

Emergent quasiparticles in Euclidean tiling

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Abstract

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$k = 5$ LATTICES

t5001

Tiling reference number t5001 with space-group ' $Cmmm$ ' (65) and 18 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 t5001 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	0	0	2	0	0	4	4

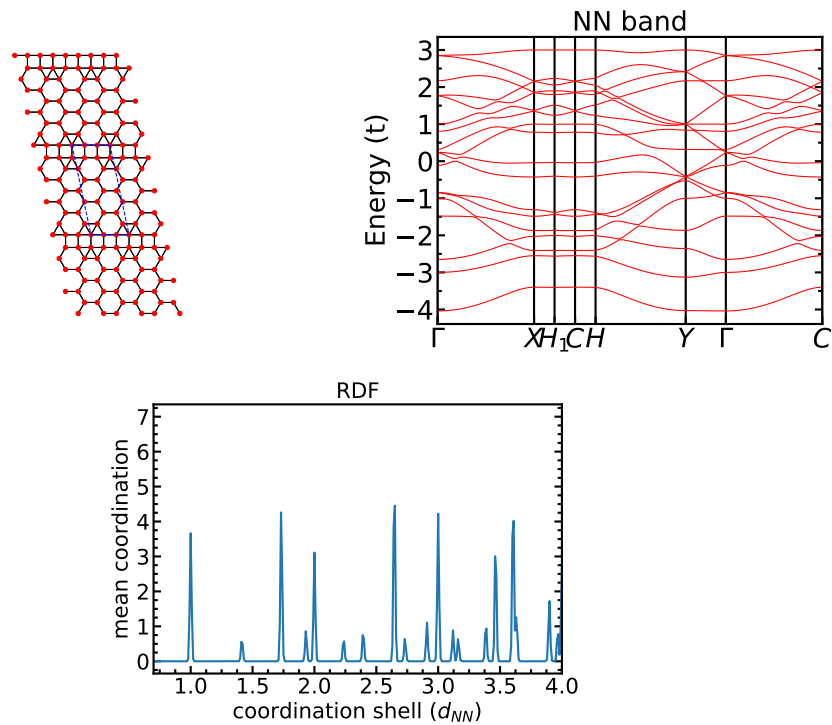


FIG. S1. t5001 lattice framework, nearest neighbors band structure and radial distribution function.

t5002

Tiling reference number t5002 with space-group ' $Cmmm$ ' (65) and 15 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 t5002 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	8	0	0	0	0	0	0	0	0	0	0	0	6

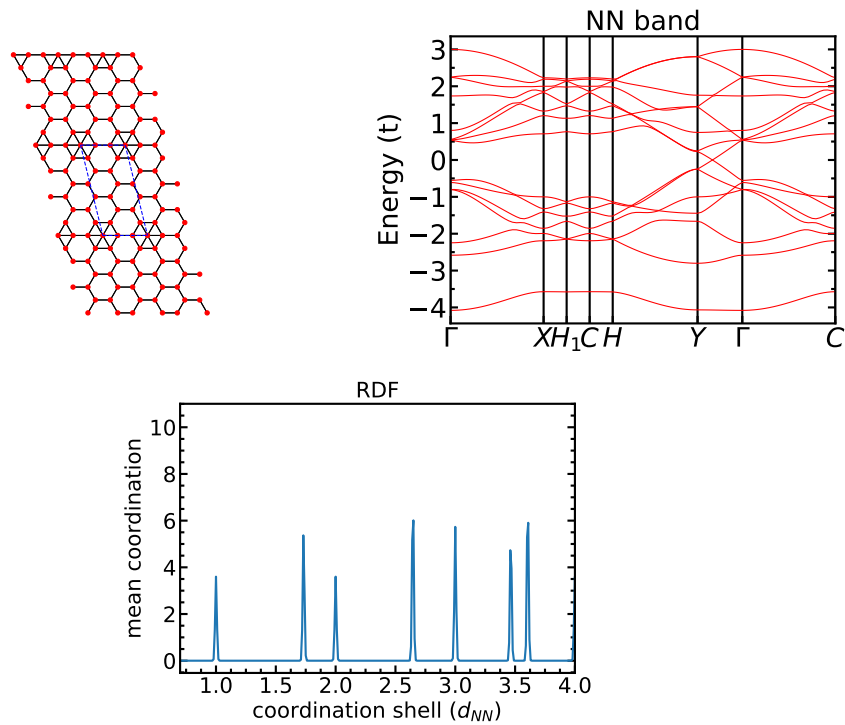


FIG. S2. t5002 lattice framework, nearest neighbors band structure and radial distribution function.

t5003

Tiling reference number t5003 with space-group ' $Pmma'$ ' (51) and 18 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 t5003 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	4	0	0	0	0	0	4

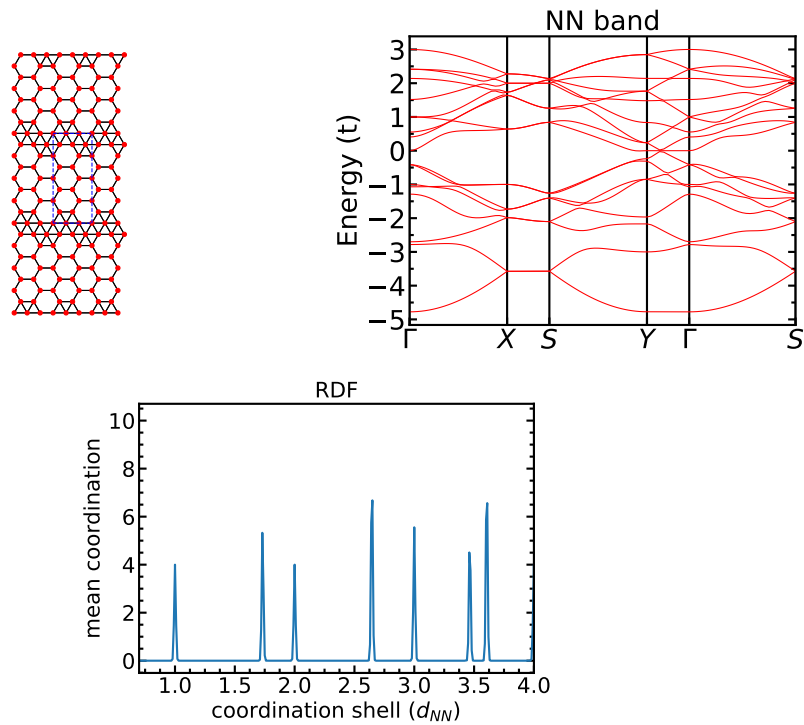


FIG. S3. t5003 lattice framework, nearest neighbors band structure and radial distribution function.

t5004

Tiling reference number t5004 with space-group ' $Cmmm$ ' (65) and 9 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 t5004 vertex types

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

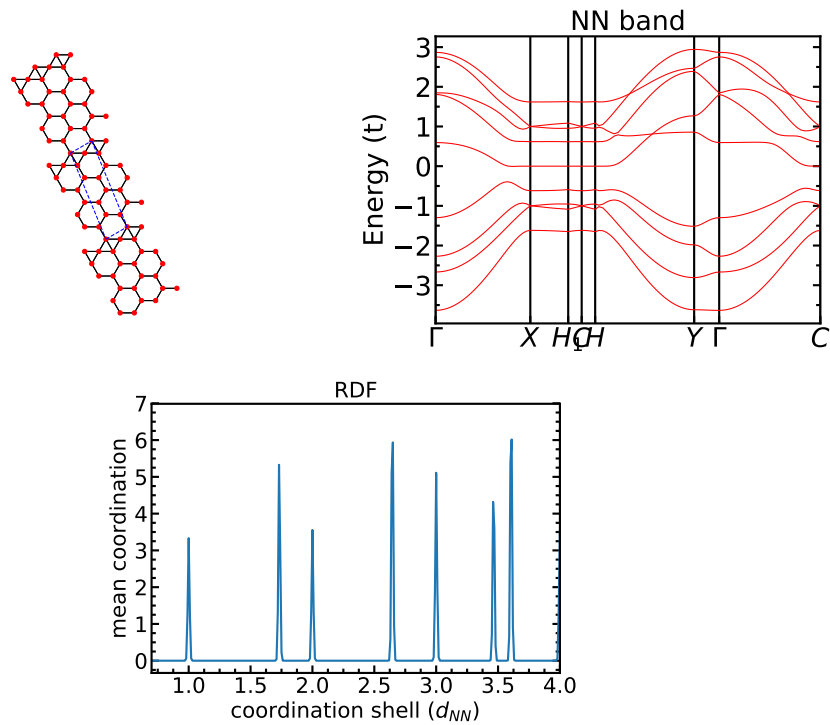


FIG. S4. t5004 lattice framework, nearest neighbors band structure and radial distribution function.

t5005

Tiling reference number t5005 with space-group ' $Pmma$ ' (51) and 10 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 t5005 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	2	0	0	0	0	0	2

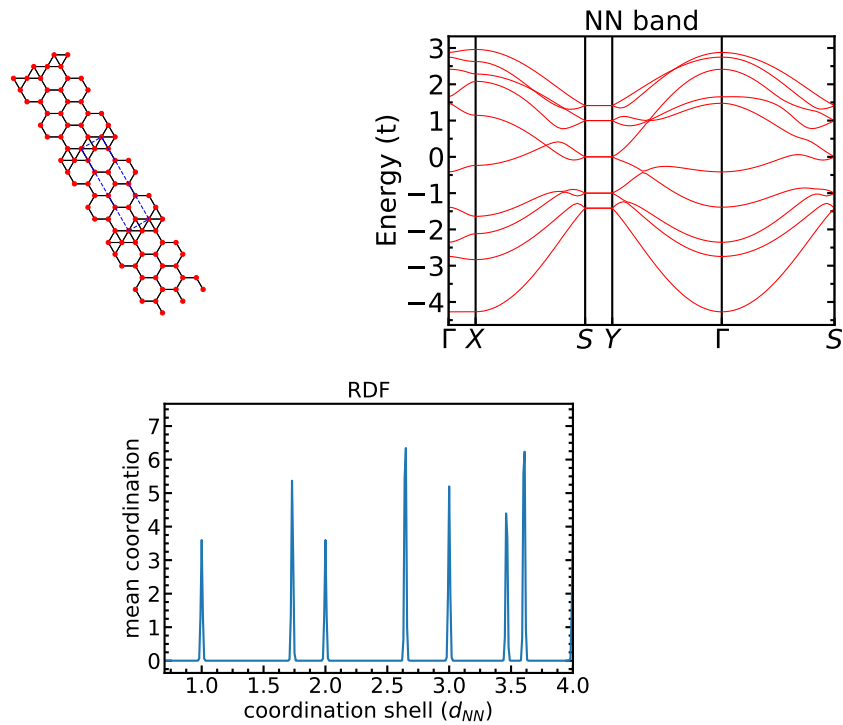


FIG. S5. t5005 lattice framework, nearest neighbors band structure and radial distribution function.

t5006

Tiling reference number t5006 with space-group ' $Pmma$ ' (51) and 18 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 t5006 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	0	0	0	0	0	0	12

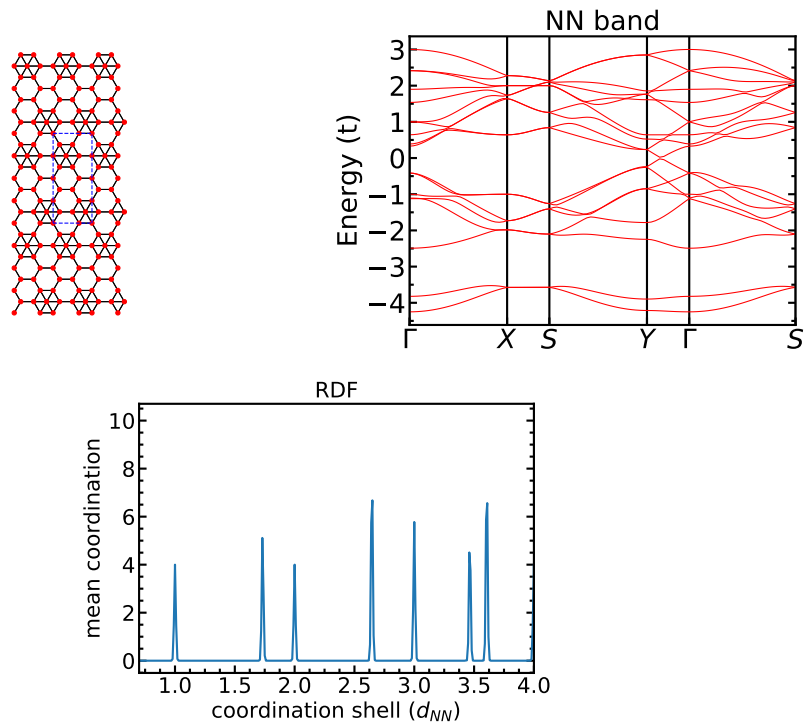


FIG. S6. t5006 lattice framework, nearest neighbors band structure and radial distribution function.

t5007

Tiling reference number t5007 with space-group ' $Cmmm$ ' (65) and 16 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 t5007 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	2	0	0	0	0	0	8

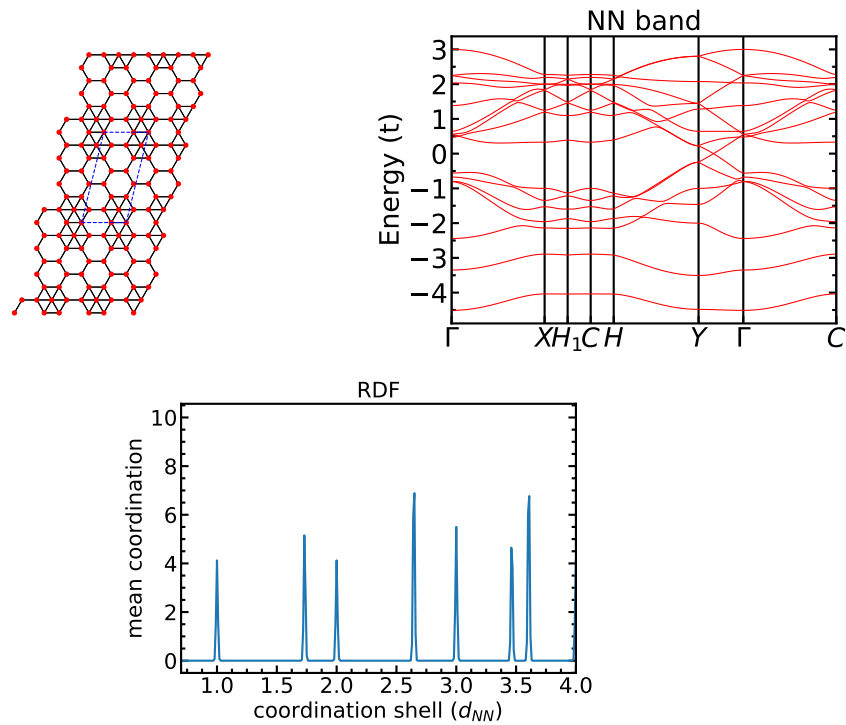


FIG. S7. t5007 lattice framework, nearest neighbors band structure and radial distribution function.

t5008

Tiling reference number t5008 with space-group ' Pm' ' (6) and 36 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 t5008 vertex types

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

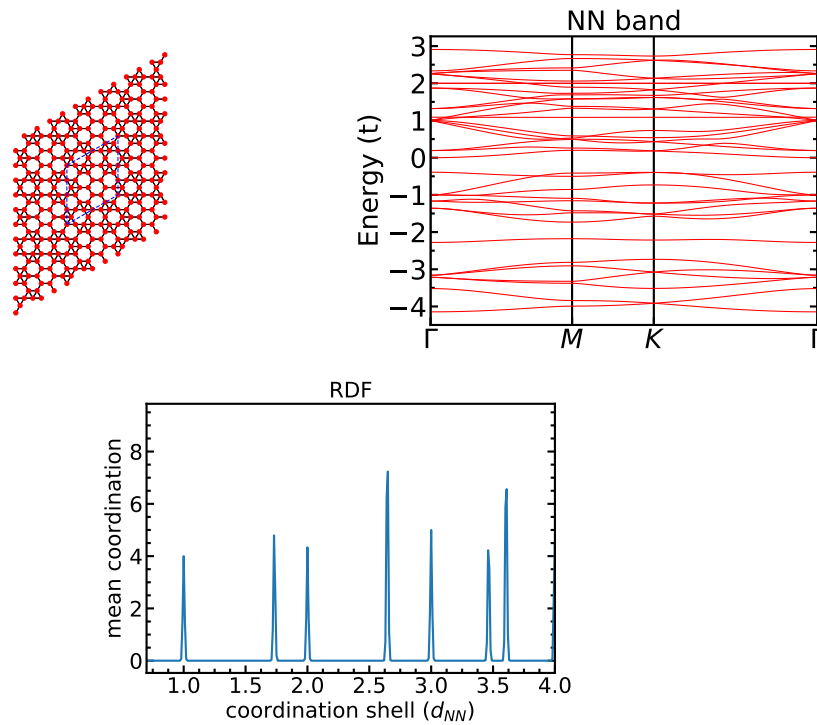


FIG. S8. t5008 lattice framework, nearest neighbors band structure and radial distribution function.

t5009

Tiling reference number t5009 with space-group ' $Amm2'$ ' (38) 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 t5009 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	0	0	0	0	0	0	12

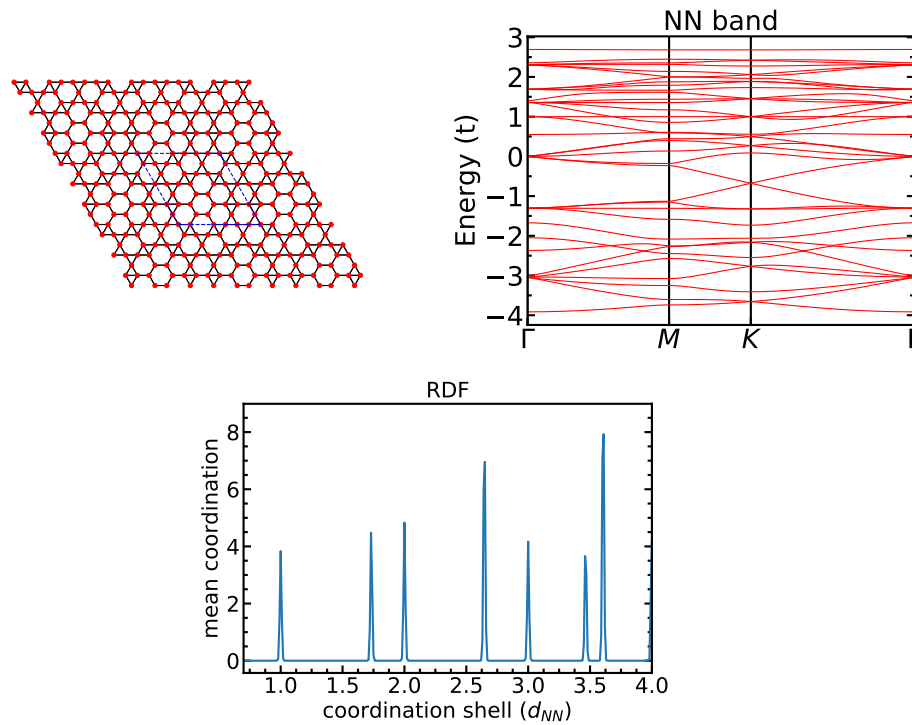


FIG. S9. t5009 lattice framework, nearest neighbors band structure and radial distribution function.

t5010

Tiling reference number t5010 with space-group ' Pm' ' (6) and 30 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 t5010 vertex types

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

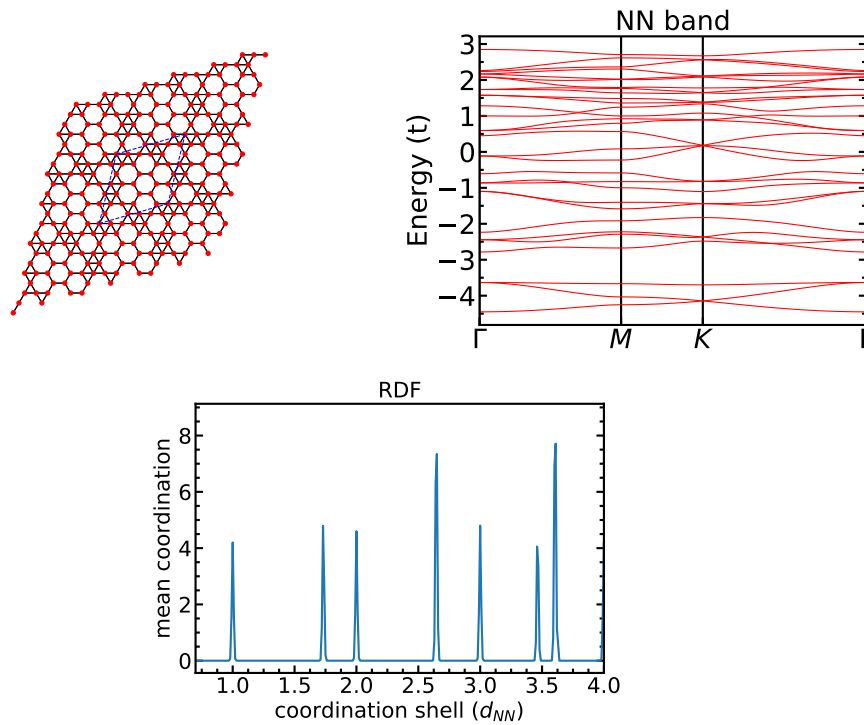


FIG. S10. t5010 lattice framework, nearest neighbors band structure and radial distribution function.

t5011

Tiling reference number t5011 with space-group ' $P6/mmm'$ ' (191) and 29 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 t5011 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	0	6	0	0	0	0	0	12	0	0	0	0	0	6

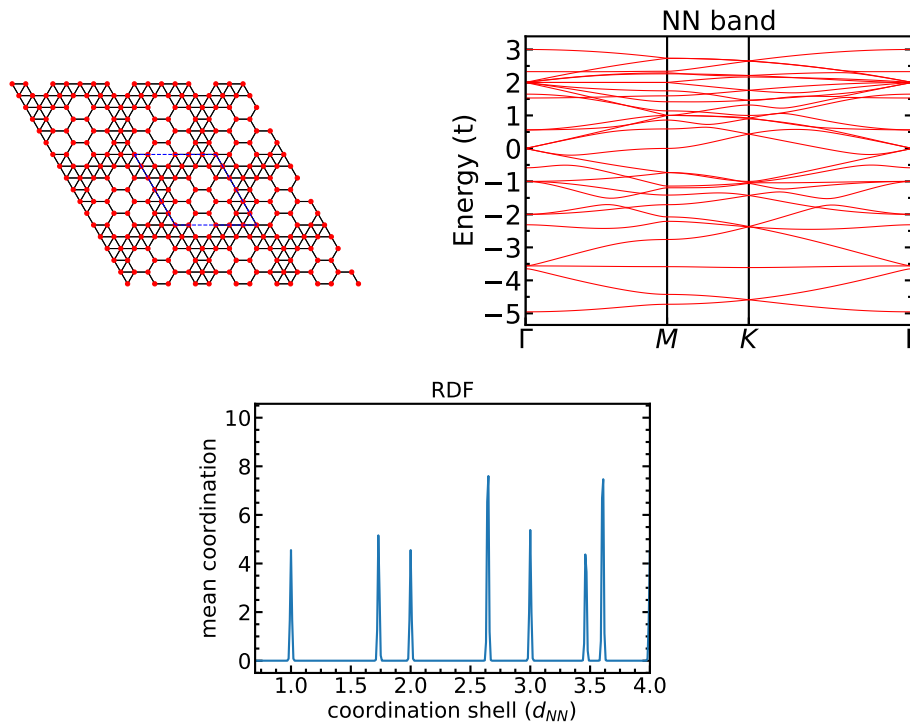


FIG. S11. t5011 lattice framework, nearest neighbors band structure and radial distribution function.

t5012

Tiling reference number t5012 with space-group ' $P6/m'$ ' (175) and 30 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 t5012 vertex types

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

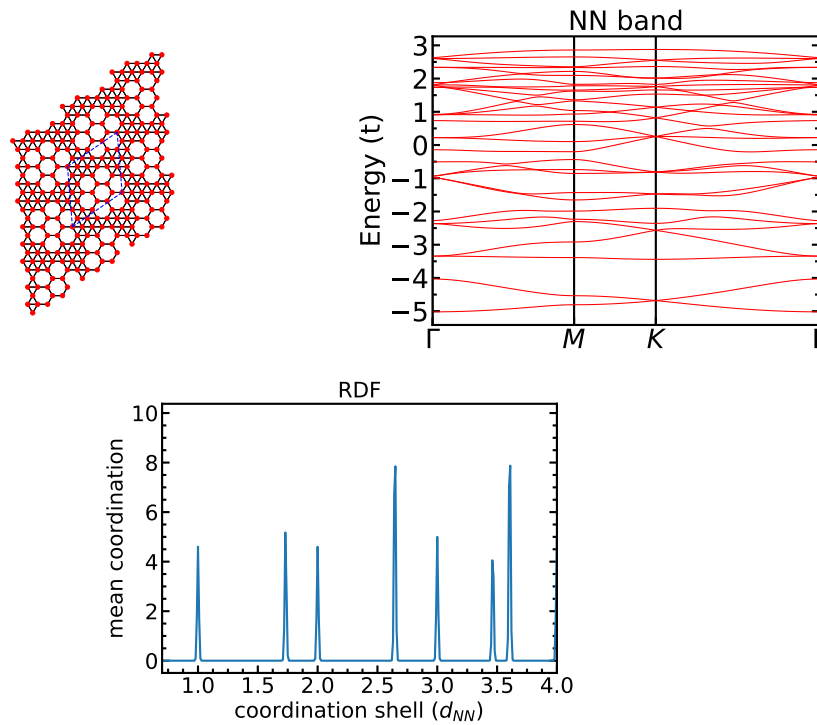


FIG. S12. t5012 lattice framework, nearest neighbors band structure and radial distribution function.

t5013

Tiling reference number t5013 with space-group ' $Cmmm$ ' (65) and 10 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 t5013 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	4	0	0	0	0	0	4

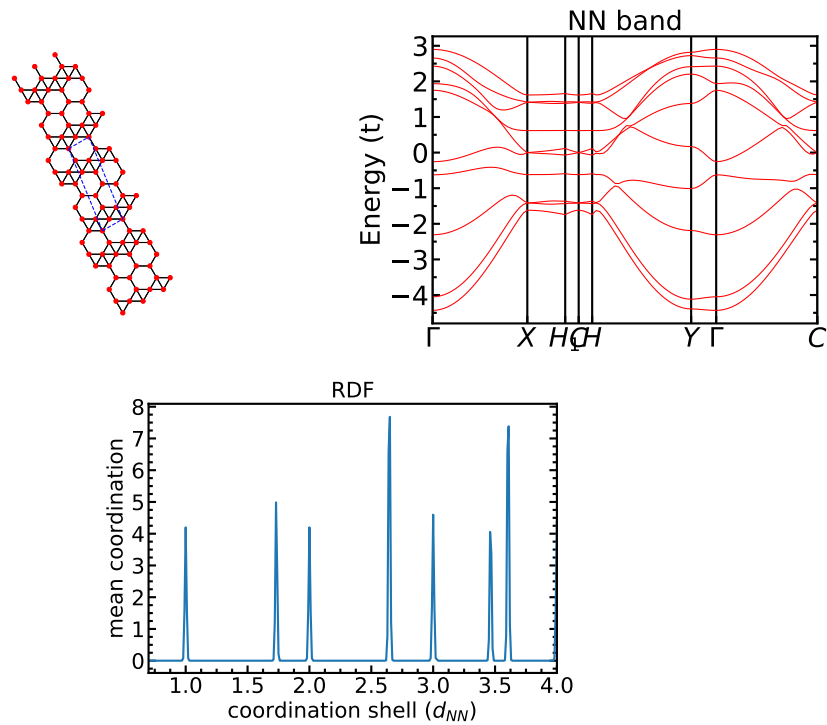


FIG. S13. t5013 lattice framework, nearest neighbors band structure and radial distribution function.

t5014

Tiling reference number t5014 with space-group ' $Cmmm$ ' (65) and 9 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 t5014 vertex types

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

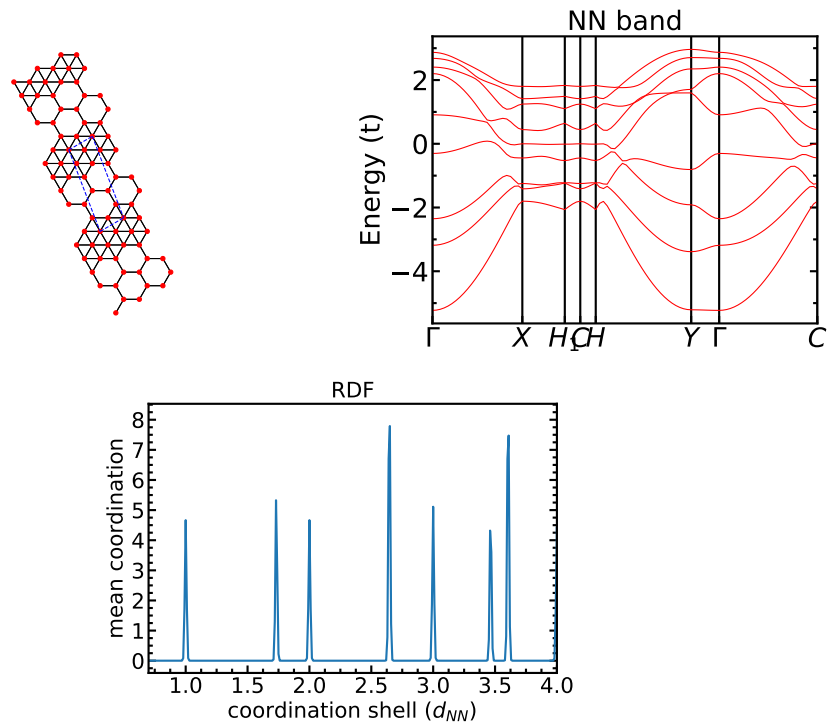


FIG. S14. t5014 lattice framework, nearest neighbors band structure and radial distribution function.

t5015

Tiling reference number t5015 with space-group ' $Pmma$ ' (51) and 10 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 t5015 vertex types

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

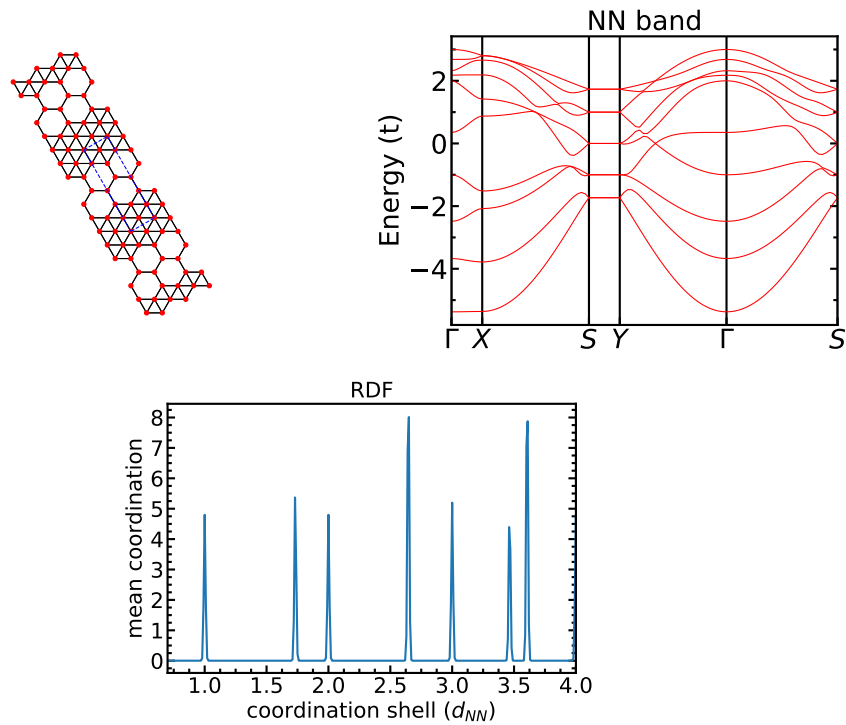


FIG. S15. t5015 lattice framework, nearest neighbors band structure and radial distribution function.

t5016

Tiling reference number t5016 with space-group ' $Pmmm$ ' (47) and 16 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 t5016 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	0	2	0	0	4	4

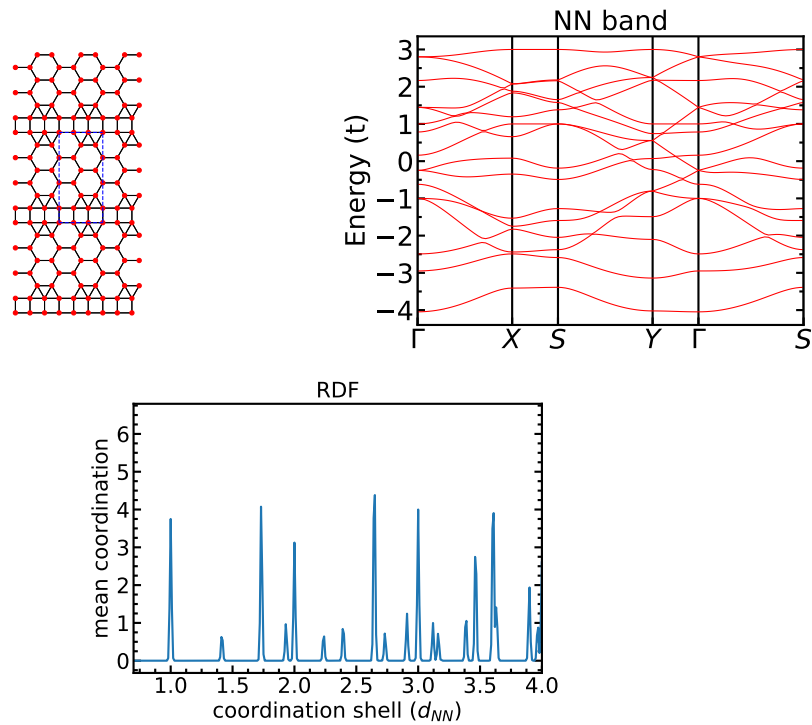


FIG. S16. t5016 lattice framework, nearest neighbors band structure and radial distribution function.

t5017

Tiling reference number t5017 with space-group ' $Pmmm$ ' (47) and 13 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 t5017 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	0	0	0	0	0	0	6

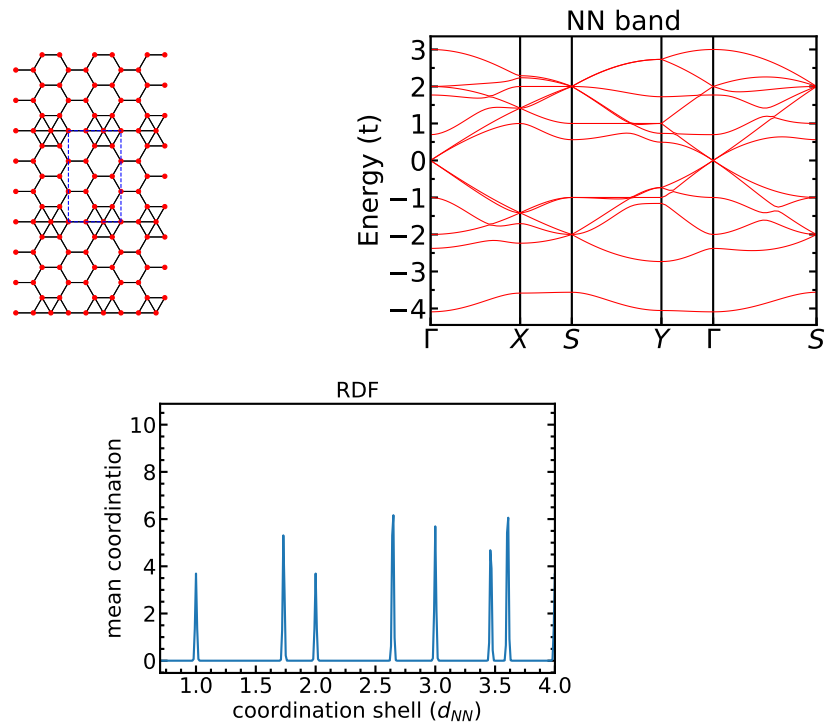


FIG. S17. t5017 lattice framework, nearest neighbors band structure and radial distribution function.

t5018

Tiling reference number t5018 with space-group ' $Amm2'$ ' (38) and 16 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 t5018 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	4	0	0	0	0	0	4

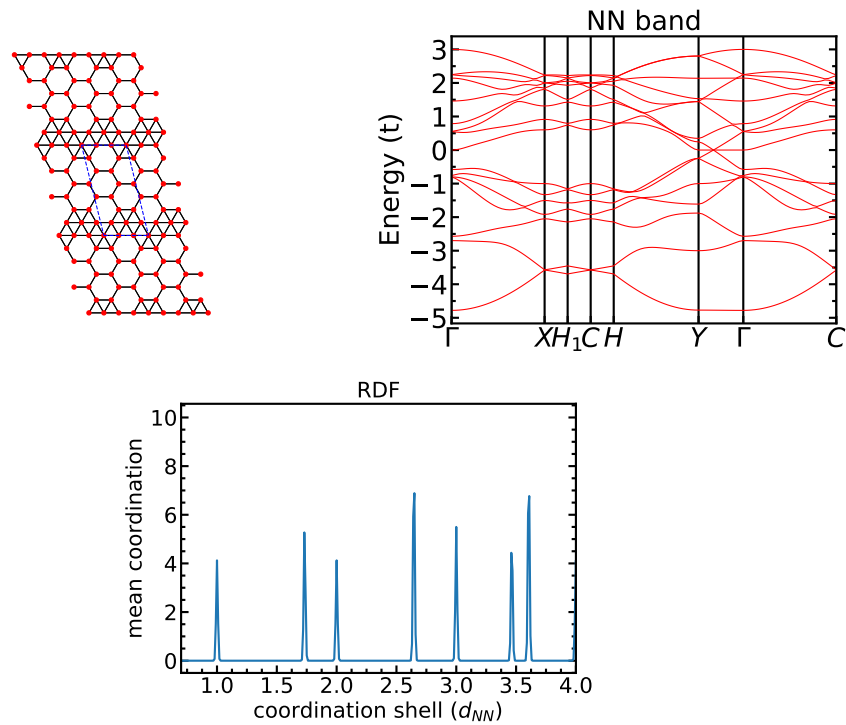


FIG. S18. t5018 lattice framework, nearest neighbors band structure and radial distribution function.

t5019

Tiling reference number t5019 with space-group ' $Pmmm$ ' (47) and 10 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 t5019 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	0	0	0	0	0	0	4

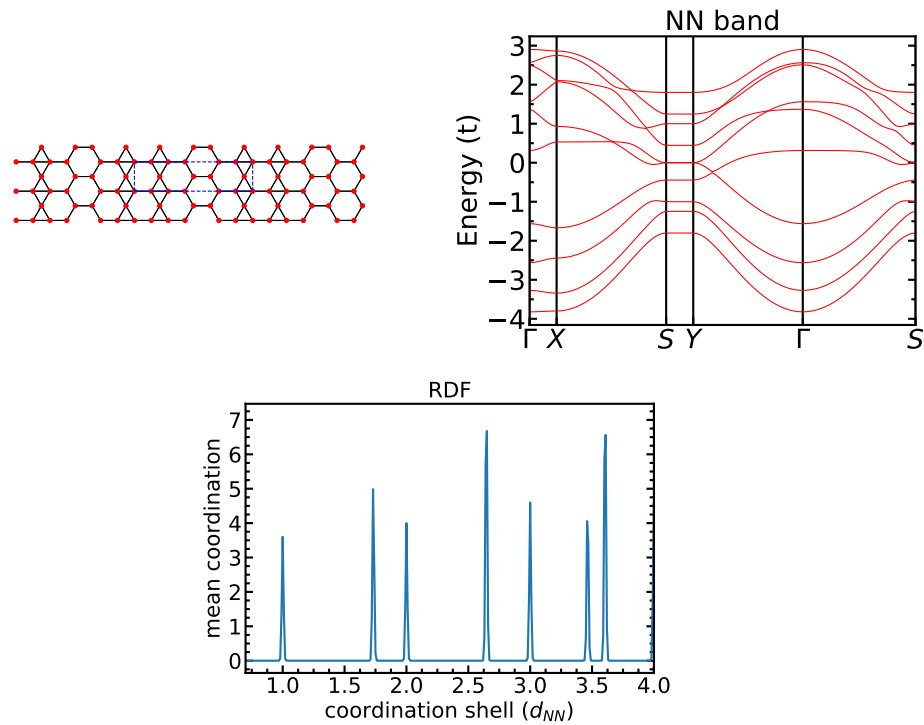


FIG. S19. t5019 lattice framework, nearest neighbors band structure and radial distribution function.

t5020

Tiling reference number t5020 with space-group ' $Pmmm'$ ' (47) and 9 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 t5020 vertex types

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

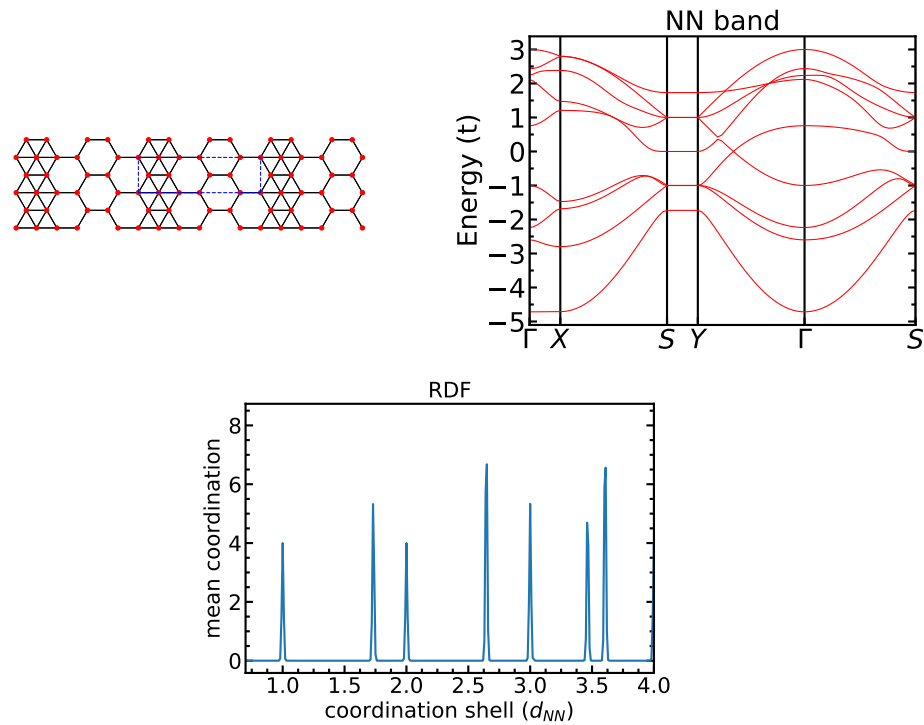


FIG. S20. t5020 lattice framework, nearest neighbors band structure and radial distribution function.

t5021

Tiling reference number t5021 with space-group ' $Cmmm$ ' (65) and 10 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 t5021 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	2	0	0	0	0	0	2

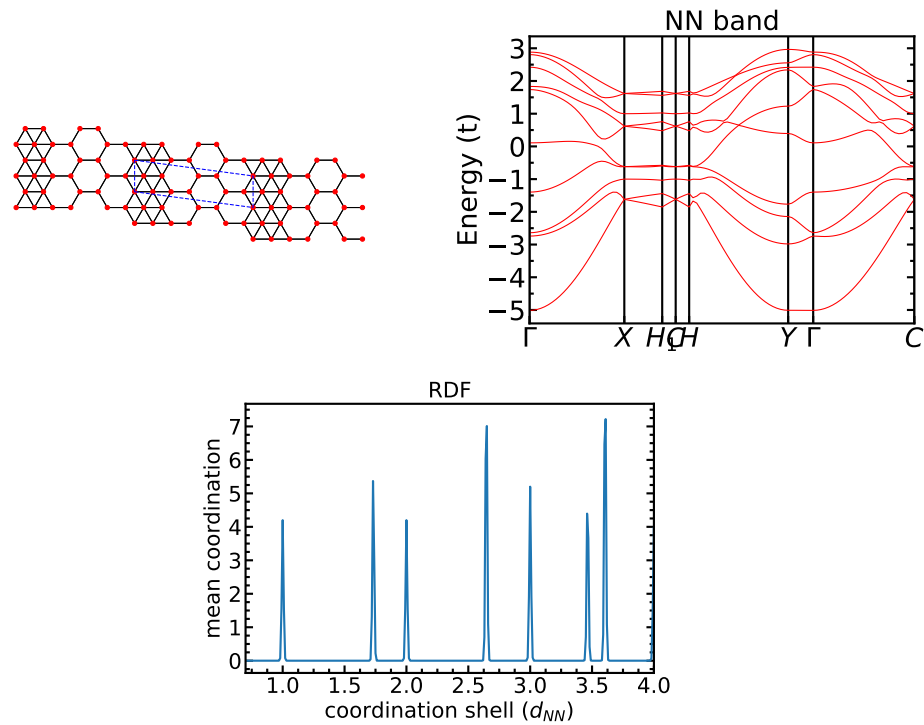


FIG. S21. t5021 lattice framework, nearest neighbors band structure and radial distribution function.

t5022

Tiling reference number t5022 with space-group ' $Cmmm$ ' (65) and 16 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 t5022 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	0	0	0	0	0	0	12

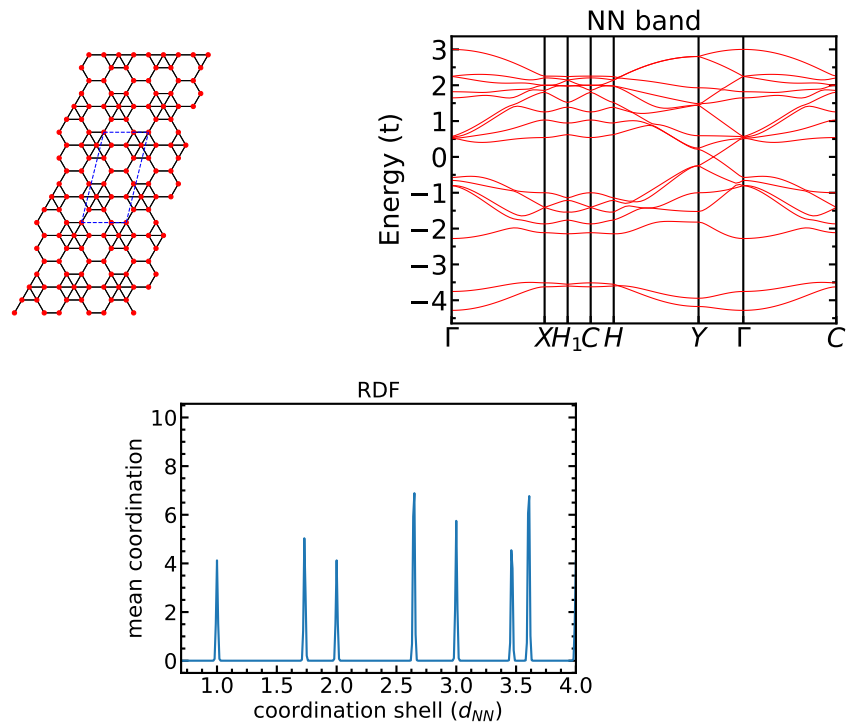


FIG. S22. t5022 lattice framework, nearest neighbors band structure and radial distribution function.

t5023

Tiling reference number t5023 with space-group ' $Pmmm$ ' (47) and 14 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 t5023 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	2	0	0	0	0	0	8

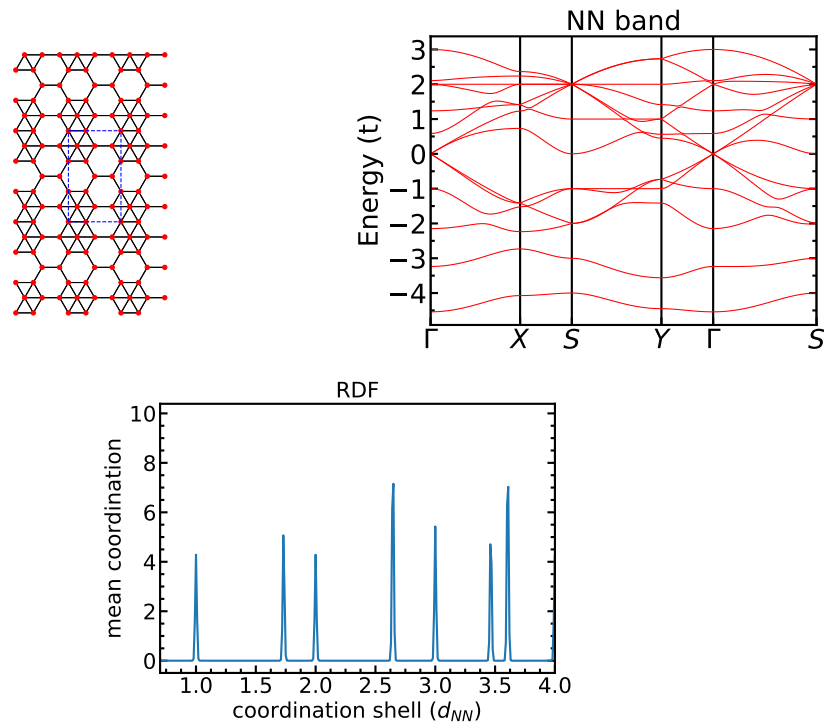


FIG. S23. t5023 lattice framework, nearest neighbors band structure and radial distribution function.

t5024

Tiling reference number t5024 with space-group ' Pm' ' (6) and 12 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 t5024 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

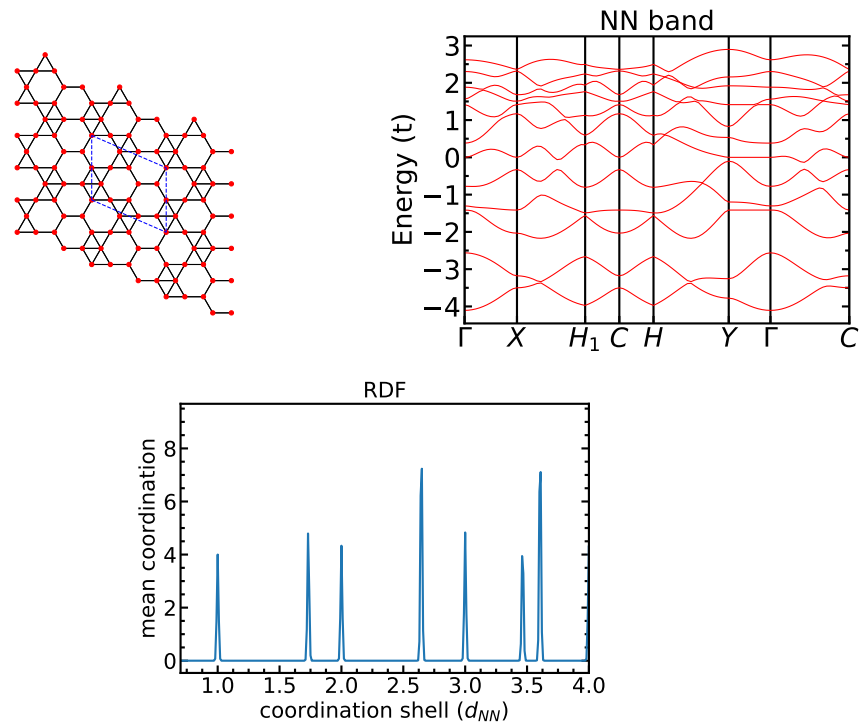


FIG. S24. t5024 lattice framework, nearest neighbors band structure and radial distribution function.

t5025

Tiling reference number t5025 with space-group ' $P6/mmm'$ ' (191) and 36 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 t5025 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	0	0	0	0	0	0	12

