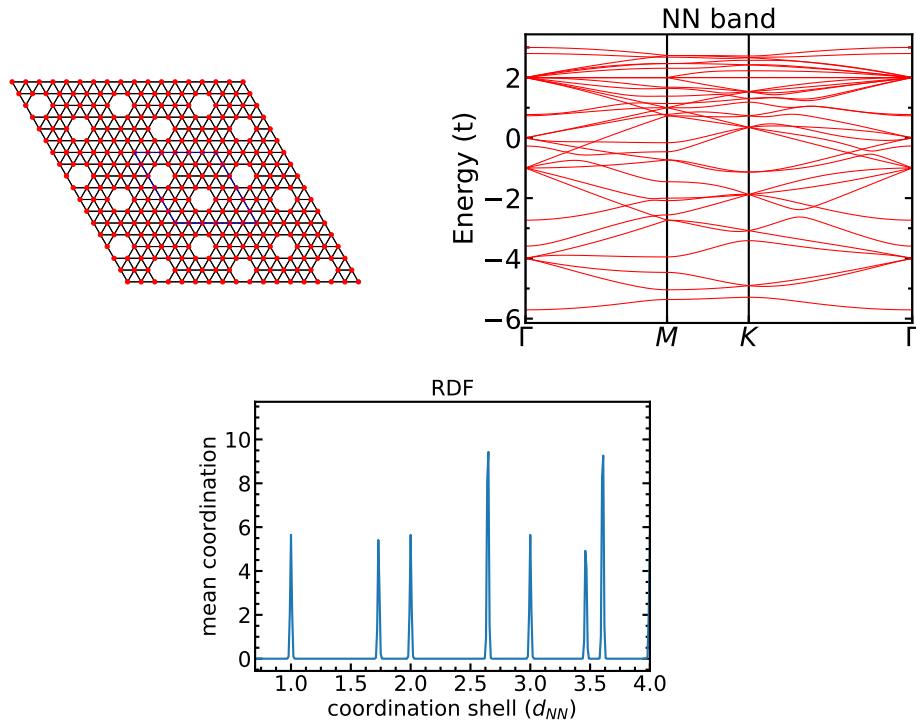


FIG. S667. t6667 lattice framework, nearest neighbors band structure and radial distribution function.

## t6668

Tiling reference number t6668 with space-group ' $P6/mmm$ ' (191) and 33 sites in the unit cell, with vertex type indicated in Tab. S668. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S668.

TABLE S668. Tiling t6668 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
15	0	0	0	0	0	0	0	18	0	0	0	0	0	0

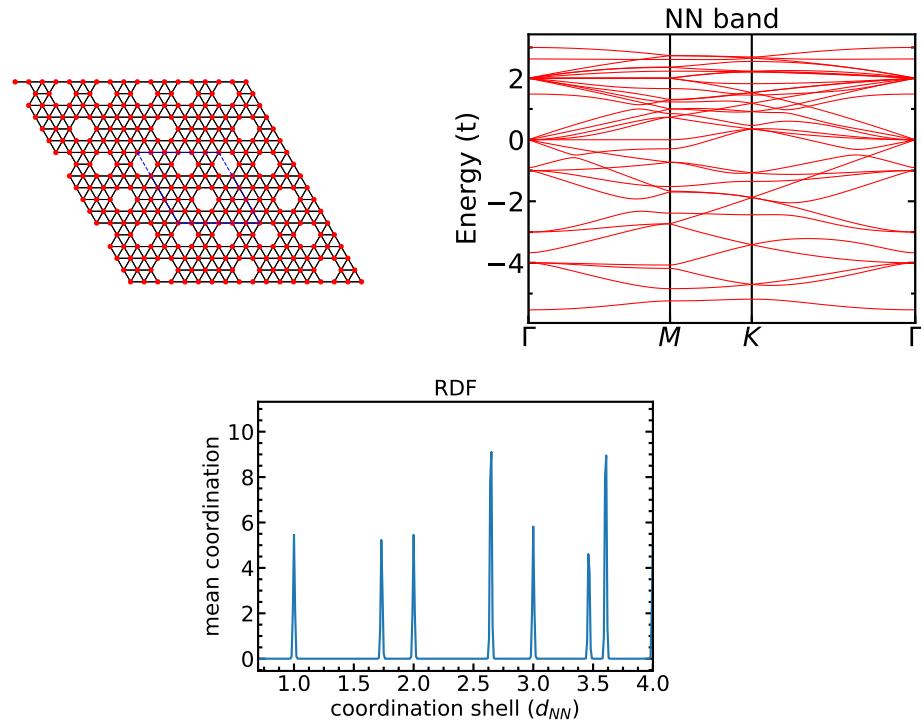


FIG. S668. t6668 lattice framework, nearest neighbors band structure and radial distribution function.