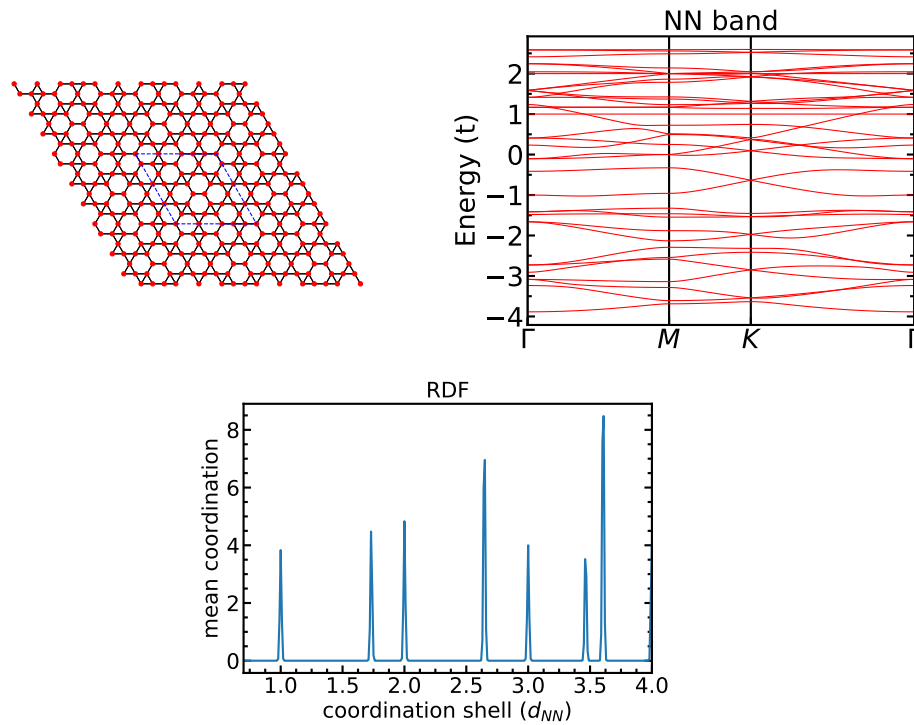


FIG. S25. t5025 lattice framework, nearest neighbors band structure and radial distribution function.

t5026

Tiling reference number t5026 with space-group ' $Cmmm$ ' (65) and 16 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 t5026 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	4	0	0	0	0	0	8

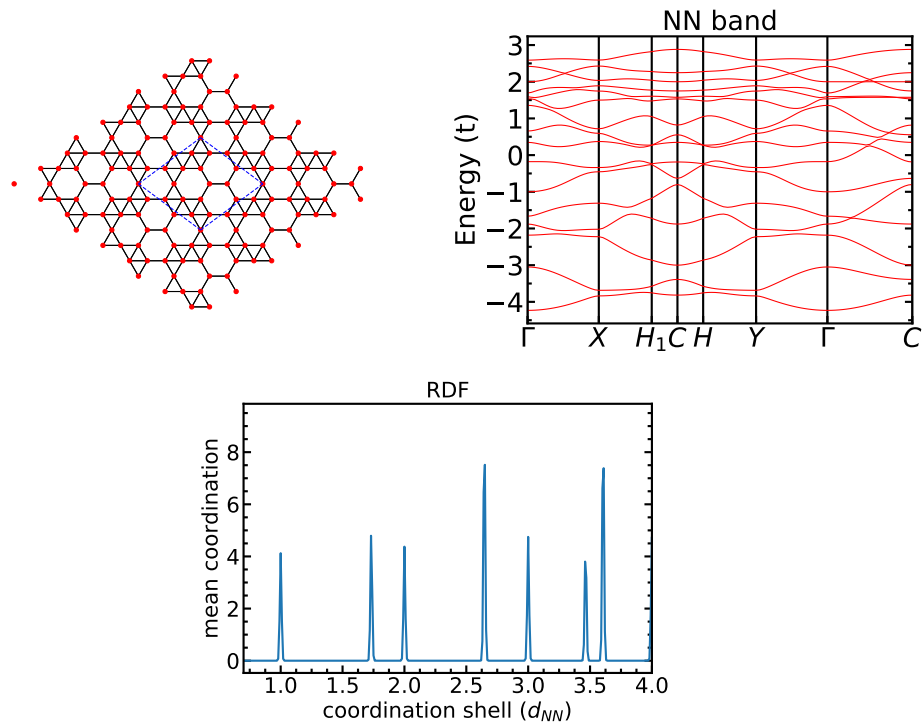


FIG. S26. t5026 lattice framework, nearest neighbors band structure and radial distribution function.

t5027

Tiling reference number t5027 with space-group $'P2/m'$ (10) and 9 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 t5027 vertex types

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

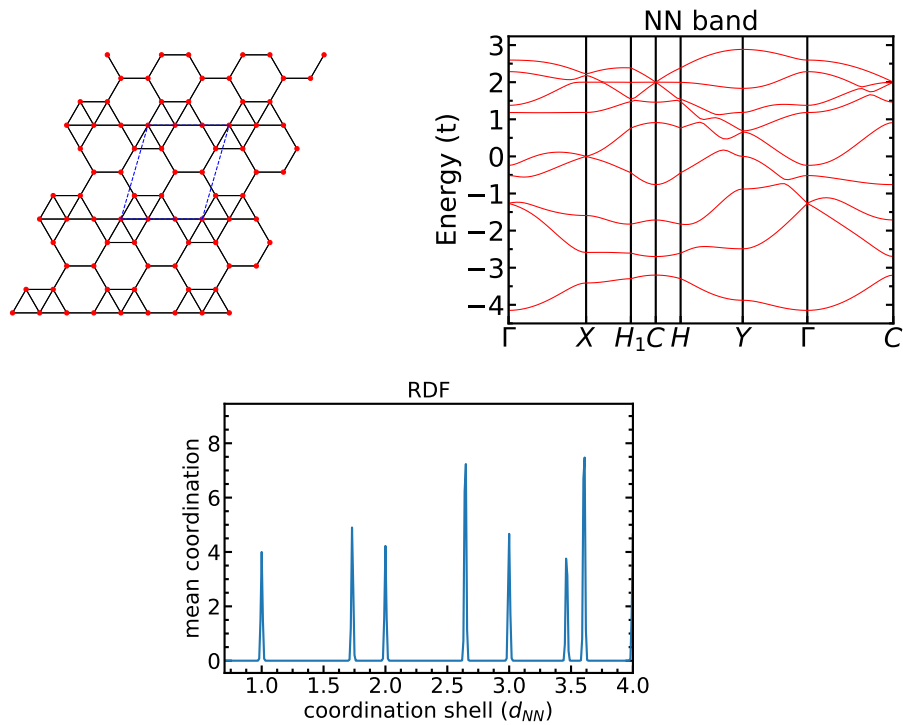


FIG. S27. t5027 lattice framework, nearest neighbors band structure and radial distribution function.

t5028

Tiling reference number t5028 with space-group ' $P - 62m'$ ' (189) and 19 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 t5028 vertex types

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

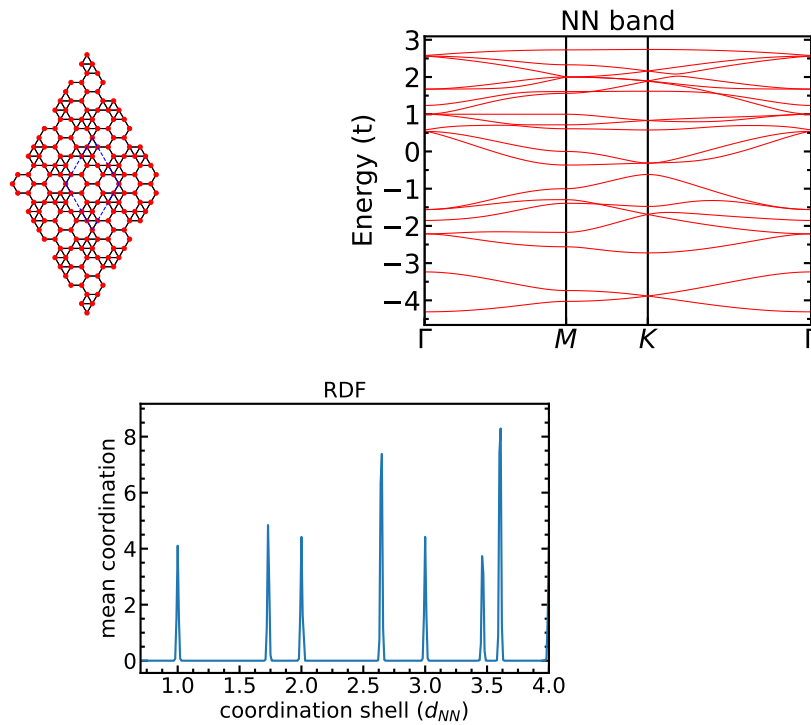


FIG. S28. t5028 lattice framework, nearest neighbors band structure and radial distribution function.

t5029

Tiling reference number t5029 with space-group ' $Amm2'$ ' (38) and 16 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 t5029 vertex types

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

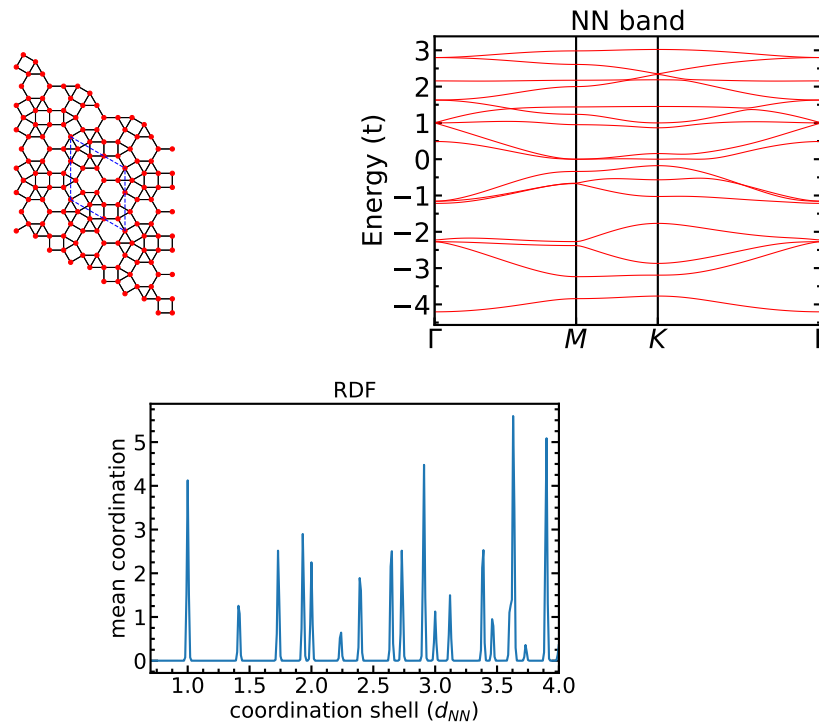


FIG. S29. t5029 lattice framework, nearest neighbors band structure and radial distribution function.

t5030

Tiling reference number t5030 with space-group ' $P2/m'$ ' (10) and 21 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 t5030 vertex types

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

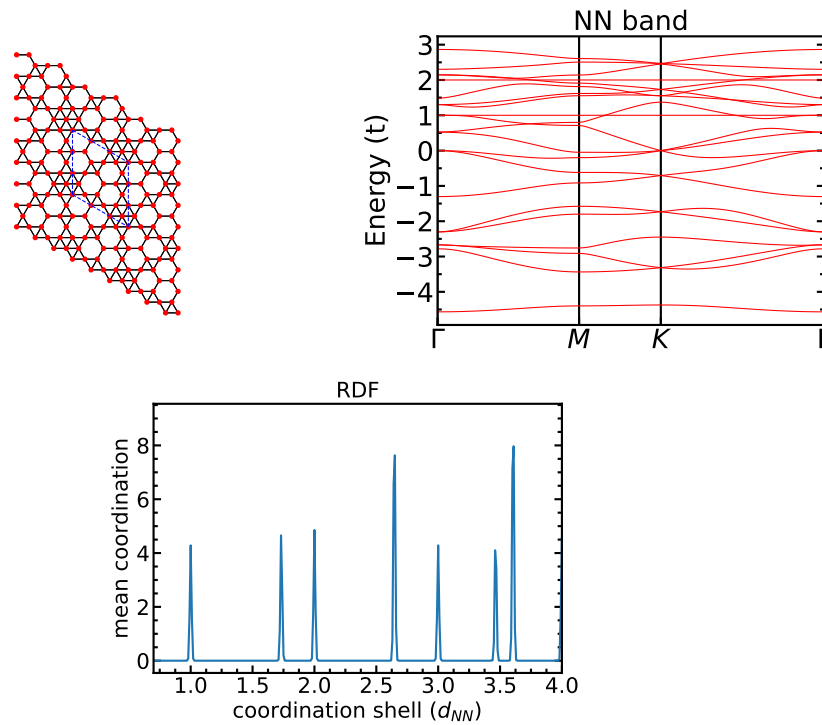


FIG. S30. t5030 lattice framework, nearest neighbors band structure and radial distribution function.

t5031

Tiling reference number t5031 with space-group ' $Pmma$ ' (51) 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 t5031 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

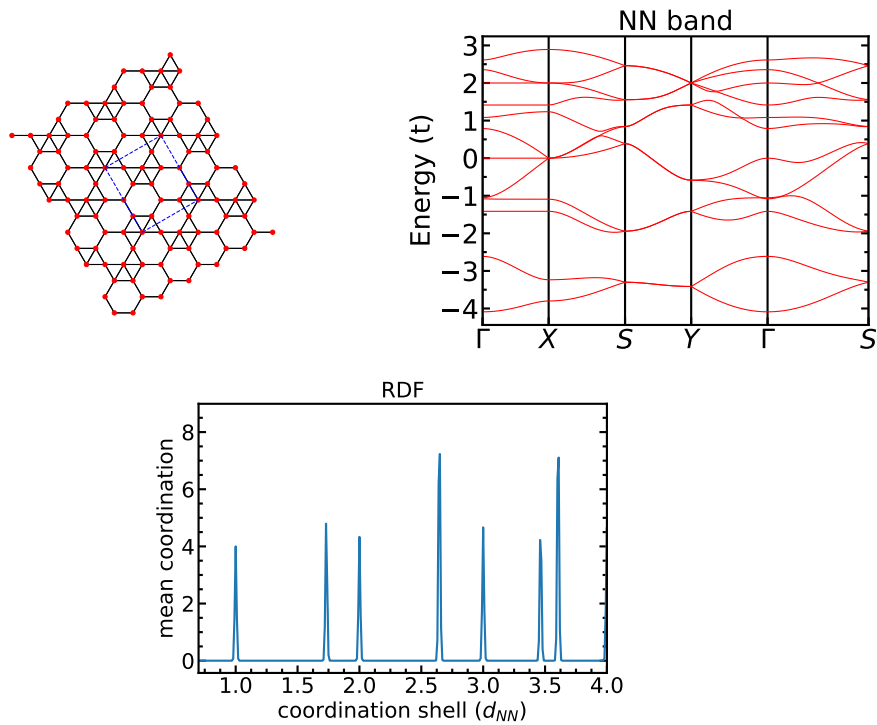


FIG. S31. t5031 lattice framework, nearest neighbors band structure and radial distribution function.

t5032

Tiling reference number t5032 with space-group ' Pm' ' (6) and 50 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 t5032 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	36	0	0	0	0	0	0	12	0	0	0

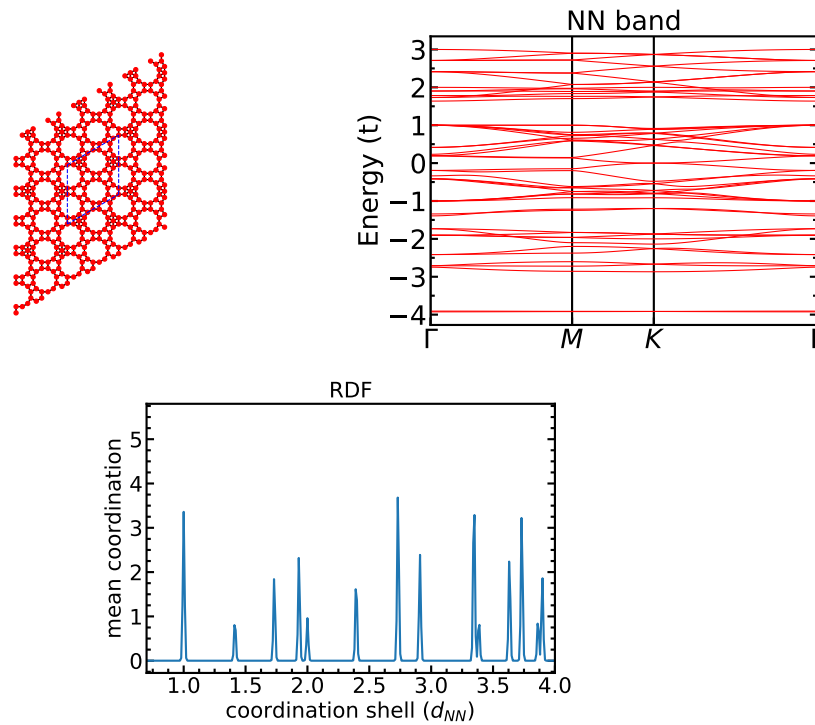


FIG. S32. t5032 lattice framework, nearest neighbors band structure and radial distribution function.

t5033

Tiling reference number t5033 with space-group ' $Amm2'$ ' (38) and 50 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 t5033 vertex types

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

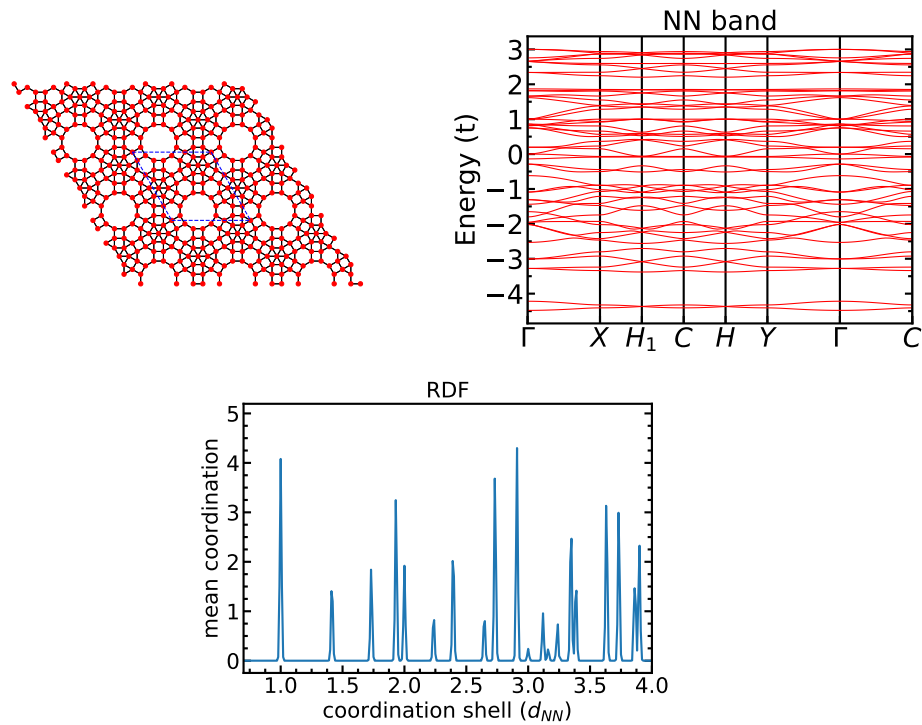


FIG. S33. t5033 lattice framework, nearest neighbors band structure and radial distribution function.

t5034

Tiling reference number t5034 with space-group ' Pm' ' (6) and 54 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 t5034 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	12	0	3	15	0	0	0	0	0	21	1

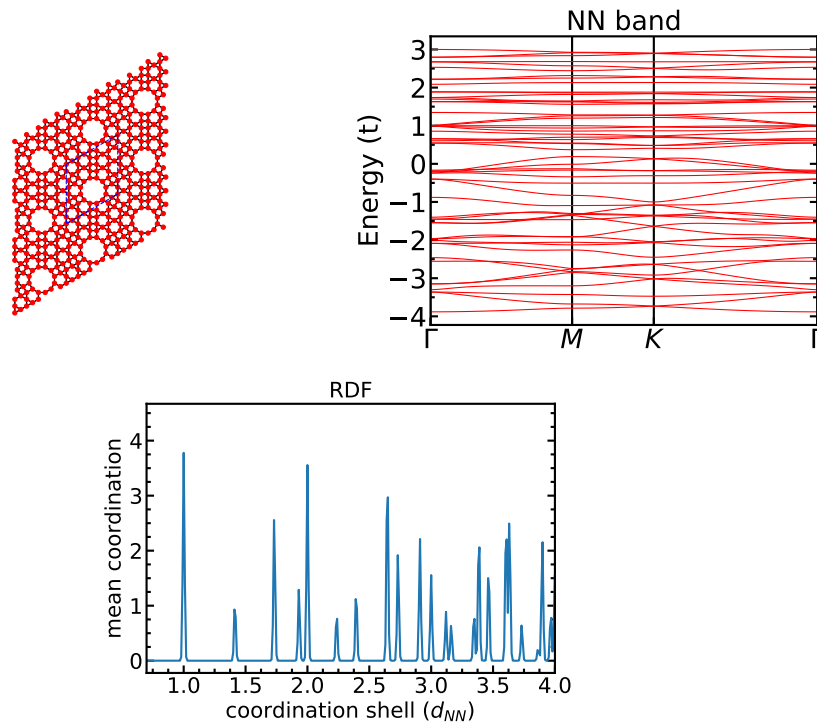


FIG. S34. t5034 lattice framework, nearest neighbors band structure and radial distribution function.

t5035

Tiling reference number t5035 with space-group ' Pm' ' (6) and 44 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 t5035 vertex types

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

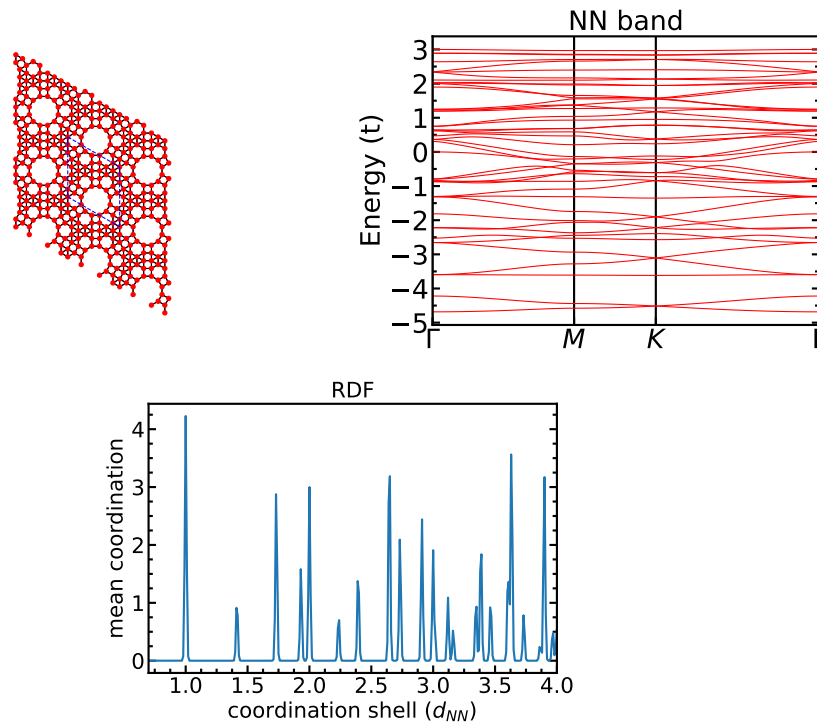


FIG. S35. t5035 lattice framework, nearest neighbors band structure and radial distribution function.

t5036

Tiling reference number t5036 with space-group ' $Amm2'$ ' (38) and 48 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 t5036 vertex types

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

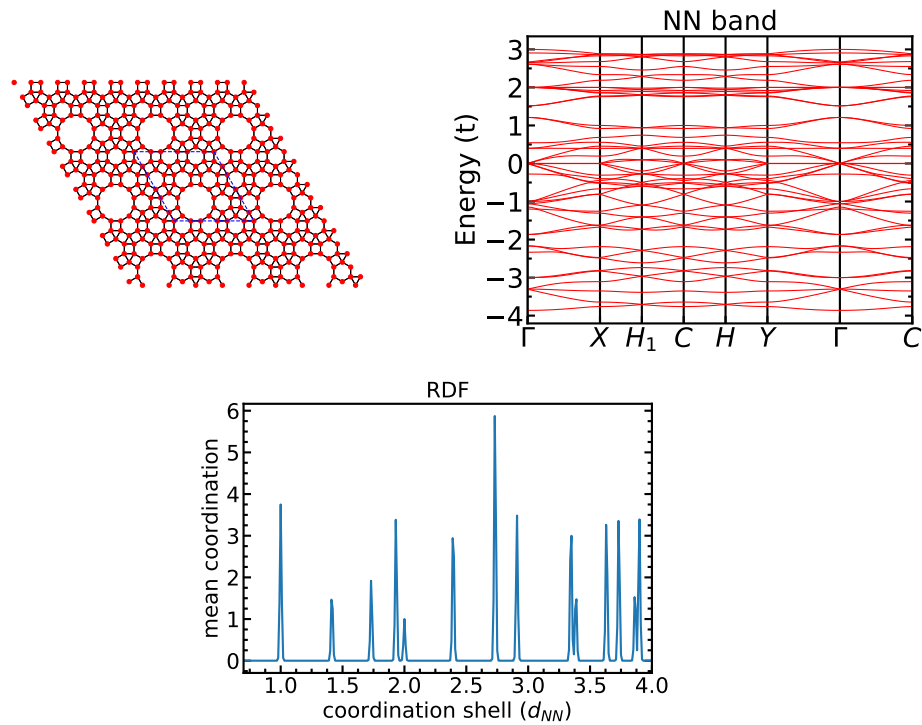


FIG. S36. t5036 lattice framework, nearest neighbors band structure and radial distribution function.

t5037

Tiling reference number t5037 with space-group ' $Amm2'$ ' (38) and 43 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 t5037 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	24	0	1	0	0	6	0	0	0	11	0

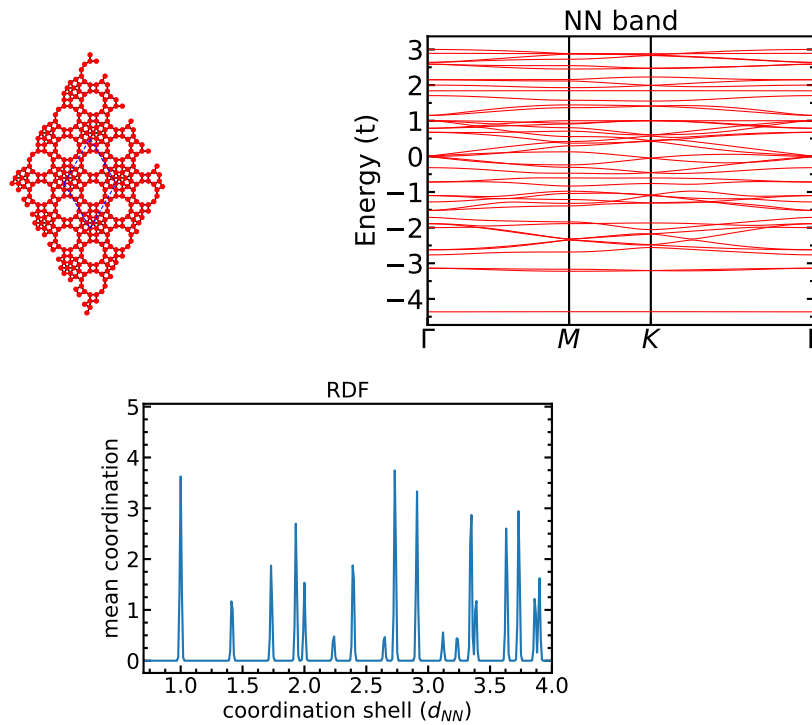


FIG. S37. t5037 lattice framework, nearest neighbors band structure and radial distribution function.

t5038

Tiling reference number t5038 with space-group ' Pm' ' (6) and 43 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 t5038 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	24	0	12	0	0	6	0	0	0	0	0

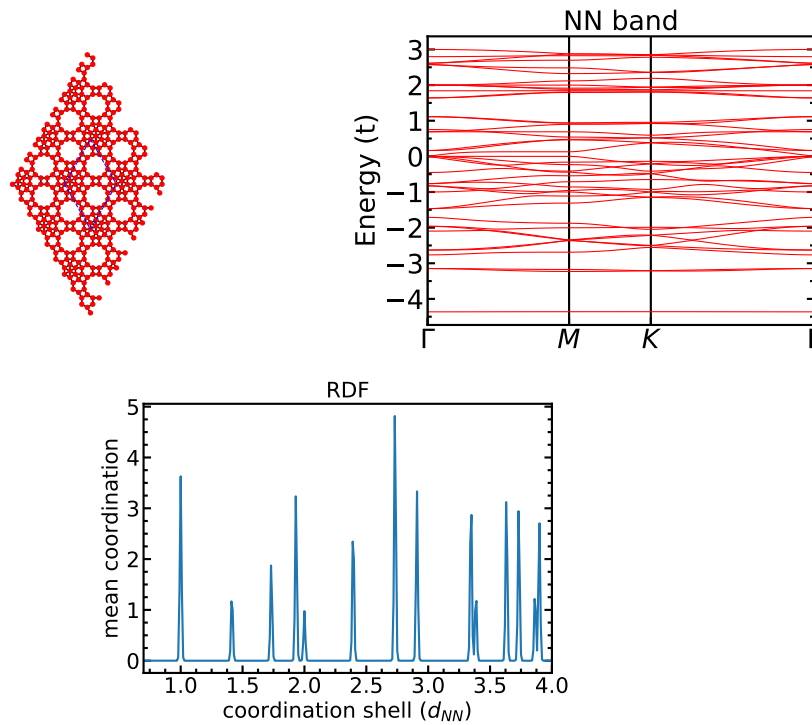


FIG. S38. t5038 lattice framework, nearest neighbors band structure and radial distribution function.

t5039

Tiling reference number t5039 with space-group ' $Pmm2$ ' (25) and 18 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 t5039 vertex types

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

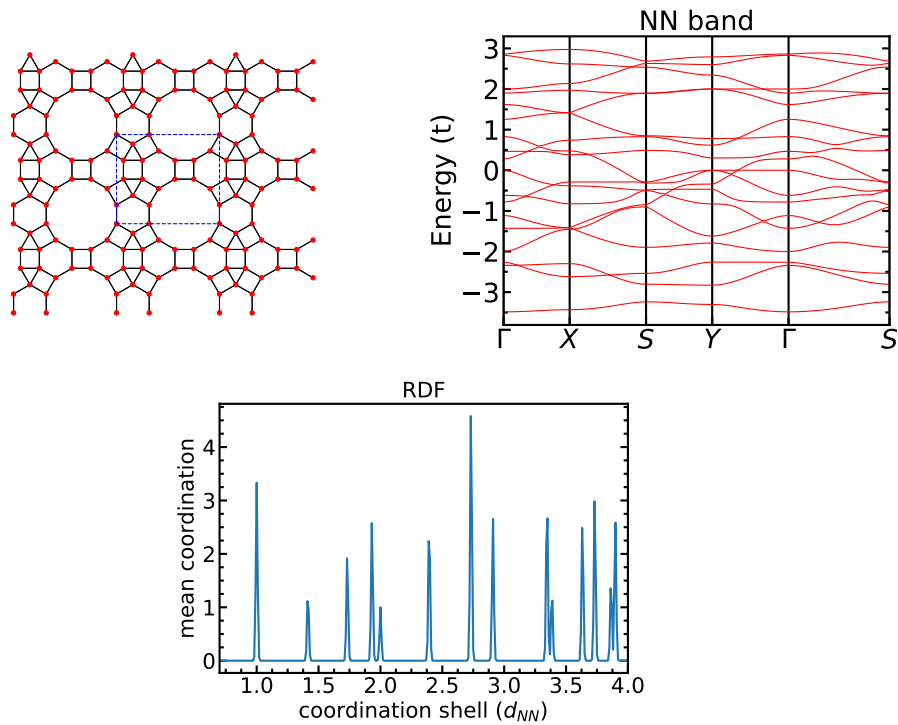


FIG. S39. t5039 lattice framework, nearest neighbors band structure and radial distribution function.

t5040

Tiling reference number t5040 with space-group ' $Amm2'$ ' (38) and 54 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 t5040 vertex types

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

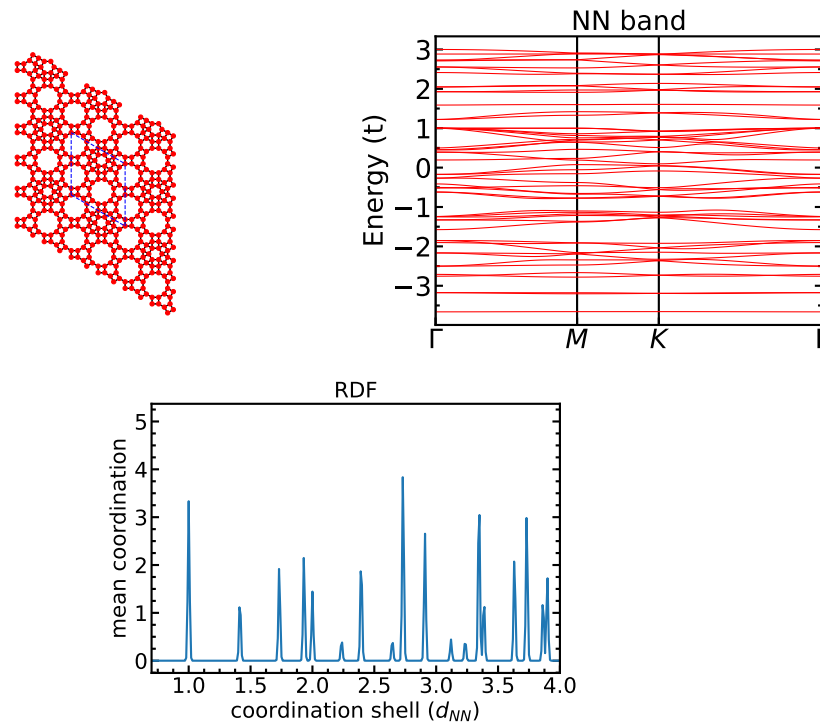


FIG. S40. t5040 lattice framework, nearest neighbors band structure and radial distribution function.

t5041

Tiling reference number t5041 with space-group ' $Amm2'$ ' (38) and 54 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 t5041 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	36	0	18	0	0	0	0	0	0	0	0

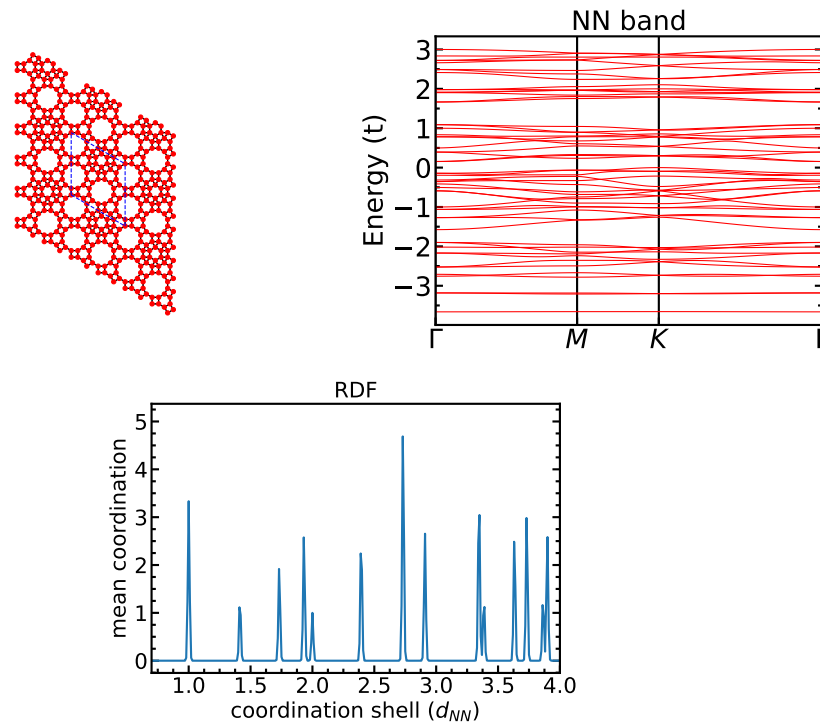


FIG. S41. t5041 lattice framework, nearest neighbors band structure and radial distribution function.

t5042

Tiling reference number t5042 with space-group ' Pm' ' (6) and 54 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 t5042 vertex types

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

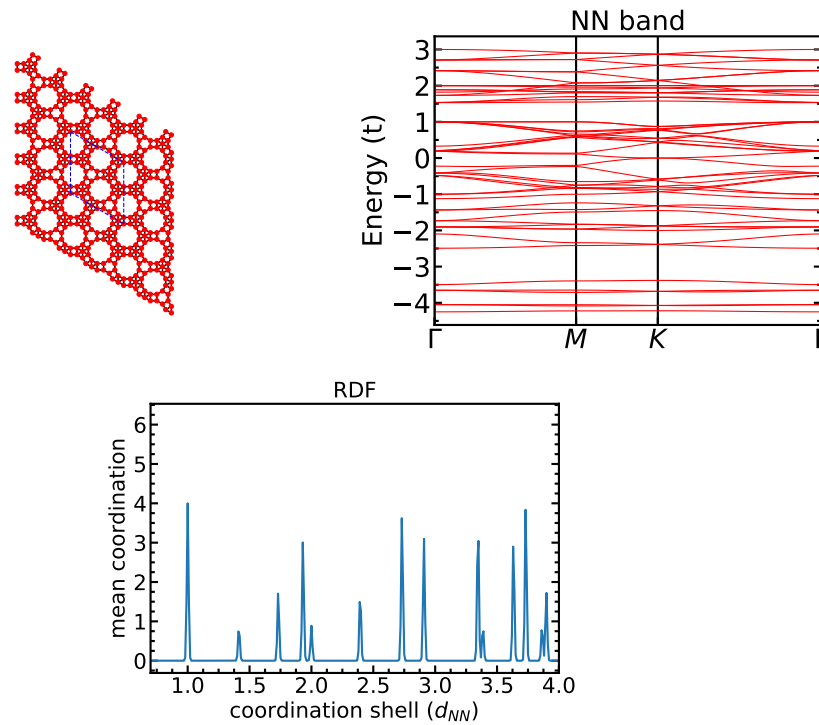


FIG. S42. t5042 lattice framework, nearest neighbors band structure and radial distribution function.

t5043

Tiling reference number t5043 with space-group ' Pm' ' (6) and 14 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 t5043 vertex types

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

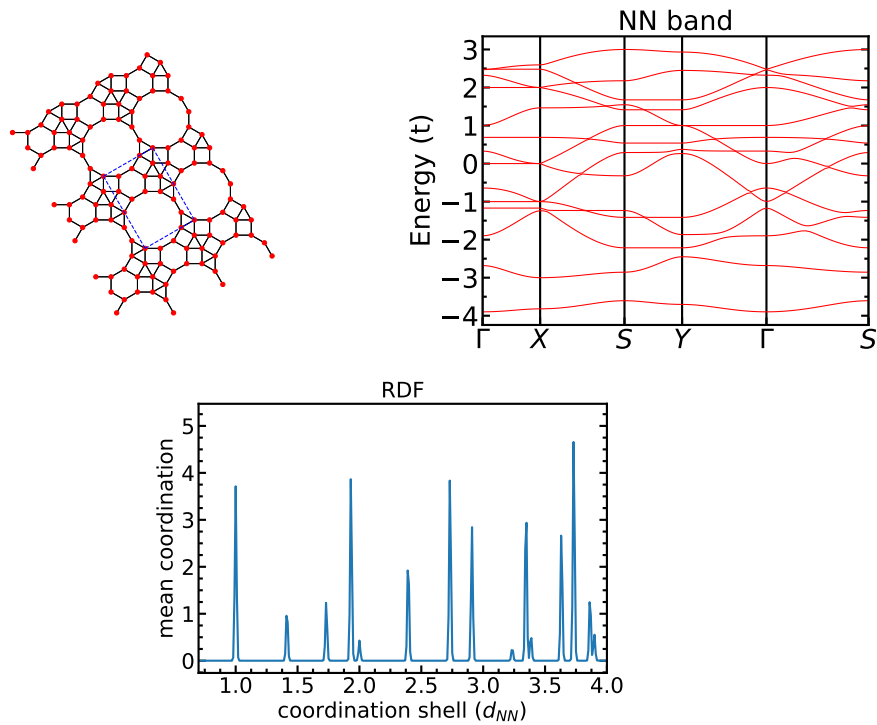


FIG. S43. t5043 lattice framework, nearest neighbors band structure and radial distribution function.

t5044

Tiling reference number t5044 with space-group ' $Amm2'$ ' (38) and 14 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 t5044 vertex types

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

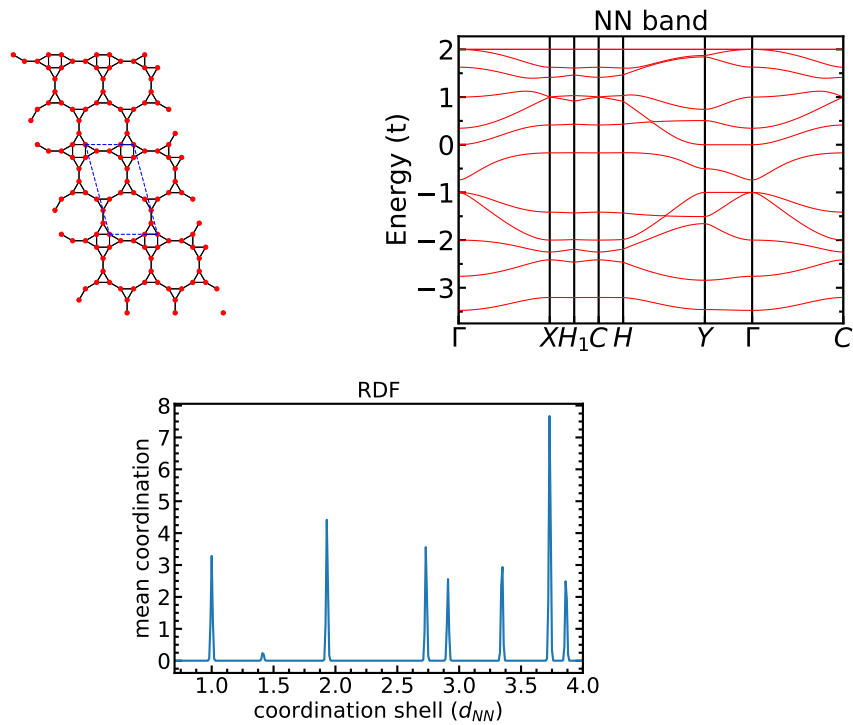


FIG. S44. t5044 lattice framework, nearest neighbors band structure and radial distribution function.

t5045

Tiling reference number t5045 with space-group ' $Pmm2'$ ' (25) and 16 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 t5045 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	0	4	4	0	0

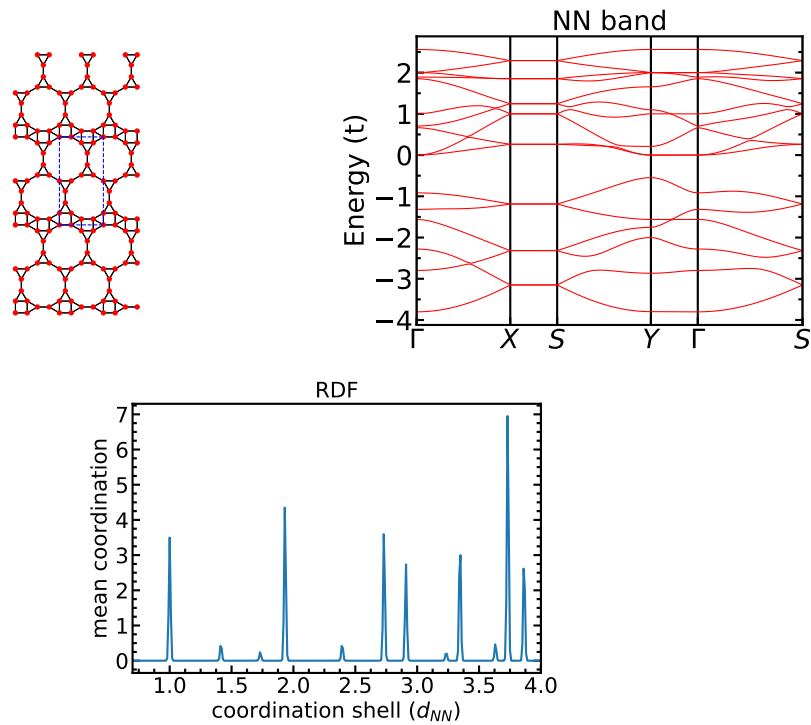


FIG. S45. t5045 lattice framework, nearest neighbors band structure and radial distribution function.

t5046

Tiling reference number t5046 with space-group ' Pm' ' (6) and 31 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 t5046 vertex types

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

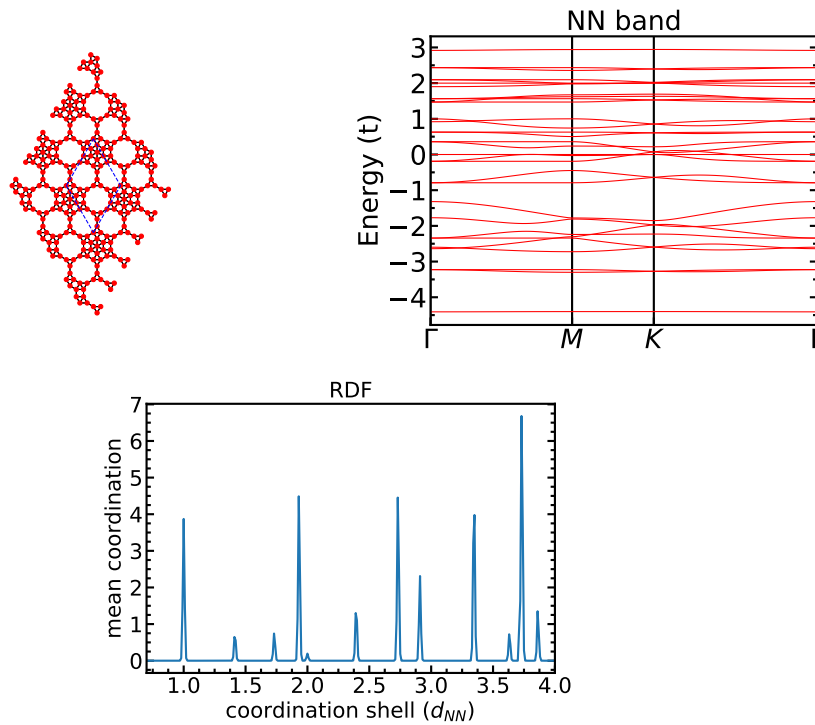


FIG. S46. t5046 lattice framework, nearest neighbors band structure and radial distribution function.

t5047

Tiling reference number t5047 with space-group ' Pm' ' (6) and 31 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 t5047 vertex types

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

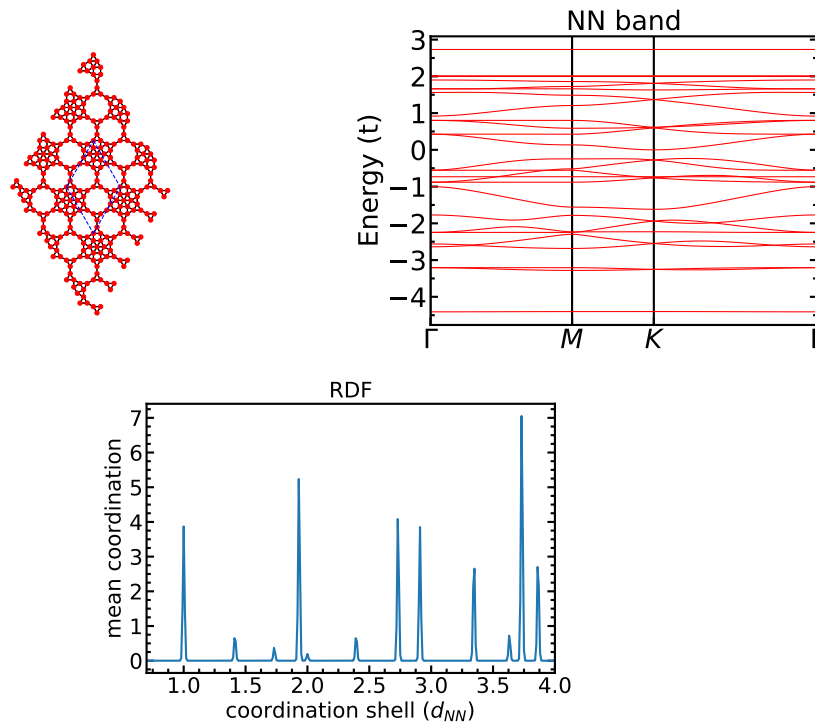


FIG. S47. t5047 lattice framework, nearest neighbors band structure and radial distribution function.

t5048

Tiling reference number t5048 with space-group ' $P2/m'$ ' (10) and 16 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 t5048 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	6	4	4	0	0

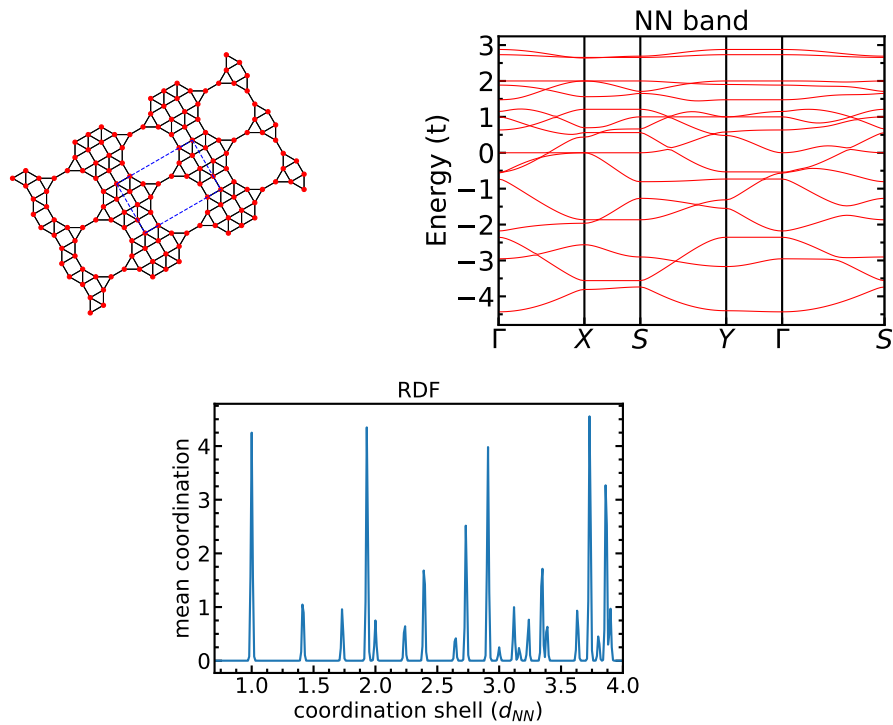


FIG. S48. t5048 lattice framework, nearest neighbors band structure and radial distribution function.

t5049

Tiling reference number t5049 with space-group ' $P2/m'$ ' (10) and 18 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 t5049 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	8	4	4	0	0

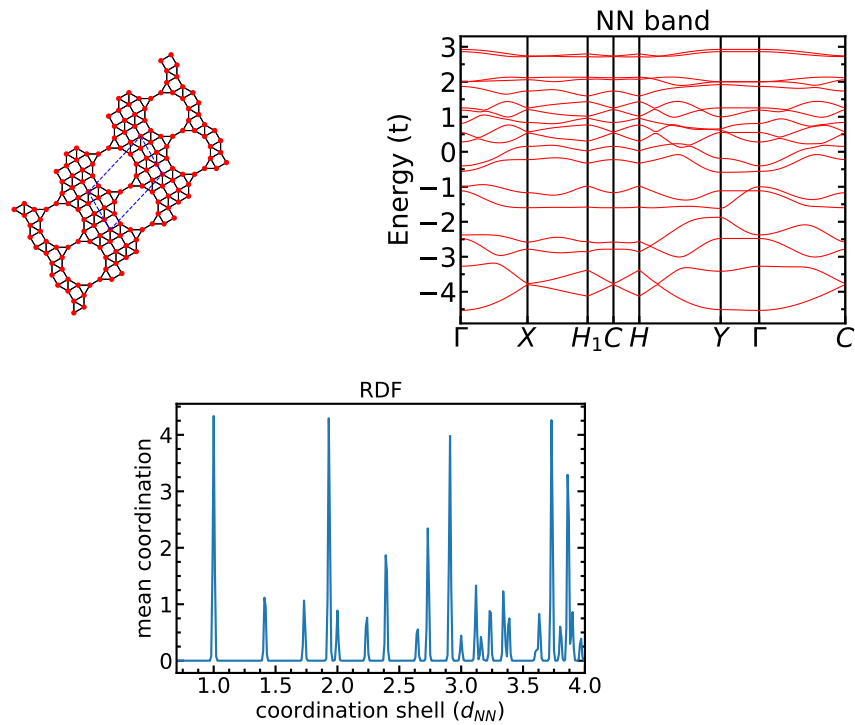


FIG. S49. t5049 lattice framework, nearest neighbors band structure and radial distribution function.

t5050

Tiling reference number t5050 with space-group ' $Cmmm$ ' (65) and 10 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 t5050 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	2	0	0	0	0

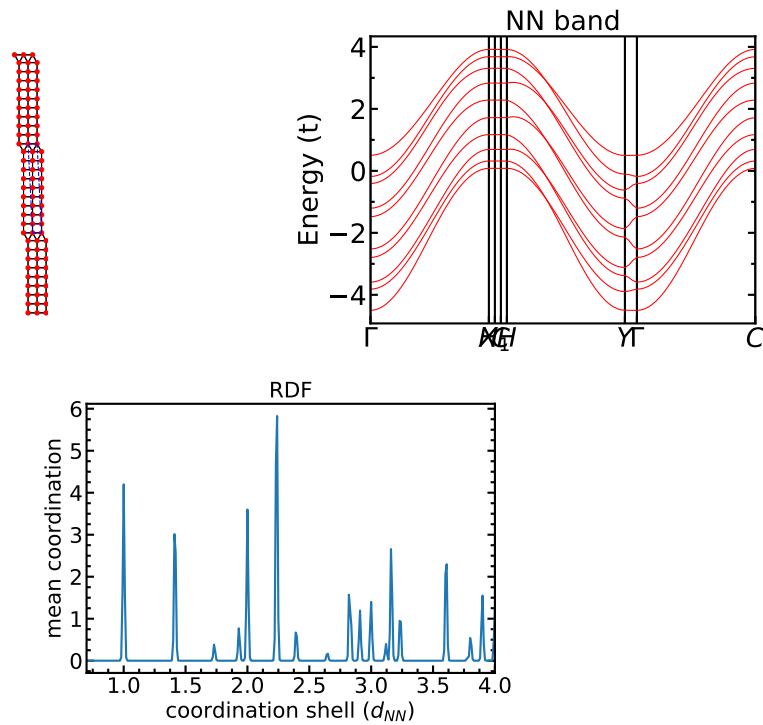


FIG. S50. t5050 lattice framework, nearest neighbors band structure and radial distribution function.

t5051

Tiling reference number t5051 with space-group ' $Cmmm$ ' (65) and 17 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 t5051 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	1	0	0	0	0	0	4	0

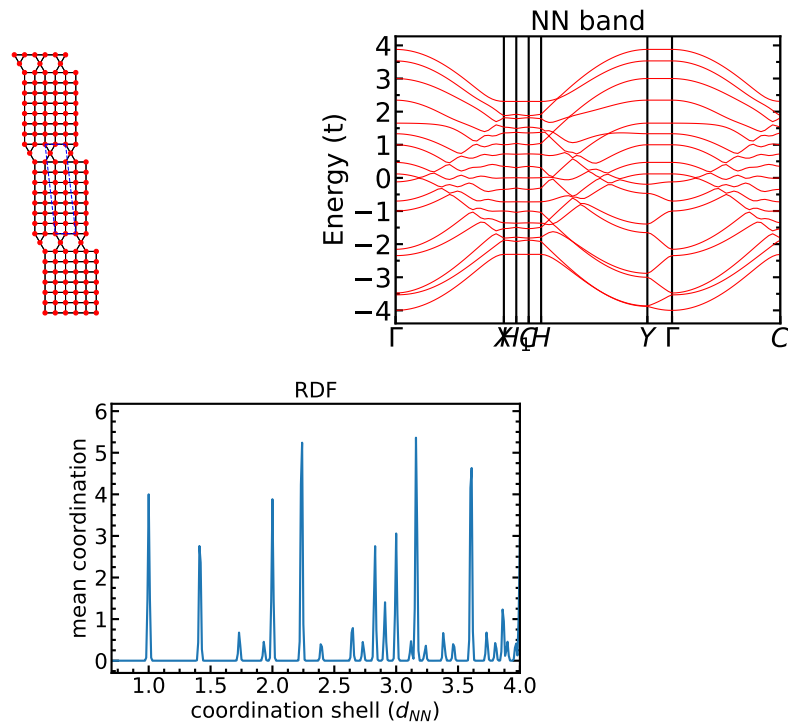


FIG. S51. t5051 lattice framework, nearest neighbors band structure and radial distribution function.

t5052

Tiling reference number t5052 with space-group ' $Pmm2'$ ' (25) and 17 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 t5052 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	12	0	0	0	0	0	1	0	0	0	0	0	4	0

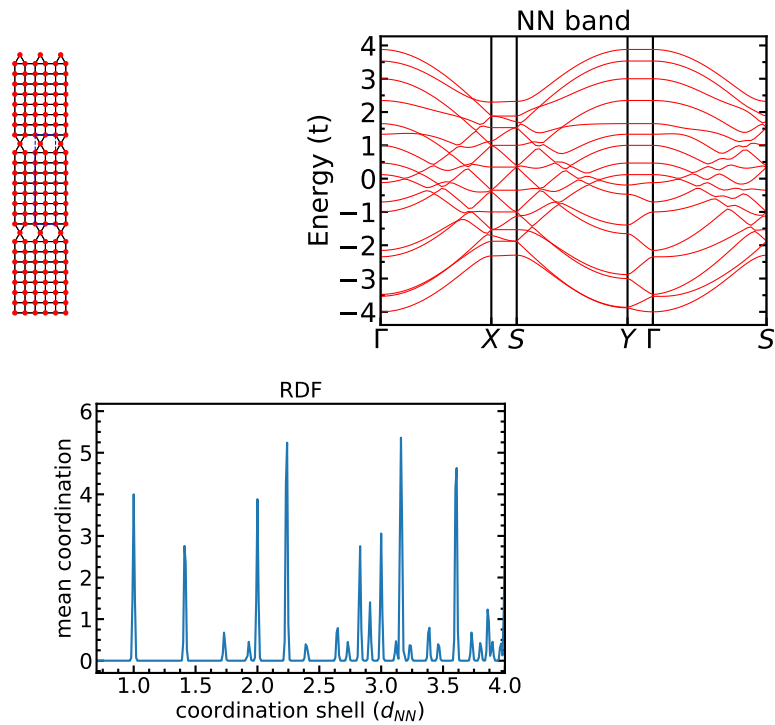


FIG. S52. t5052 lattice framework, nearest neighbors band structure and radial distribution function.

t5053

Tiling reference number t5053 with space-group ' $Pmm2'$ ' (25) and 10 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 t5053 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

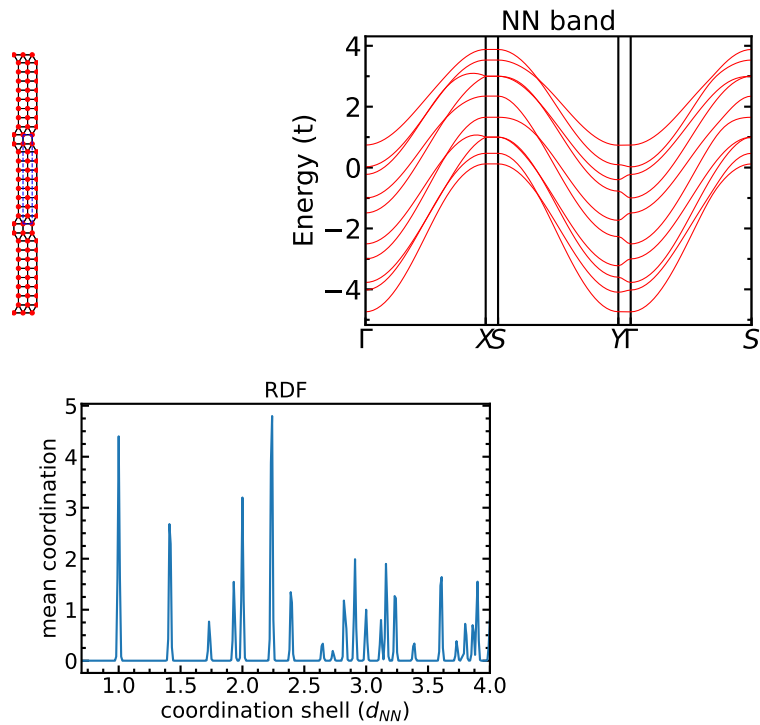


FIG. S53. t5053 lattice framework, nearest neighbors band structure and radial distribution function.

t5054

Tiling reference number t5054 with space-group ' $Pmm2'$ ' (25) and 9 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 t5054 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	2	0	0	0	0

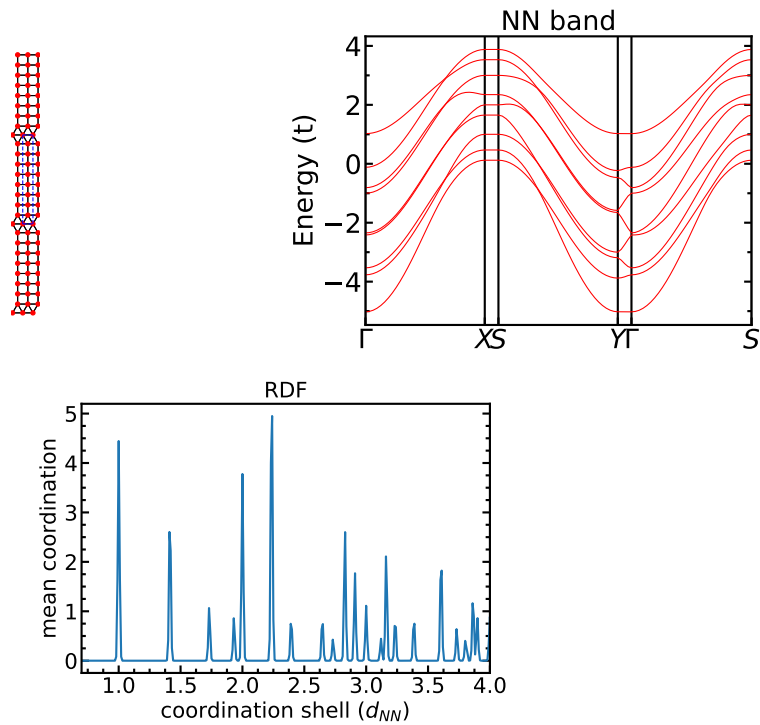


FIG. S54. t5054 lattice framework, nearest neighbors band structure and radial distribution function.

t5055

Tiling reference number t5055 with space-group ' $Cmmm$ ' (65) and 10 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 t5055 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	2	0	0	0	0

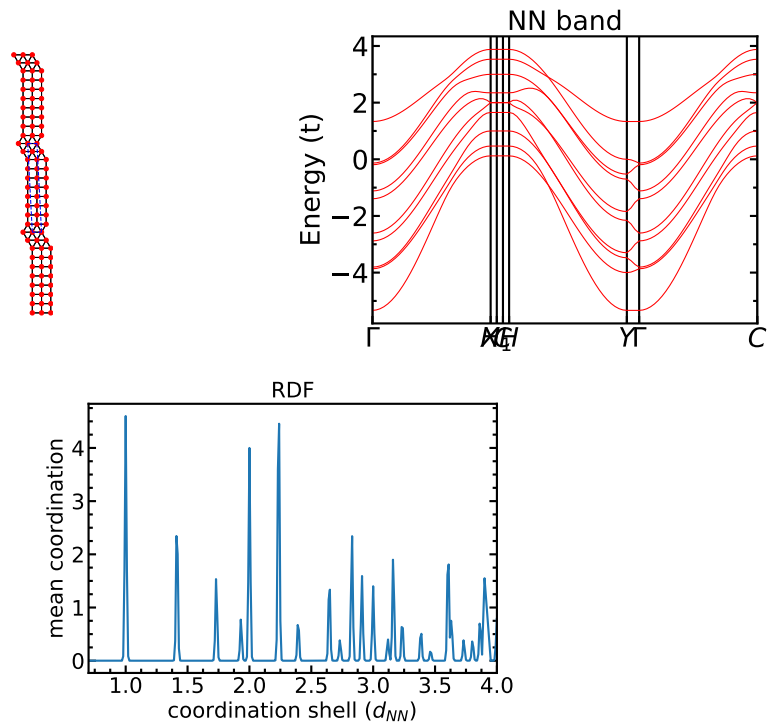


FIG. S55. t5055 lattice framework, nearest neighbors band structure and radial distribution function.

t5056

Tiling reference number t5056 with space-group ' $Cmmm$ ' (65) and 18 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 t5056 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

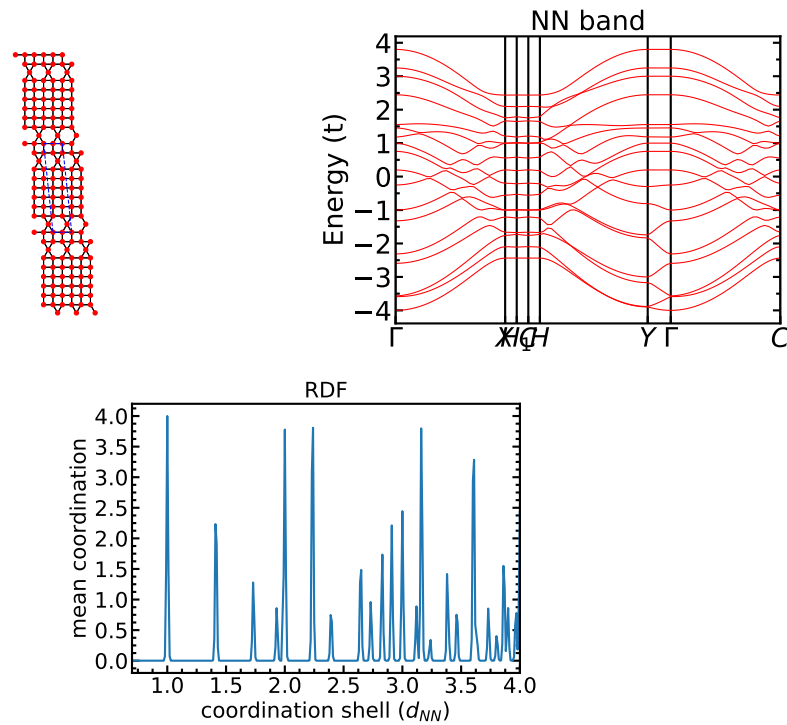


FIG. S56. t5056 lattice framework, nearest neighbors band structure and radial distribution function.

t5057

Tiling reference number t5057 with space-group ' $Pmma'$ (51) 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 t5057 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

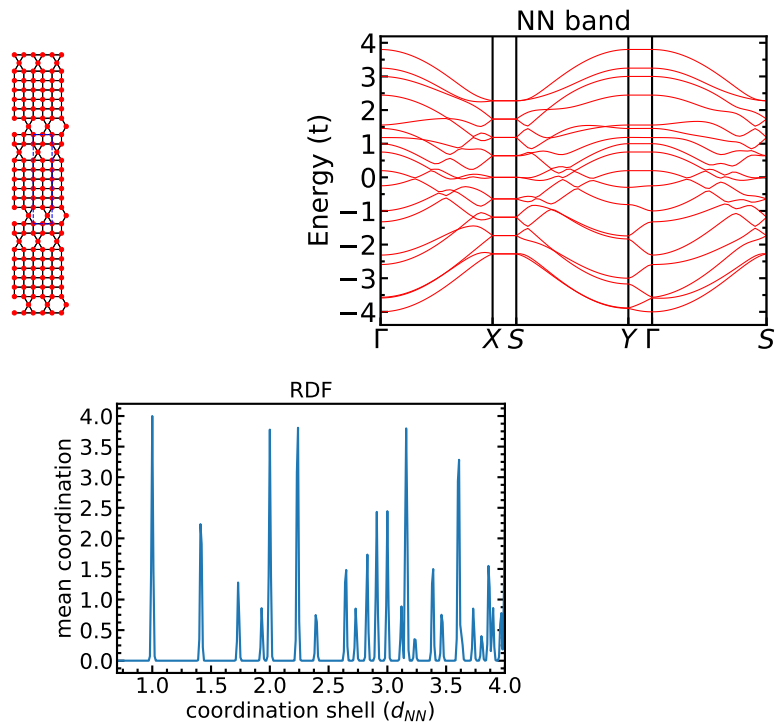


FIG. S57. t5057 lattice framework, nearest neighbors band structure and radial distribution function.

t5058

Tiling reference number t5058 with space-group ' $Cmmm$ ' (65) and 16 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 t5058 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	2

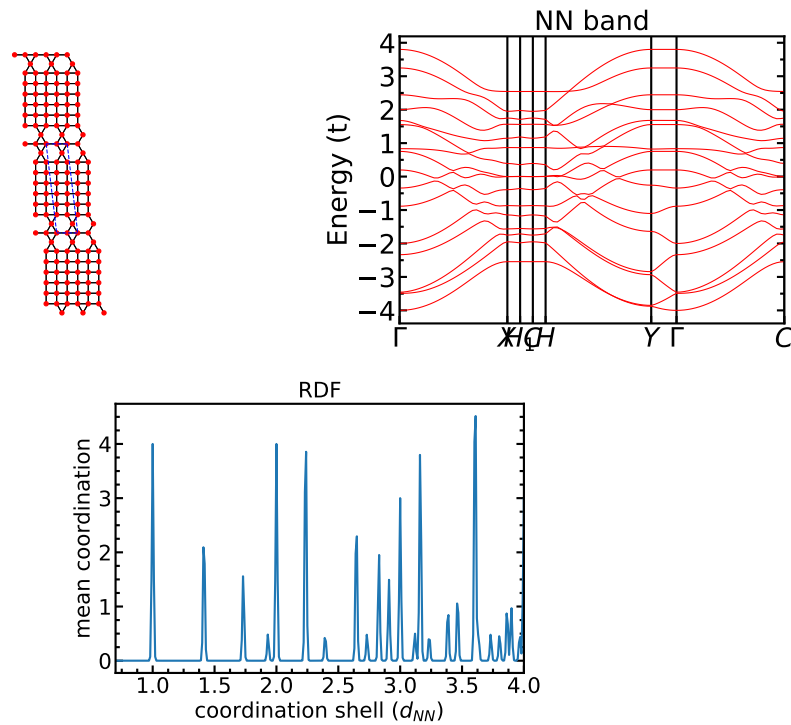


FIG. S58. t5058 lattice framework, nearest neighbors band structure and radial distribution function.

t5059

Tiling reference number t5059 with space-group ' $Pmma'$ ' (51) and 16 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 t5059 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	0

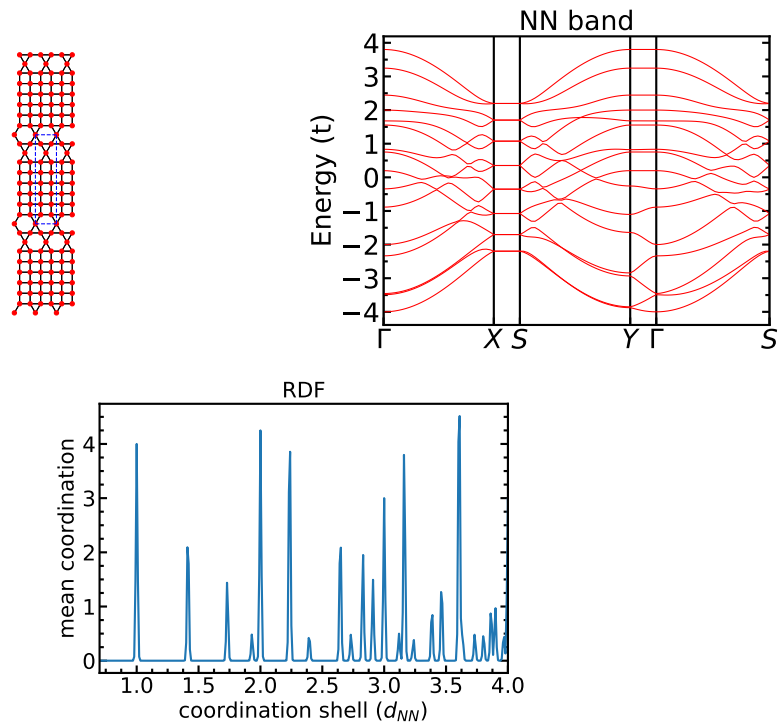


FIG. S59. t5059 lattice framework, nearest neighbors band structure and radial distribution function.

t5060

Tiling reference number t5060 with space-group ' $Pmmm$ ' (47) and 18 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 t5060 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

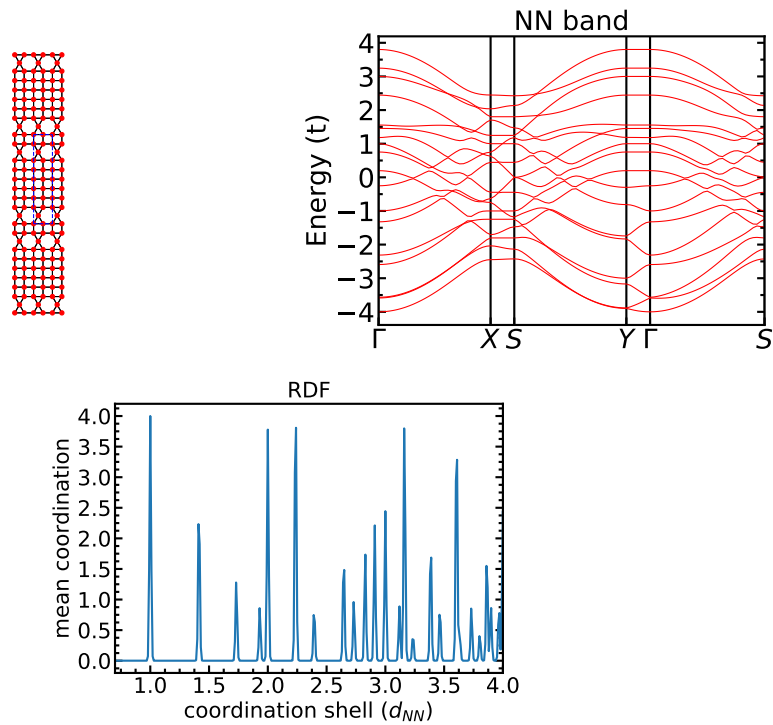


FIG. S60. t5060 lattice framework, nearest neighbors band structure and radial distribution function.

t5061

Tiling reference number t5061 with space-group ' $Cmmm$ ' (65) and 18 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 t5061 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

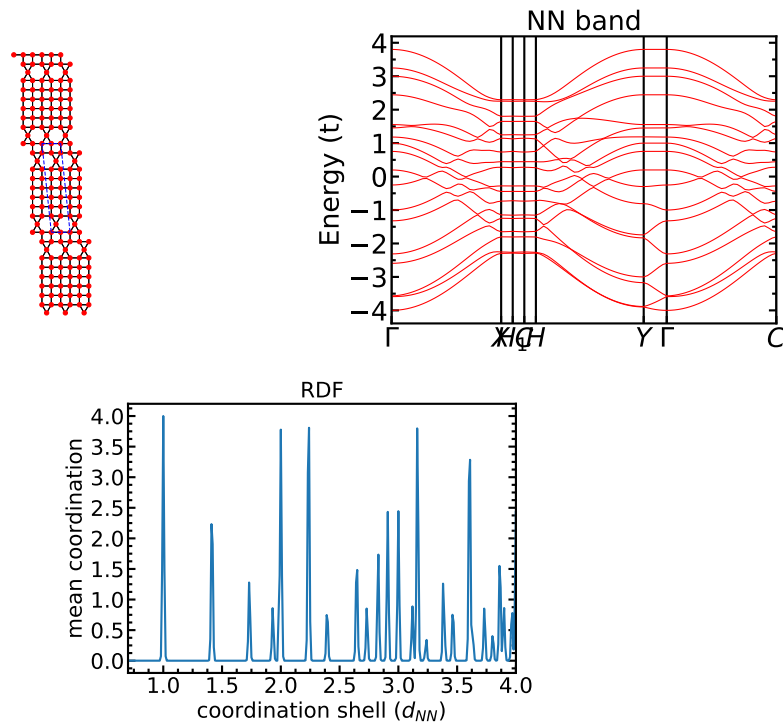


FIG. S61. t5061 lattice framework, nearest neighbors band structure and radial distribution function.

t5062

Tiling reference number t5062 with space-group ' $Pmmm$ ' (47) 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 t5062 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	2

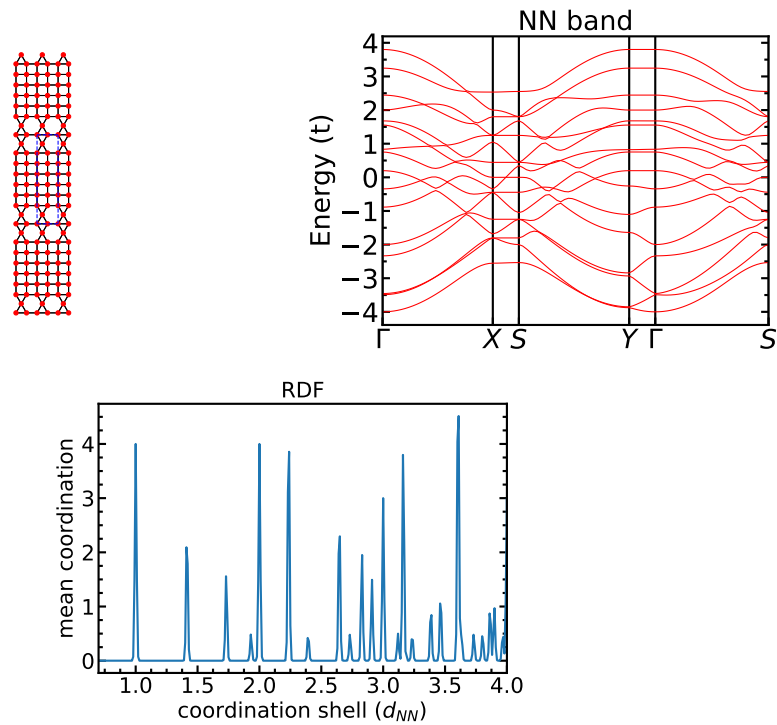


FIG. S62. t5062 lattice framework, nearest neighbors band structure and radial distribution function.

t5063

Tiling reference number t5063 with space-group ' $Amm2'$ ' (38) and 16 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 t5063 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	0

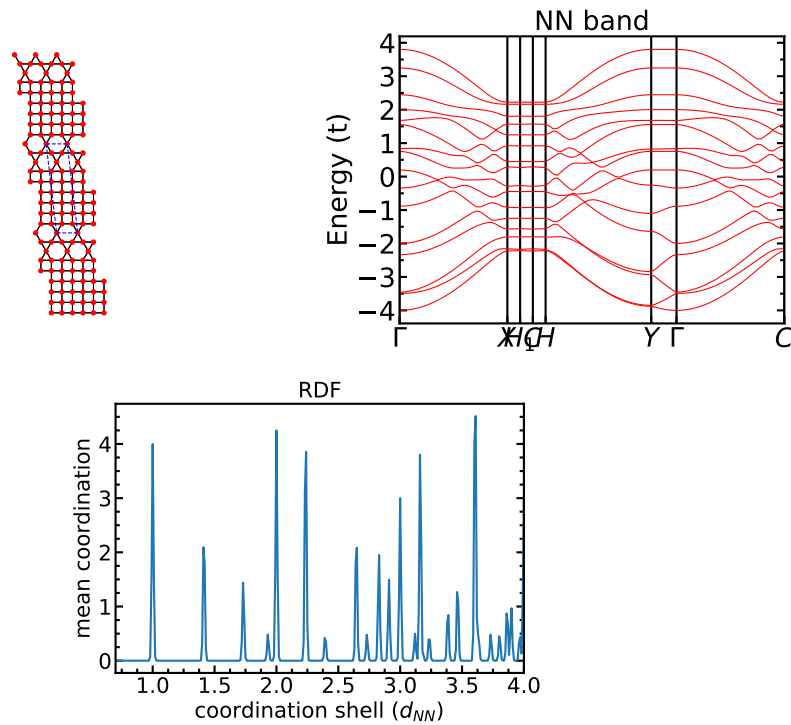


FIG. S63. t5063 lattice framework, nearest neighbors band structure and radial distribution function.

t5064

Tiling reference number t5064 with space-group ' $Pmm2'$ ' (25) and 9 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 t5064 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	4	0	0	0	0

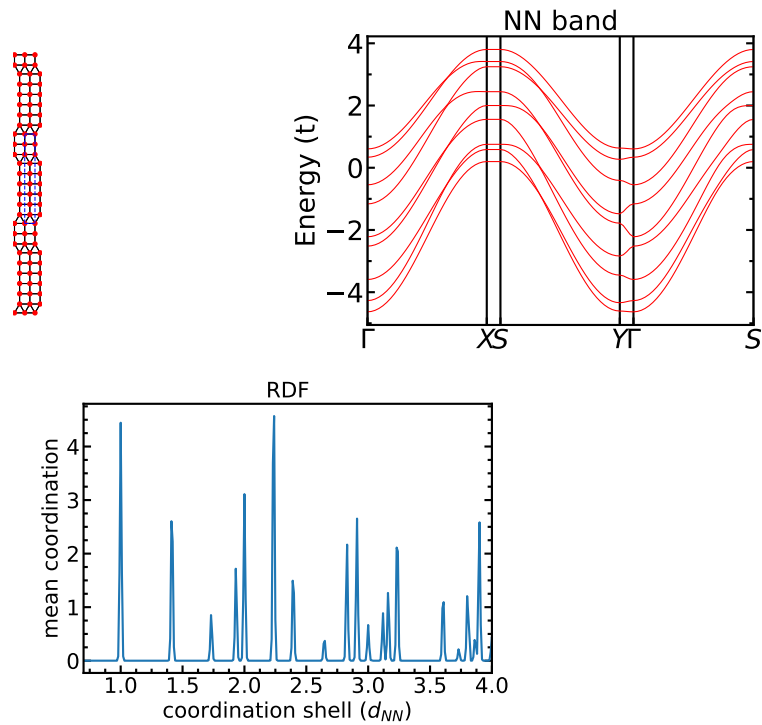


FIG. S64. t5064 lattice framework, nearest neighbors band structure and radial distribution function.

t5065

Tiling reference number t5065 with space-group ' $Pmm2'$ ' (25) and 10 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 t5065 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

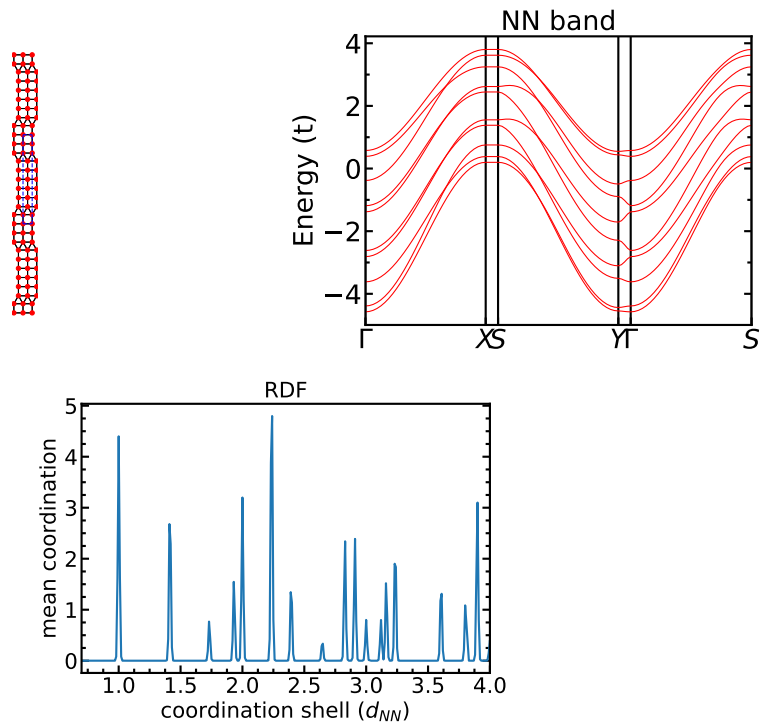


FIG. S65. t5065 lattice framework, nearest neighbors band structure and radial distribution function.

t5066

Tiling reference number t5066 with space-group ' $Cmmm$ ' (65) and 10 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 t5066 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	6	0	0	0	0

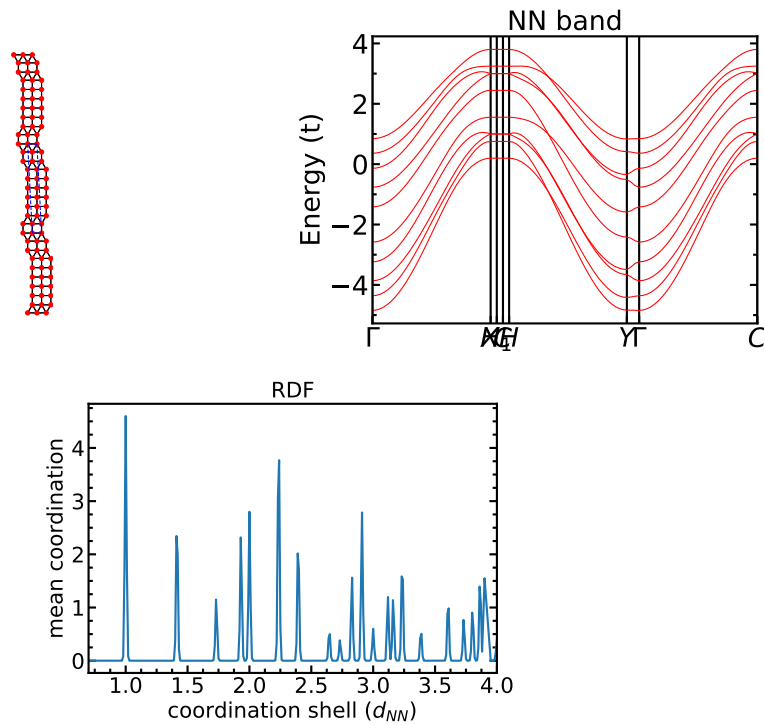


FIG. S66. t5066 lattice framework, nearest neighbors band structure and radial distribution function.

t5067

Tiling reference number t5067 with space-group ' $Pmmm$ ' (47) and 10 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 t5067 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

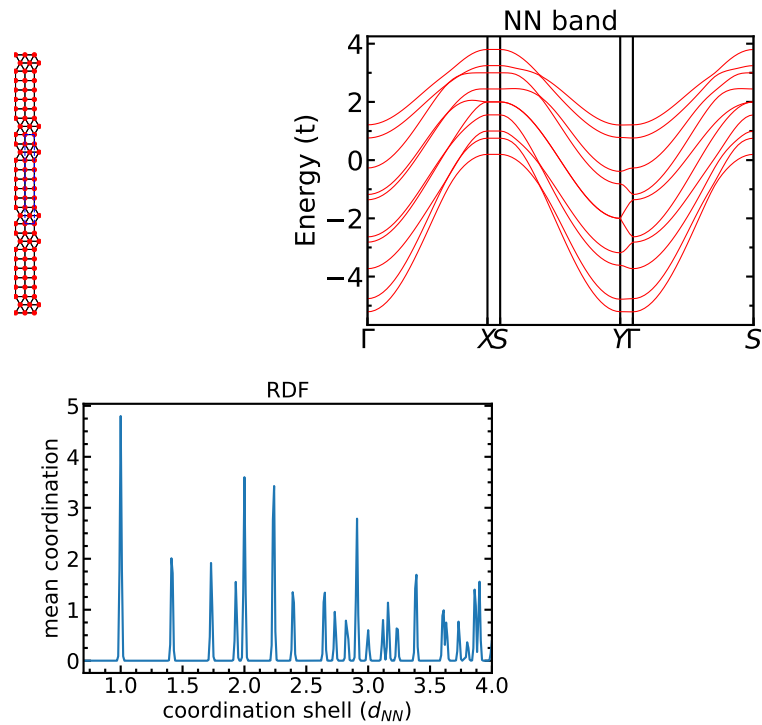


FIG. S67. t5067 lattice framework, nearest neighbors band structure and radial distribution function.

t5068

Tiling reference number t5068 with space-group ' $Pmmm'$ ' (47) and 9 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 t5068 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	2	0	0	0	0

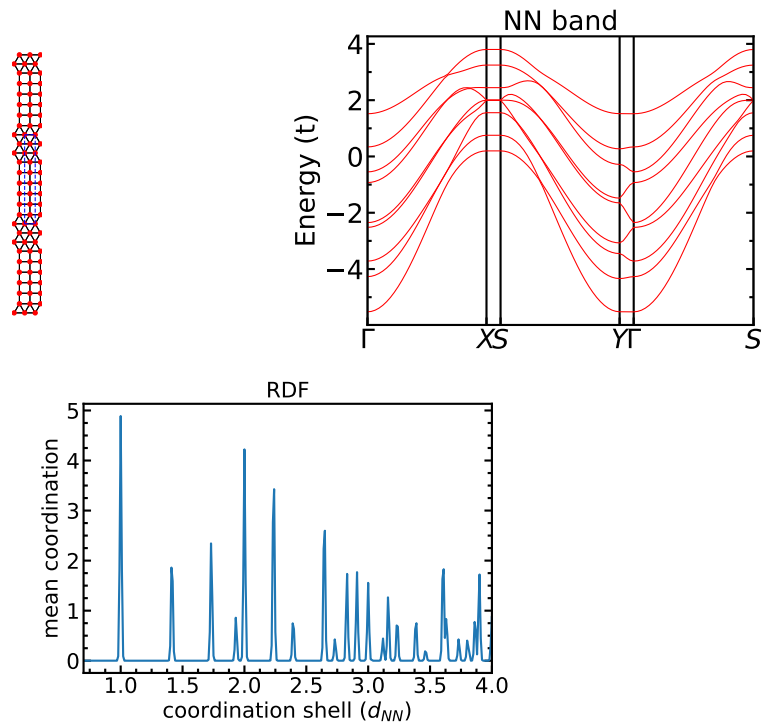


FIG. S68. t5068 lattice framework, nearest neighbors band structure and radial distribution function.

t5069

Tiling reference number t5069 with space-group ' $Cmmm$ ' (65) and 10 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 t5069 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	2	0	0	0	0

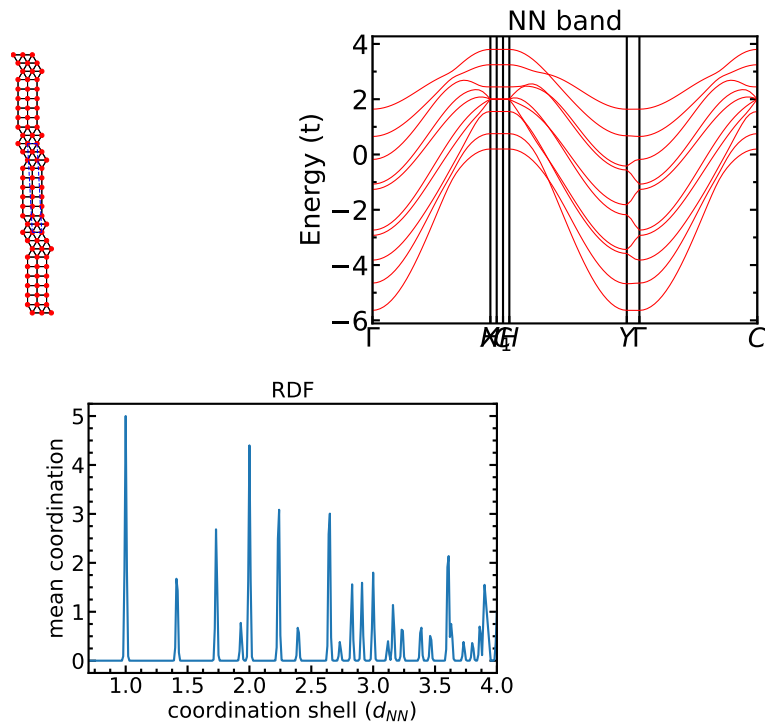


FIG. S69. t5069 lattice framework, nearest neighbors band structure and radial distribution function.

t5070

Tiling reference number t5070 with space-group ' $Amm2'$ ' (38) and 16 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 t5070 vertex types

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

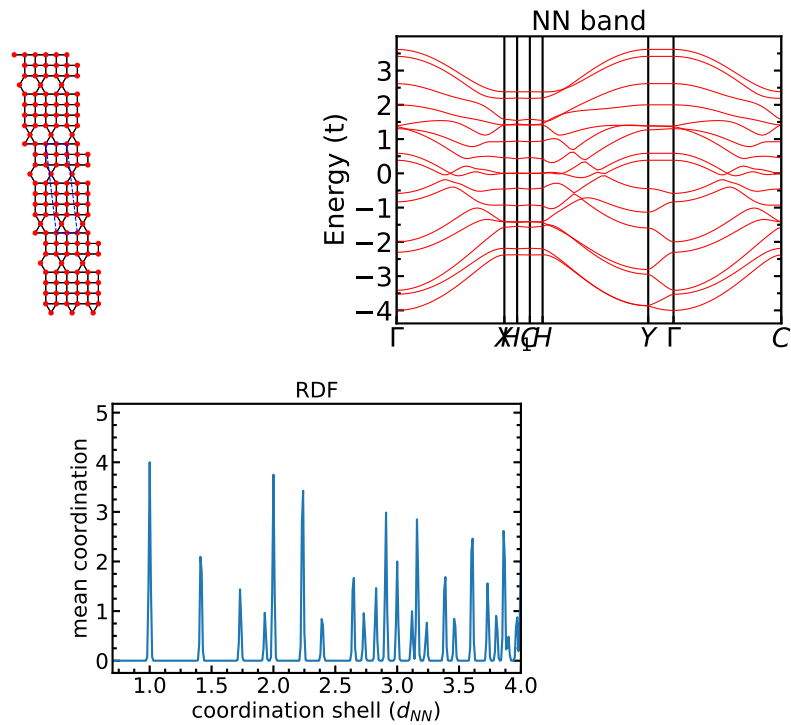


FIG. S70. t5070 lattice framework, nearest neighbors band structure and radial distribution function.

t5071

Tiling reference number t5071 with space-group ' $Pmma'$ ' (51) and 16 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 t5071 vertex types

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

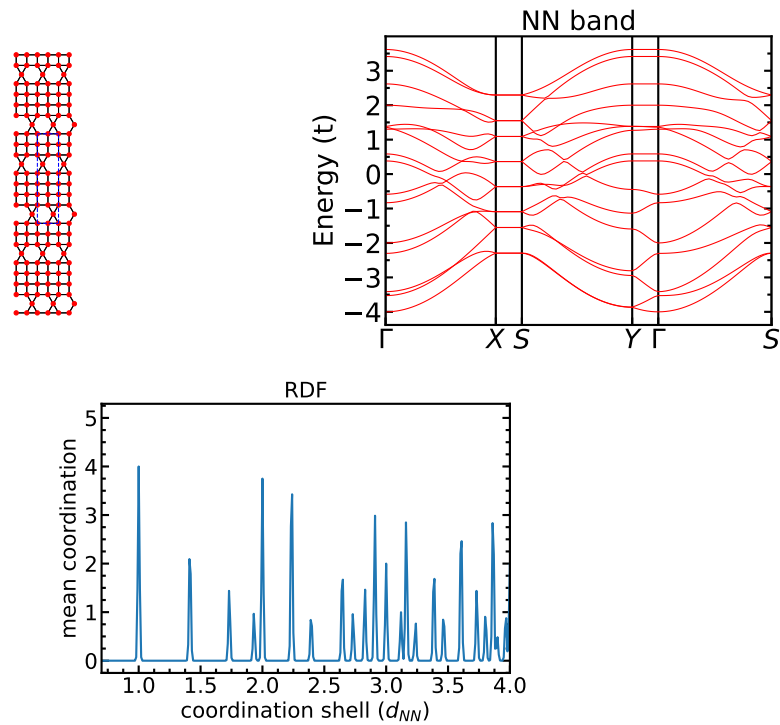


FIG. S71. t5071 lattice framework, nearest neighbors band structure and radial distribution function.

t5072

Tiling reference number t5072 with space-group ' $Cmmm$ ' (65) and 18 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 t5072 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

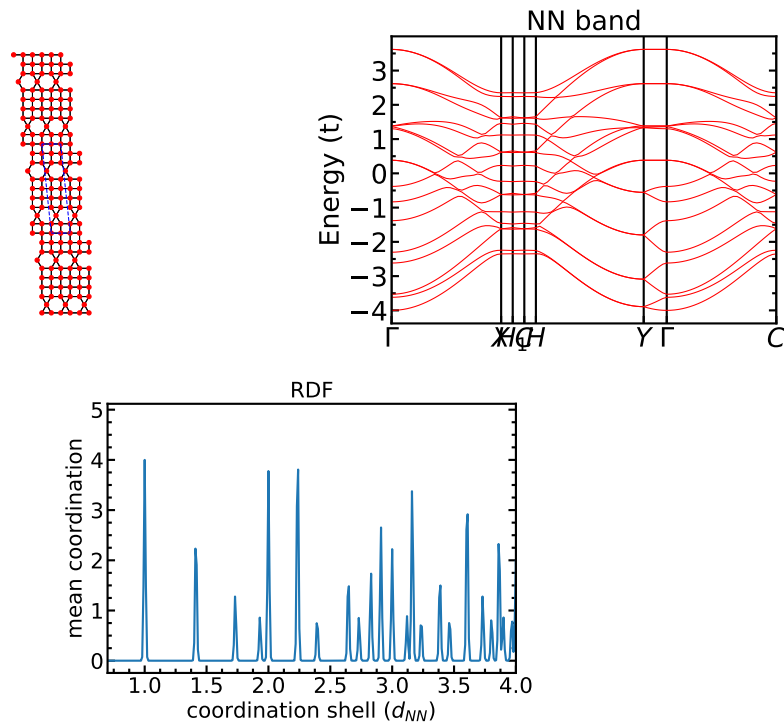


FIG. S72. t5072 lattice framework, nearest neighbors band structure and radial distribution function.

t5073

Tiling reference number t5073 with space-group ' $Cmmm$ ' (65) and 15 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 t5073 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	4	4

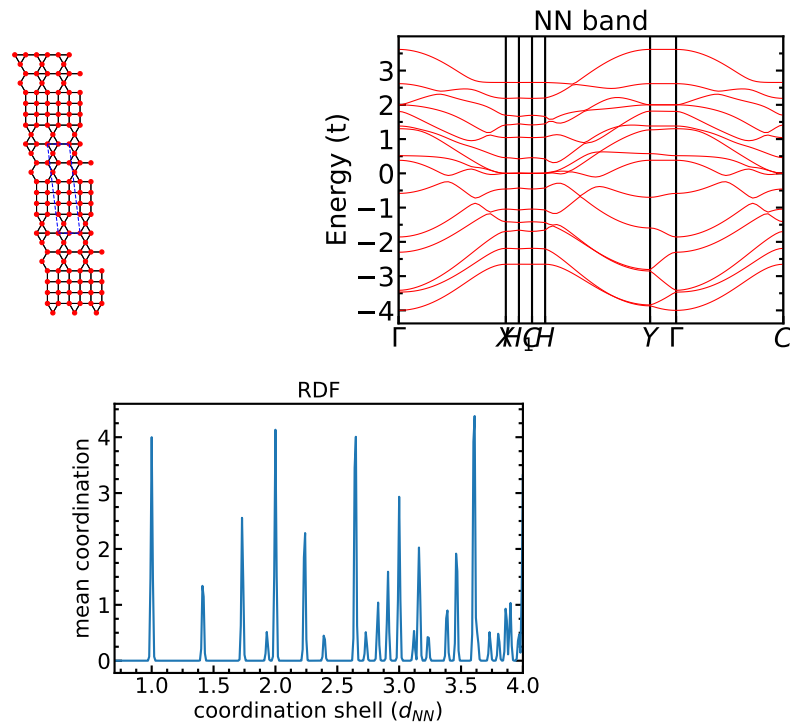


FIG. S73. t5073 lattice framework, nearest neighbors band structure and radial distribution function.

t5074

Tiling reference number t5074 with space-group ' $Cmmm$ ' (65) and 15 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 t5074 vertex types

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

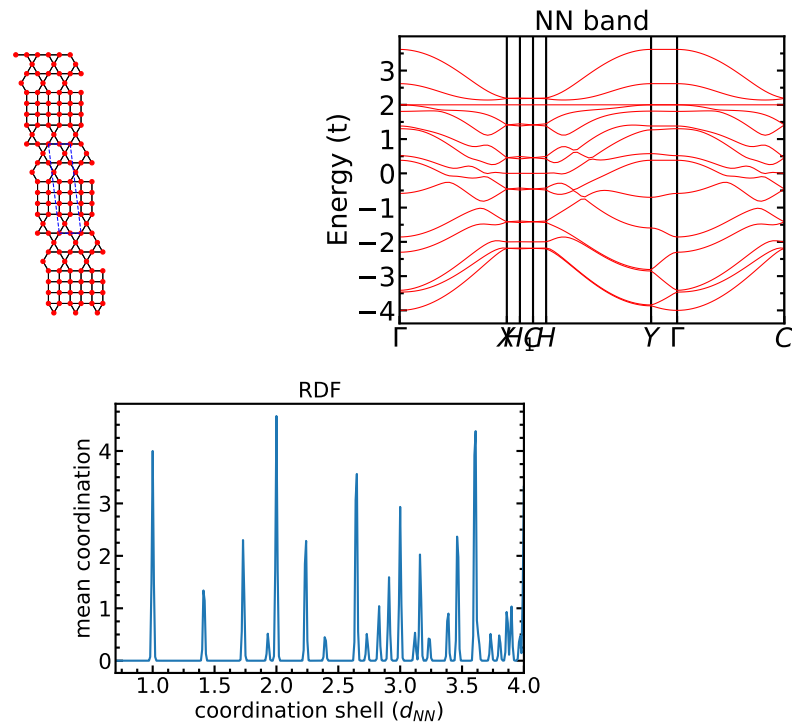


FIG. S74. t5074 lattice framework, nearest neighbors band structure and radial distribution function.

t5075

Tiling reference number t5075 with space-group ' $Pmma'$ ' (51) and 16 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 t5075 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

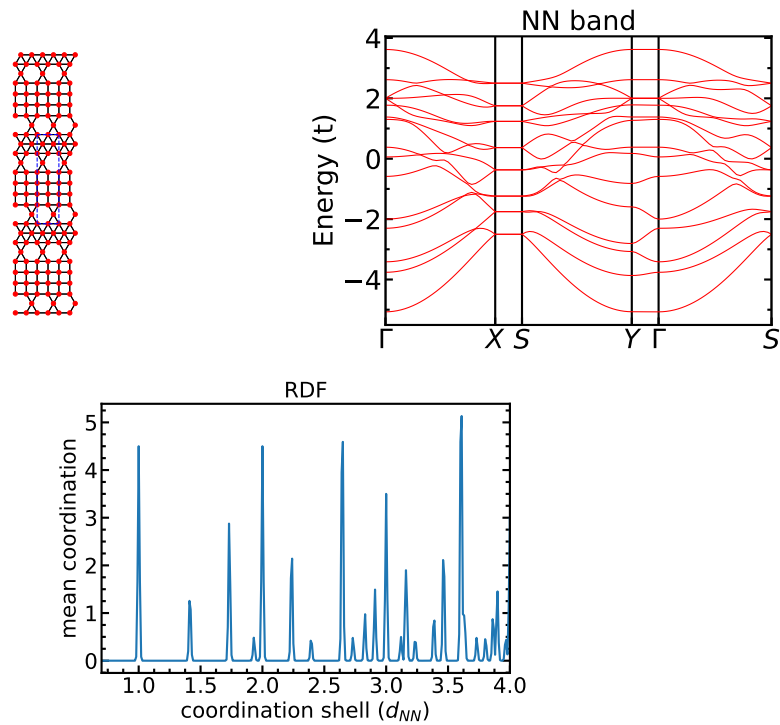


FIG. S75. t5075 lattice framework, nearest neighbors band structure and radial distribution function.