## t6669

Tiling reference number t6669 with space-group ' $Cmmm$ ' (65) and 15 sites in the unit cell, with vertex type indicated in Tab. S669. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S669.

TABLE S669. Tiling t6669 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
9	0	0	0	0	0	0	0	6	0	0	0	0	0	0

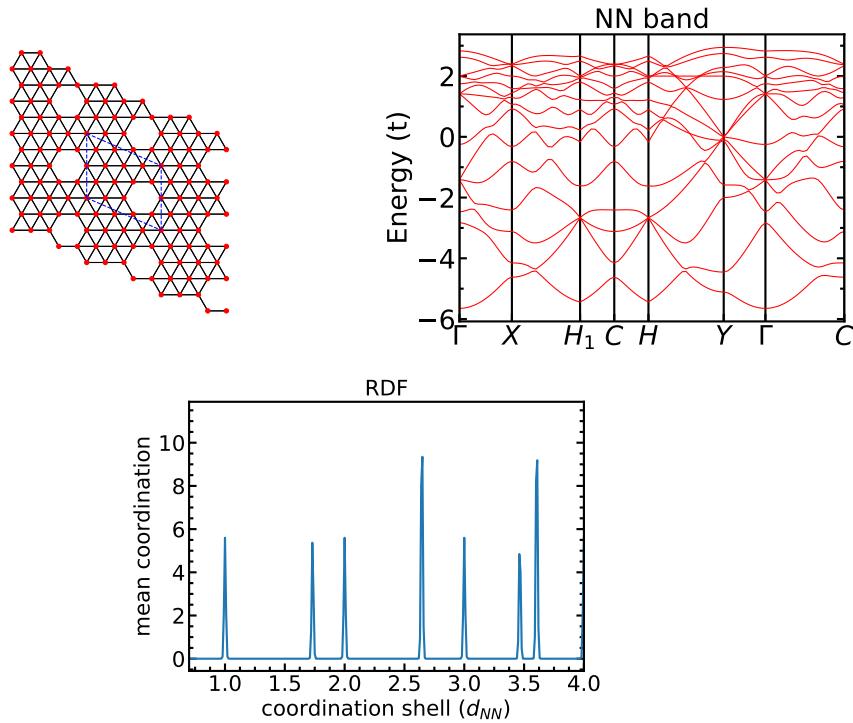


FIG. S669. t6669 lattice framework, nearest neighbors band structure and radial distribution function.

## t6670

Tiling reference number t6670 with space-group ' $P - 62m'$  (189) and 22 sites in the unit cell, with vertex type indicated in Tab. S670. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S670.

TABLE S670. Tiling t6670 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4	0	0	0	0	0	0	0	18	0	0	0	0	0	0