t5076

Tiling reference number t5076 with space-group ' $Pmmm$ ' (47) and 16 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 t5076 vertex types

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

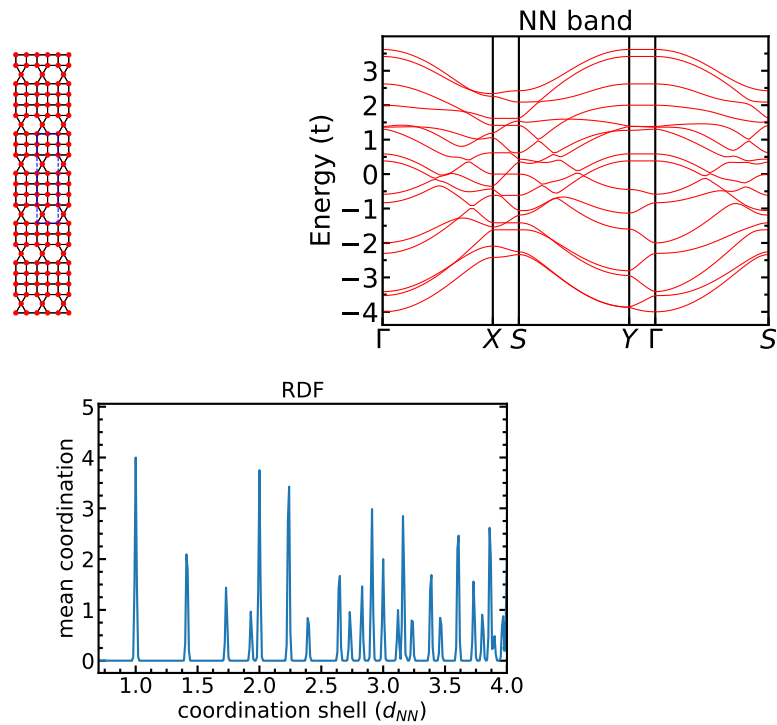


FIG. S76. t5076 lattice framework, nearest neighbors band structure and radial distribution function.

t5077

Tiling reference number t5077 with space-group ' $Amm2'$ ' (38) 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 t5077 vertex types

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

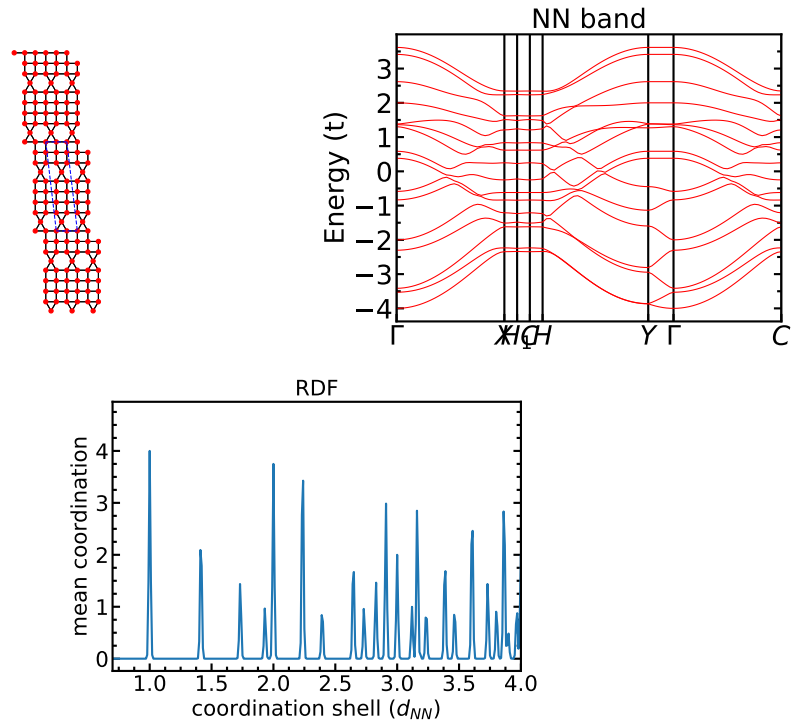


FIG. S77. t5077 lattice framework, nearest neighbors band structure and radial distribution function.

t5078

Tiling reference number t5078 with space-group ' $Pmmm$ ' (47) 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 t5078 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	4	4

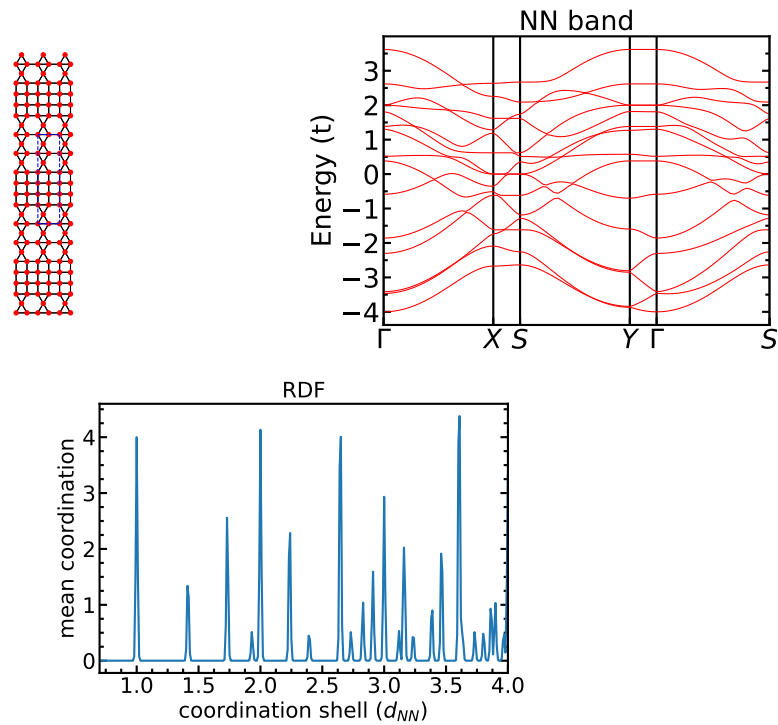


FIG. S78. t5078 lattice framework, nearest neighbors band structure and radial distribution function.

t5079

Tiling reference number t5079 with space-group ' $Pmmm$ ' (47) and 15 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 t5079 vertex types

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

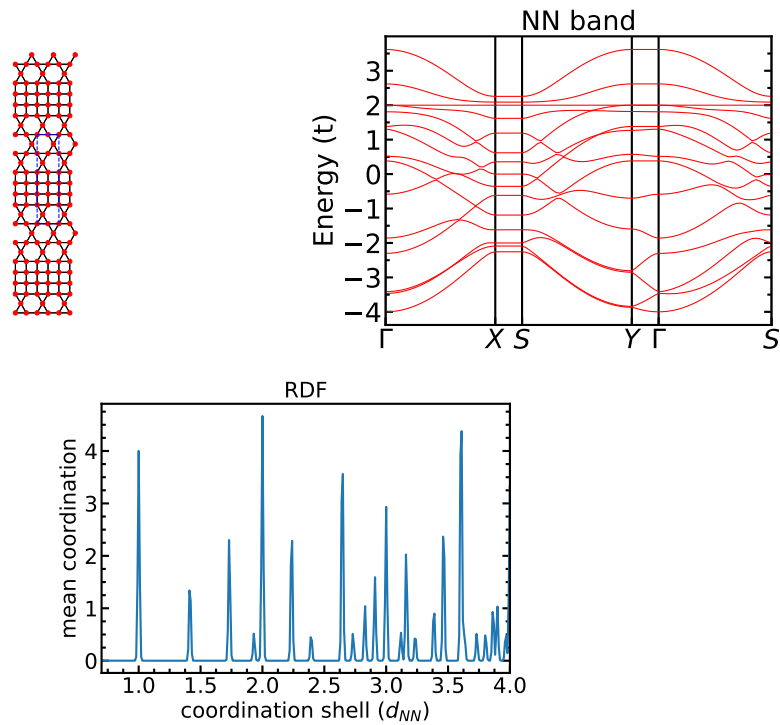


FIG. S79. t5079 lattice framework, nearest neighbors band structure and radial distribution function.

t5080

Tiling reference number t5080 with space-group ' $Cmmm$ ' (65) 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 t5080 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

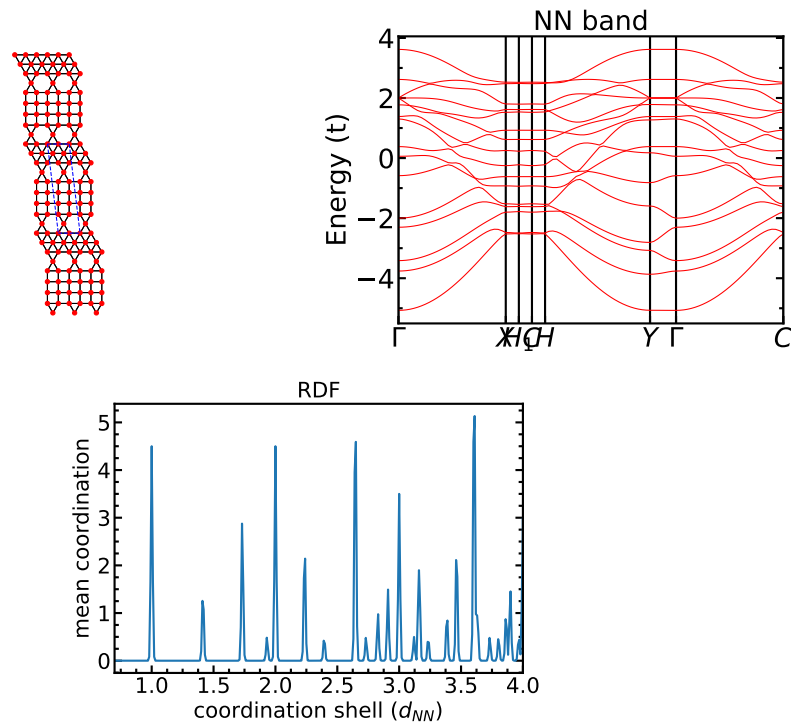


FIG. S80. t5080 lattice framework, nearest neighbors band structure and radial distribution function.

t5081

Tiling reference number t5081 with space-group ' $Pmmm'$ ' (47) and 9 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 t5081 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	4	0	0	0	0

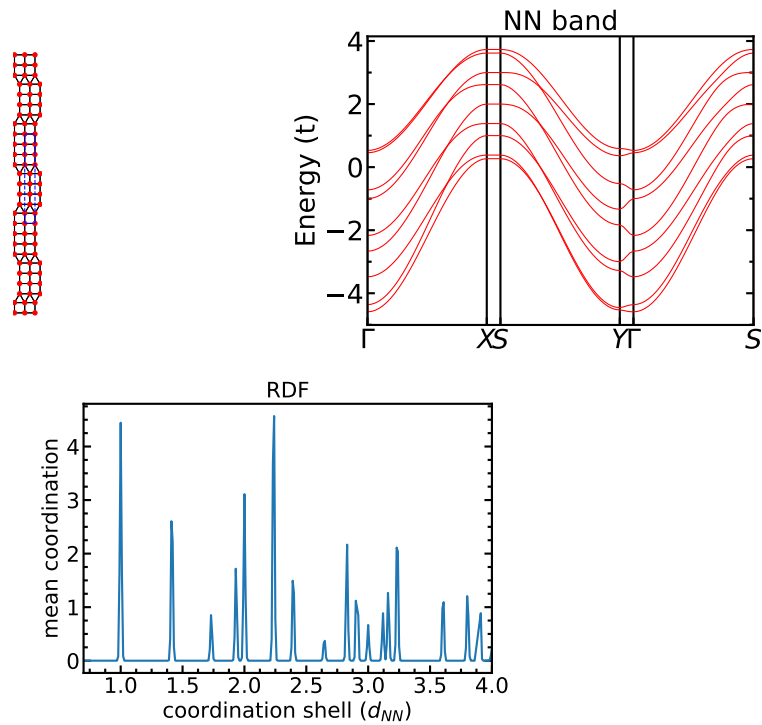


FIG. S81. t5081 lattice framework, nearest neighbors band structure and radial distribution function.

t5082

Tiling reference number t5082 with space-group ' $Cmmm$ ' (65) and 10 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 t5082 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	6	0	0	0	0

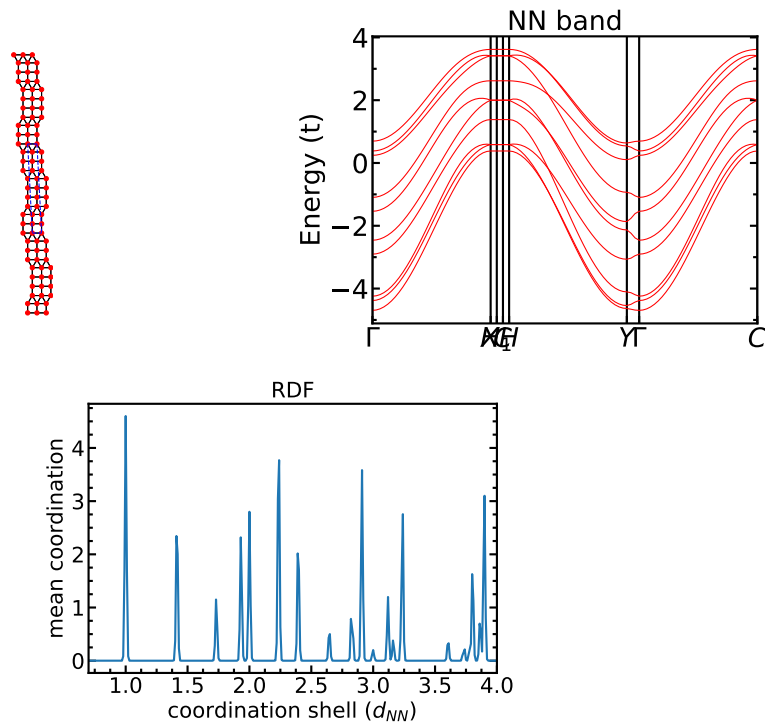


FIG. S82. t5082 lattice framework, nearest neighbors band structure and radial distribution function.

t5083

Tiling reference number t5083 with space-group ' $Pmmm$ ' (47) and 10 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 t5083 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	8	0	0	0	0

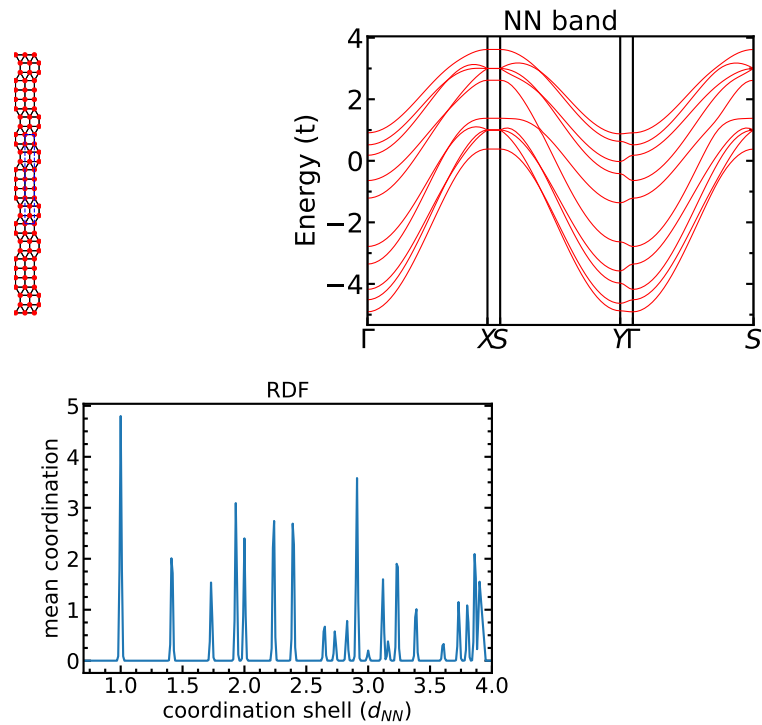


FIG. S83. t5083 lattice framework, nearest neighbors band structure and radial distribution function.

t5084

Tiling reference number t5084 with space-group ' $Pmmm'$ ' (47) and 9 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 t5084 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	6	0	0	0	0

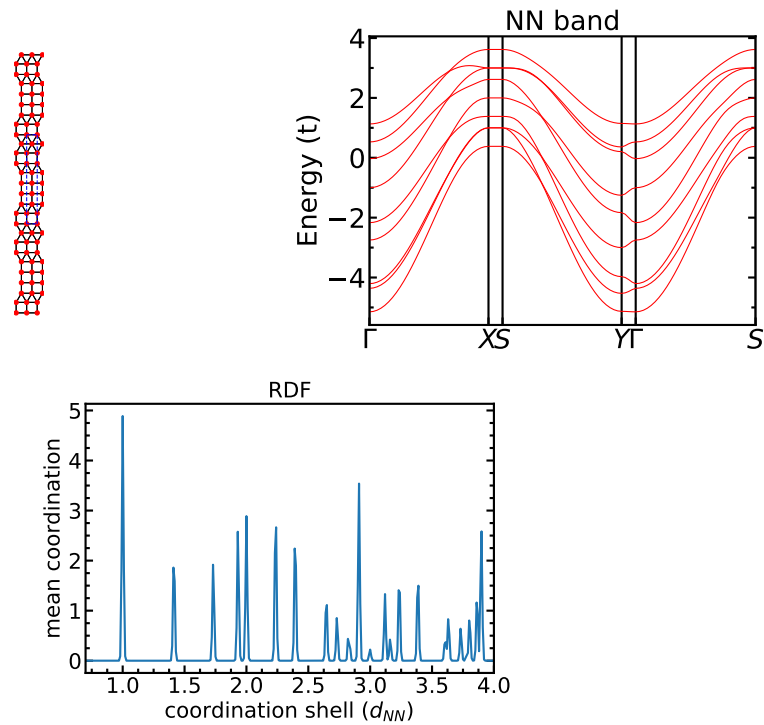


FIG. S84. t5084 lattice framework, nearest neighbors band structure and radial distribution function.

t5085

Tiling reference number t5085 with space-group ' $Cmmm$ ' (65) and 10 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 t5085 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	6	0	0	0	0

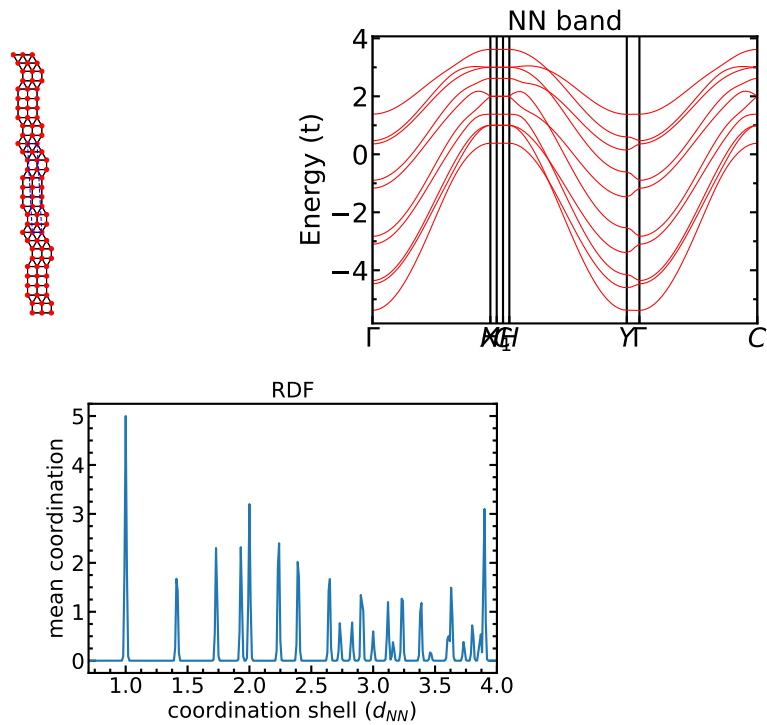


FIG. S85. t5085 lattice framework, nearest neighbors band structure and radial distribution function.

t5086

Tiling reference number t5086 with space-group ' $Pmmm$ ' (47) and 9 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 t5086 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	4	0	0	0	0

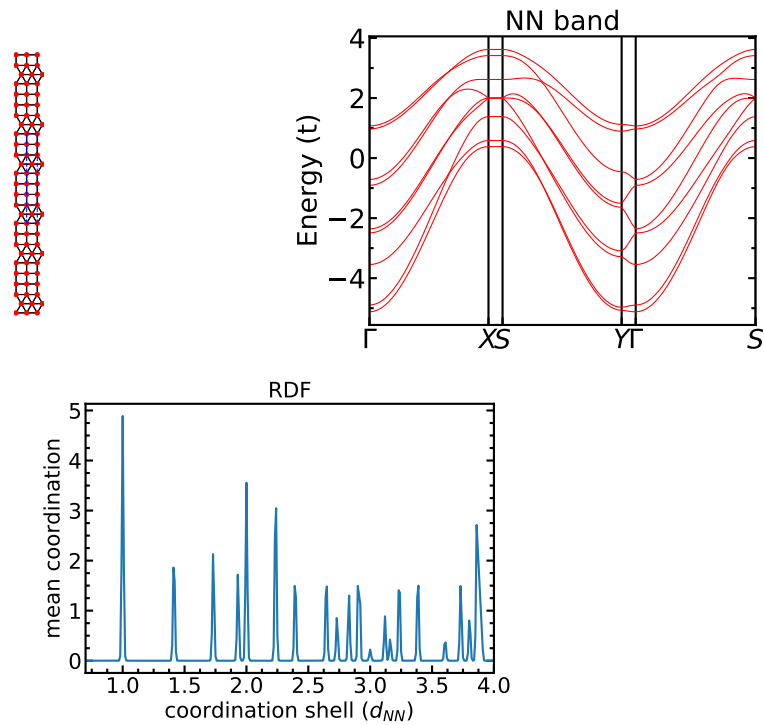


FIG. S86. t5086 lattice framework, nearest neighbors band structure and radial distribution function.

t5087

Tiling reference number t5087 with space-group ' $Cmmm$ ' (65) and 10 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 t5087 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	6	0	0	0	0

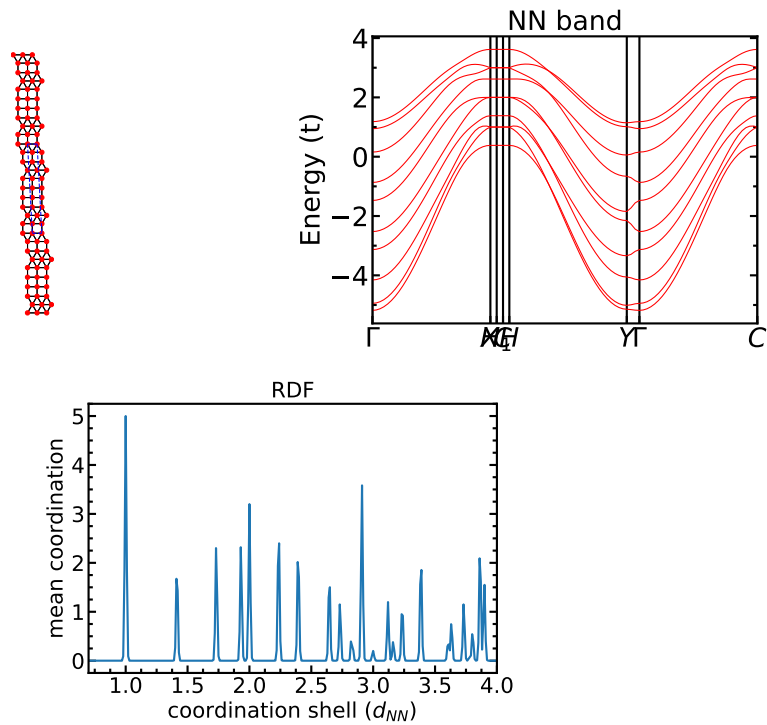


FIG. S87. t5087 lattice framework, nearest neighbors band structure and radial distribution function.

t5088

Tiling reference number t5088 with space-group ' $Pmm2'$ ' (25) and 10 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 t5088 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

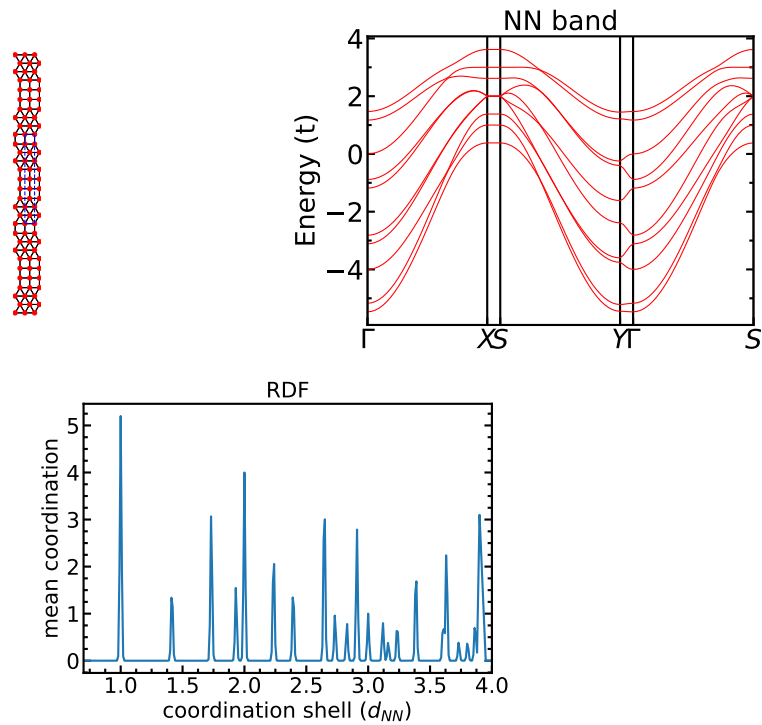


FIG. S88. t5088 lattice framework, nearest neighbors band structure and radial distribution function.

t5089

Tiling reference number t5089 with space-group ' $Pmmm'$ ' (47) and 9 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 t5089 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	2	0	0	0	0

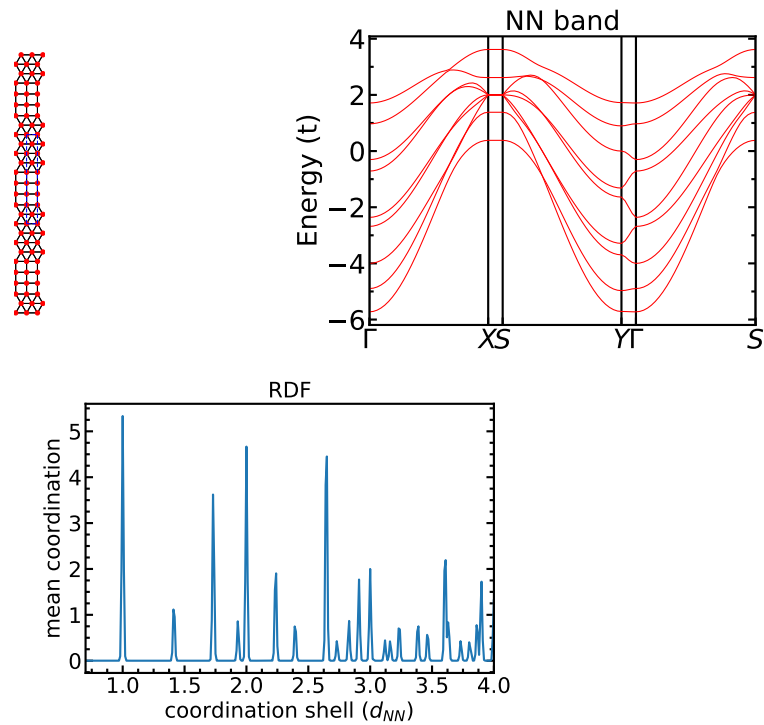


FIG. S89. t5089 lattice framework, nearest neighbors band structure and radial distribution function.

t5090

Tiling reference number t5090 with space-group ' $Cmmm$ ' (65) and 10 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 t5090 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	2	0	0	0	0

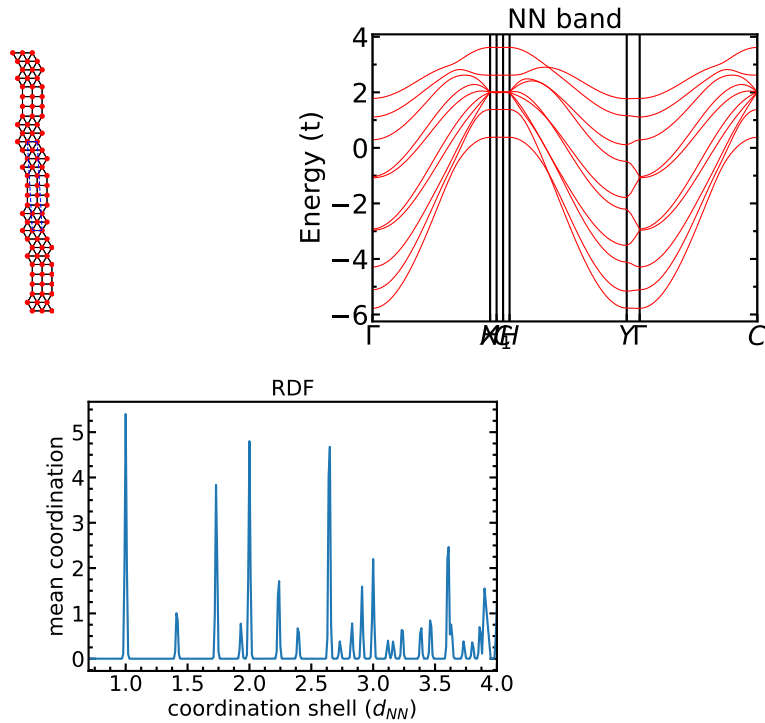


FIG. S90. t5090 lattice framework, nearest neighbors band structure and radial distribution function.

t5091

Tiling reference number t5091 with space-group ' $Cmmm$ ' (65) and 16 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 t5091 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	2	0	0	4	4

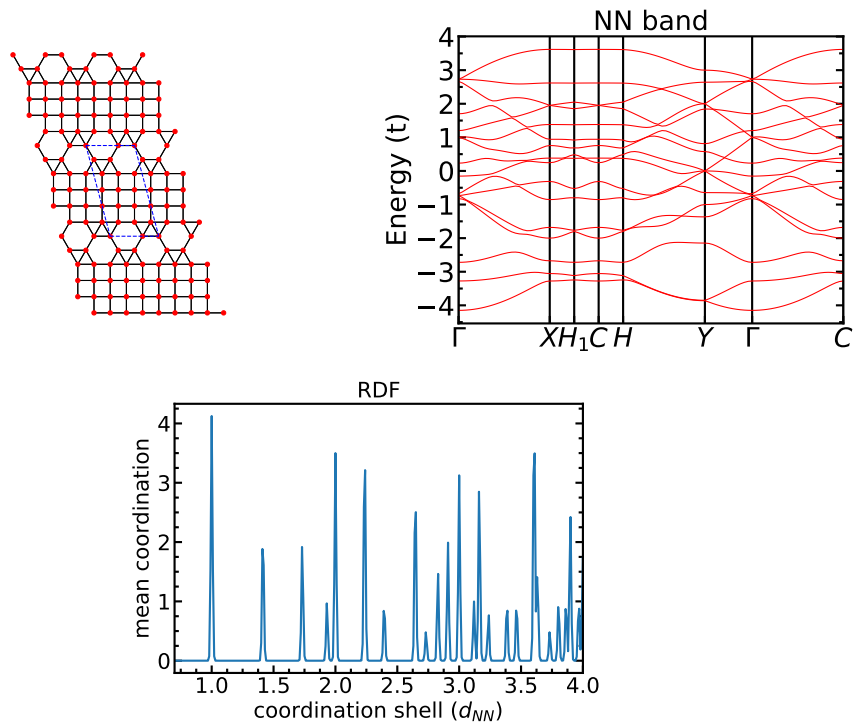


FIG. S91. t5091 lattice framework, nearest neighbors band structure and radial distribution function.

t5092

Tiling reference number t5092 with space-group ' $Pmmm$ ' (47) and 14 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 t5092 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	2	0	2	0	0	4	0

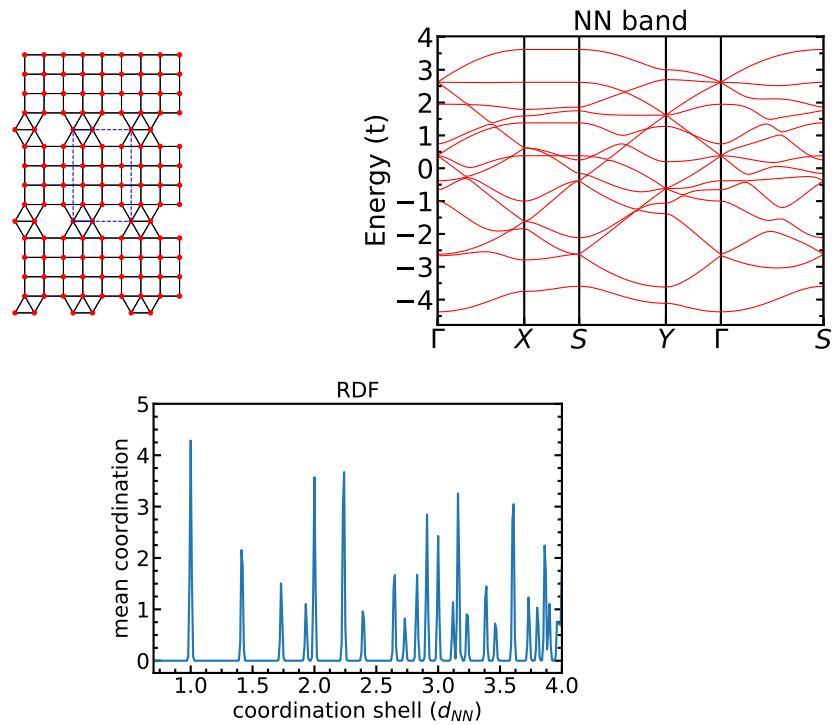


FIG. S92. t5092 lattice framework, nearest neighbors band structure and radial distribution function.

t5093

Tiling reference number t5093 with space-group ' $Amm2'$ ' (38) and 32 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 t5093 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	4	0	0	0	16	4

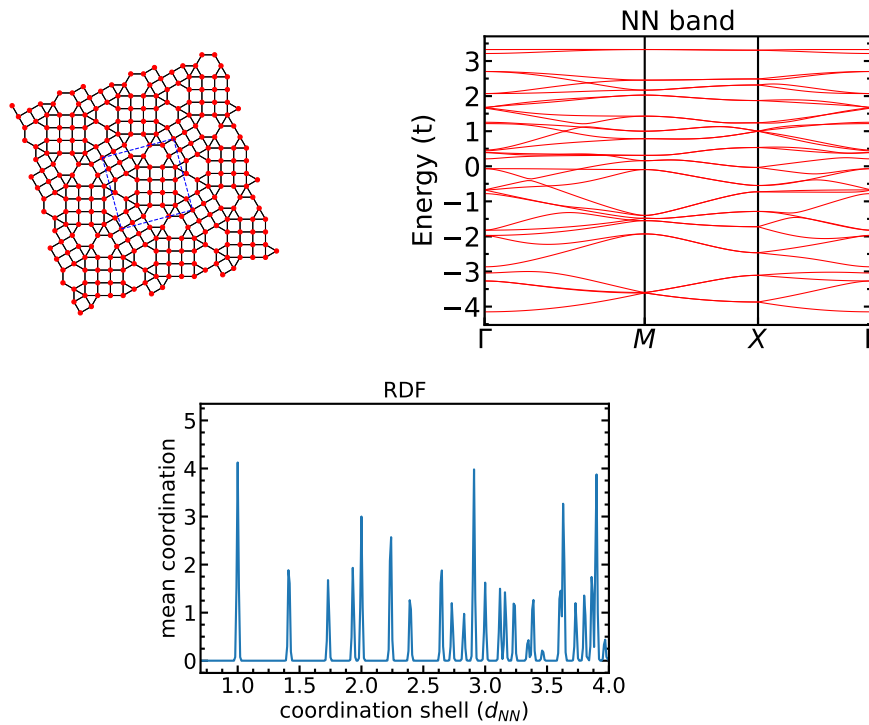


FIG. S93. t5093 lattice framework, nearest neighbors band structure and radial distribution function.

t5094

Tiling reference number t5094 with space-group ' Pm' ' (6) and 28 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 t5094 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	12	8	4	0	0

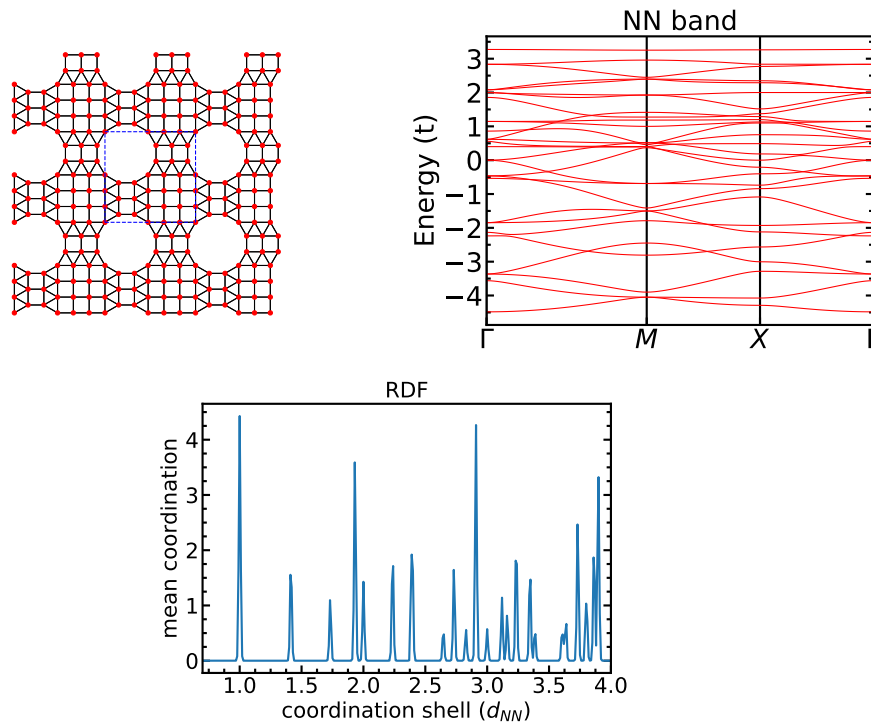


FIG. S94. t5094 lattice framework, nearest neighbors band structure and radial distribution function.

t5095

Tiling reference number t5095 with space-group ' $Cmmm$ ' (65) and 9 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 t5095 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	2	0	0	0	0

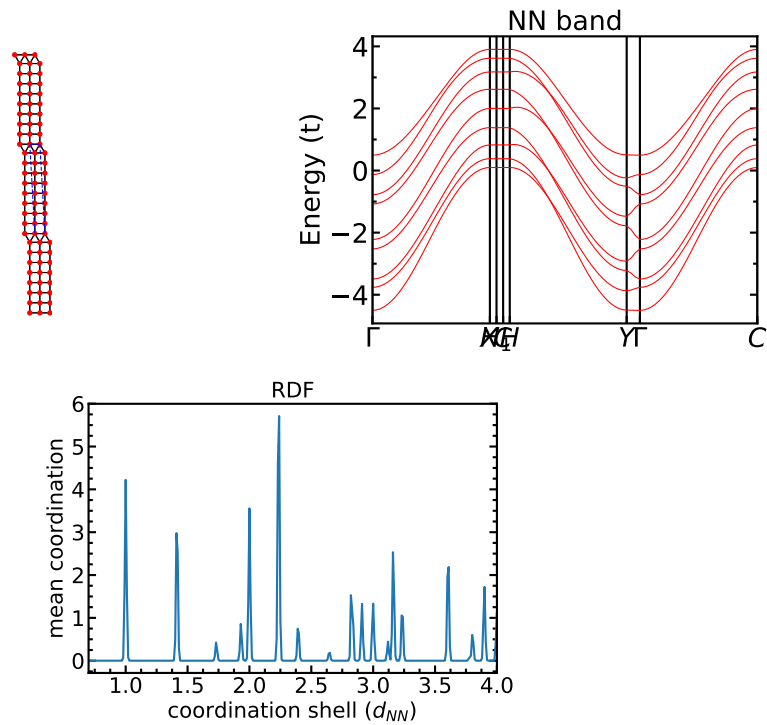


FIG. S95. t5095 lattice framework, nearest neighbors band structure and radial distribution function.

t5096

Tiling reference number t5096 with space-group ' $Cmmm$ ' (65) and 15 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 t5096 vertex types

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

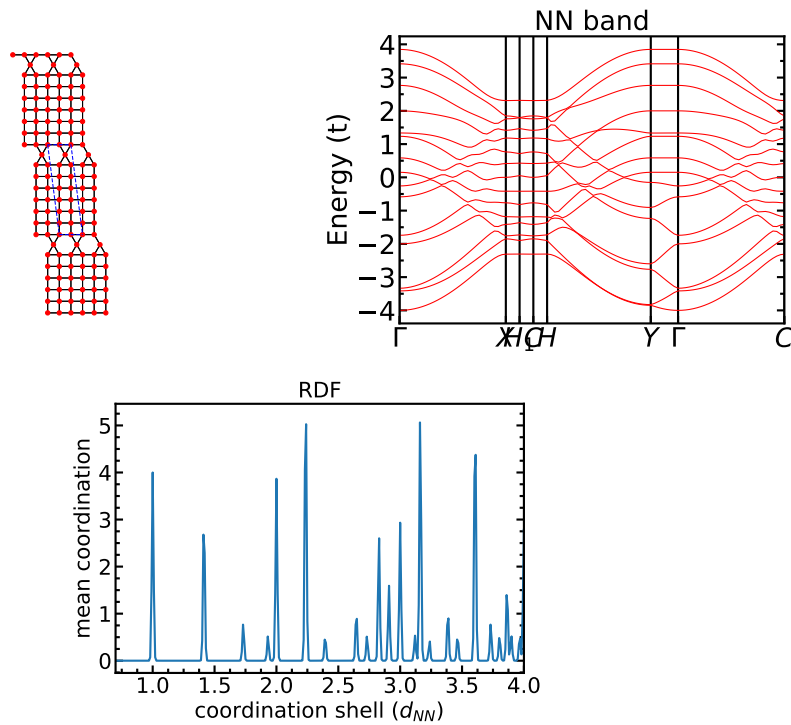


FIG. S96. t5096 lattice framework, nearest neighbors band structure and radial distribution function.

t5097

Tiling reference number t5097 with space-group ' $Pmm2'$ ' (25) and 15 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 t5097 vertex types

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

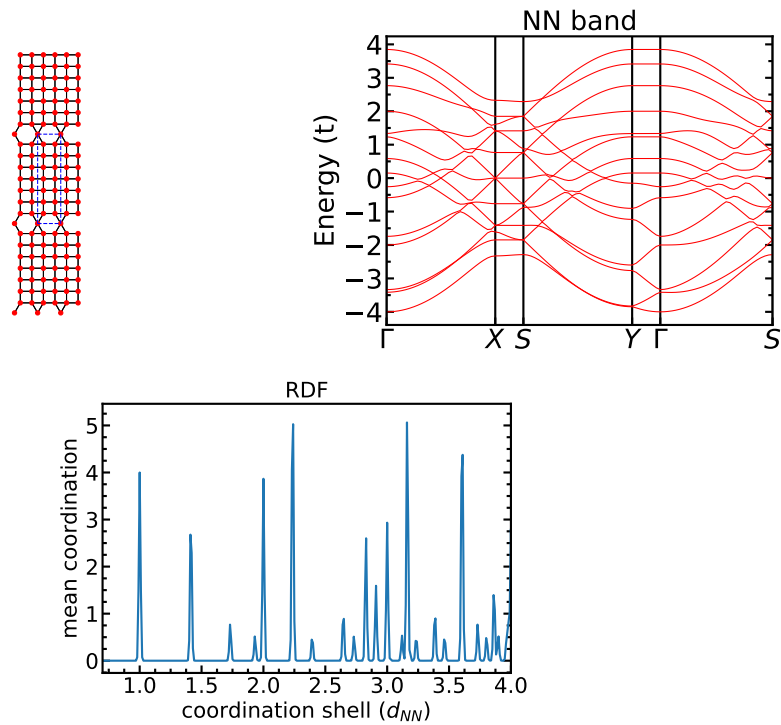


FIG. S97. t5097 lattice framework, nearest neighbors band structure and radial distribution function.

t5098

Tiling reference number t5098 with space-group ' $Pmm2'$ ' (25) and 9 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 t5098 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	4	0	0	0	0

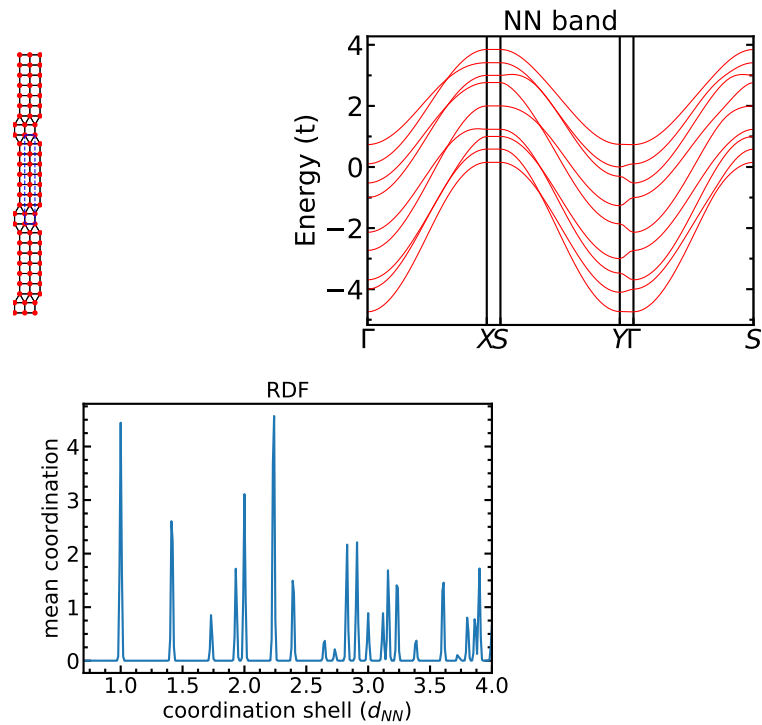


FIG. S98. t5098 lattice framework, nearest neighbors band structure and radial distribution function.

t5099

Tiling reference number t5099 with space-group ' $Pmm2'$ ' (25) and 8 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 t5099 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	5	0	0	0	0	0	0	0	0	2	0	0	0	0

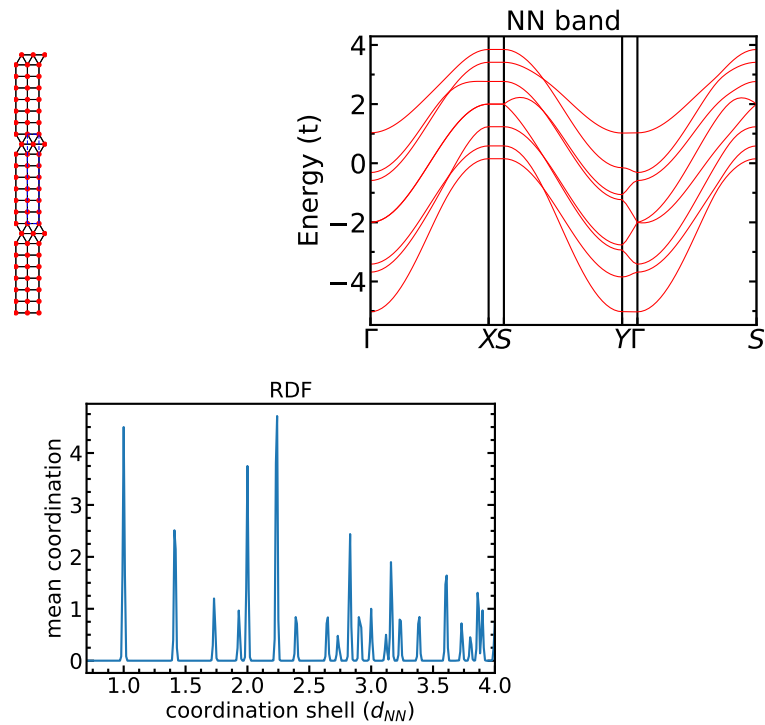


FIG. S99. t5099 lattice framework, nearest neighbors band structure and radial distribution function.

t5100

Tiling reference number t5100 with space-group ' $Cmmm$ ' (65) and 9 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 t5100 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	2	0	0	0	0

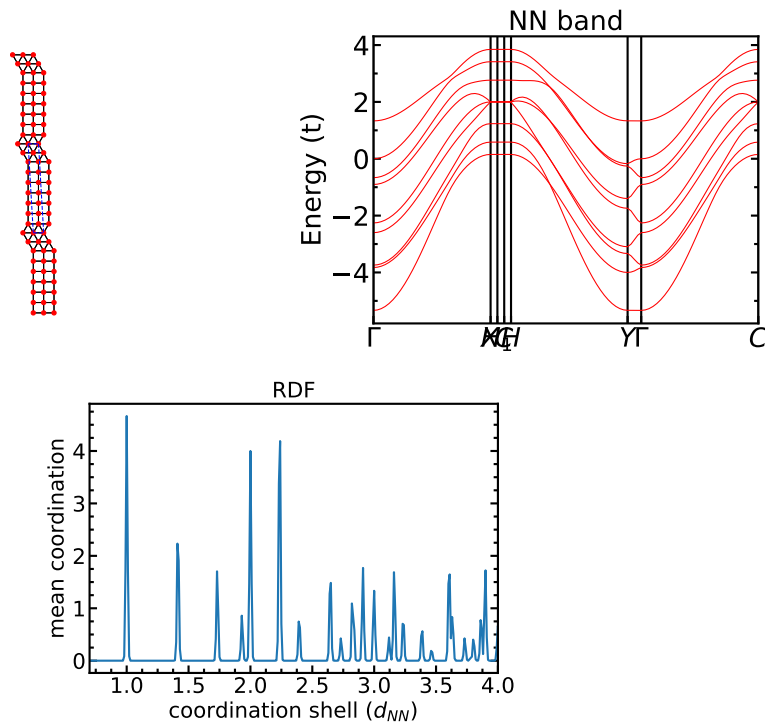


FIG. S100. t5100 lattice framework, nearest neighbors band structure and radial distribution function.

t5101

Tiling reference number t5101 with space-group ' $Cmmm$ ' (65) and 16 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 t5101 vertex types

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

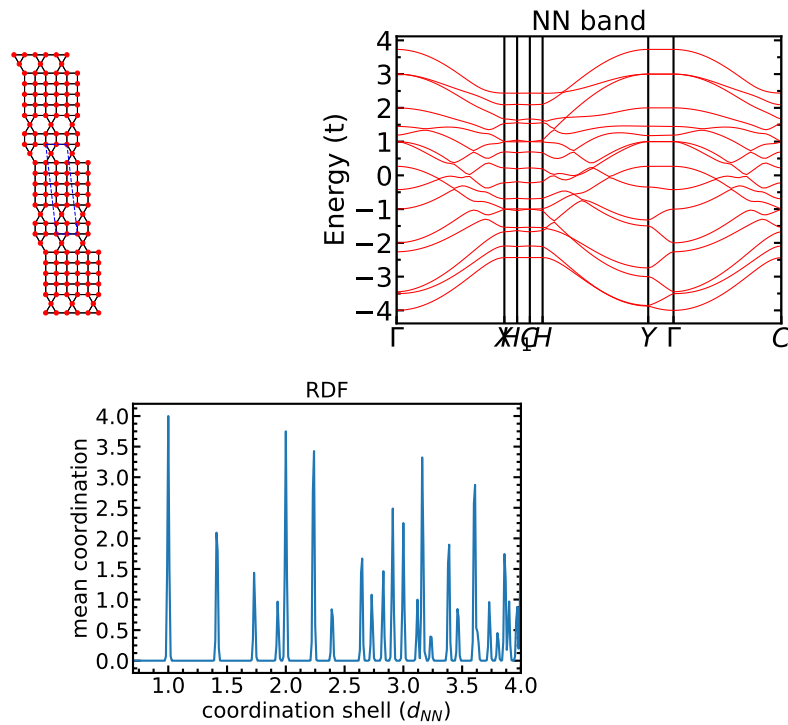


FIG. S101. t5101 lattice framework, nearest neighbors band structure and radial distribution function.

t5102

Tiling reference number t5102 with space-group ' $Pmma'$ ' (51) and 16 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 t5102 vertex types

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

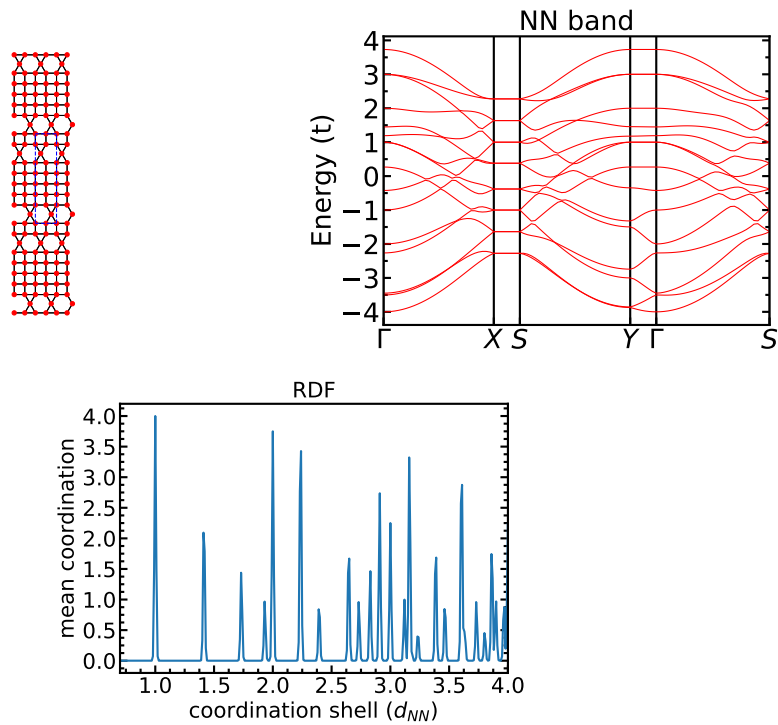


FIG. S102. t5102 lattice framework, nearest neighbors band structure and radial distribution function.

t5103

Tiling reference number t5103 with space-group ' $Cmmm$ ' (65) and 14 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 t5103 vertex types

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

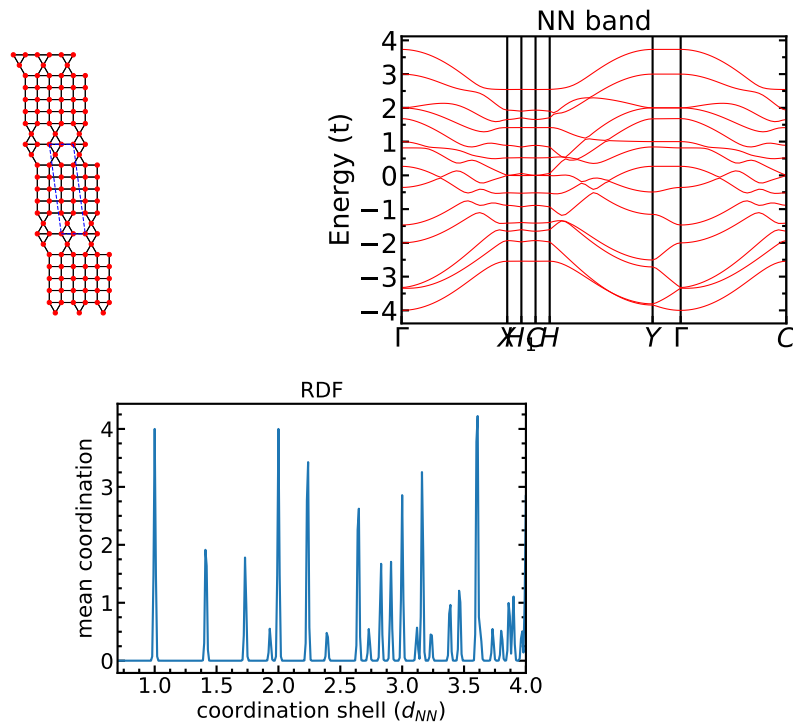


FIG. S103. t5103 lattice framework, nearest neighbors band structure and radial distribution function.

t5104

Tiling reference number t5104 with space-group ' $Pmma'$ ' (51) and 14 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 t5104 vertex types

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

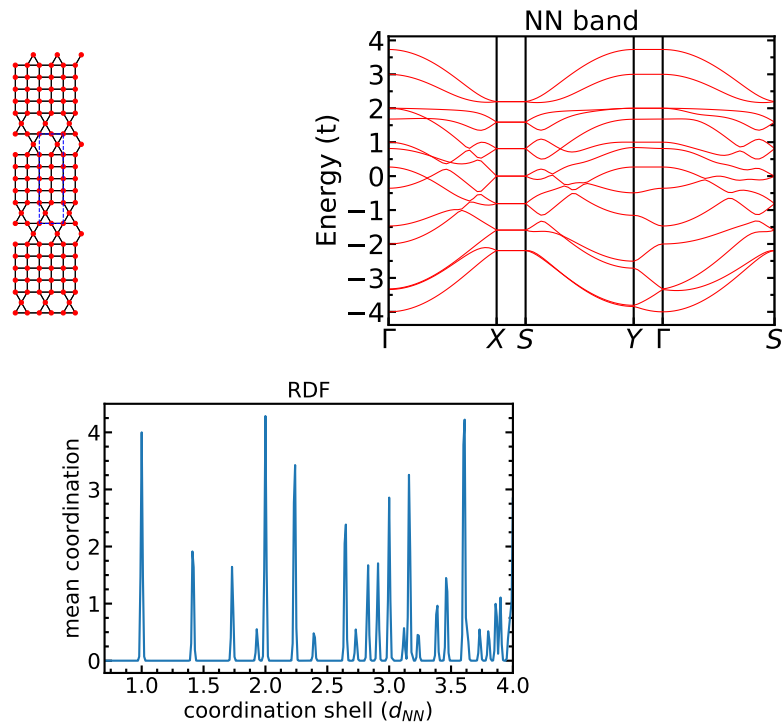


FIG. S104. t5104 lattice framework, nearest neighbors band structure and radial distribution function.

t5105

Tiling reference number t5105 with space-group ' $Pmmm$ ' (47) and 16 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 t5105 vertex types

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

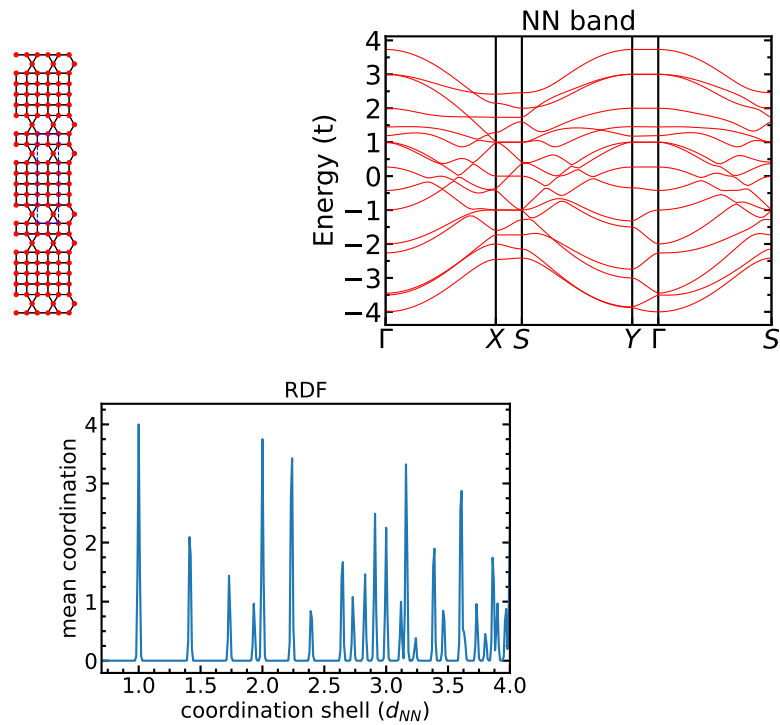


FIG. S105. t5105 lattice framework, nearest neighbors band structure and radial distribution function.

t5106

Tiling reference number t5106 with space-group ' $Cmmm$ ' (65) and 16 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 t5106 vertex types

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

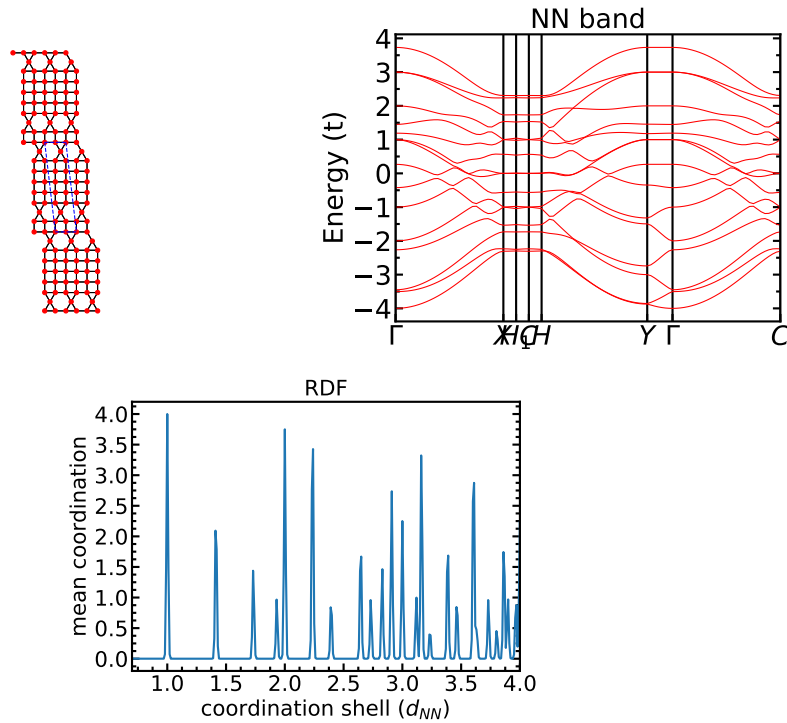


FIG. S106. t5106 lattice framework, nearest neighbors band structure and radial distribution function.

t5107

Tiling reference number t5107 with space-group ' $Pmmm$ ' (47) and 14 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 t5107 vertex types

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

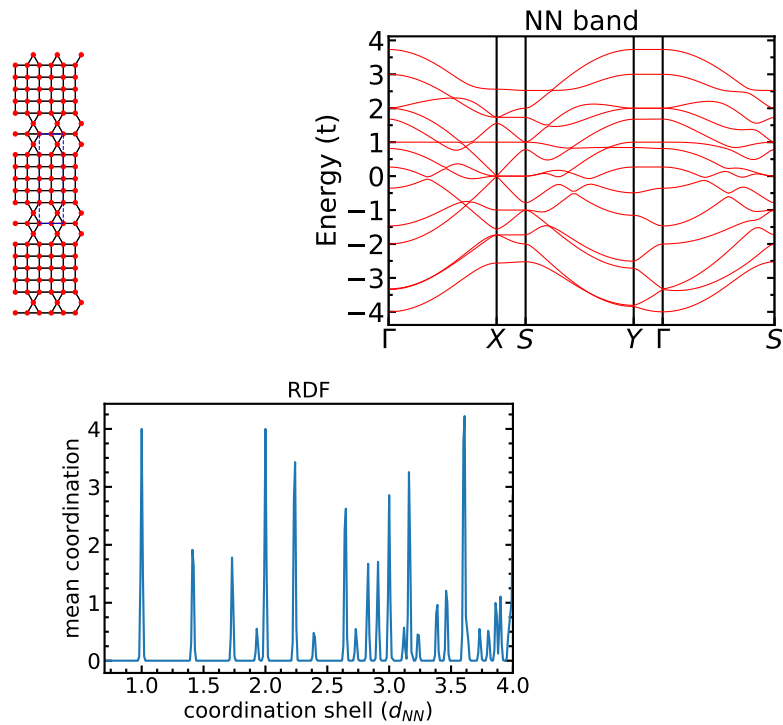


FIG. S107. t5107 lattice framework, nearest neighbors band structure and radial distribution function.

t5108

Tiling reference number t5108 with space-group ' $Cmmm$ ' (65) and 14 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 t5108 vertex types

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

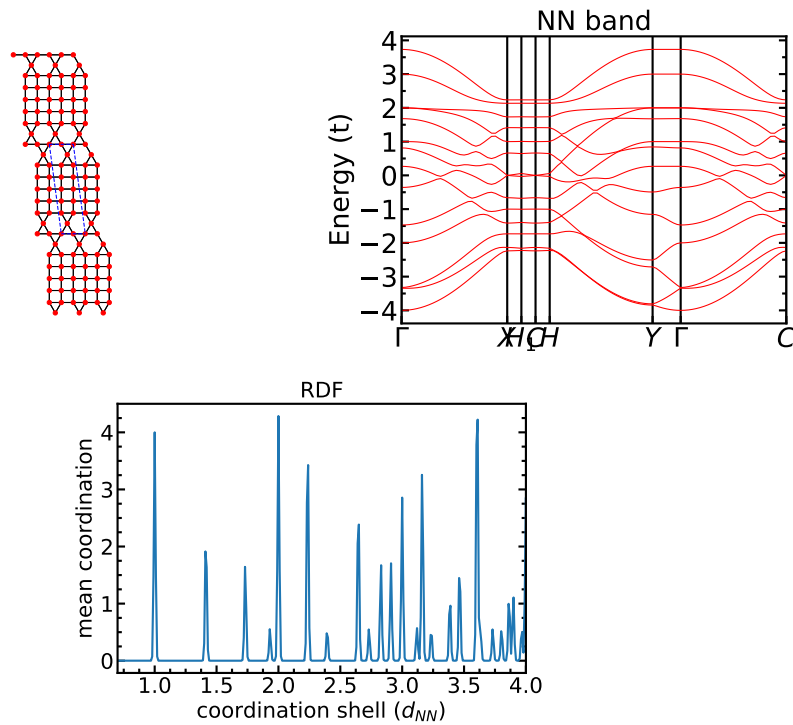


FIG. S108. t5108 lattice framework, nearest neighbors band structure and radial distribution function.

t5109

Tiling reference number t5109 with space-group ' $Pmm2'$ ' (25) and 8 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 t5109 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	4	0	0	0	0

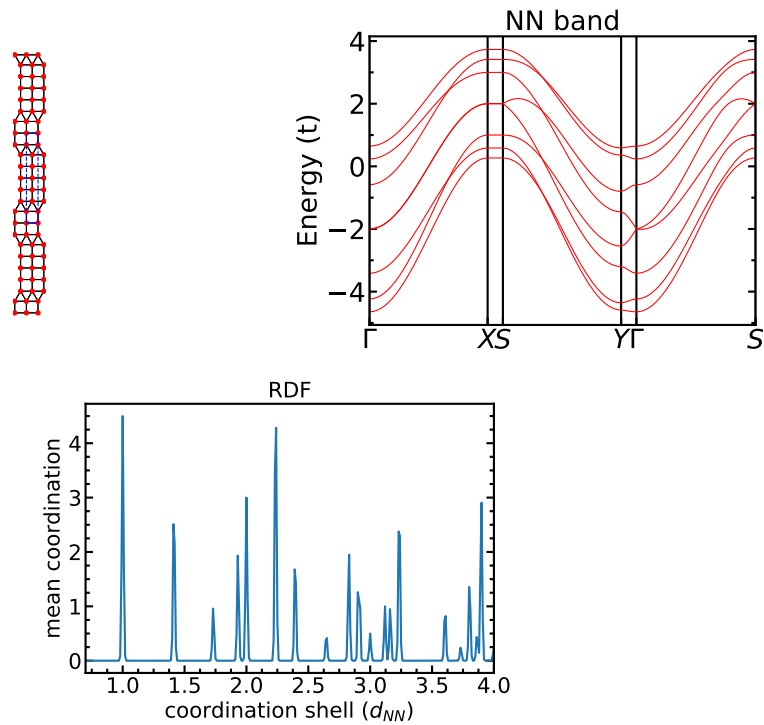


FIG. S109. t5109 lattice framework, nearest neighbors band structure and radial distribution function.

t5110

Tiling reference number t5110 with space-group ' $Cmmm$ ' (65) and 9 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 t5110 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	6	0	0	0	0

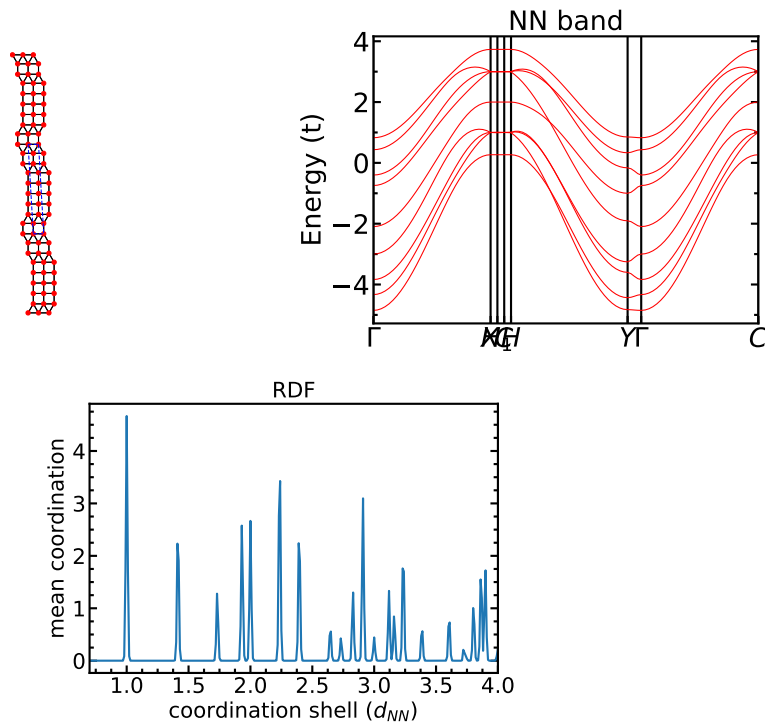


FIG. S110. t5110 lattice framework, nearest neighbors band structure and radial distribution function.

t5111

Tiling reference number t5111 with space-group ' $Pmmm'$ ' (47) and 9 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 t5111 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	4	0	0	0	0

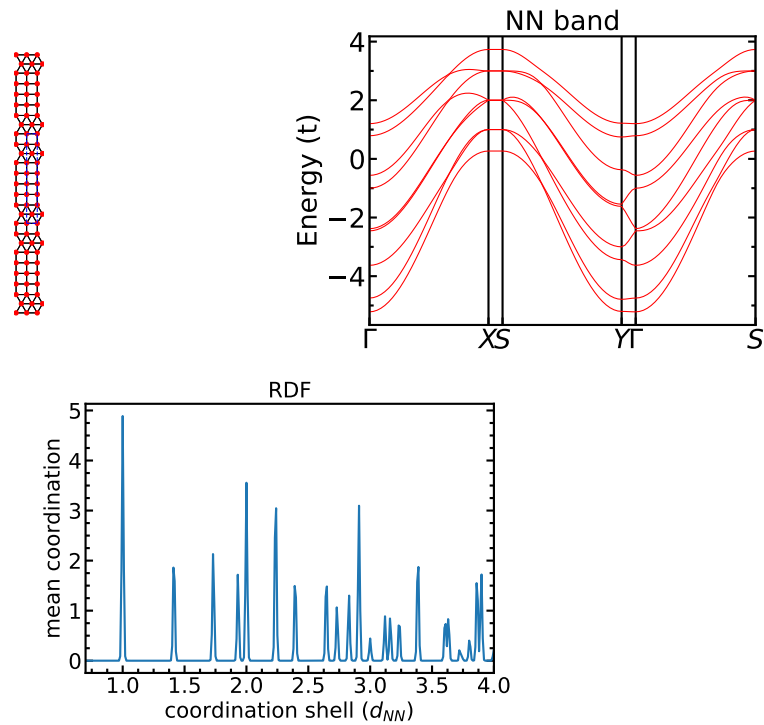


FIG. S111. t5111 lattice framework, nearest neighbors band structure and radial distribution function.

t5112

Tiling reference number t5112 with space-group ' $Pmmm'$ ' (47) and 8 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 t5112 vertex types

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

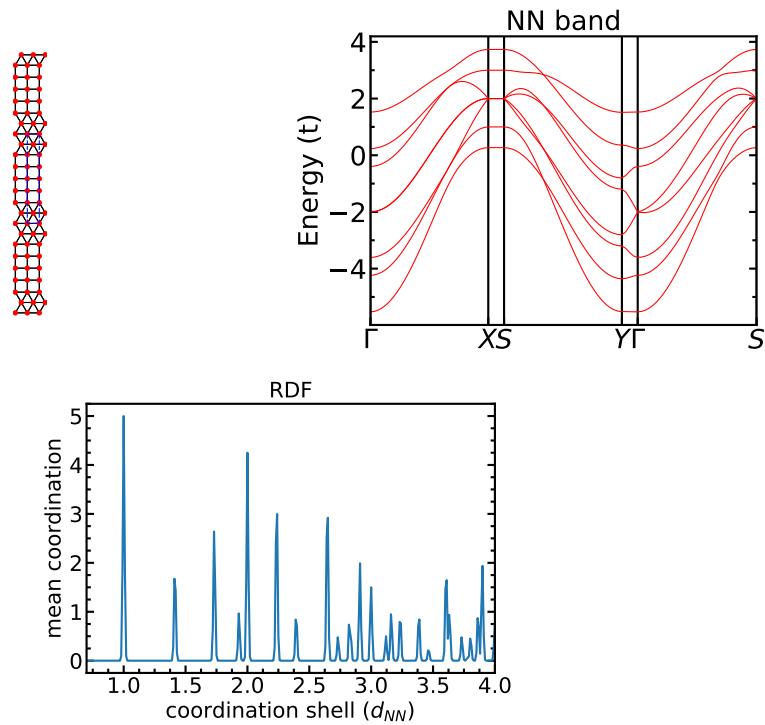


FIG. S112. t5112 lattice framework, nearest neighbors band structure and radial distribution function.

t5113

Tiling reference number t5113 with space-group ' $Cmmm$ ' (65) and 9 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 t5113 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	2	0	0	0	0

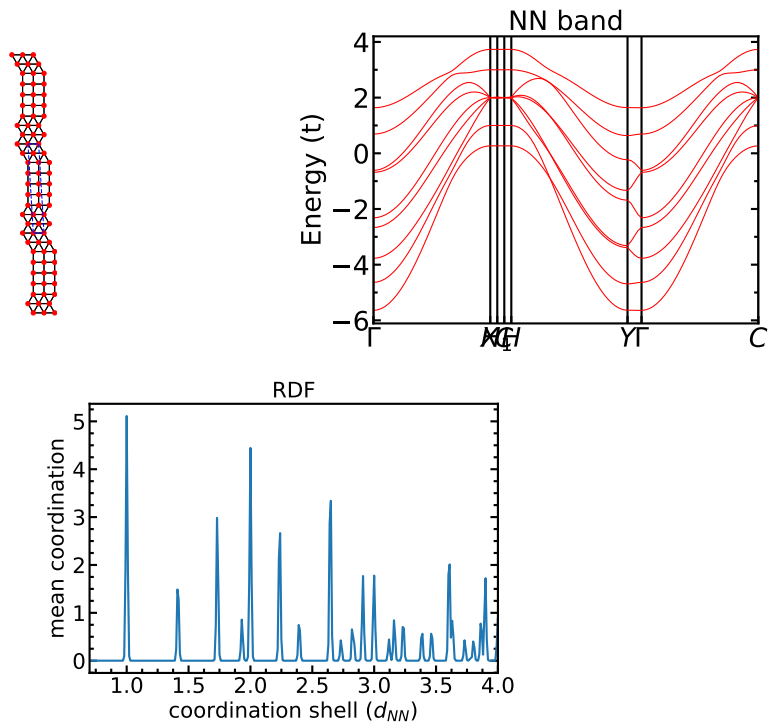


FIG. S113. t5113 lattice framework, nearest neighbors band structure and radial distribution function.

t5114

Tiling reference number t5114 with space-group ' $Amm2'$ ' (38) and 10 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 t5114 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	6	0	0	0	0

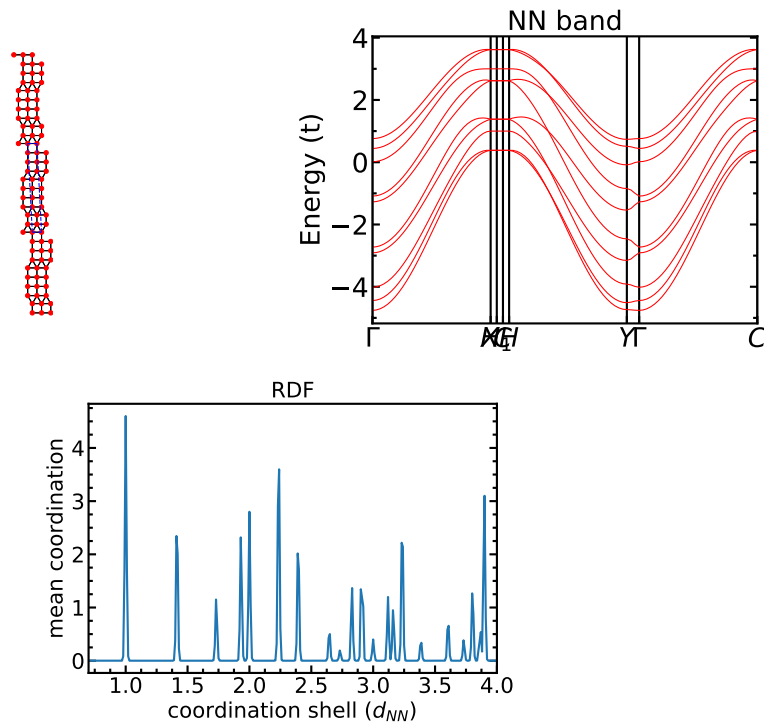


FIG. S114. t5114 lattice framework, nearest neighbors band structure and radial distribution function.

t5115

Tiling reference number t5115 with space-group ' $Amm2'$ ' (38) and 9 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 t5115 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	4	0	0	0	0

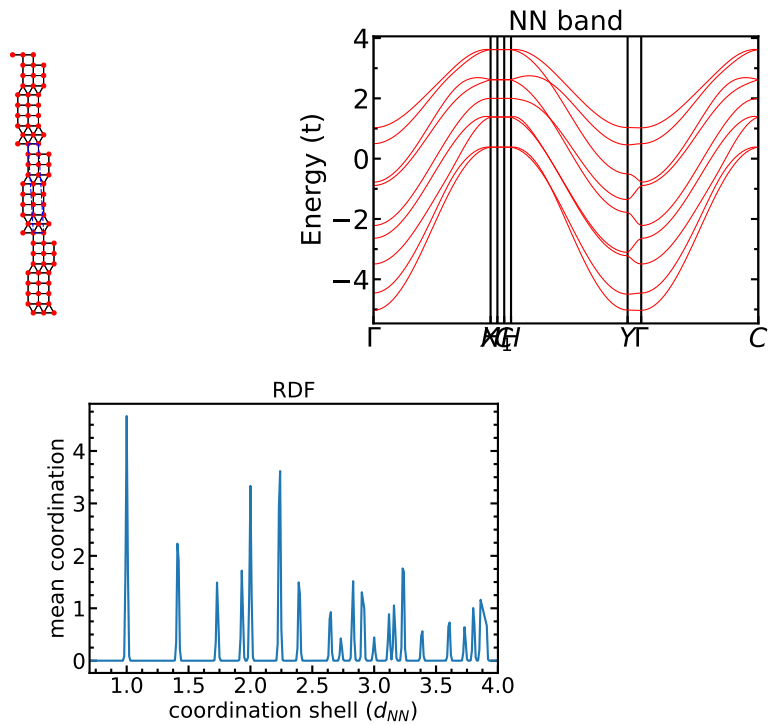


FIG. S115. t5115 lattice framework, nearest neighbors band structure and radial distribution function.

t5116

Tiling reference number t5116 with space-group ' $Pmma'$ ' (51) and 10 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 t5116 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

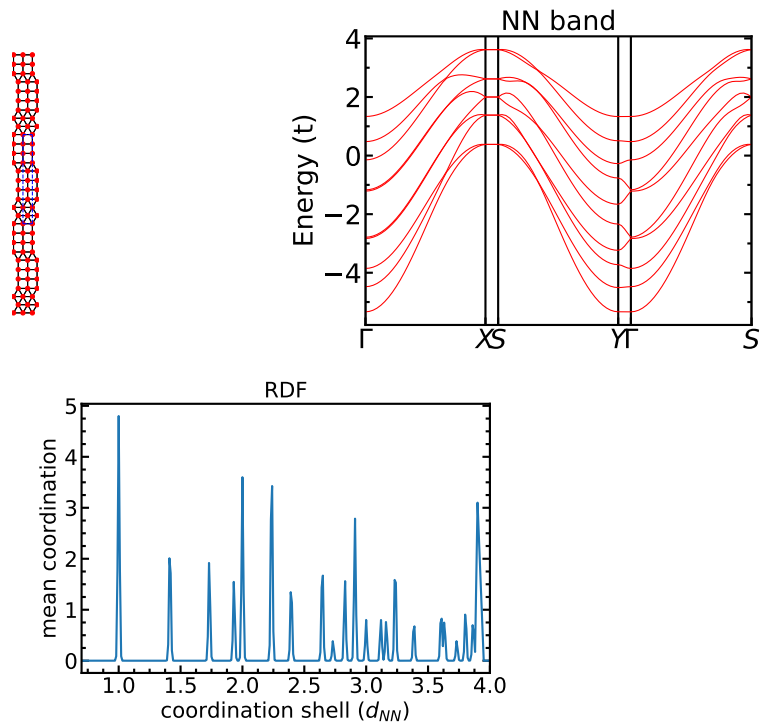


FIG. S116. t5116 lattice framework, nearest neighbors band structure and radial distribution function.

t5117

Tiling reference number t5117 with space-group ' $Cmmm$ ' (65) and 14 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 t5117 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	8	0

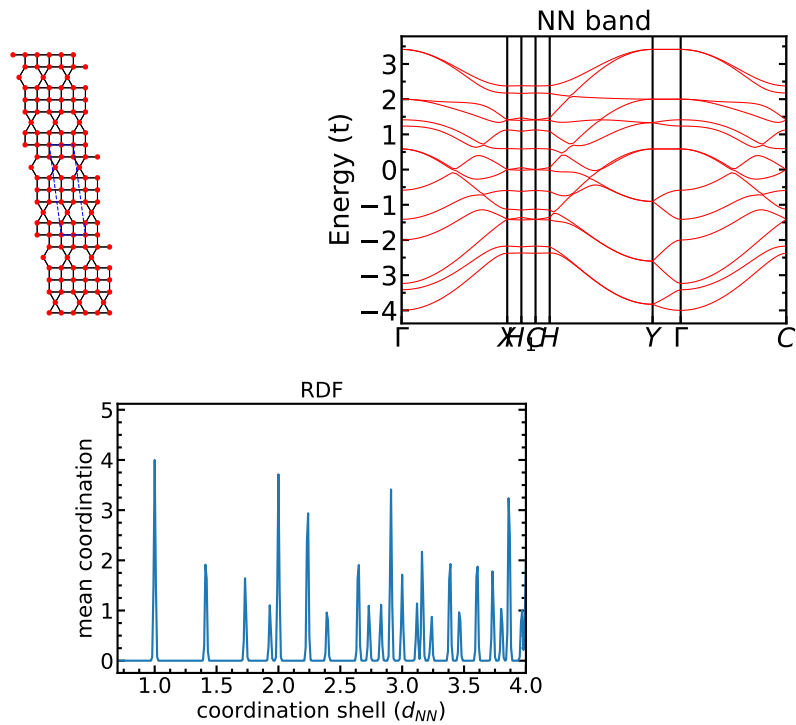


FIG. S117. t5117 lattice framework, nearest neighbors band structure and radial distribution function.

t5118

Tiling reference number t5118 with space-group ' $Cmmm$ ' (65) and 13 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 t5118 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	4	4

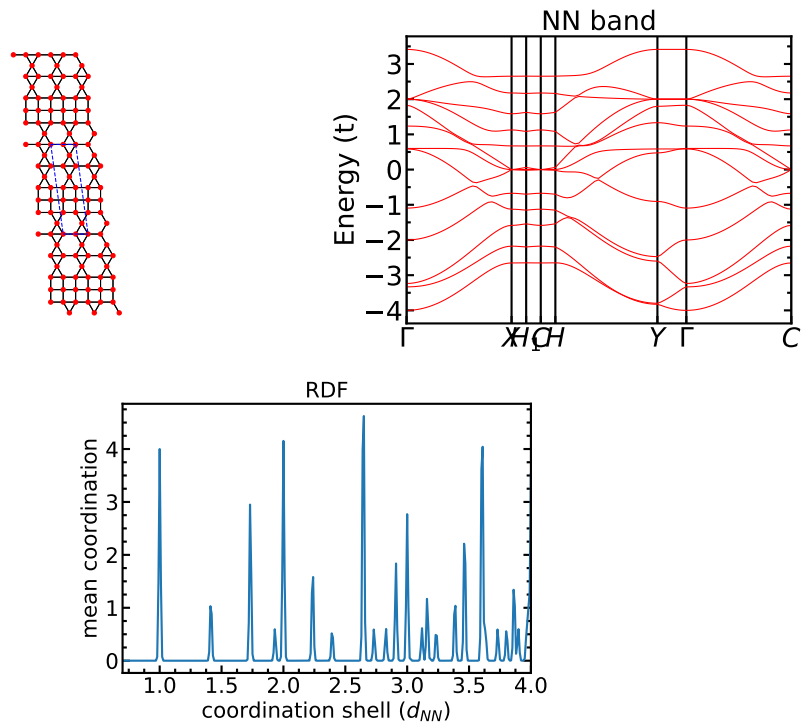


FIG. S118. t5118 lattice framework, nearest neighbors band structure and radial distribution function.

t5119

Tiling reference number t5119 with space-group ' $Cmmm$ ' (65) and 13 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 t5119 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	7	0	0	0	0	0	4	0

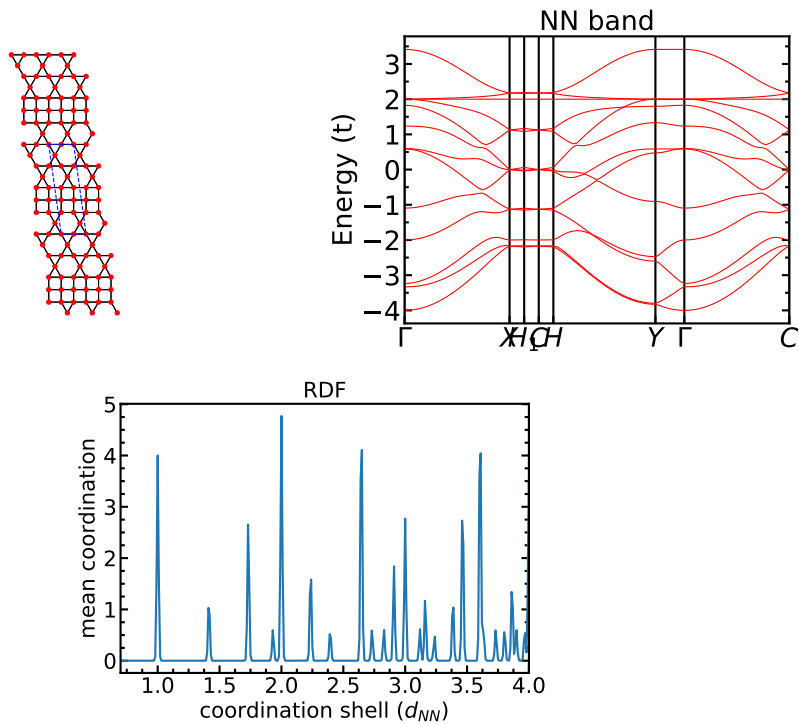


FIG. S119. t5119 lattice framework, nearest neighbors band structure and radial distribution function.

t5120

Tiling reference number t5120 with space-group ' $Pmm2'$ ' (25) and 14 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 t5120 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

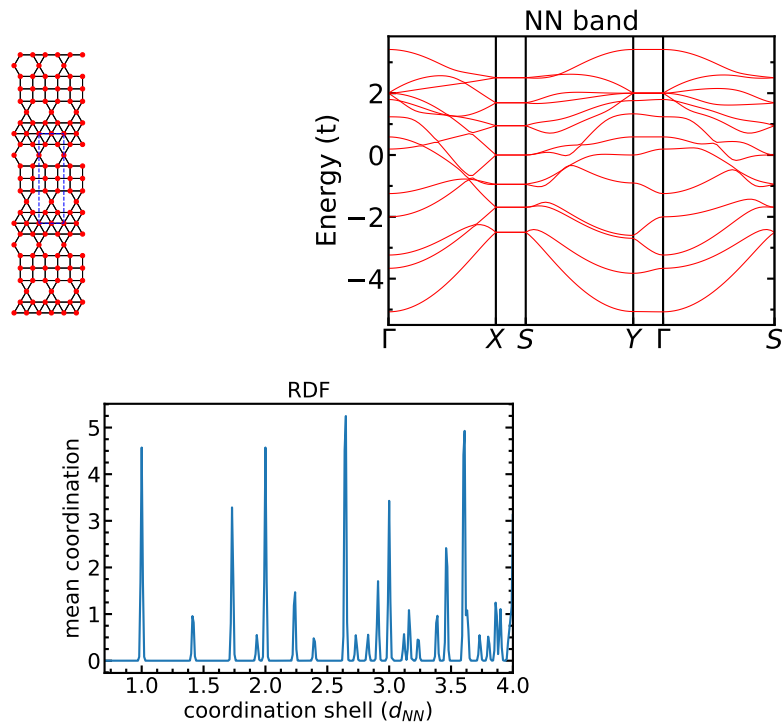


FIG. S120. t5120 lattice framework, nearest neighbors band structure and radial distribution function.

t5121

Tiling reference number t5121 with space-group ' $Pmm2'$ ' (25) and 13 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 t5121 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	4	4

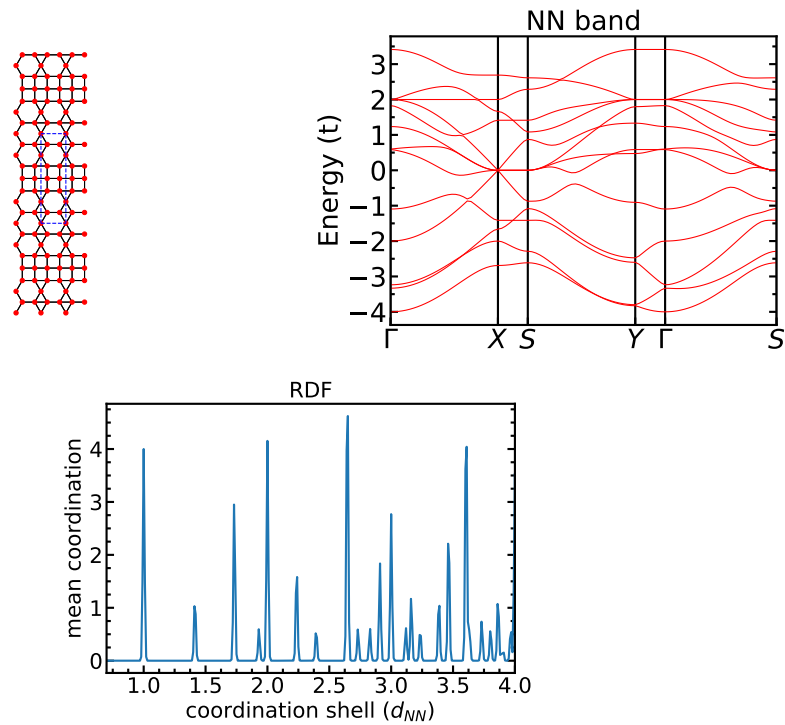


FIG. S121. t5121 lattice framework, nearest neighbors band structure and radial distribution function.

t5122

Tiling reference number t5122 with space-group ' $Pmm2'$ ' (25) and 13 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 t5122 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	2	0	0	0	0	0	7	0	0	0	0	0	4	0

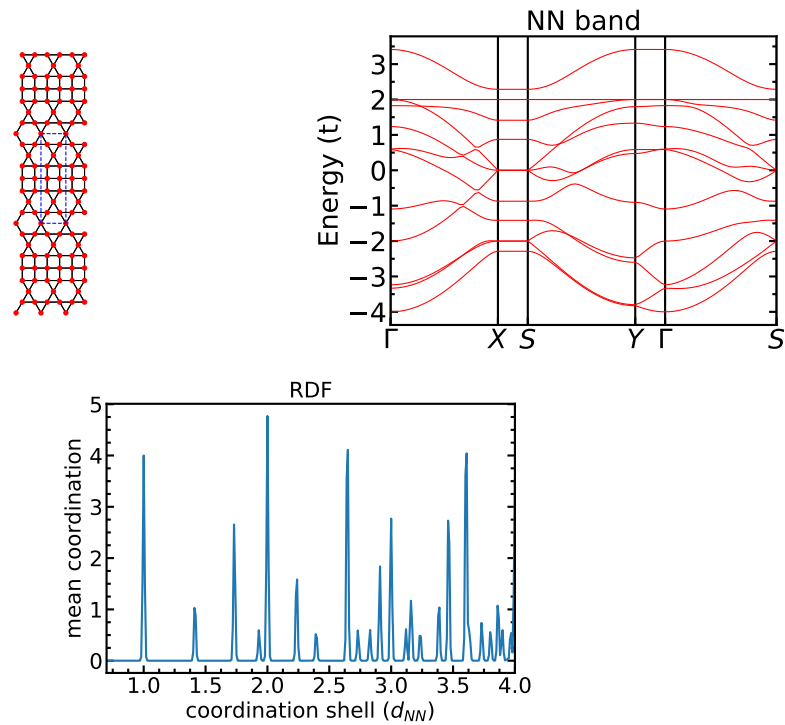


FIG. S122. t5122 lattice framework, nearest neighbors band structure and radial distribution function.

t5123

Tiling reference number t5123 with space-group ' $Amm2'$ ' (38) and 14 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 t5123 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

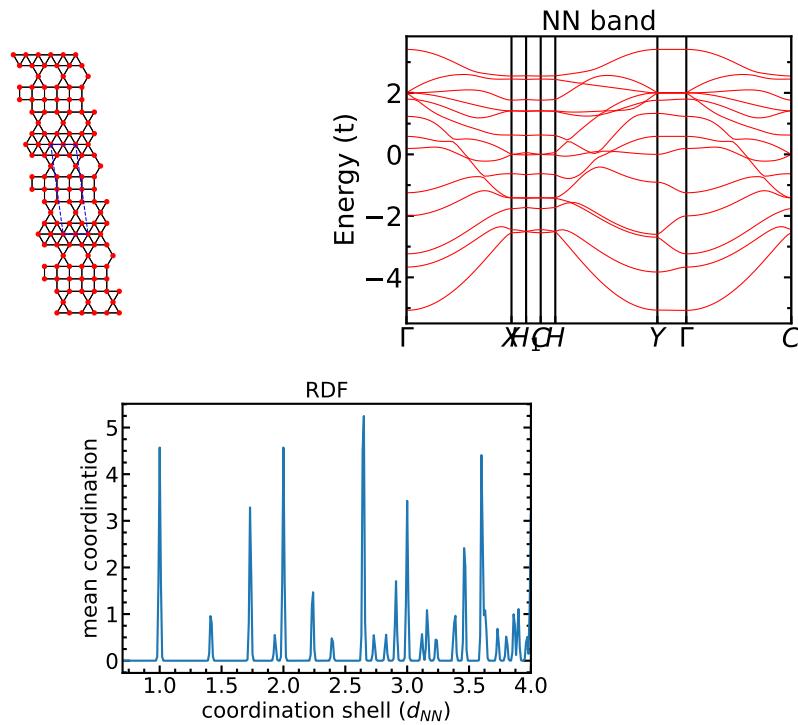


FIG. S123. t5123 lattice framework, nearest neighbors band structure and radial distribution function.

t5124

Tiling reference number t5124 with space-group '*Amm2*' (38) and 15 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 t5124 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

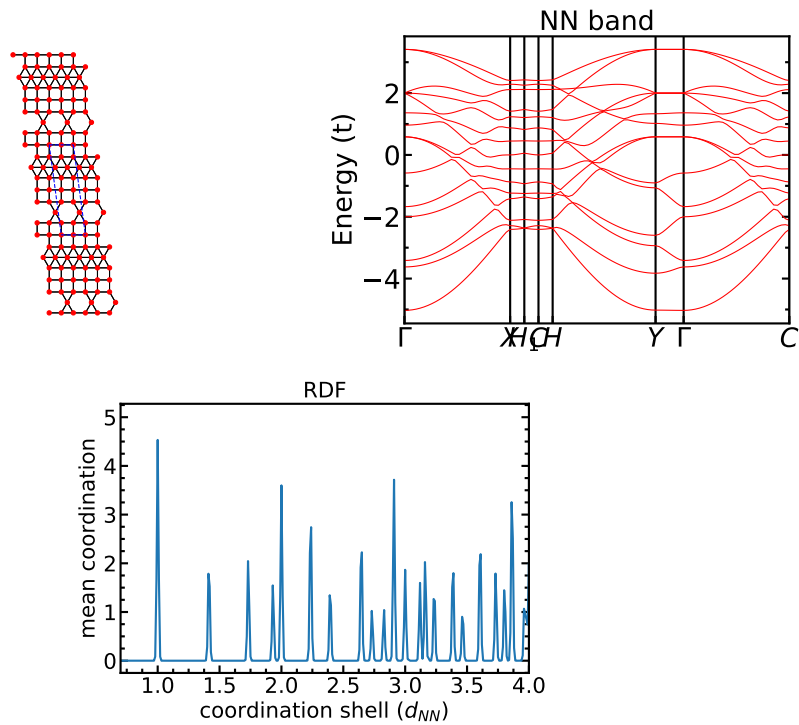


FIG. S124. t5124 lattice framework, nearest neighbors band structure and radial distribution function.

t5125

Tiling reference number t5125 with space-group ' $Amm2'$ ' (38) and 15 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 t5125 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

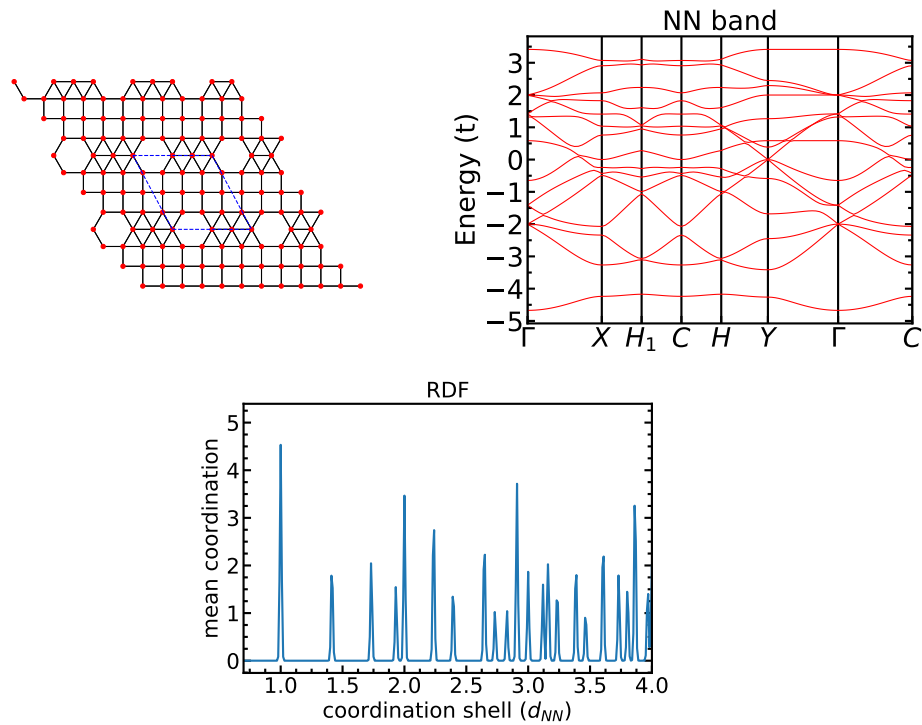


FIG. S125. t5125 lattice framework, nearest neighbors band structure and radial distribution function.

t5126

Tiling reference number t5126 with space-group ' $Cmmm$ ' (65) and 13 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 t5126 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	2	0	0	4	4

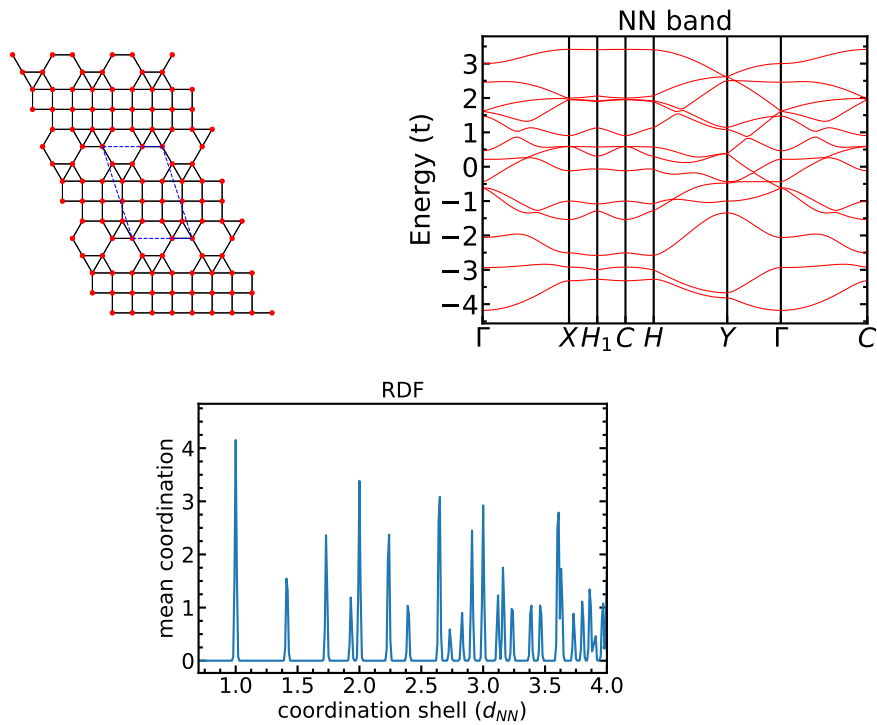


FIG. S126. t5126 lattice framework, nearest neighbors band structure and radial distribution function.

t5127

Tiling reference number t5127 with space-group ' $Pmmm$ ' (47) and 11 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 t5127 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