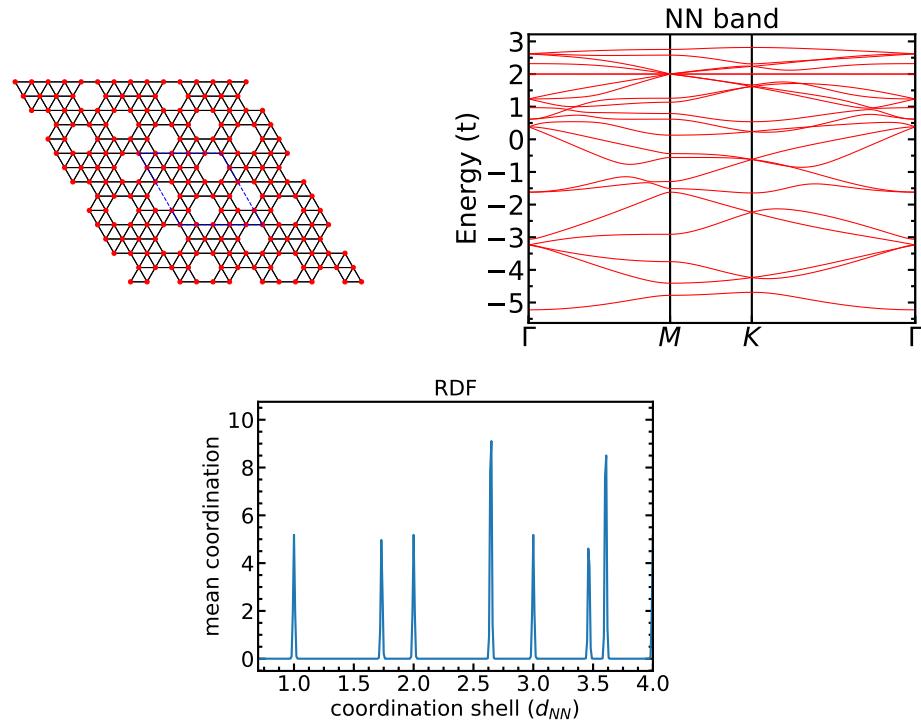


FIG. S670. t6670 lattice framework, nearest neighbors band structure and radial distribution function.

## t6671

Tiling reference number t6671 with space-group ' $P2/m$ ' (10) and 12 sites in the unit cell, with vertex type indicated in Tab. S671. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S671.

TABLE S671. Tiling t6671 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
6	0	0	0	0	0	0	0	6	0	0	0	0	0	0

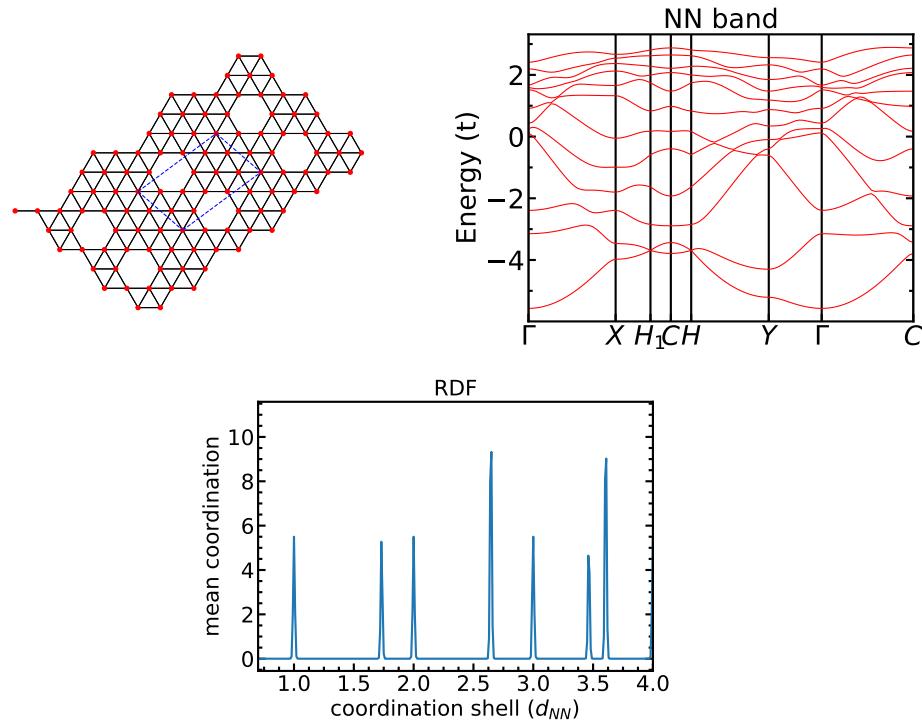


FIG. S671. t6671 lattice framework, nearest neighbors band structure and radial distribution function.

## t6672

Tiling reference number t6672 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S672. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S672.