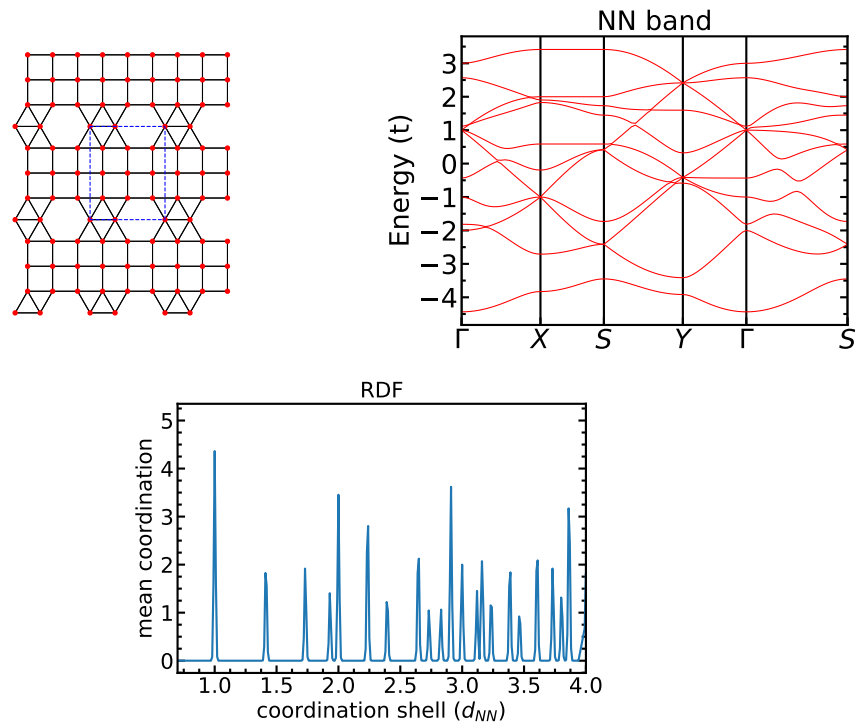


FIG. S127. t5127 lattice framework, nearest neighbors band structure and radial distribution function.

t5128

Tiling reference number t5128 with space-group ' $Amm2'$ ' (38) and 36 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 t5128 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	6	6	6	0	0	12	0

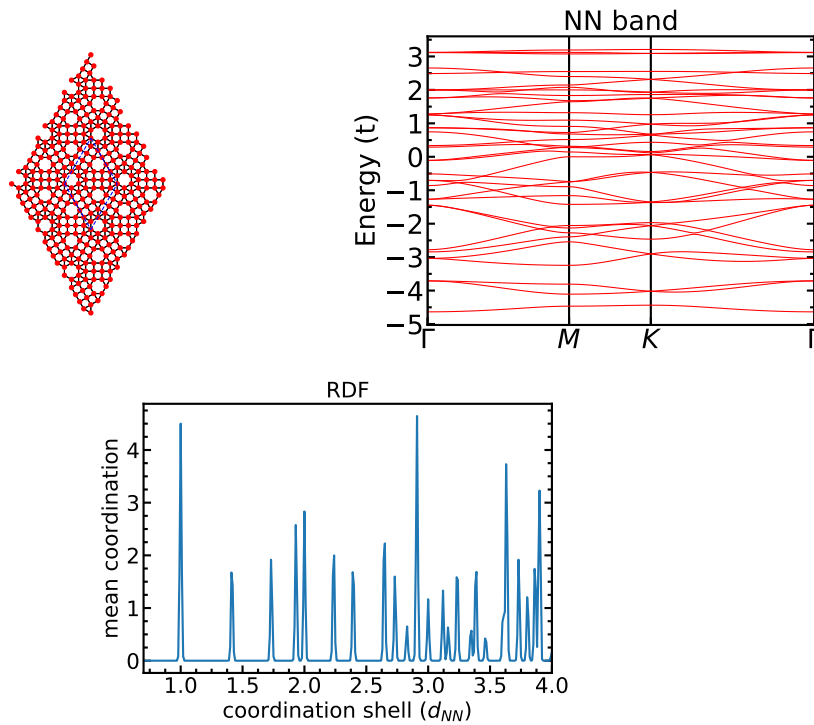


FIG. S128. t5128 lattice framework, nearest neighbors band structure and radial distribution function.

t5129

Tiling reference number t5129 with space-group ' $Pmm2'$ ' (25) and 9 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 t5129 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	8	0	0	0	0

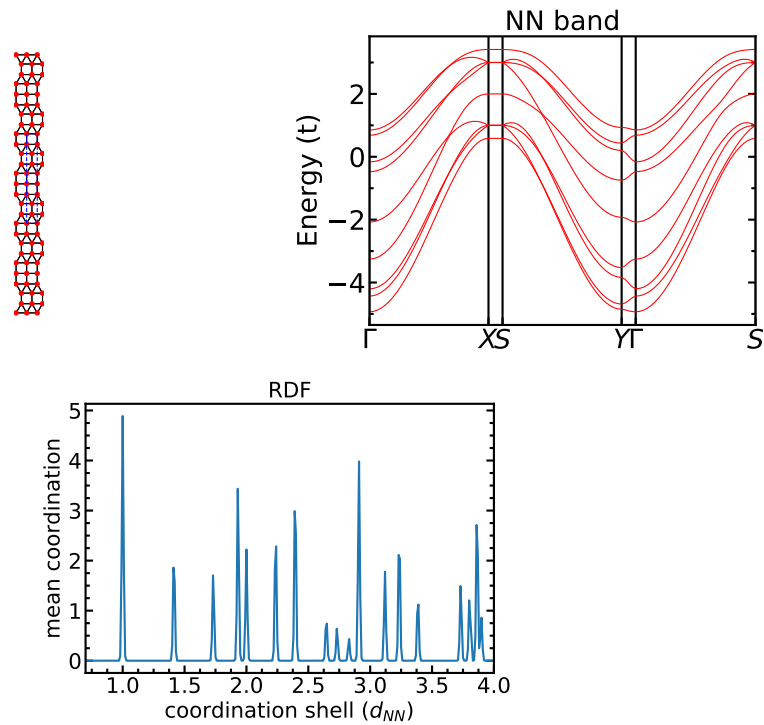


FIG. S129. t5129 lattice framework, nearest neighbors band structure and radial distribution function.

t5130

Tiling reference number t5130 with space-group ' $Pmm2'$ ' (25) and 8 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 t5130 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	6	0	0	0	0

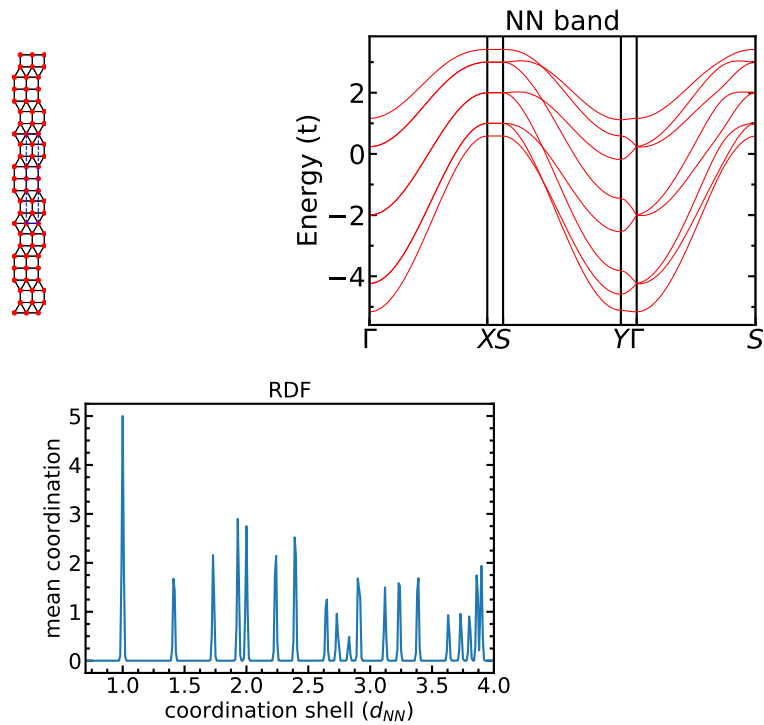


FIG. S130. t5130 lattice framework, nearest neighbors band structure and radial distribution function.

t5131

Tiling reference number t5131 with space-group ' $Amm2'$ ' (38) and 9 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 t5131 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	6	0	0	0	0

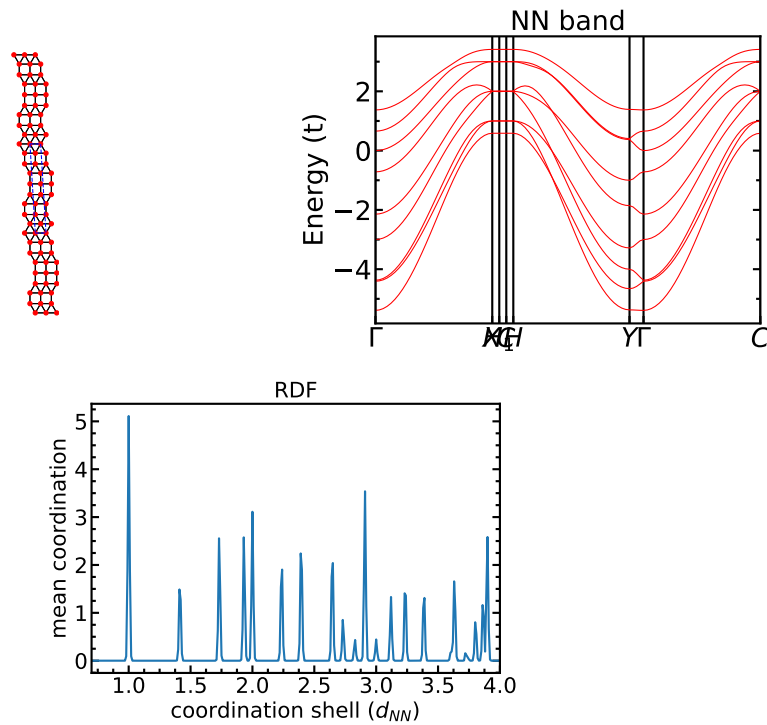


FIG. S131. t5131 lattice framework, nearest neighbors band structure and radial distribution function.

t5132

Tiling reference number t5132 with space-group ' $Amm2'$ ' (38) and 9 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 t5132 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	6	0	0	0	0

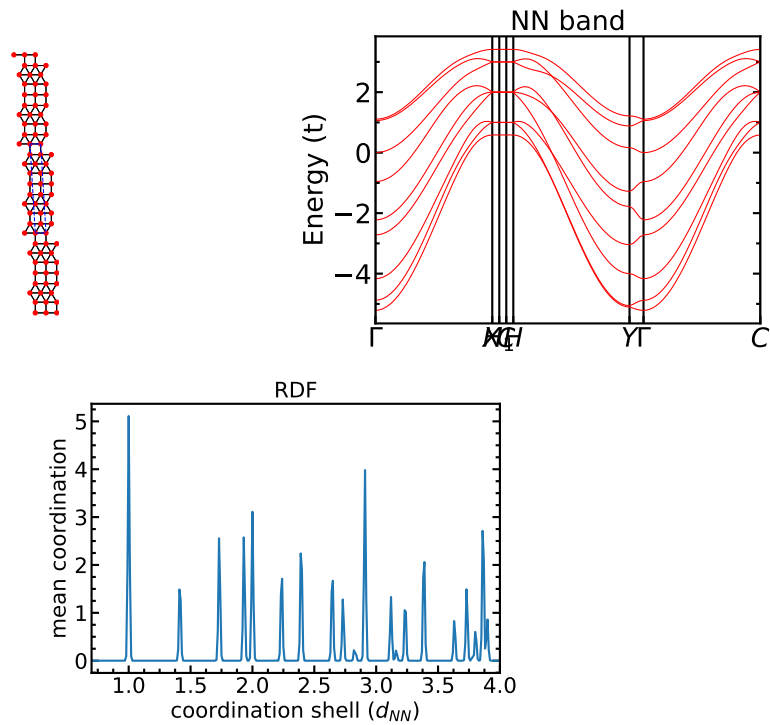


FIG. S132. t5132 lattice framework, nearest neighbors band structure and radial distribution function.

t5133

Tiling reference number t5133 with space-group ' $Pmm2'$ ' (25) and 9 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 t5133 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	4	0	0	0	0

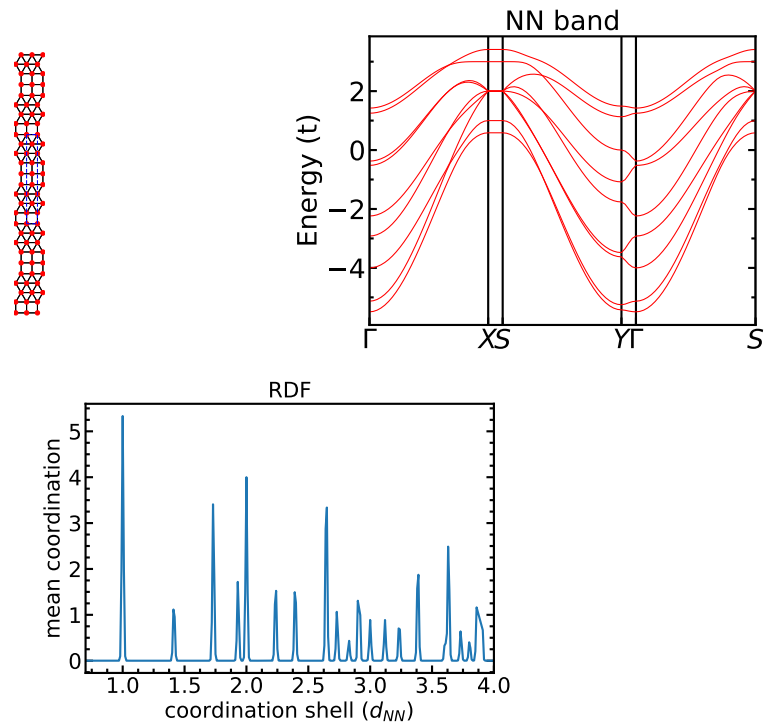


FIG. S133. t5133 lattice framework, nearest neighbors band structure and radial distribution function.

t5134

Tiling reference number t5134 with space-group ' $Pmmm'$ ' (47) and 8 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 t5134 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	1	0	0	0	0	0	0	0	0	2	0	0	0	0

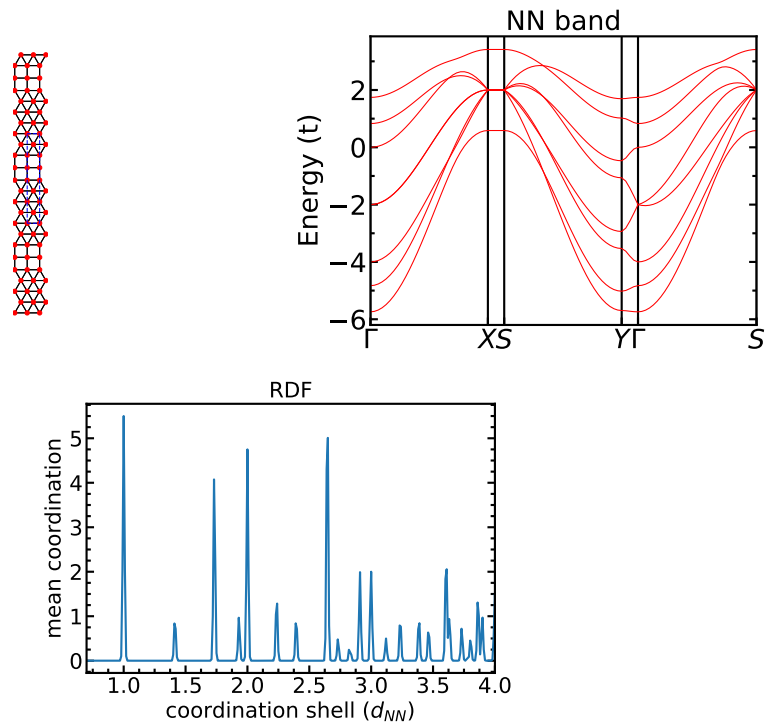


FIG. S134. t5134 lattice framework, nearest neighbors band structure and radial distribution function.

t5135

Tiling reference number t5135 with space-group ' $Amm2'$ ' (38) and 9 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 t5135 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	2	0	0	0	0

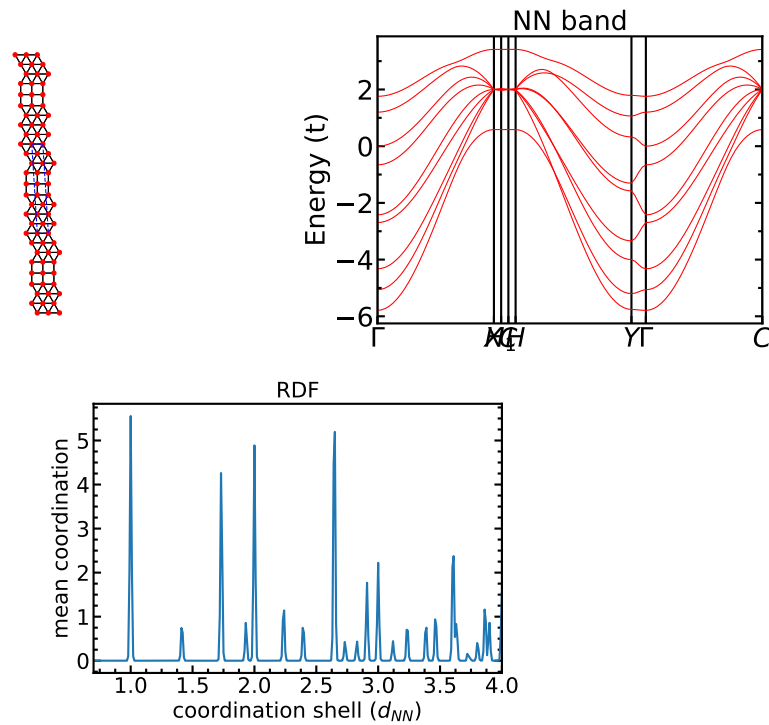


FIG. S135. t5135 lattice framework, nearest neighbors band structure and radial distribution function.

t5136

Tiling reference number t5136 with space-group ' $Pmma'$ (51) and 10 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 t5136 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	8	0	0	0	0

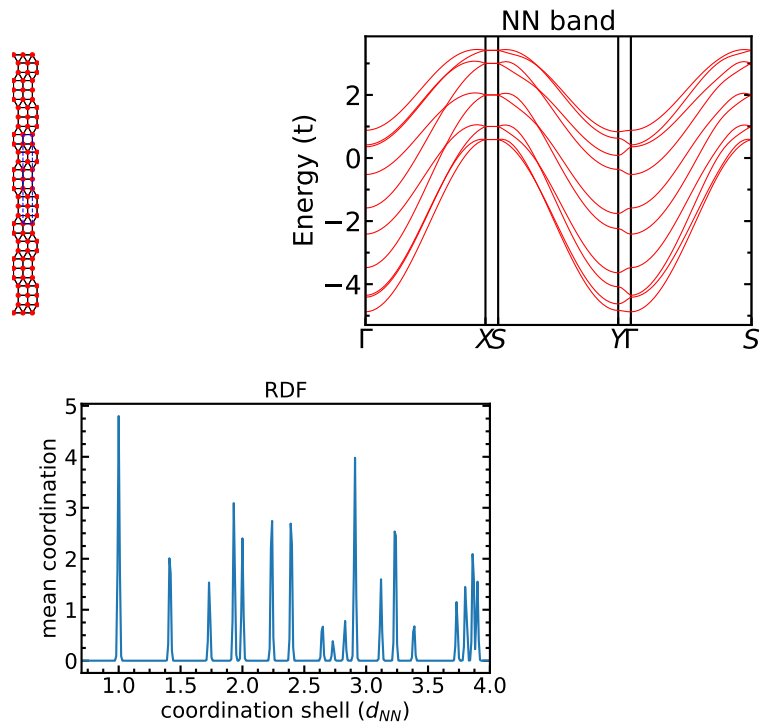


FIG. S136. t5136 lattice framework, nearest neighbors band structure and radial distribution function.

t5137

Tiling reference number t5137 with space-group ' $Cmmm$ ' (65) and 10 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 t5137 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	6	0	0	0	0

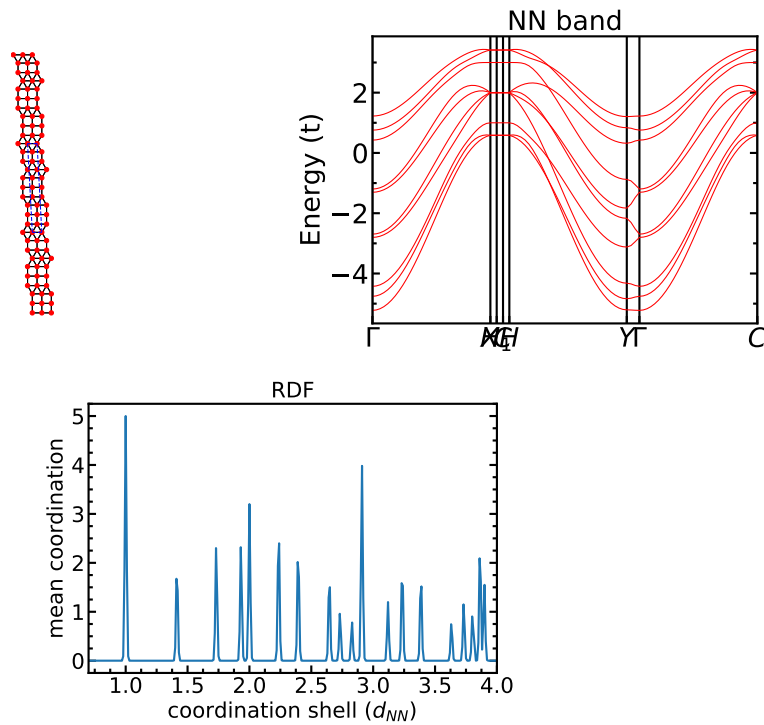


FIG. S137. t5137 lattice framework, nearest neighbors band structure and radial distribution function.

t5138

Tiling reference number t5138 with space-group ' $Cmmm$ ' (65) and 9 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 t5138 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	4	0	0	0	0

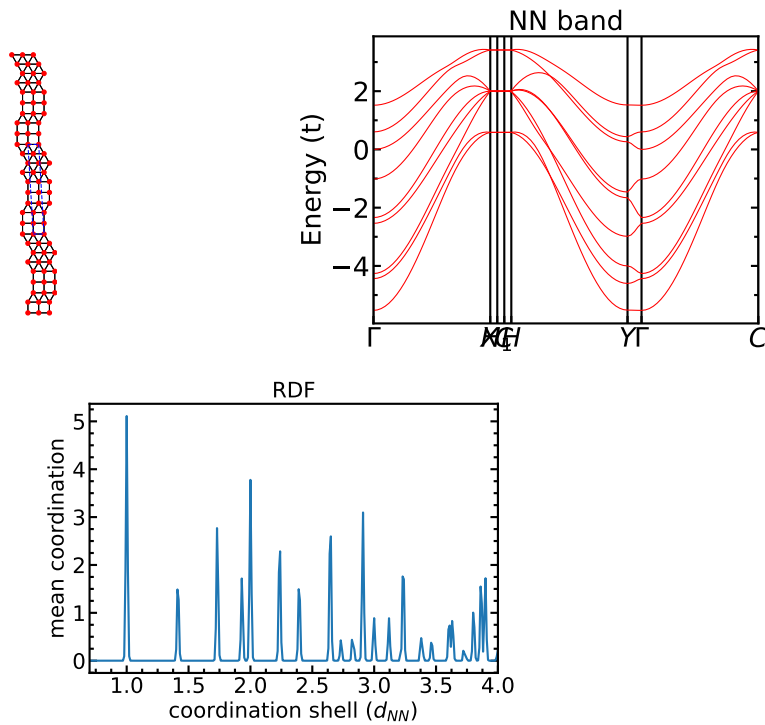


FIG. S138. t5138 lattice framework, nearest neighbors band structure and radial distribution function.

t5139

Tiling reference number t5139 with space-group ' $Pmma'$ ' (51) and 10 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 t5139 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

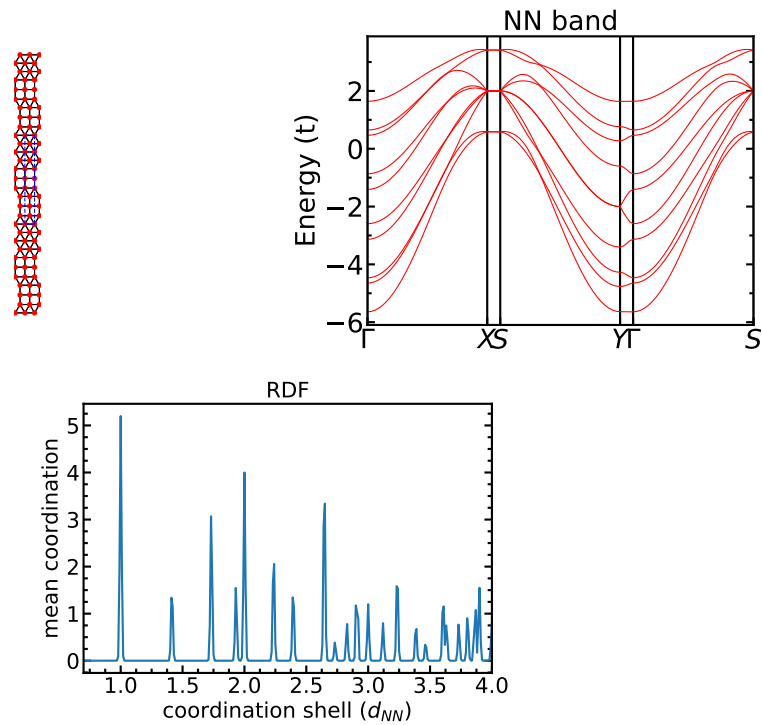


FIG. S139. t5139 lattice framework, nearest neighbors band structure and radial distribution function.

t5140

Tiling reference number t5140 with space-group ' $Pmm2'$ ' (25) and 9 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 t5140 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	6	0	0	0	0

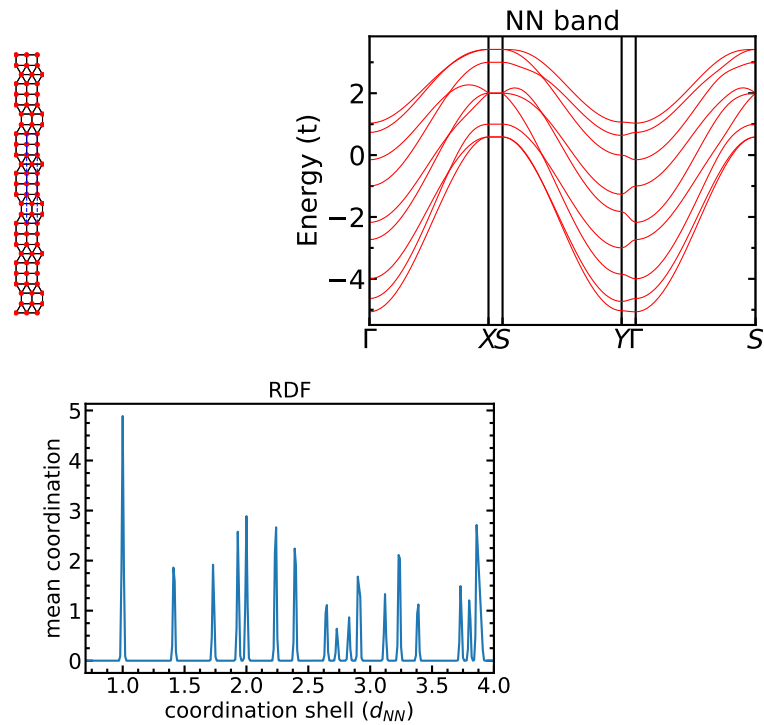


FIG. S140. t5140 lattice framework, nearest neighbors band structure and radial distribution function.

t5141

Tiling reference number t5141 with space-group ' $Amm2'$ ' (38) and 10 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 t5141 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	6	0	0	0	0

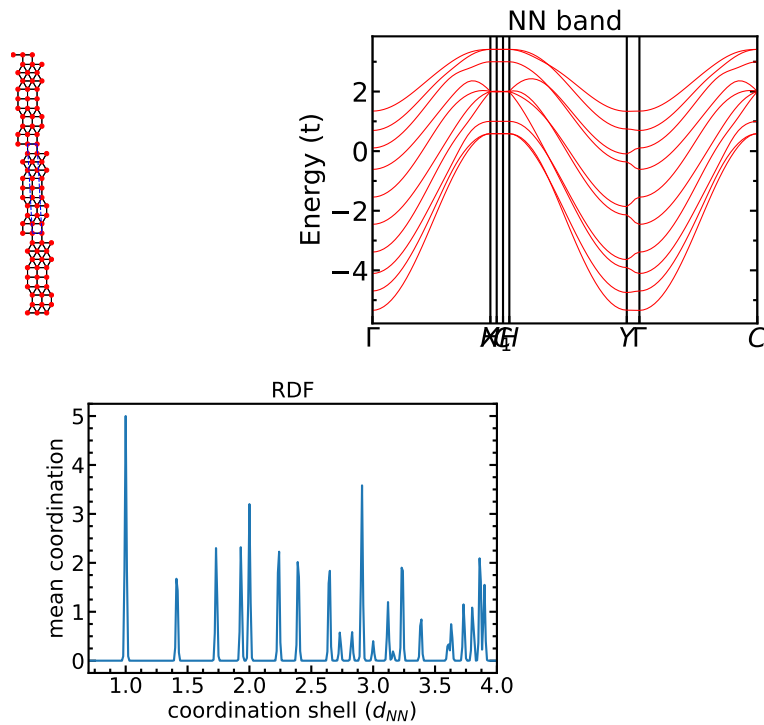


FIG. S141. t5141 lattice framework, nearest neighbors band structure and radial distribution function.

t5142

Tiling reference number t5142 with space-group ' $Amm2'$ ' (38) and 9 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 t5142 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	4	0	0	0	0

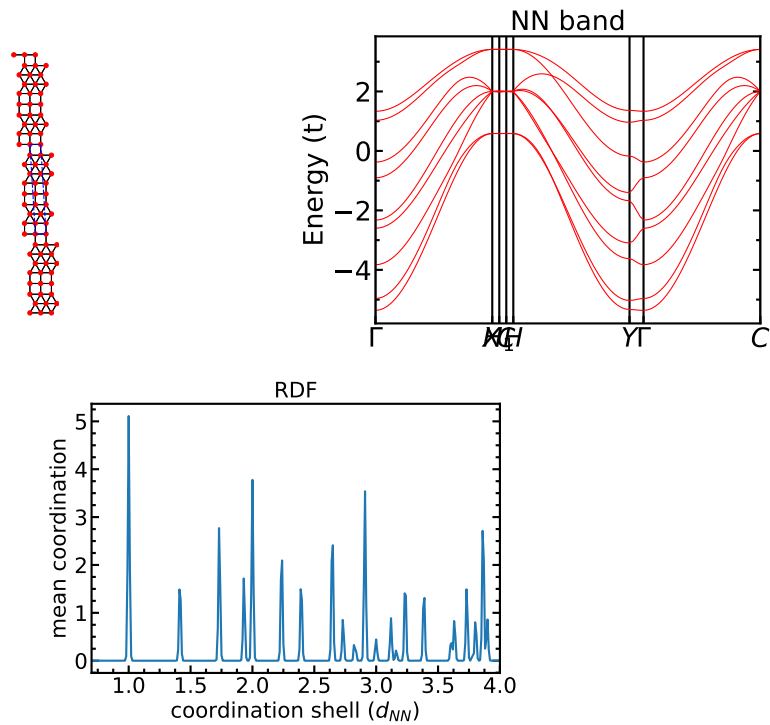


FIG. S142. t5142 lattice framework, nearest neighbors band structure and radial distribution function.

t5143

Tiling reference number t5143 with space-group ' $Cmmm$ ' (65) and 11 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 t5143 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

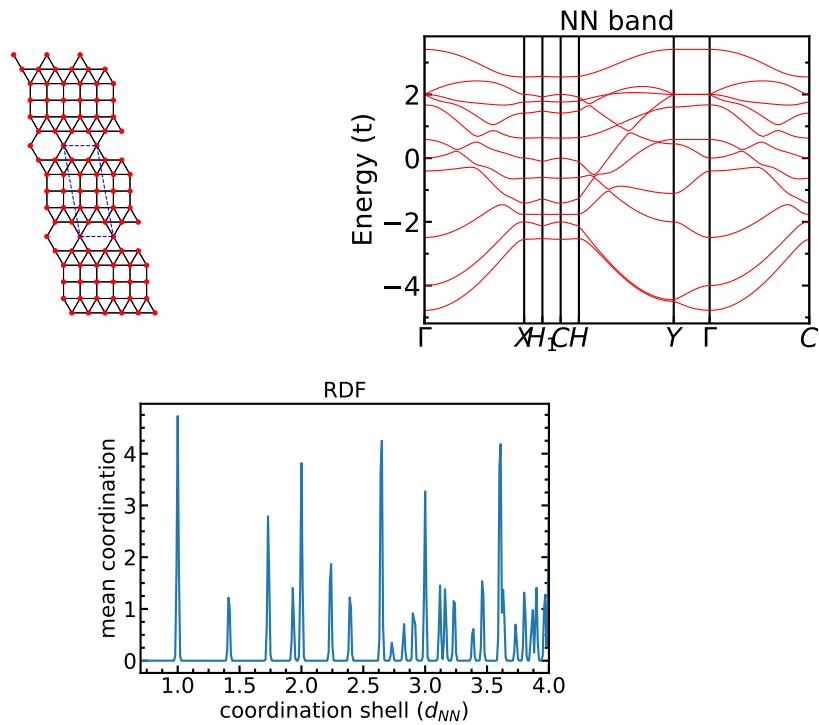


FIG. S143. t5143 lattice framework, nearest neighbors band structure and radial distribution function.

t5144

Tiling reference number t5144 with space-group ' Pm' ' (6) and 30 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 t5144 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	9	15	0	0	0	0

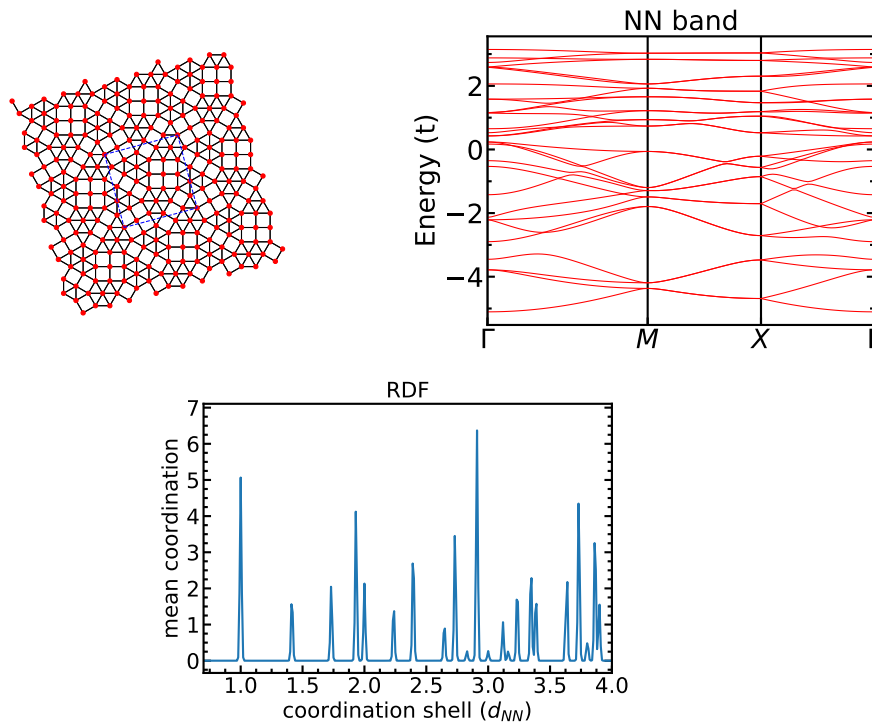


FIG. S144. t5144 lattice framework, nearest neighbors band structure and radial distribution function.

t5145

Tiling reference number t5145 with space-group ' Pm' ' (6) and 27 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 t5145 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	6	6	12	0	0	0	0

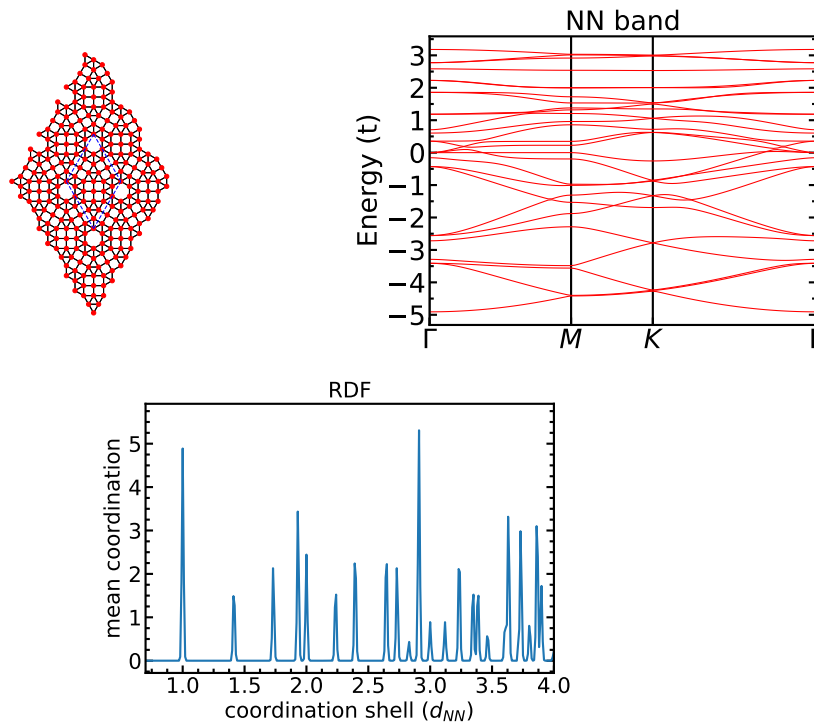


FIG. S145. t5145 lattice framework, nearest neighbors band structure and radial distribution function.

t5146

Tiling reference number t5146 with space-group ' $Amm2'$ ' (38) 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 t5146 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	0	6	0	0	6	0

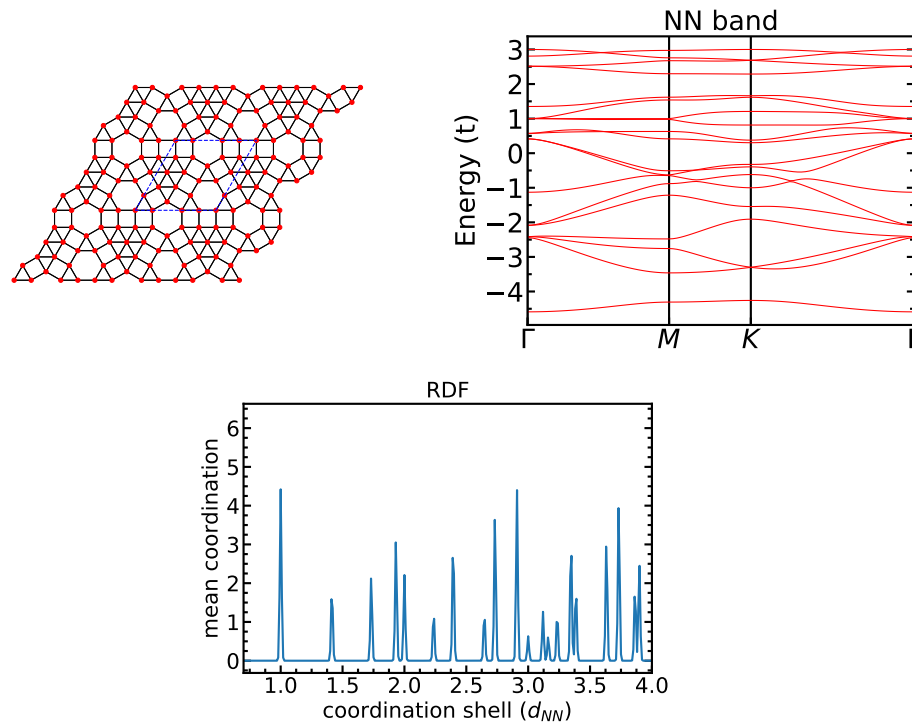


FIG. S146. t5146 lattice framework, nearest neighbors band structure and radial distribution function.

t5147

Tiling reference number t5147 with space-group ' Pm' ' (6) and 48 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 t5147 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	0	6	0	0	24	12

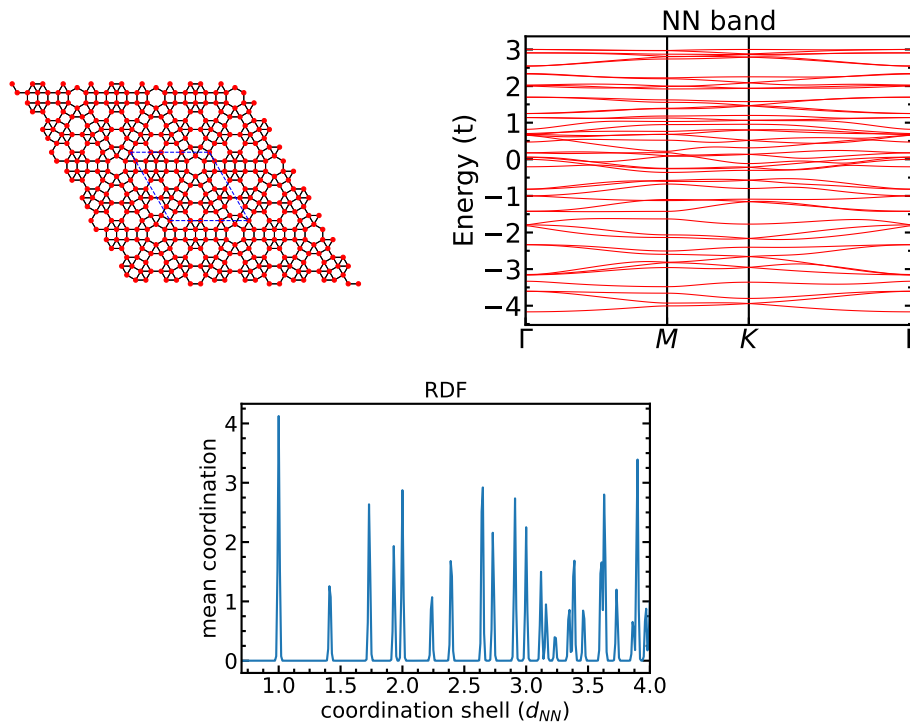


FIG. S147. t5147 lattice framework, nearest neighbors band structure and radial distribution function.

t5148

Tiling reference number t5148 with space-group ' Pm' ' (6) and 42 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 t5148 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	0	0	0	24	6

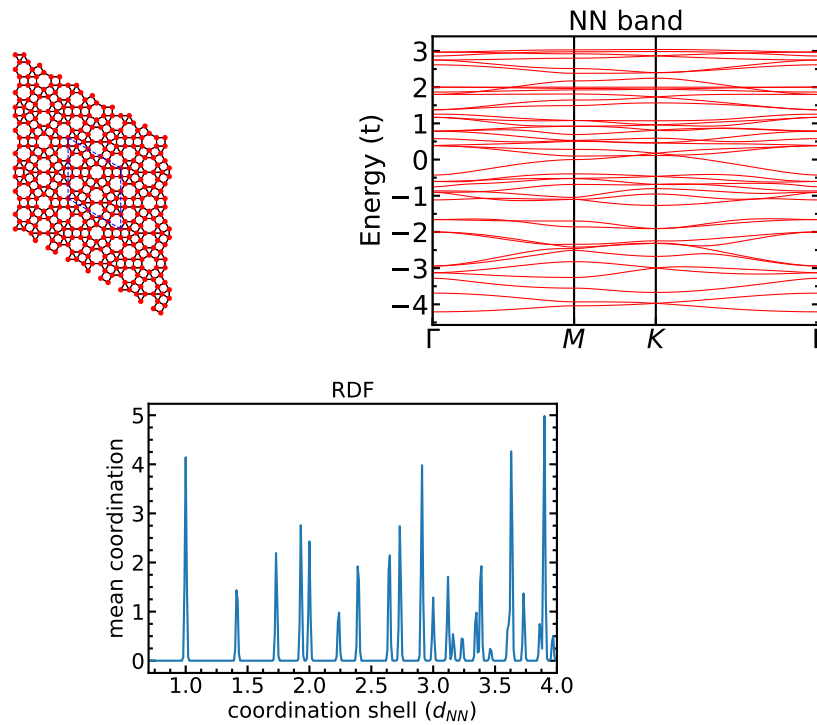


FIG. S148. t5148 lattice framework, nearest neighbors band structure and radial distribution function.

t5149

Tiling reference number t5149 with space-group ' $Amm2'$ ' (38) and 37 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 t5149 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	0	6	0	0	0	24	0

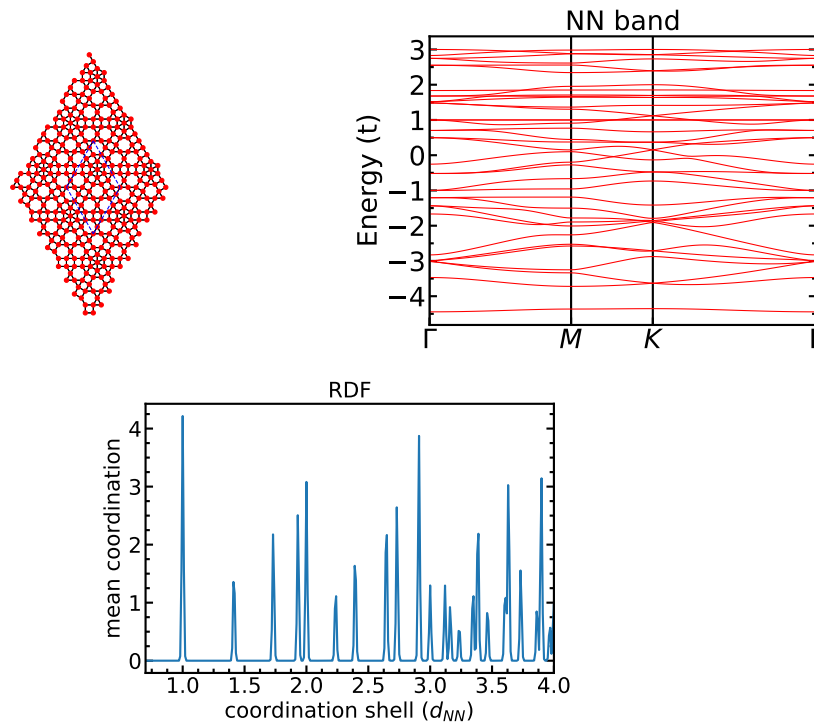


FIG. S149. t5149 lattice framework, nearest neighbors band structure and radial distribution function.

t5150

Tiling reference number t5150 with space-group ' $Cmmm$ ' (65) and 14 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 t5150 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	0	0	0	8	2

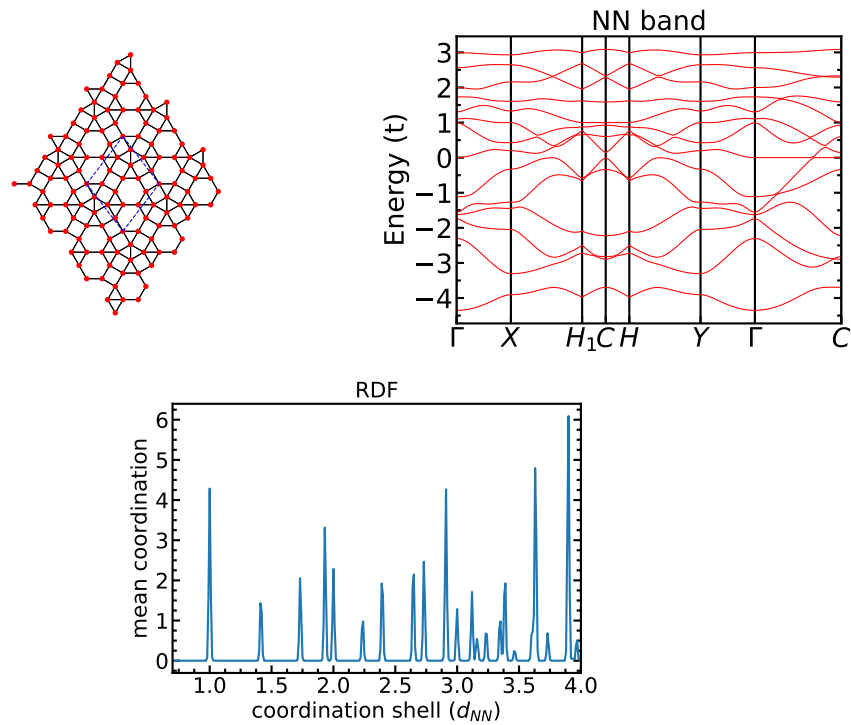


FIG. S150. t5150 lattice framework, nearest neighbors band structure and radial distribution function.

t5151

Tiling reference number t5151 with space-group ' Pm' ' (6) and 54 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 t5151 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	30	0	0	0	0	0	0	24	0

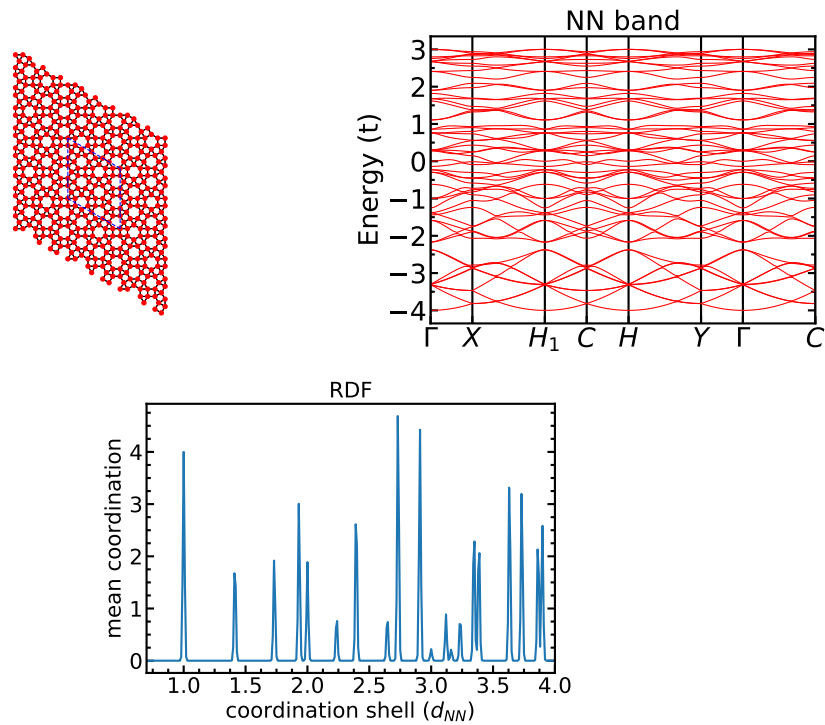


FIG. S151. t5151 lattice framework, nearest neighbors band structure and radial distribution function.

t5152

Tiling reference number t5152 with space-group ' $P2/m'$ ' (10) and 18 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 t5152 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	0	4	2	0	0	8	0

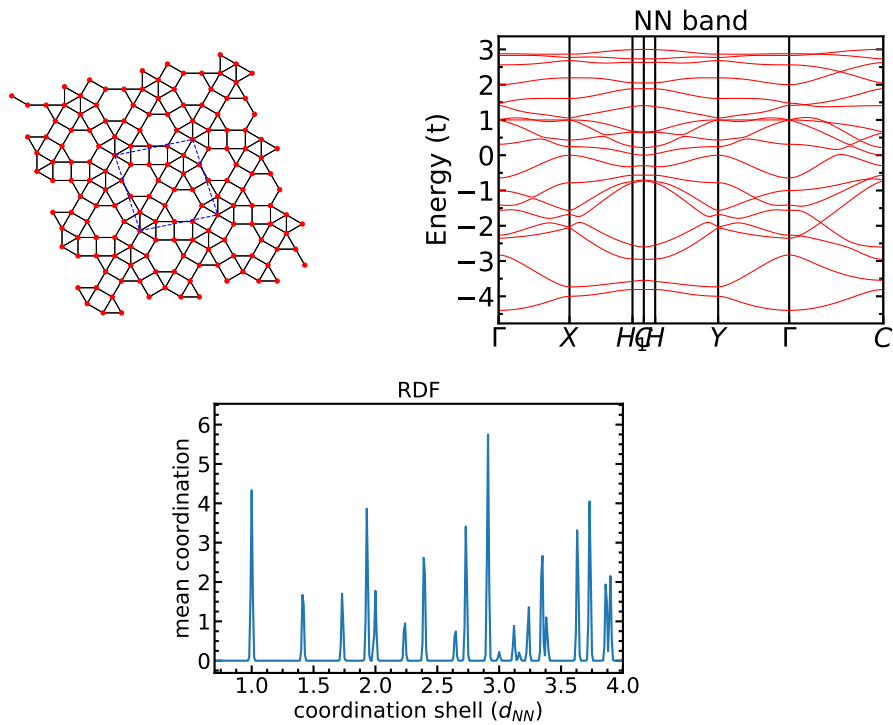


FIG. S152. t5152 lattice framework, nearest neighbors band structure and radial distribution function.

t5153

Tiling reference number t5153 with space-group ' $P2/m'$ ' (10) and 31 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 t5153 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	0	0	0	12	12

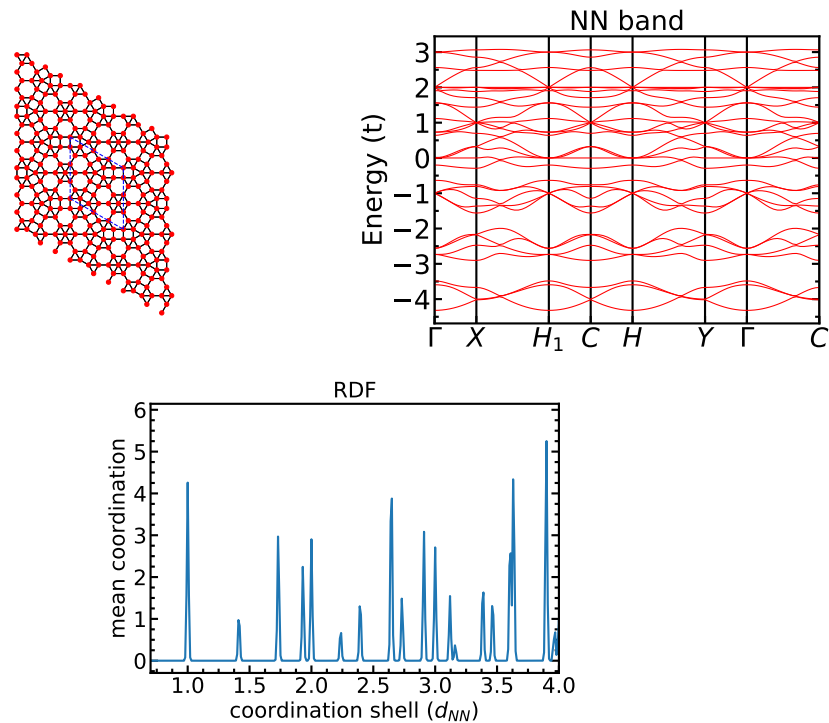


FIG. S153. t5153 lattice framework, nearest neighbors band structure and radial distribution function.

t5154

Tiling reference number t5154 with space-group ' $Pmm2'$ ' (25) and 16 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 t5154 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	0	8	0	0	4	4

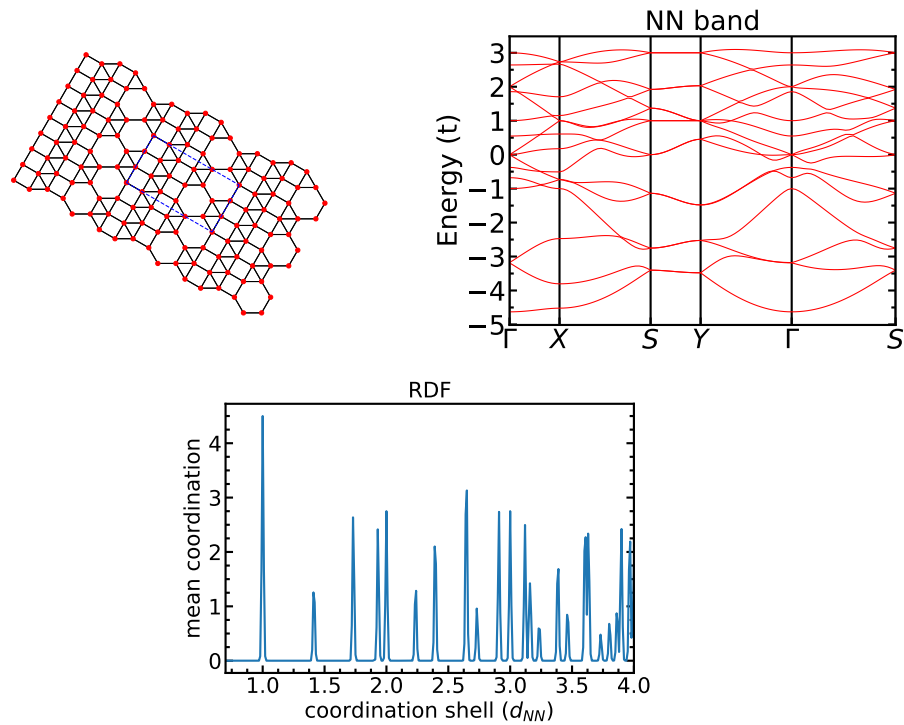


FIG. S154. t5154 lattice framework, nearest neighbors band structure and radial distribution function.

t5155

Tiling reference number t5155 with space-group ' $P2/m'$ ' (10) and 10 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 t5155 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	0	2	0	0	4	4

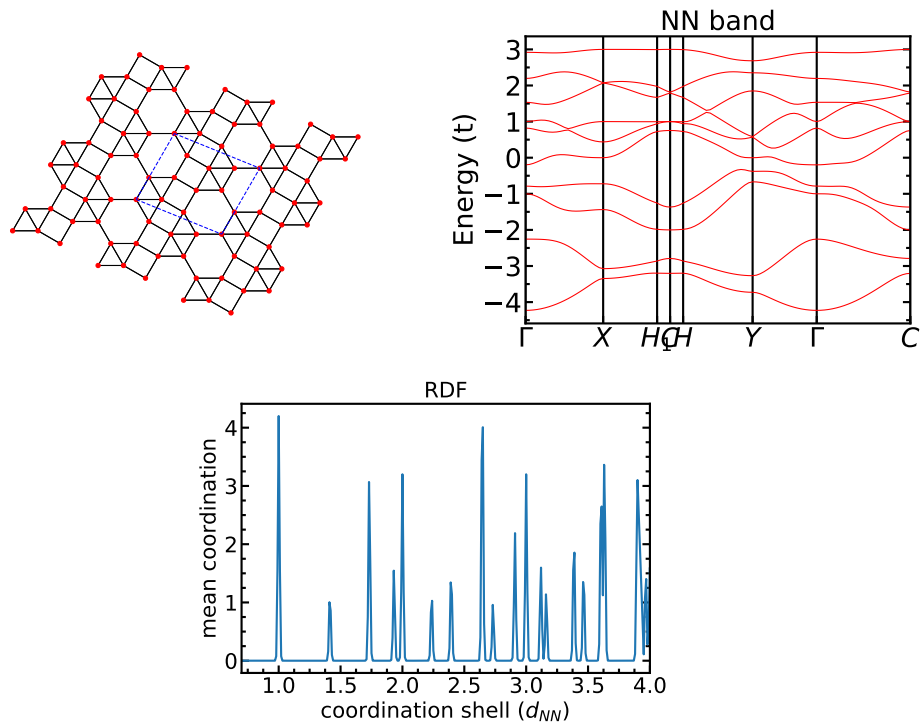


FIG. S155. t5155 lattice framework, nearest neighbors band structure and radial distribution function.

t5156

Tiling reference number t5156 with space-group ' $P2/m'$ ' (10) and 20 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 t5156 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	0	4	0	0	8	8

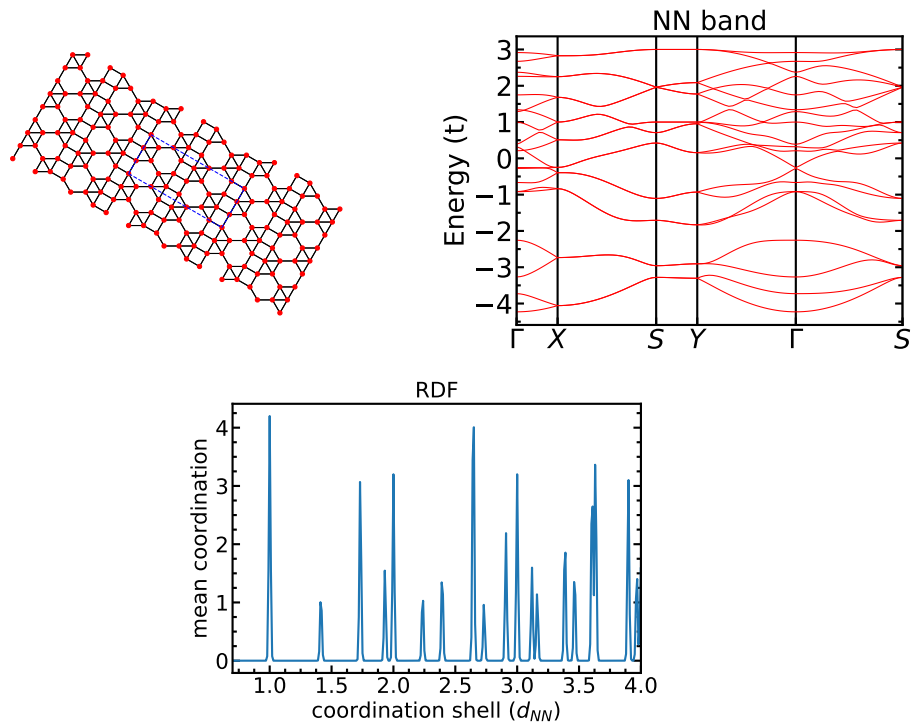


FIG. S156. t5156 lattice framework, nearest neighbors band structure and radial distribution function.

t5157

Tiling reference number t5157 with space-group ' Pm' ' (6) and 48 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 t5157 vertex types

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

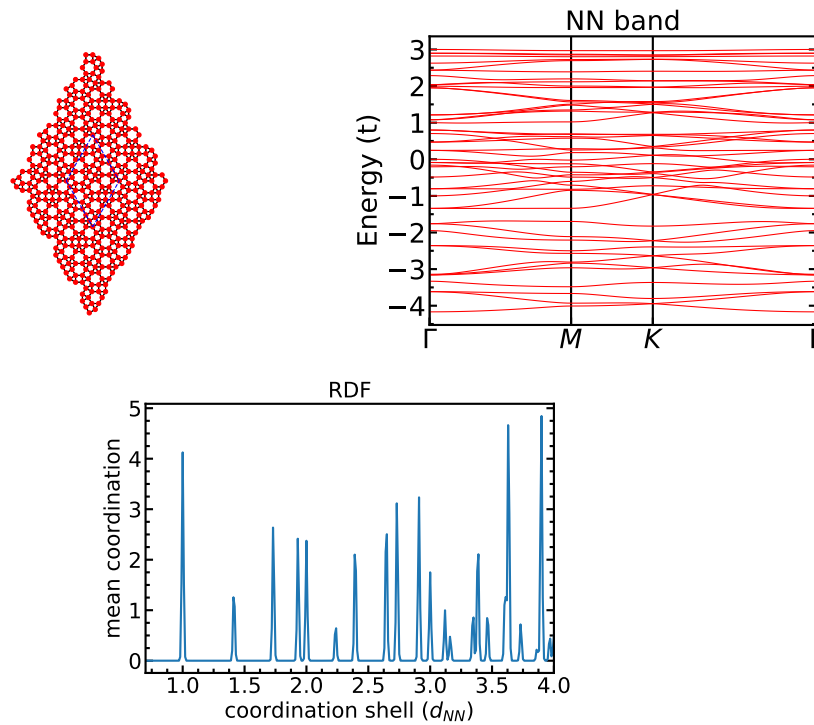


FIG. S157. t5157 lattice framework, nearest neighbors band structure and radial distribution function.

t5158

Tiling reference number t5158 with space-group ' Pm' ' (6) and 42 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 t5158 vertex types

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

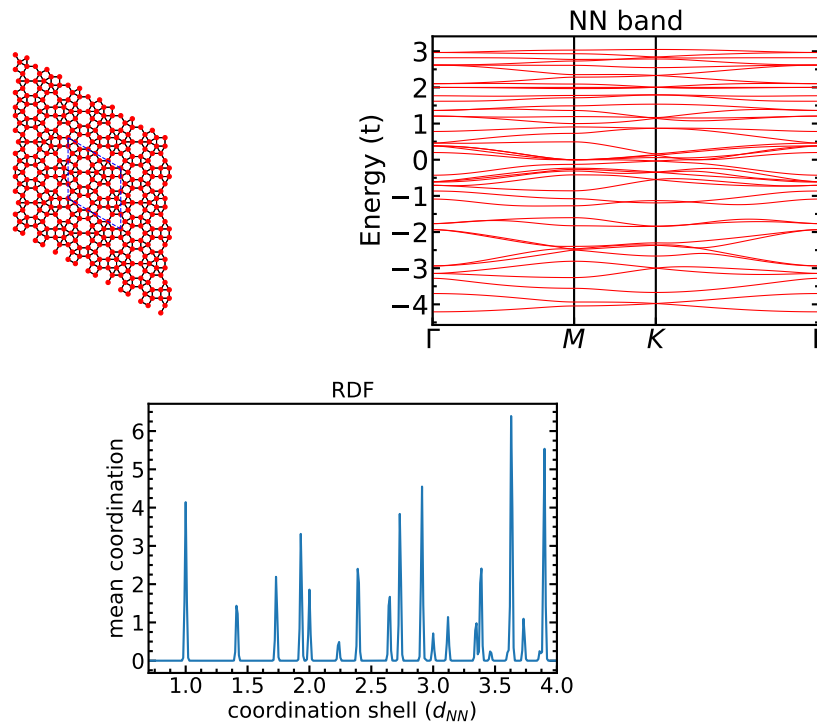


FIG. S158. t5158 lattice framework, nearest neighbors band structure and radial distribution function.

t5159

Tiling reference number t5159 with space-group ' $Amm2'$ ' (38) and 15 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 t5159 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	0	0	0	0	0	12	0

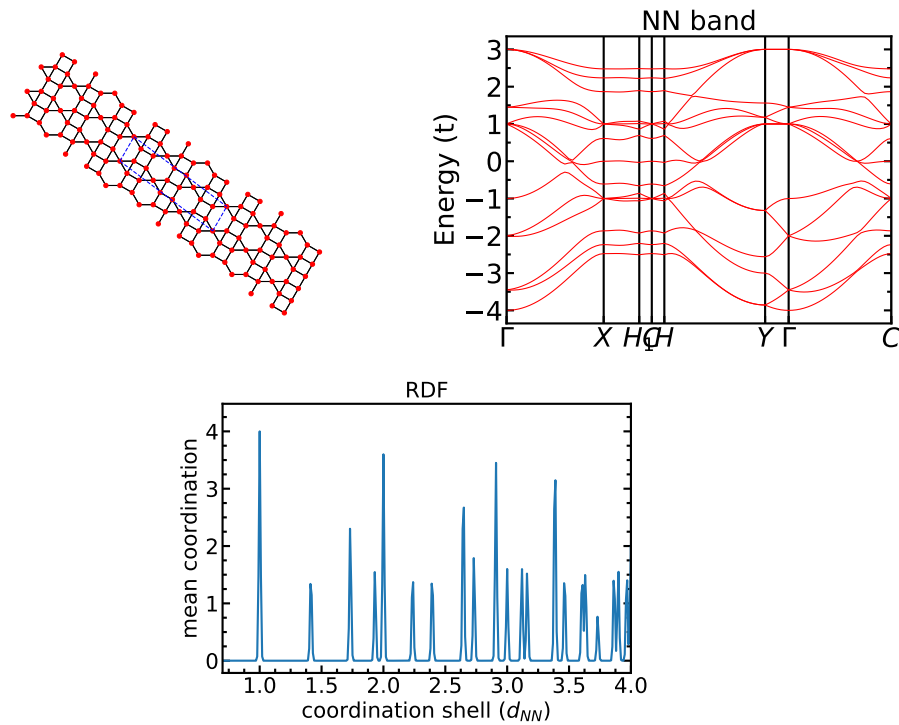


FIG. S159. t5159 lattice framework, nearest neighbors band structure and radial distribution function.

t5160

Tiling reference number t5160 with space-group $'Pmc2'_1$ (26) and 16 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 t5160 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

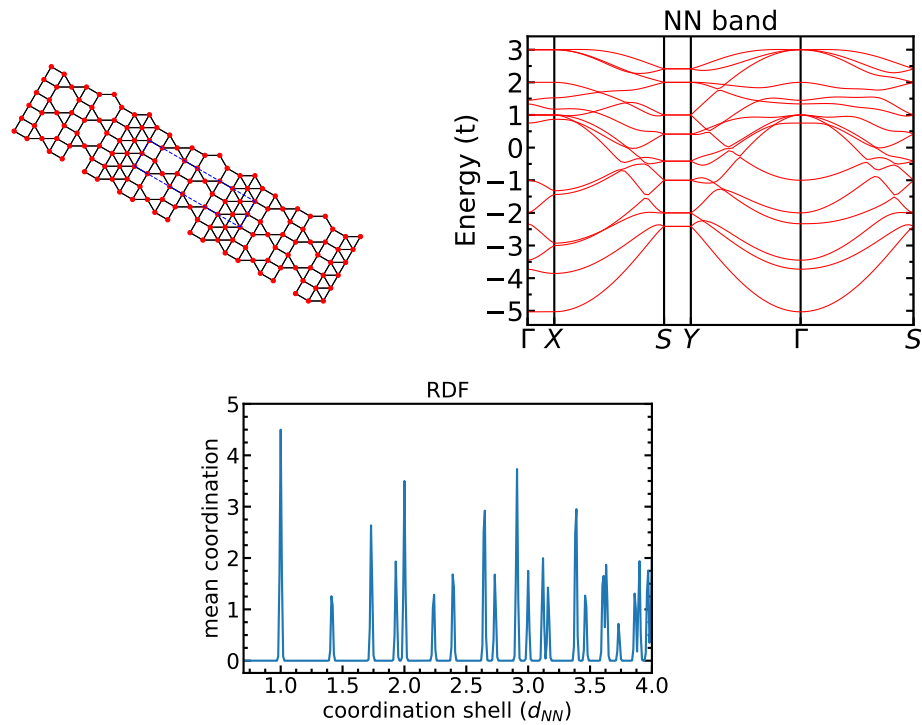


FIG. S160. t5160 lattice framework, nearest neighbors band structure and radial distribution function.

t5161

Tiling reference number t5161 with space-group ' $P2/m'$ ' (10) and 16 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 t5161 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

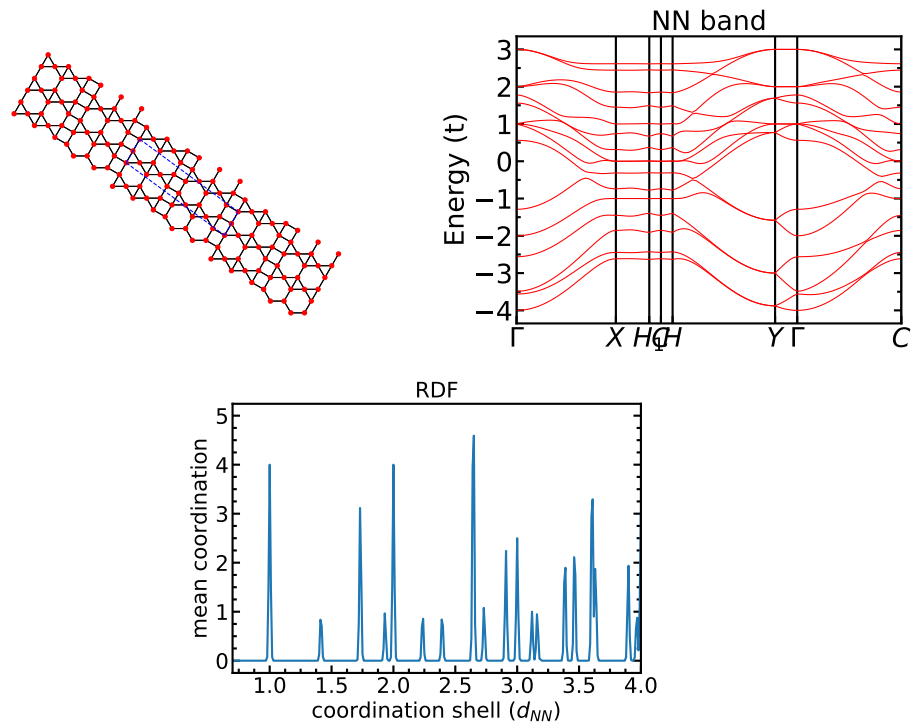


FIG. S161. t5161 lattice framework, nearest neighbors band structure and radial distribution function.

t5162

Tiling reference number t5162 with space-group ' $P2/m'$ ' (10) and 14 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 t5162 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	4	6

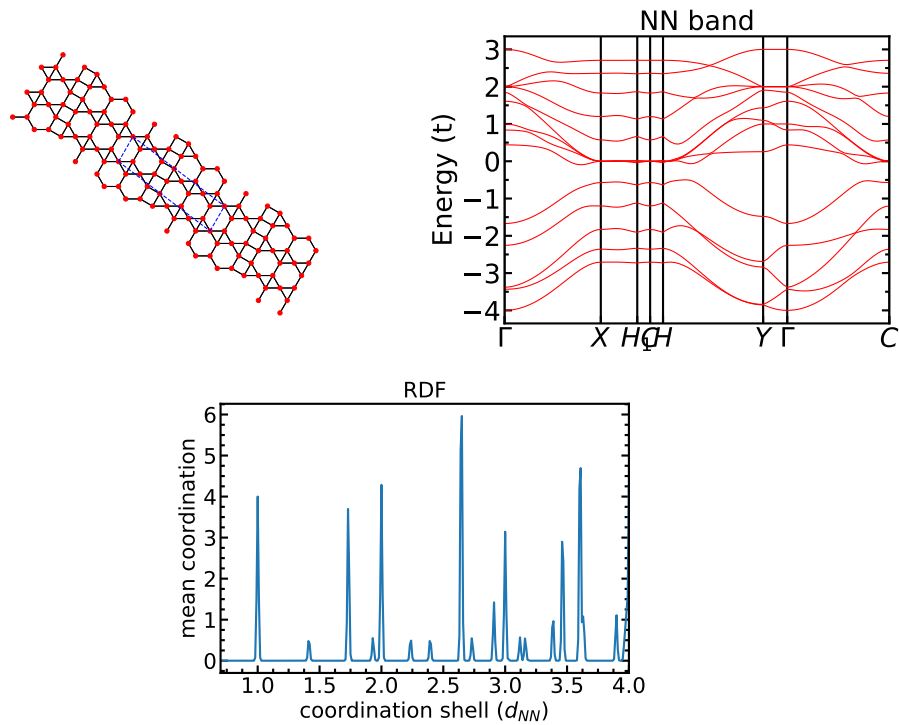


FIG. S162. t5162 lattice framework, nearest neighbors band structure and radial distribution function.

t5163

Tiling reference number t5163 with space-group ' $Pmma$ ' (51) and 14 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 t5163 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	4	4

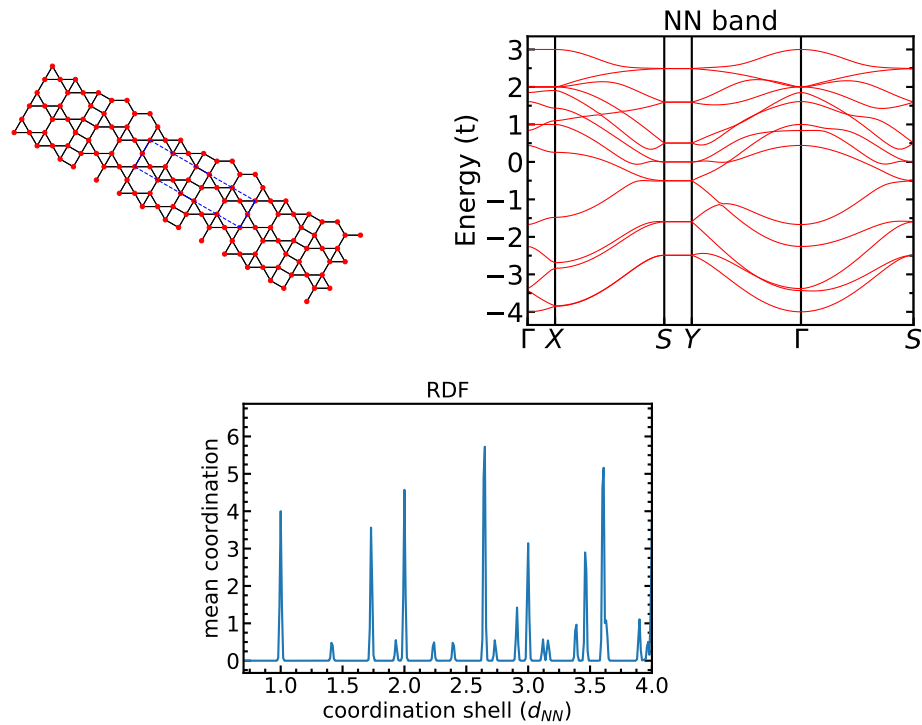


FIG. S163. t5163 lattice framework, nearest neighbors band structure and radial distribution function.

t5164

Tiling reference number t5164 with space-group ' $P2/m'$ ' (10) and 16 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 t5164 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

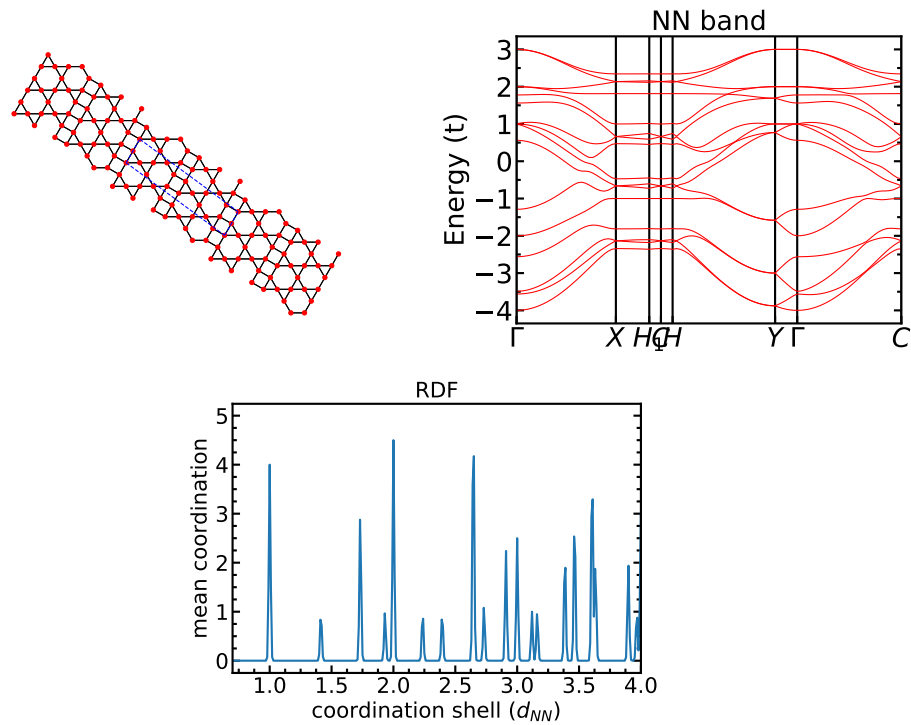


FIG. S164. t5164 lattice framework, nearest neighbors band structure and radial distribution function.

t5165

Tiling reference number t5165 with space-group ' $Cmmm$ ' (65) and 14 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 t5165 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	4	2

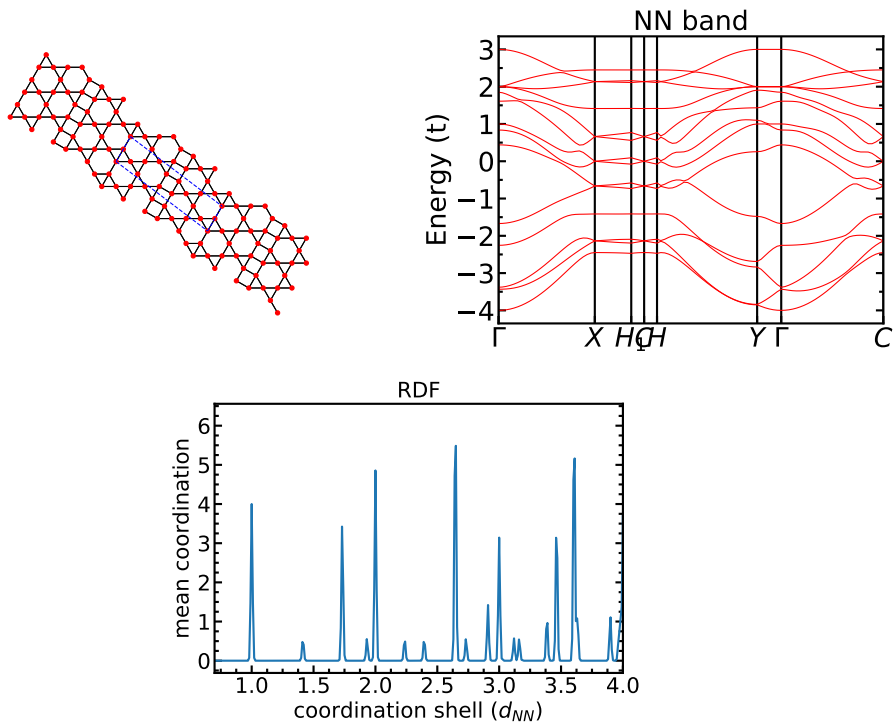


FIG. S165. t5165 lattice framework, nearest neighbors band structure and radial distribution function.

t5166

Tiling reference number t5166 with space-group ' $Pmma$ ' (51) and 14 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 t5166 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	0	0	0	0	0	4	0

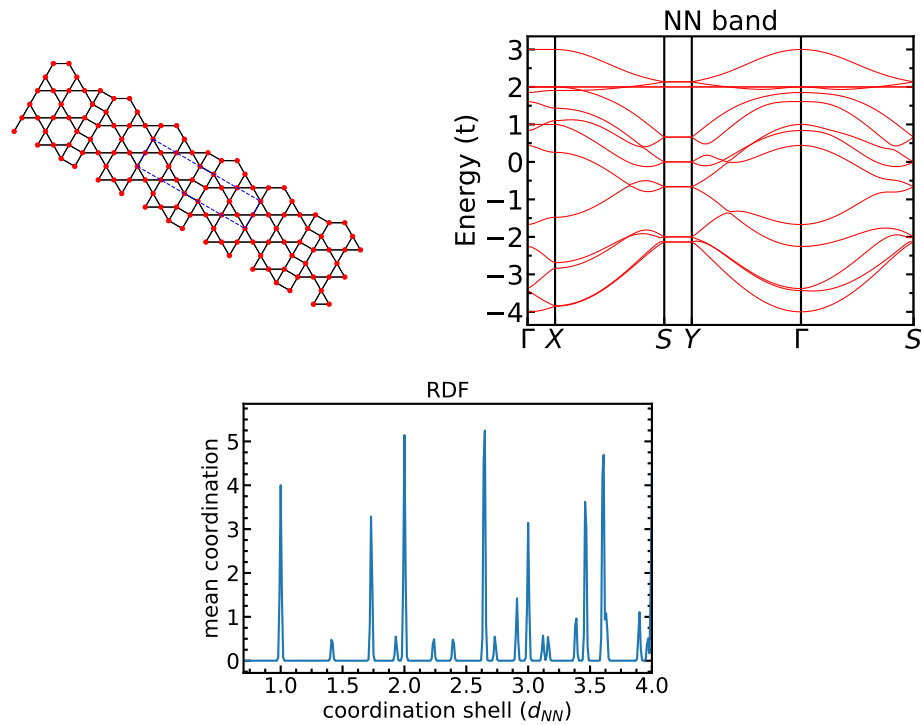


FIG. S166. t5166 lattice framework, nearest neighbors band structure and radial distribution function.

t5167

Tiling reference number t5167 with space-group ' $P2/m'$ ' (10) and 14 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 t5167 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	4	0	4	0	0	4	0

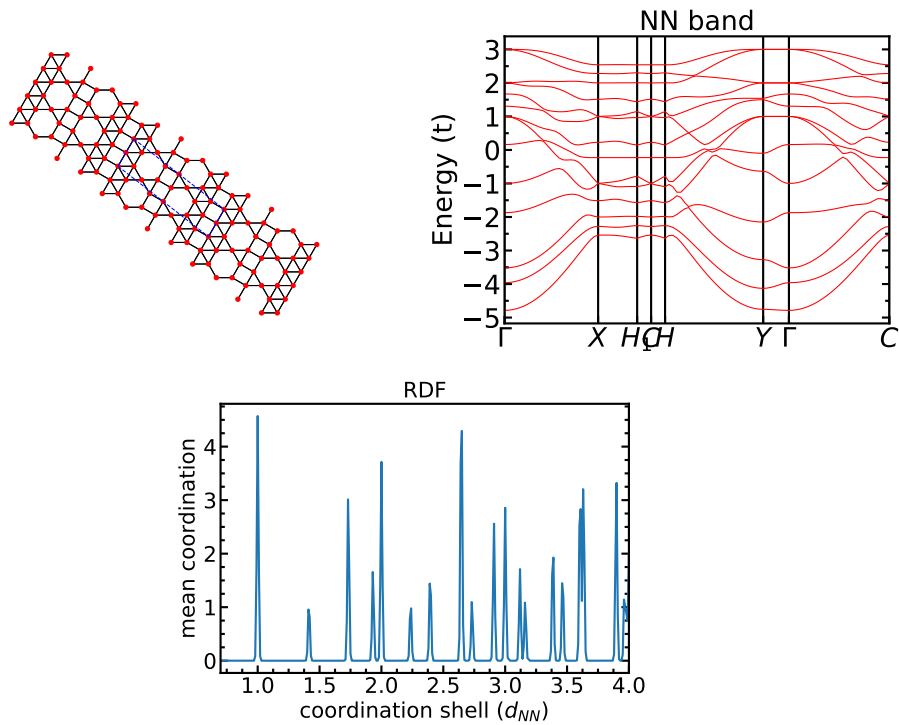


FIG. S167. t5167 lattice framework, nearest neighbors band structure and radial distribution function.

t5168

Tiling reference number t5168 with space-group ' $P2/m'$ ' (10) and 14 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 t5168 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	4	0	4	0	0	4	0

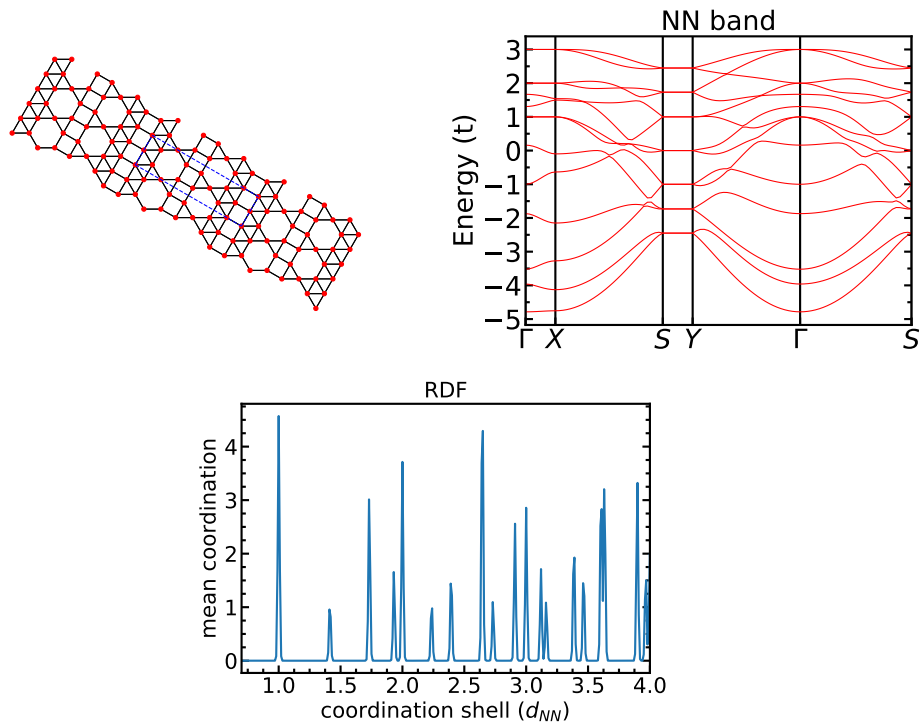


FIG. S168. t5168 lattice framework, nearest neighbors band structure and radial distribution function.

t5169

Tiling reference number t5169 with space-group ' $Cmmm$ ' (65) and 12 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 t5169 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	4	0	0	0	0	4	0

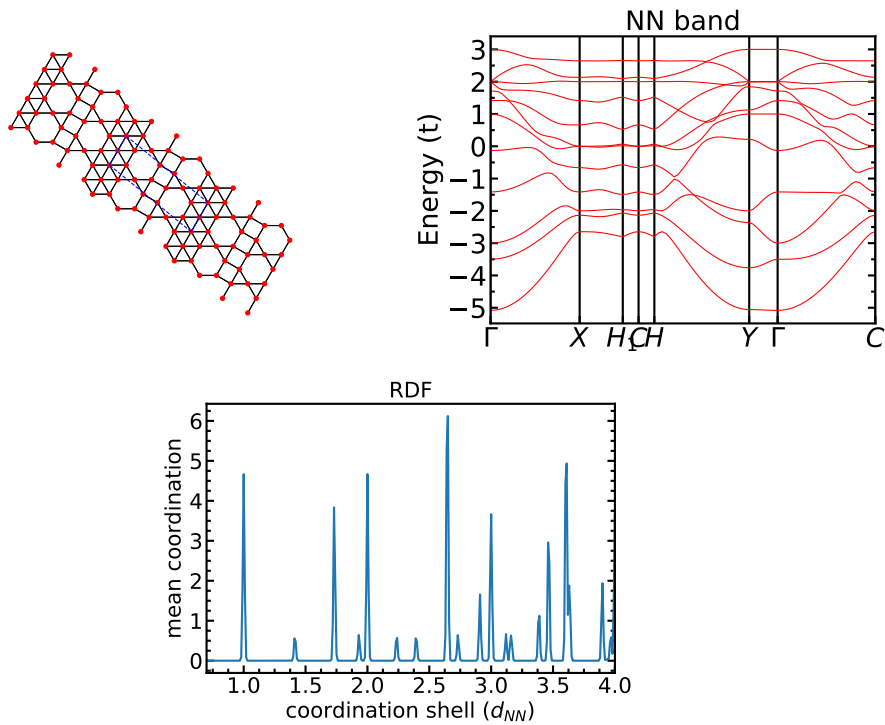


FIG. S169. t5169 lattice framework, nearest neighbors band structure and radial distribution function.

t5170

Tiling reference number t5170 with space-group ' $Pmm2$ ' (25) and 15 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 t5170 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	0	0	0	0	0	12	0

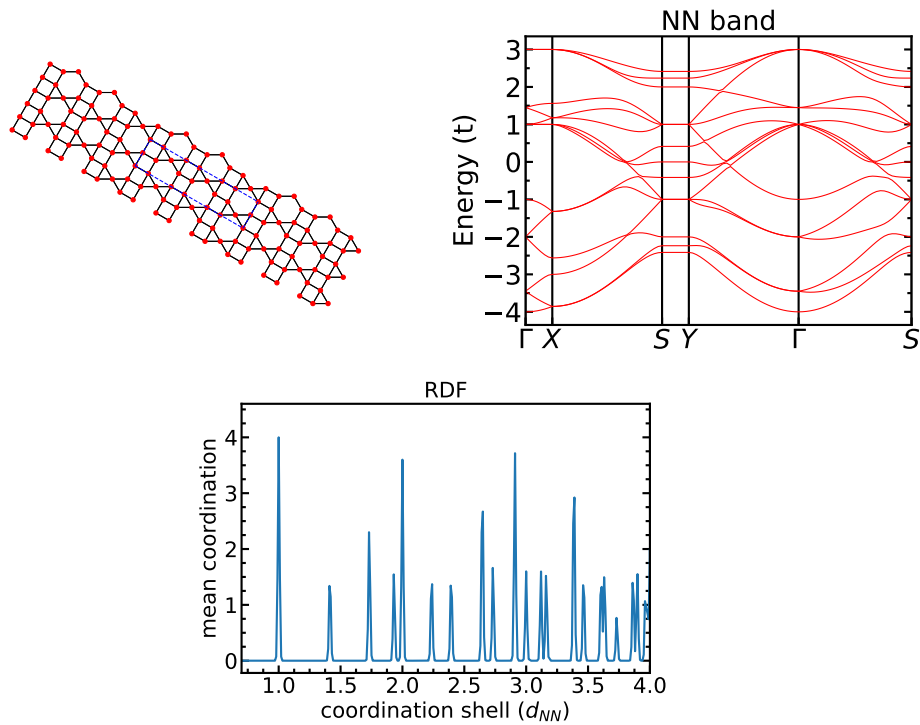


FIG. S170. t5170 lattice framework, nearest neighbors band structure and radial distribution function.

t5171

Tiling reference number t5171 with space-group ' $P2/m'$ ' (10) and 16 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 t5171 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

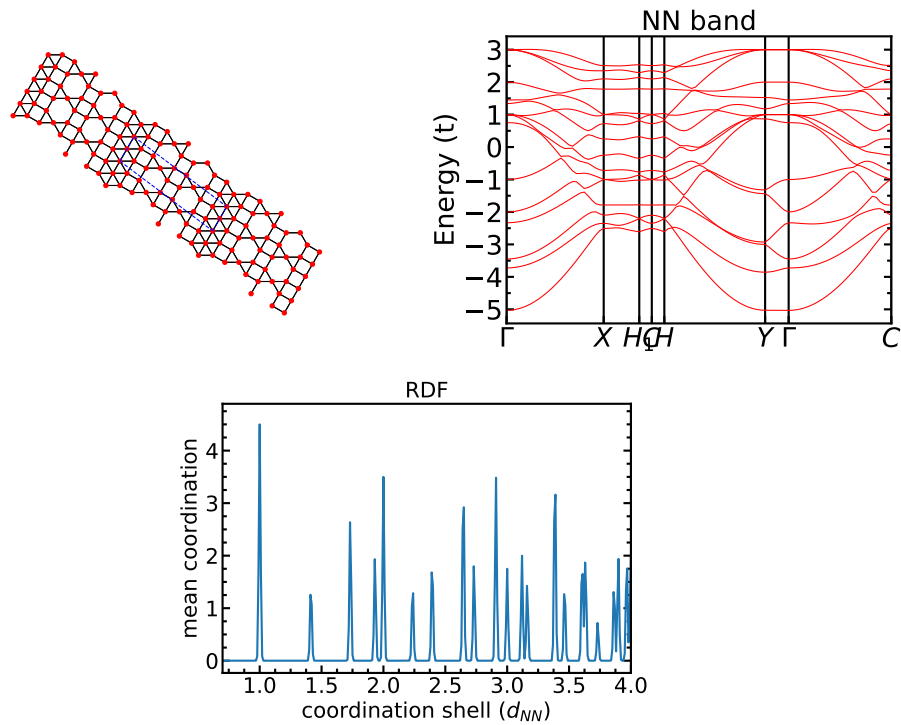


FIG. S171. t5171 lattice framework, nearest neighbors band structure and radial distribution function.

t5172

Tiling reference number t5172 with space-group ' $Pmmm$ ' (47) and 14 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 t5172 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	4	6

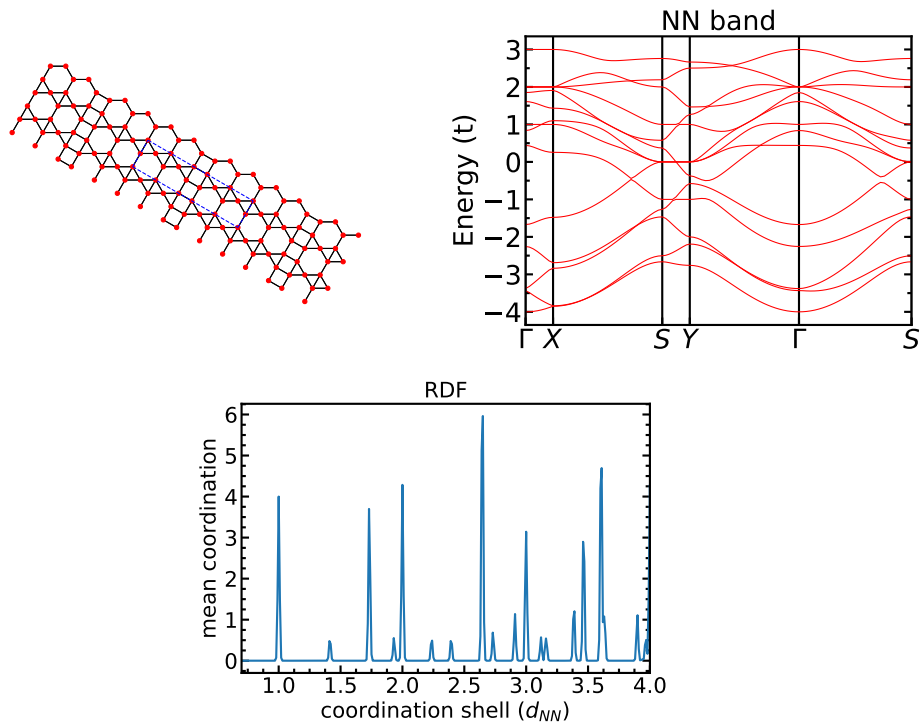


FIG. S172. t5172 lattice framework, nearest neighbors band structure and radial distribution function.

t5173

Tiling reference number t5173 with space-group ' $Cmmm$ ' (65) and 14 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 t5173 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	4	4

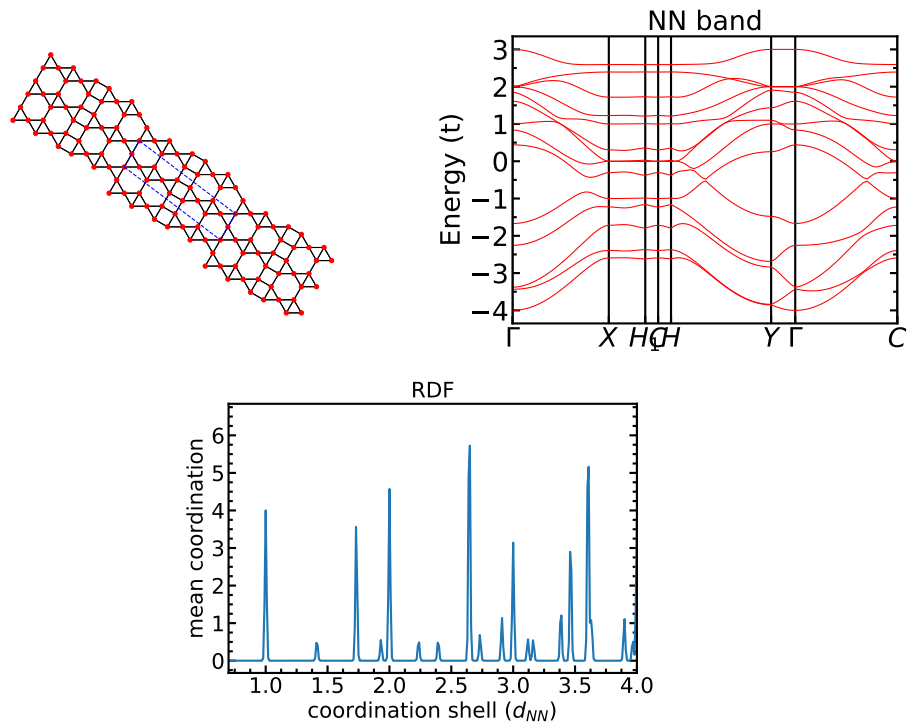


FIG. S173. t5173 lattice framework, nearest neighbors band structure and radial distribution function.

t5174

Tiling reference number t5174 with space-group ' $Pmmm$ ' (47) and 14 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 t5174 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	4	2

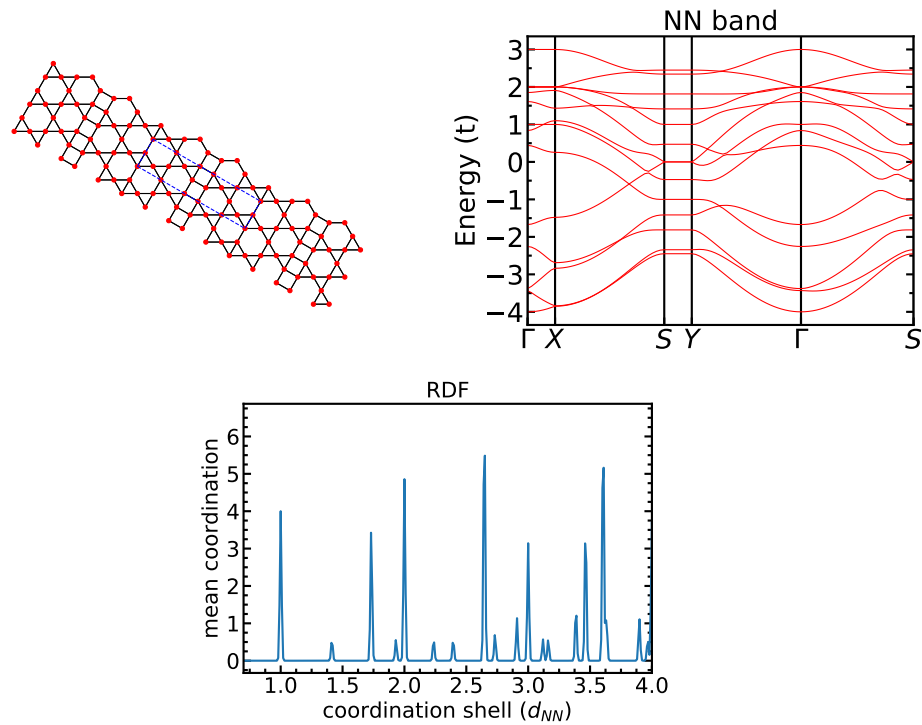


FIG. S174. t5174 lattice framework, nearest neighbors band structure and radial distribution function.

t5175

Tiling reference number t5175 with space-group ' $Cmmm$ ' (65) and 14 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 t5175 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	0	0	0	0	0	4	0

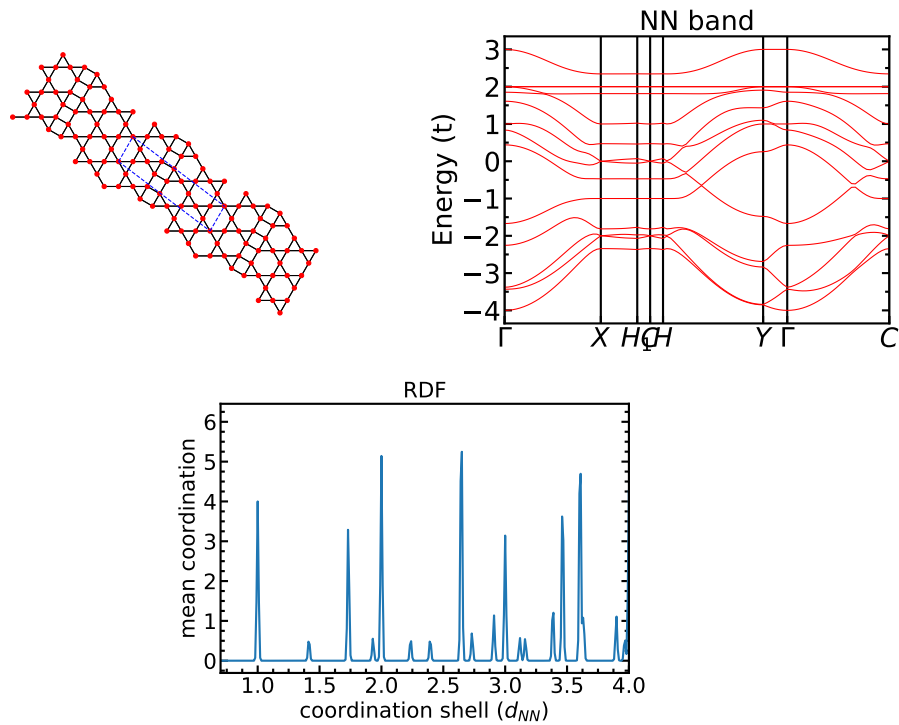


FIG. S175. t5175 lattice framework, nearest neighbors band structure and radial distribution function.