TABLE S672. Tiling t6672 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	0	0	0	0	0	0	6	0	0	0	0	0	0

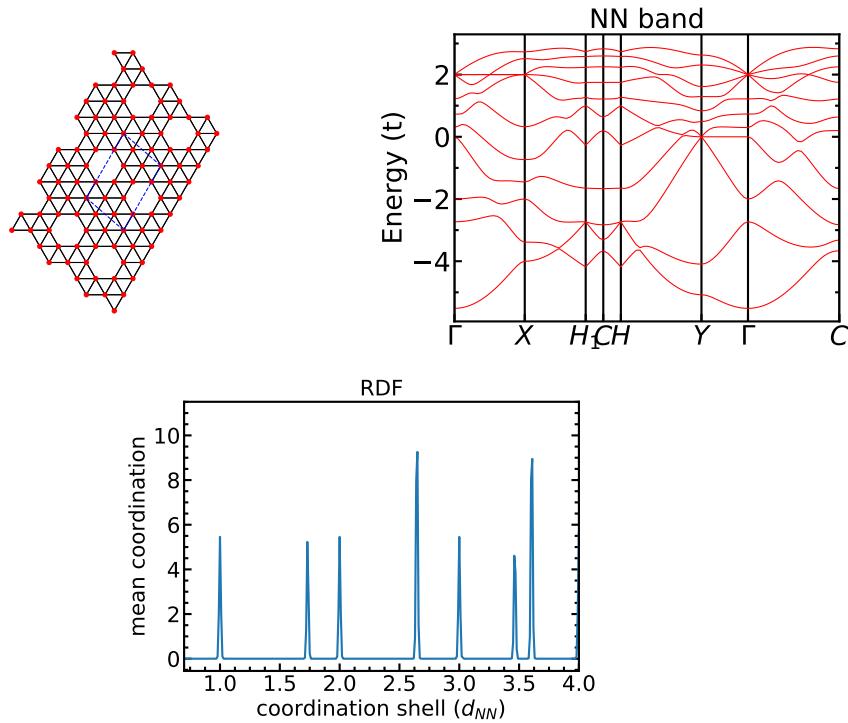


FIG. S672. t6672 lattice framework, nearest neighbors band structure and radial distribution function.

### t6673

Tiling reference number t6673 with space-group ' $P2/m$ ' (10) and 11 sites in the unit cell, with vertex type indicated in Tab. S673. The respective lattice structure, nearest neighbors band structure, and radial distribution function is shown in Fig S673.

TABLE S673. Tiling t6673 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	0	0	0	0	0	0	6	0	0	0	0	0	0

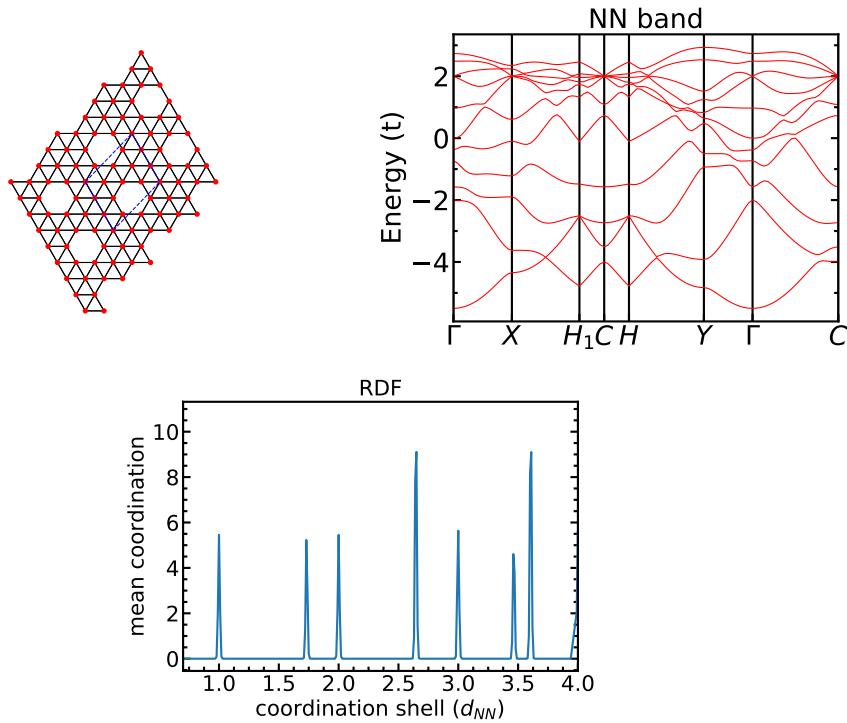


FIG. S673. t6673 lattice framework, nearest neighbors band structure and radial distribution function.

---

\* felipe.lima@lnnano.cnpem.br

† adalberto.fazzio@lnnano.cnpem.br