t5176

Tiling reference number t5176 with space-group ' $P2/m'$ ' (10) and 14 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 t5176 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	4	0	4	0	0	4	0

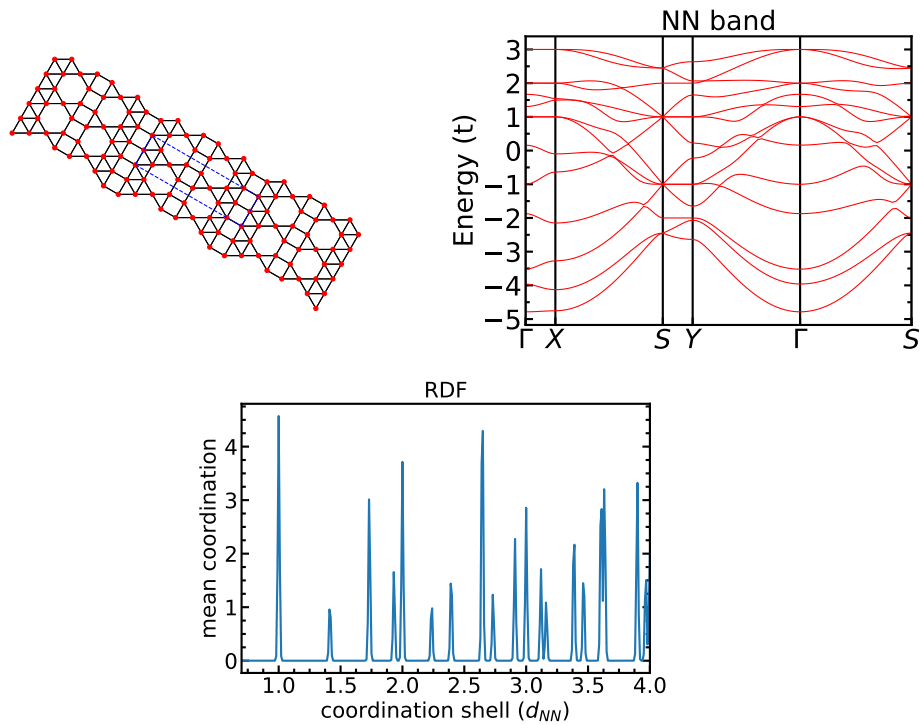


FIG. S176. t5176 lattice framework, nearest neighbors band structure and radial distribution function.

t5177

Tiling reference number t5177 with space-group ' Pm' ' (6) and 14 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 t5177 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	4	0	4	0	0	4	0

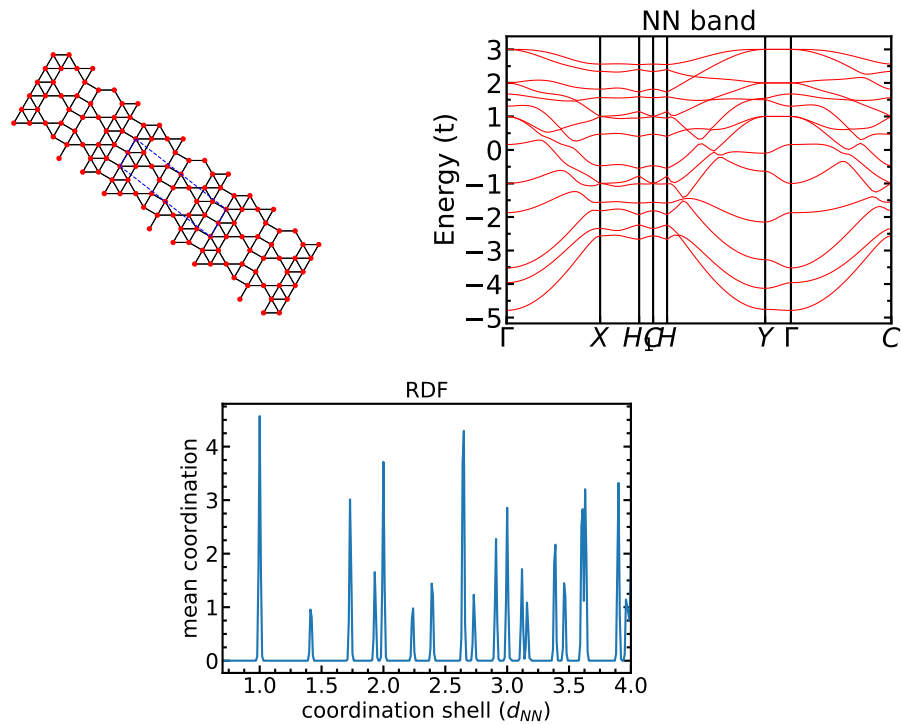


FIG. S177. t5177 lattice framework, nearest neighbors band structure and radial distribution function.

t5178

Tiling reference number t5178 with space-group ' $Pmmm$ ' (47) and 12 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 t5178 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	4	0	0	0	0	4	0

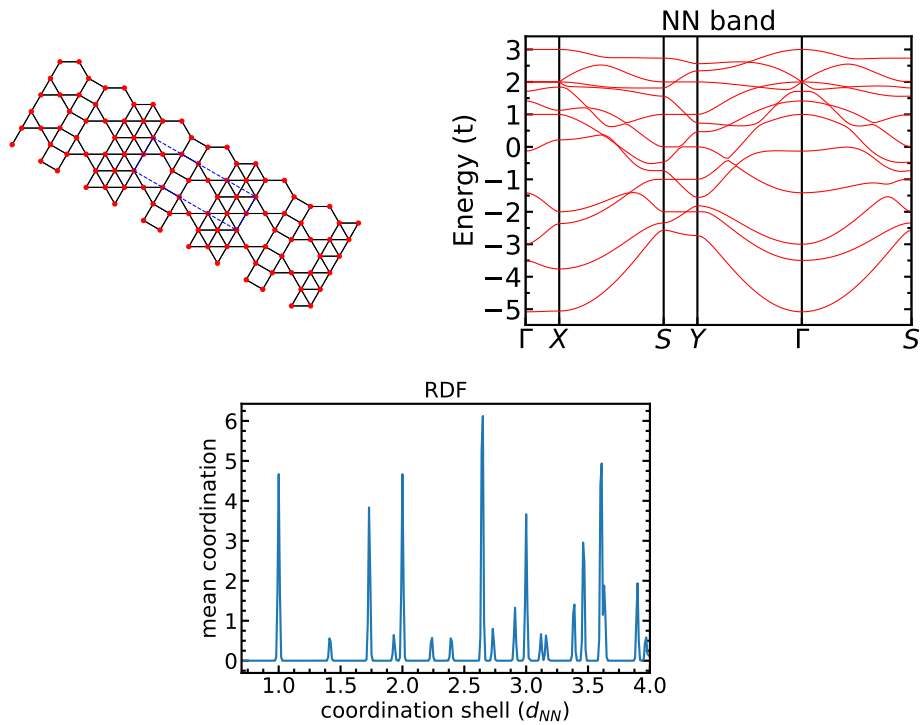


FIG. S178. t5178 lattice framework, nearest neighbors band structure and radial distribution function.

t5179

Tiling reference number t5179 with space-group ' $P2/m'$ ' (10) and 16 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 t5179 vertex types

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

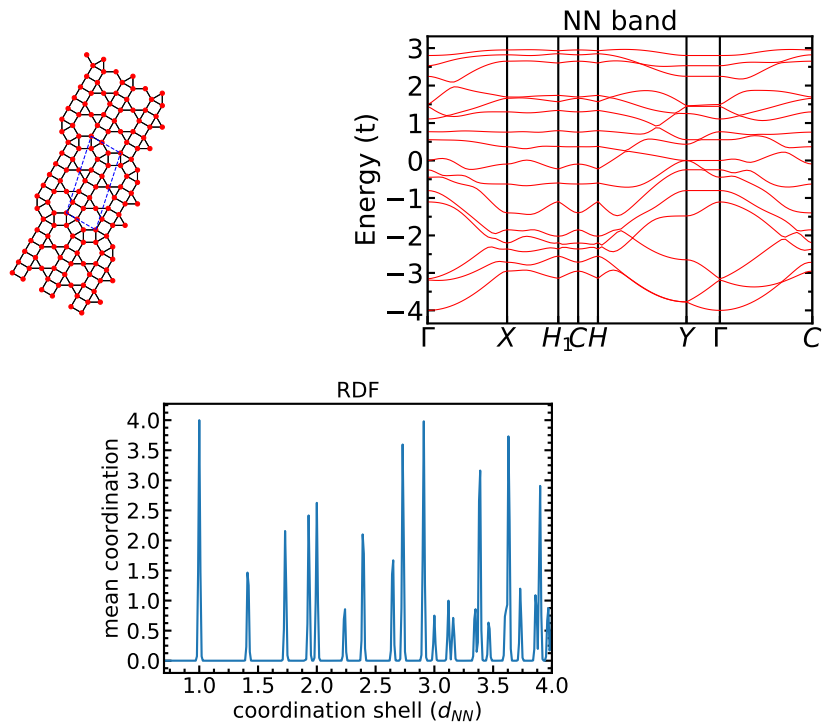


FIG. S179. t5179 lattice framework, nearest neighbors band structure and radial distribution function.

t5180

Tiling reference number t5180 with space-group ' $Pmm2'$ ' (25) and 13 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 t5180 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	0	0	0	0	0	8	2

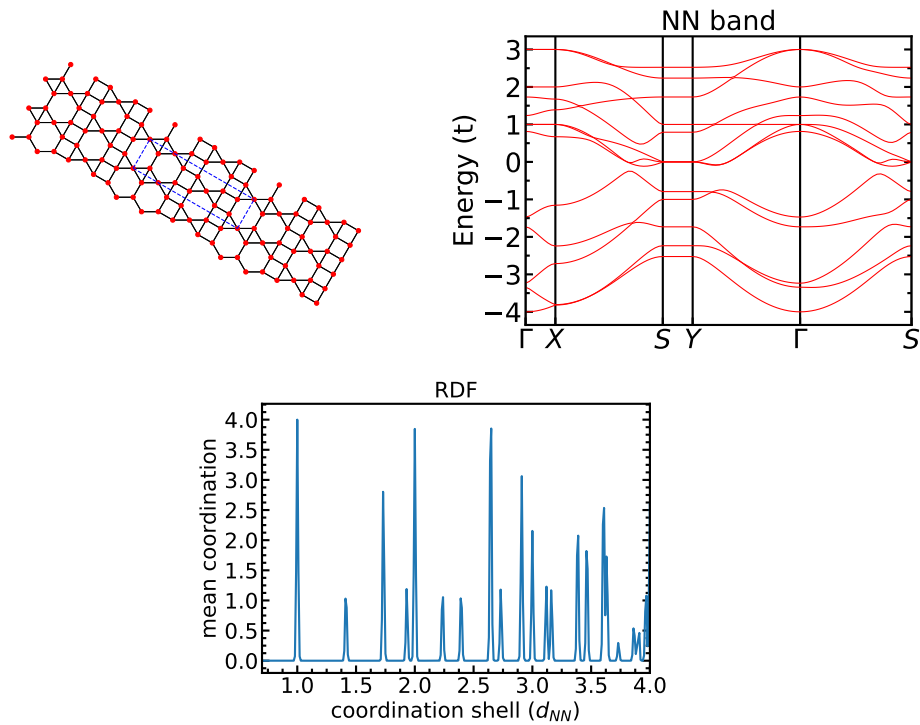


FIG. S180. t5180 lattice framework, nearest neighbors band structure and radial distribution function.

t5181

Tiling reference number t5181 with space-group ' $Amm2'$ ' (38) and 13 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 t5181 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	8	0

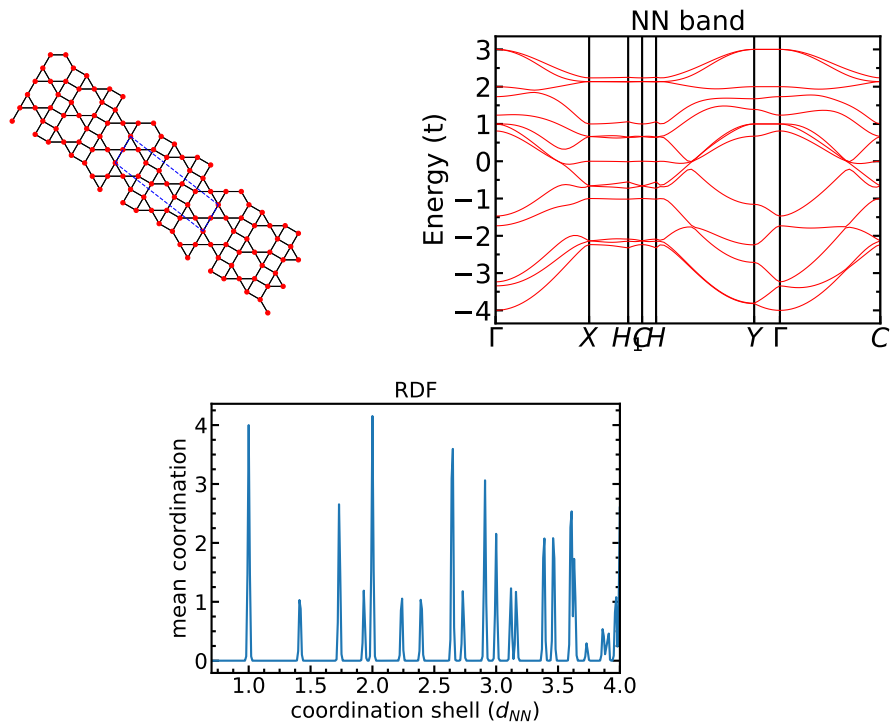


FIG. S181. t5181 lattice framework, nearest neighbors band structure and radial distribution function.

t5182

Tiling reference number t5182 with space-group ' Pm' ' (6) and 13 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 t5182 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	0	0	0	0	0	8	2

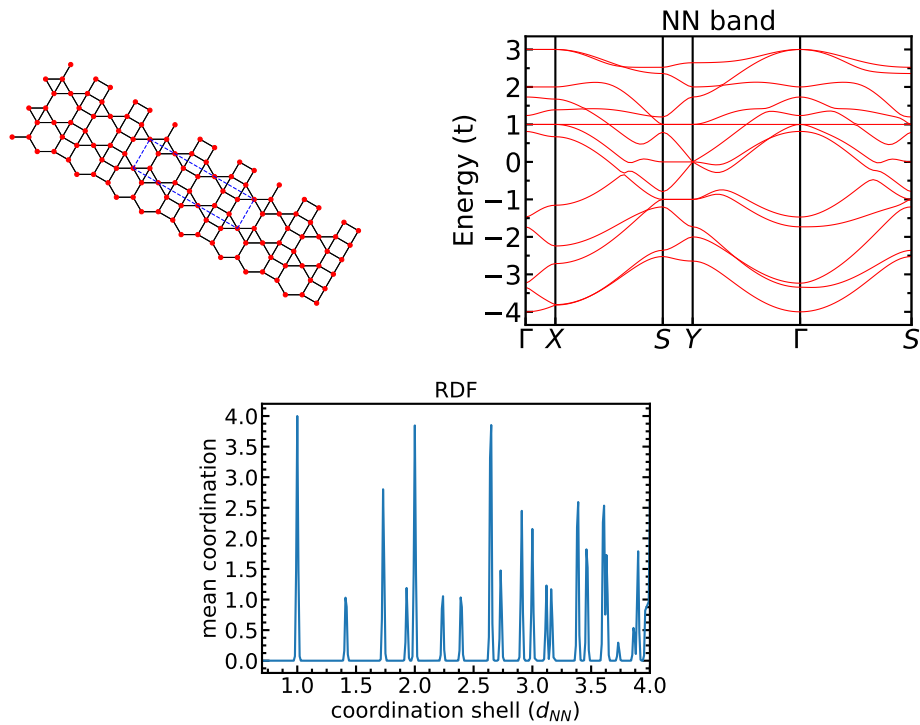


FIG. S182. t5182 lattice framework, nearest neighbors band structure and radial distribution function.

t5183

Tiling reference number t5183 with space-group ' $Amm2'$ ' (38) and 13 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 t5183 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	8	0

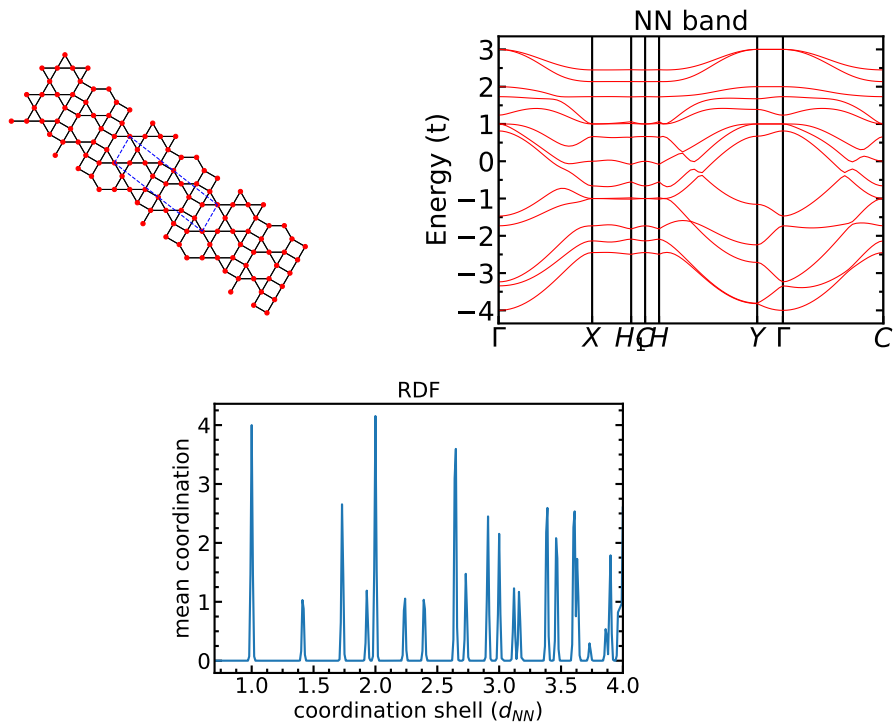


FIG. S183. t5183 lattice framework, nearest neighbors band structure and radial distribution function.

t5184

Tiling reference number t5184 with space-group ' $Pmmm$ ' (47) and 13 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 t5184 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	0	0	8	0	0	4	0

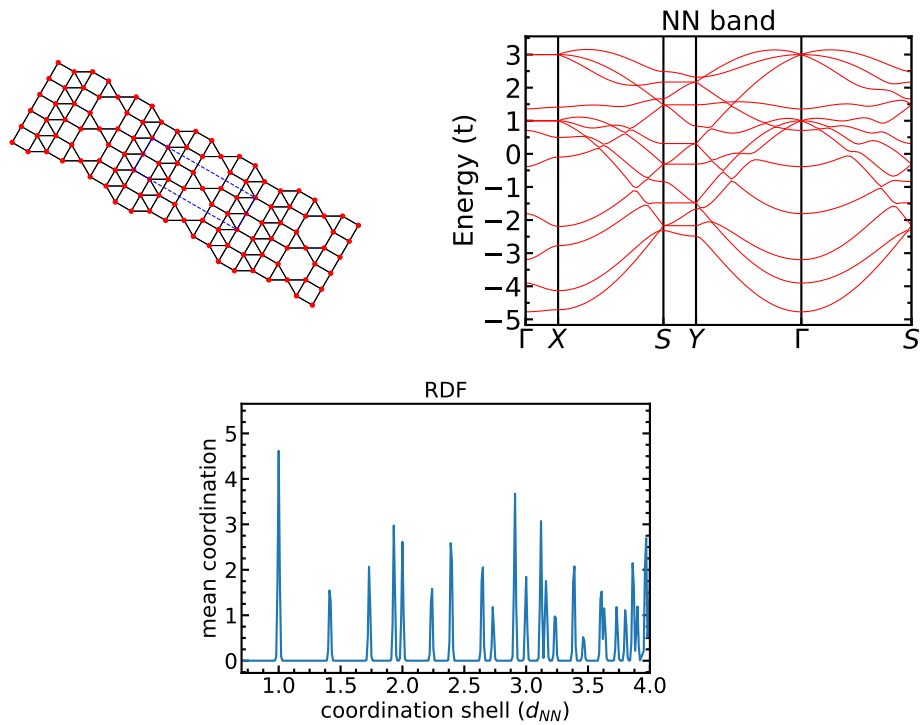


FIG. S184. t5184 lattice framework, nearest neighbors band structure and radial distribution function.

t5185

Tiling reference number t5185 with space-group ' $Amm2'$ ' (38) and 13 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 t5185 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	0	0	8	0	0	4	0

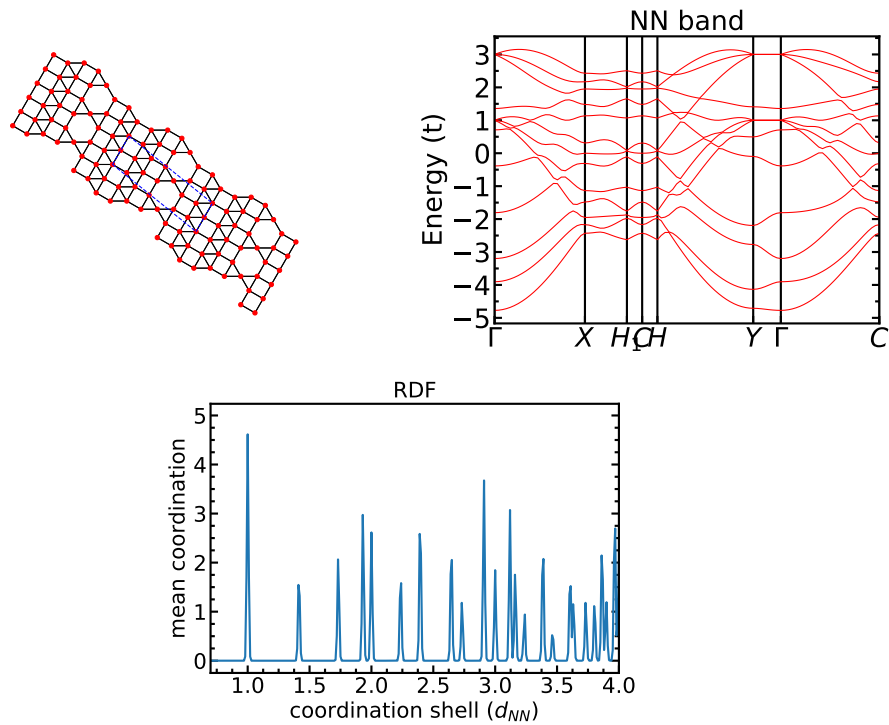


FIG. S185. t5185 lattice framework, nearest neighbors band structure and radial distribution function.

t5186

Tiling reference number t5186 with space-group ' $Pmm2'$ ' (25) and 11 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 t5186 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	0	0	4	0	0	4	0

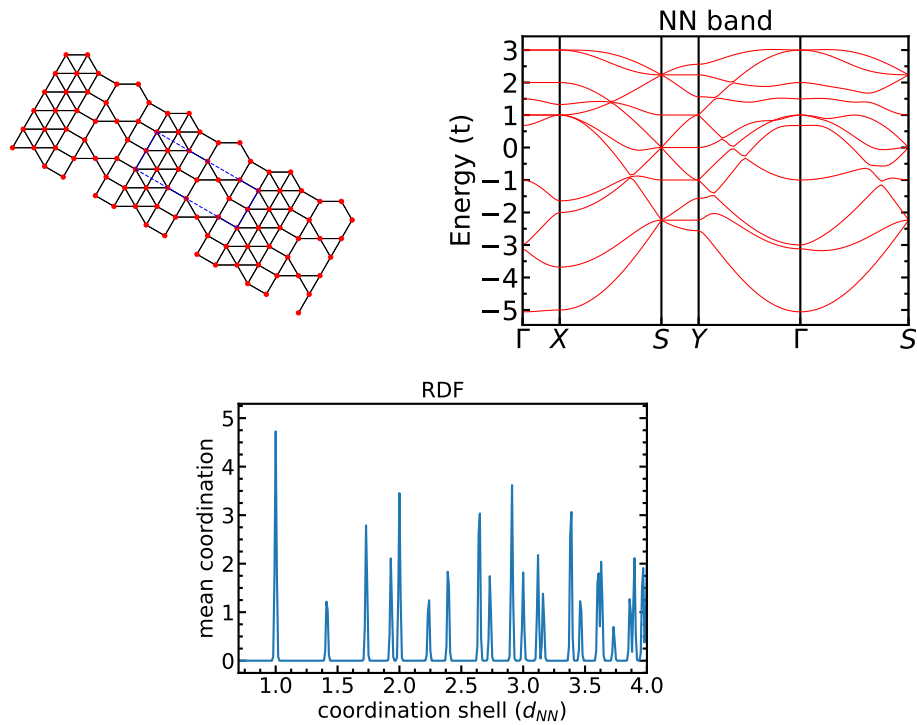


FIG. S186. t5186 lattice framework, nearest neighbors band structure and radial distribution function.

t5187

Tiling reference number t5187 with space-group ' $Amm2'$ ' (38) and 14 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 t5187 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

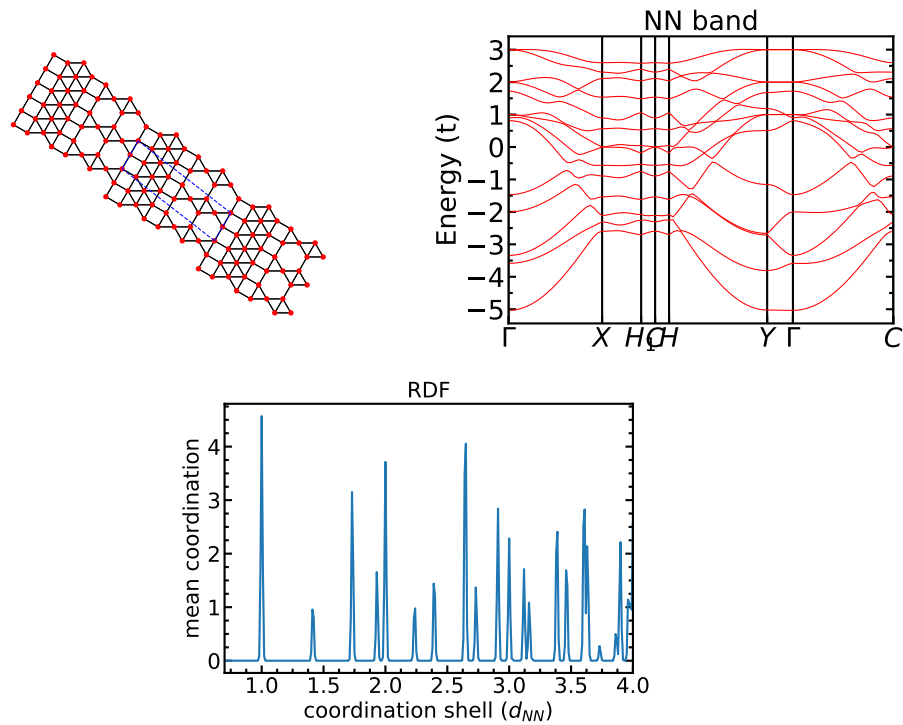


FIG. S187. t5187 lattice framework, nearest neighbors band structure and radial distribution function.

t5188

Tiling reference number t5188 with space-group ' $Pmm2'$ ' (25) and 14 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 t5188 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

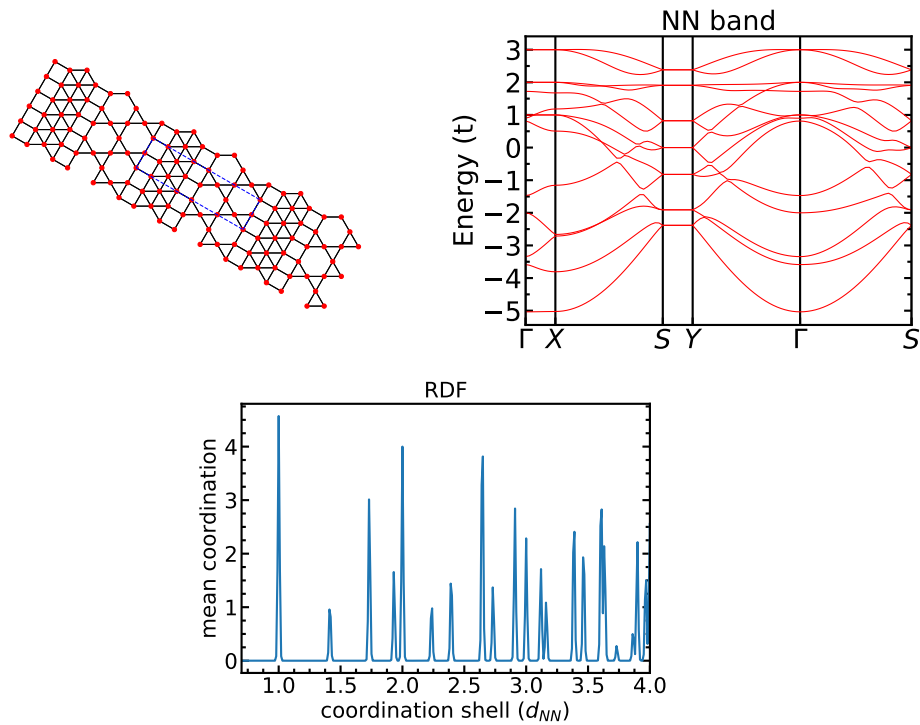


FIG. S188. t5188 lattice framework, nearest neighbors band structure and radial distribution function.

t5189

Tiling reference number t5189 with space-group ' $P2/m'$ ' (10) and 10 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 t5189 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	4	0	0	0	0	4	0

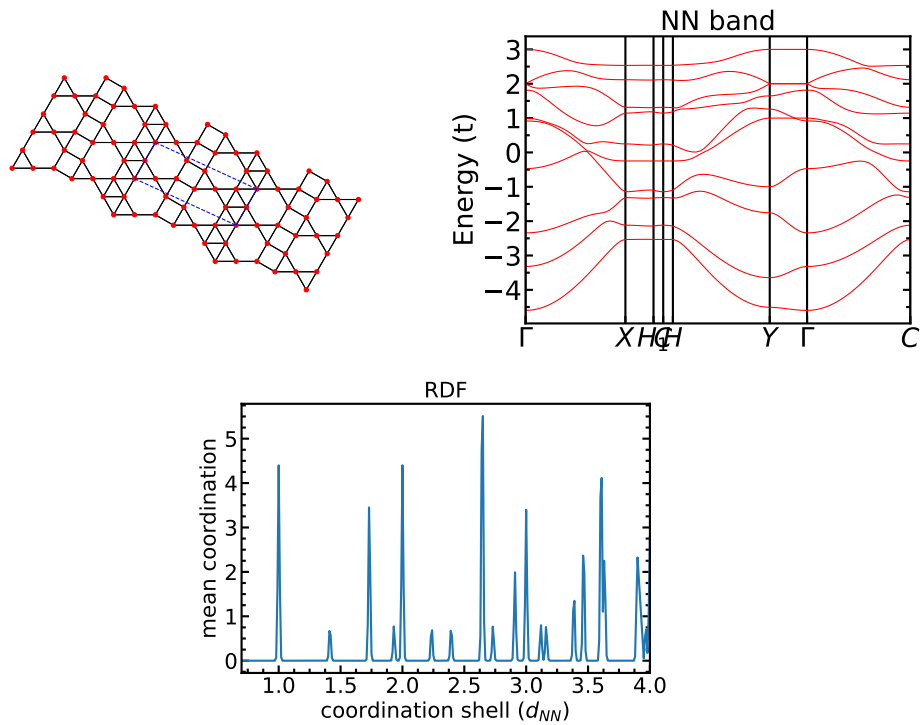


FIG. S189. t5189 lattice framework, nearest neighbors band structure and radial distribution function.

t5190

Tiling reference number t5190 with space-group ' $Pmmm$ ' (47) and 13 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 t5190 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	0	2	0	0	8	0

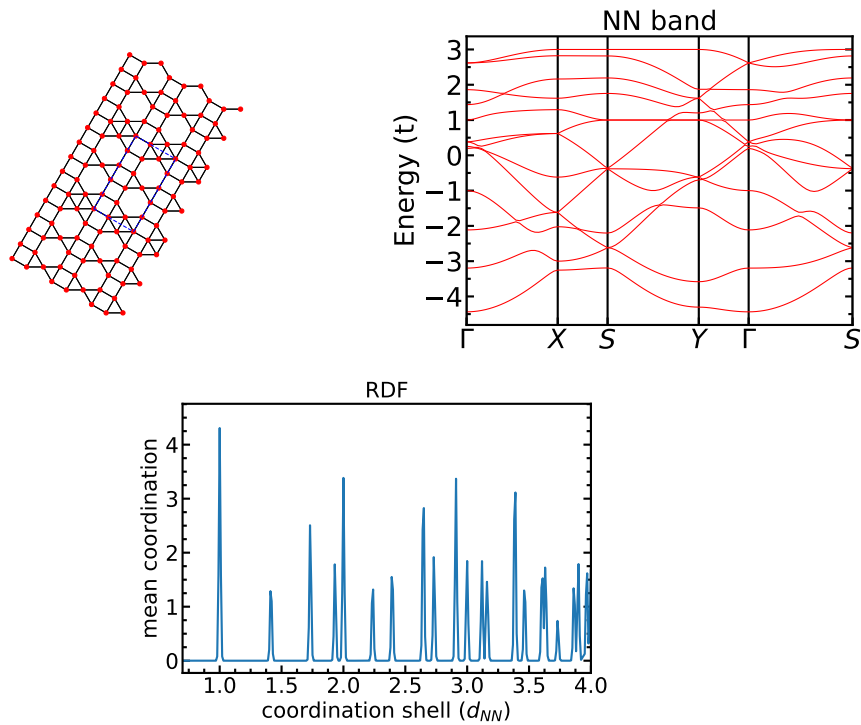


FIG. S190. t5190 lattice framework, nearest neighbors band structure and radial distribution function.

t5191

Tiling reference number t5191 with space-group ' $Pmm2'$ ' (25) and 20 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 t5191 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	8	0

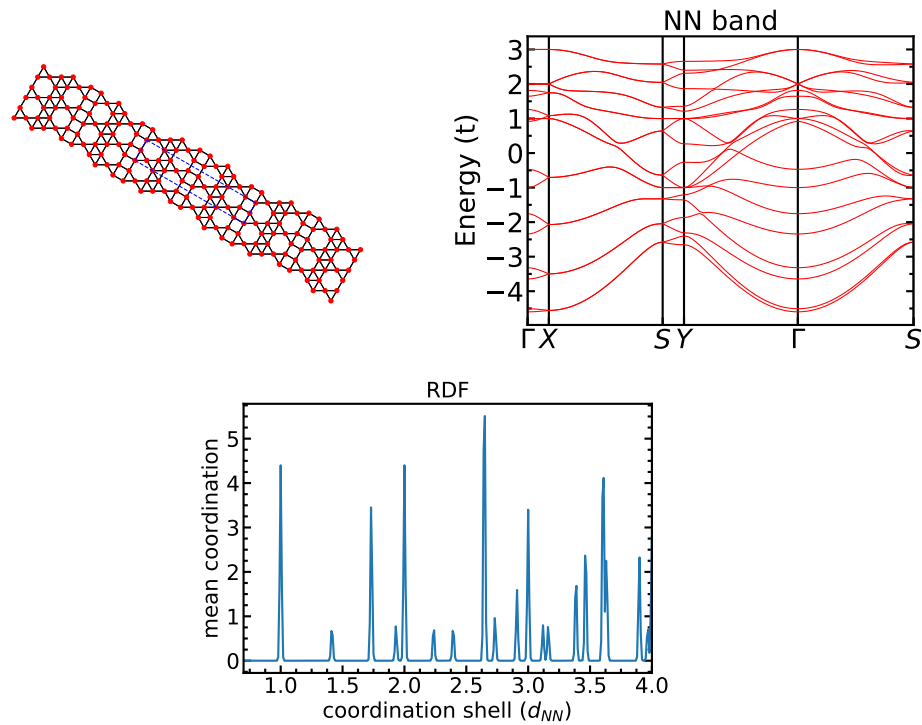


FIG. S191. t5191 lattice framework, nearest neighbors band structure and radial distribution function.

t5192

Tiling reference number t5192 with space-group $'Pmc2'_1$ (26) and 20 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 t5192 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	8	0

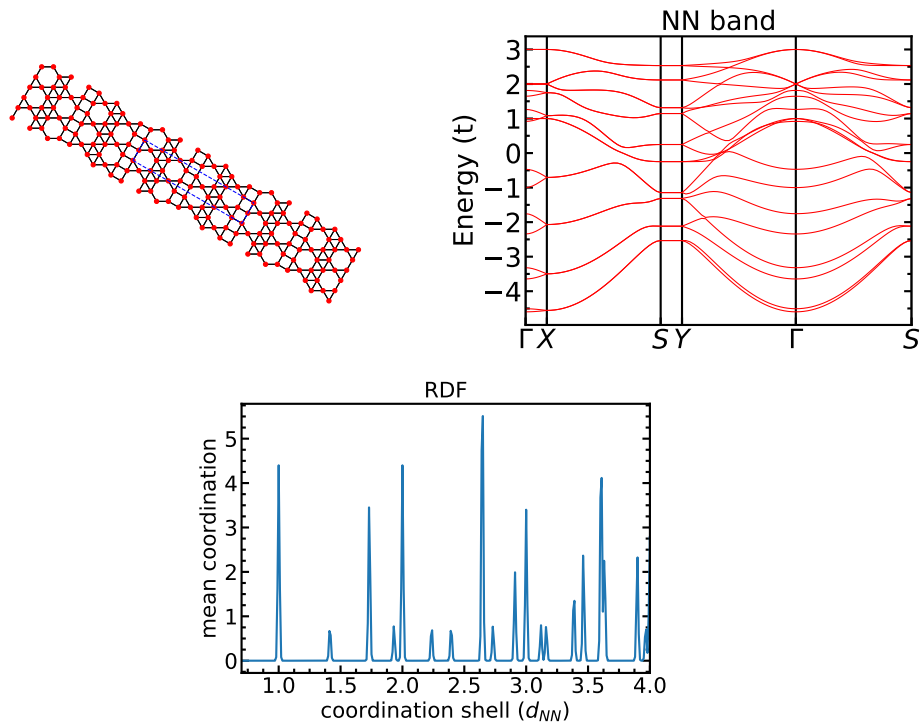


FIG. S192. t5192 lattice framework, nearest neighbors band structure and radial distribution function.

t5193

Tiling reference number t5193 with space-group ' $P2/m'$ ' (10) and 10 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 t5193 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	4	0	0	0	0	4	0

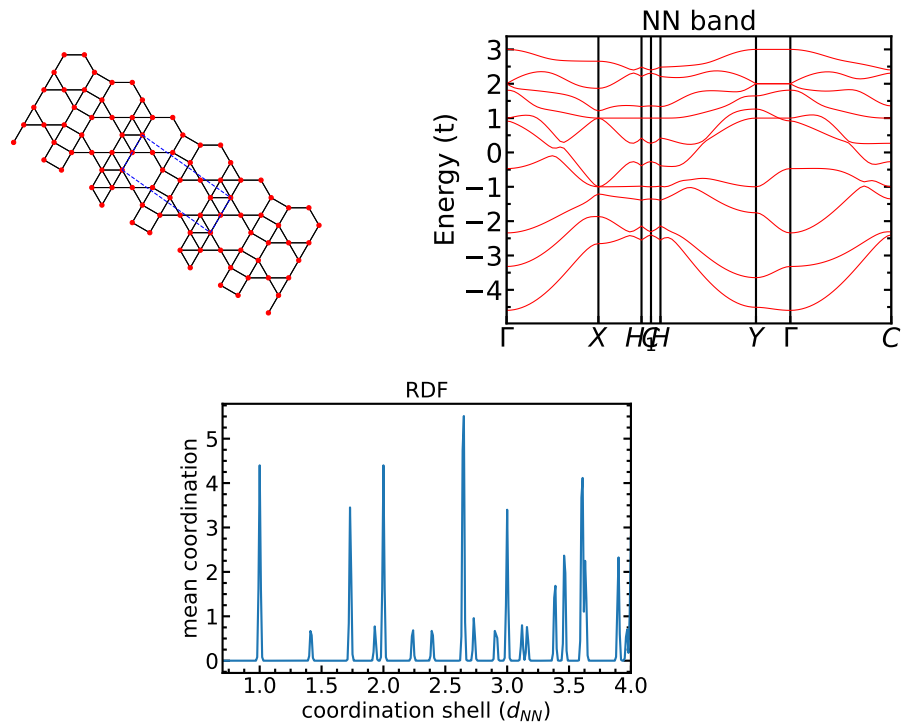


FIG. S193. t5193 lattice framework, nearest neighbors band structure and radial distribution function.

t5194

Tiling reference number t5194 with space-group ' Pm' ' (6) and 18 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 t5194 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

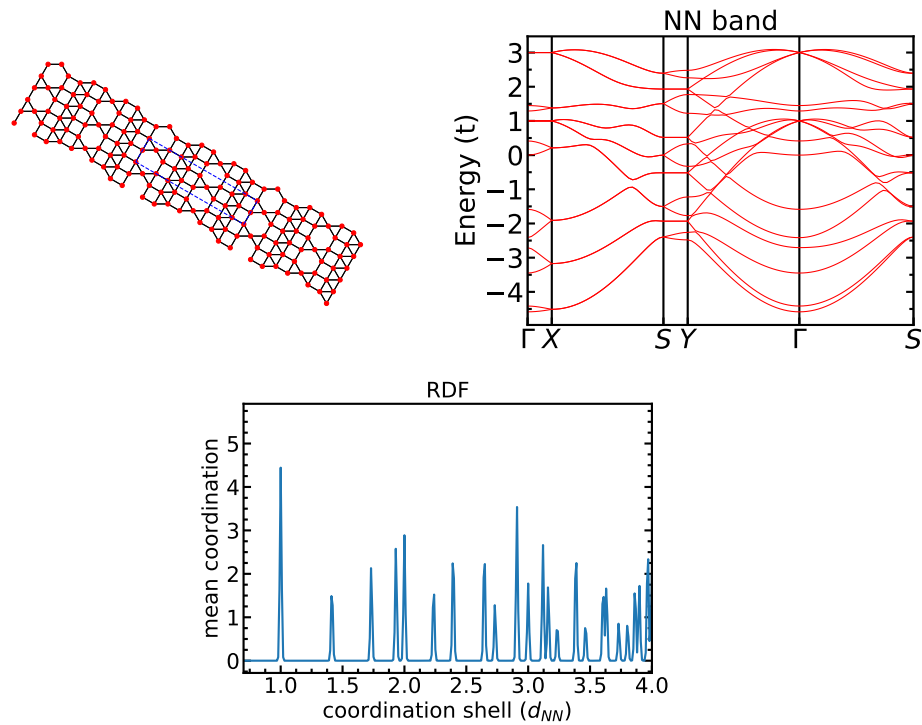


FIG. S194. t5194 lattice framework, nearest neighbors band structure and radial distribution function.

t5195

Tiling reference number t5195 with space-group ' Pm' ' (6) and 9 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 t5195 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	0	0	4	0	0	4	0

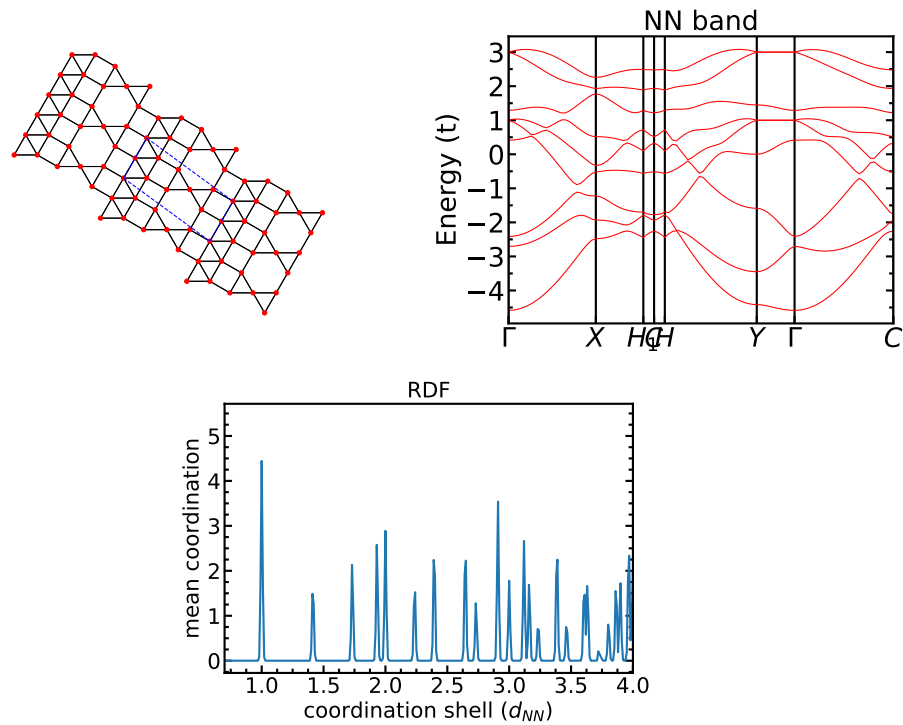


FIG. S195. t5195 lattice framework, nearest neighbors band structure and radial distribution function.

t5196

Tiling reference number t5196 with space-group ' Pm' ' (6) and 37 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 t5196 vertex types

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

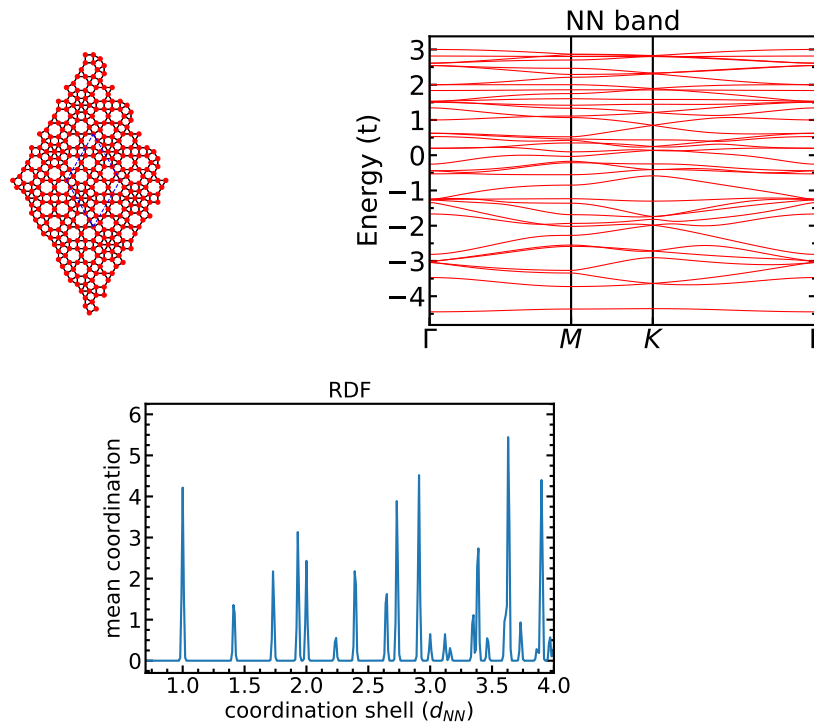


FIG. S196. t5196 lattice framework, nearest neighbors band structure and radial distribution function.

t5197

Tiling reference number t5197 with space-group ' $Amm2'$ ' (38) and 31 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 t5197 vertex types

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

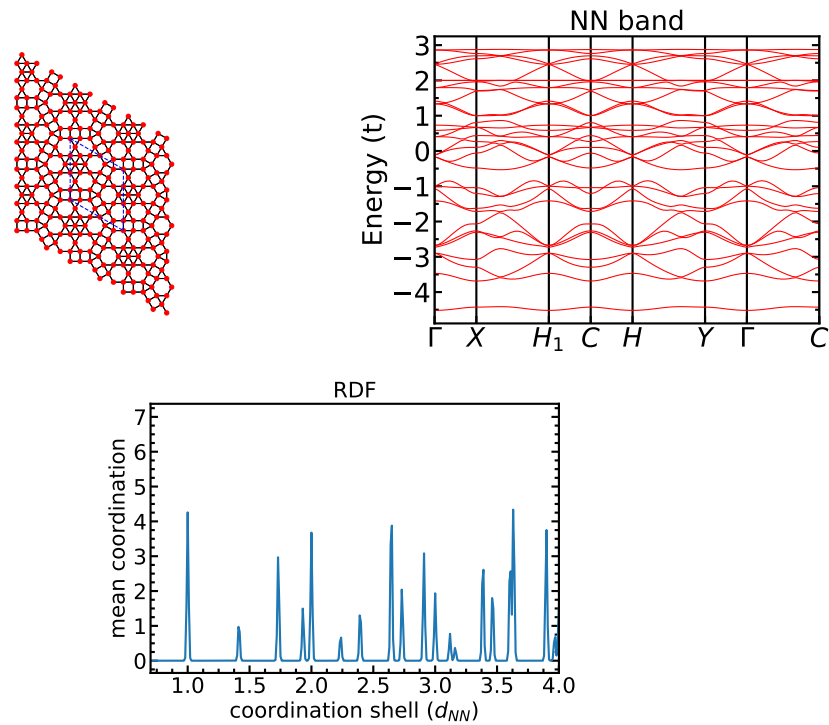


FIG. S197. t5197 lattice framework, nearest neighbors band structure and radial distribution function.

t5198

Tiling reference number t5198 with space-group ' $Pmmm$ ' (47) and 14 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 t5198 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	0	6	0	0	4	0

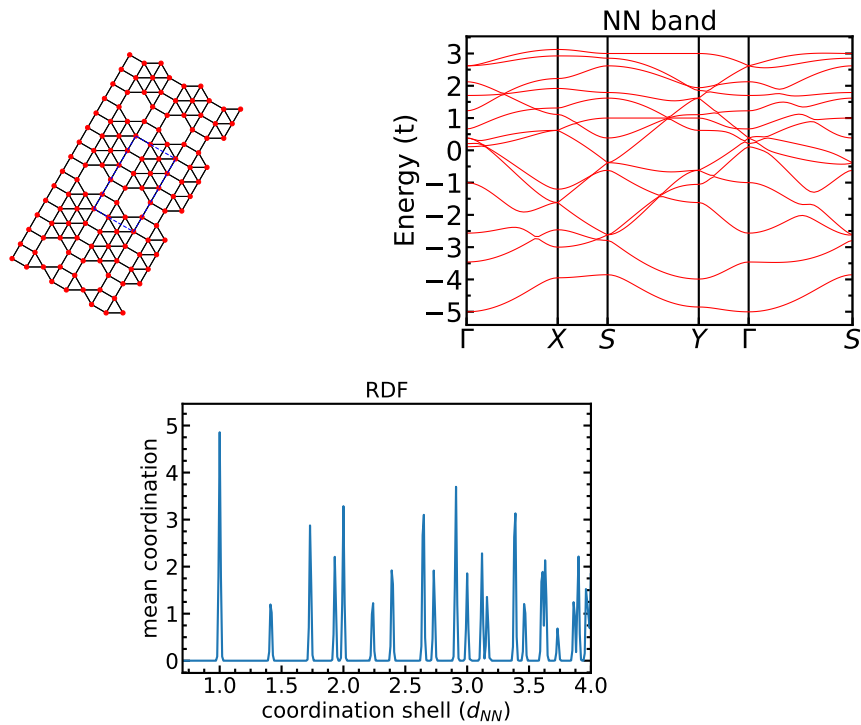


FIG. S198. t5198 lattice framework, nearest neighbors band structure and radial distribution function.

t5199

Tiling reference number t5199 with space-group ' $Pmmm$ ' (47) and 13 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 t5199 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	4	0	2	0	0	4	2

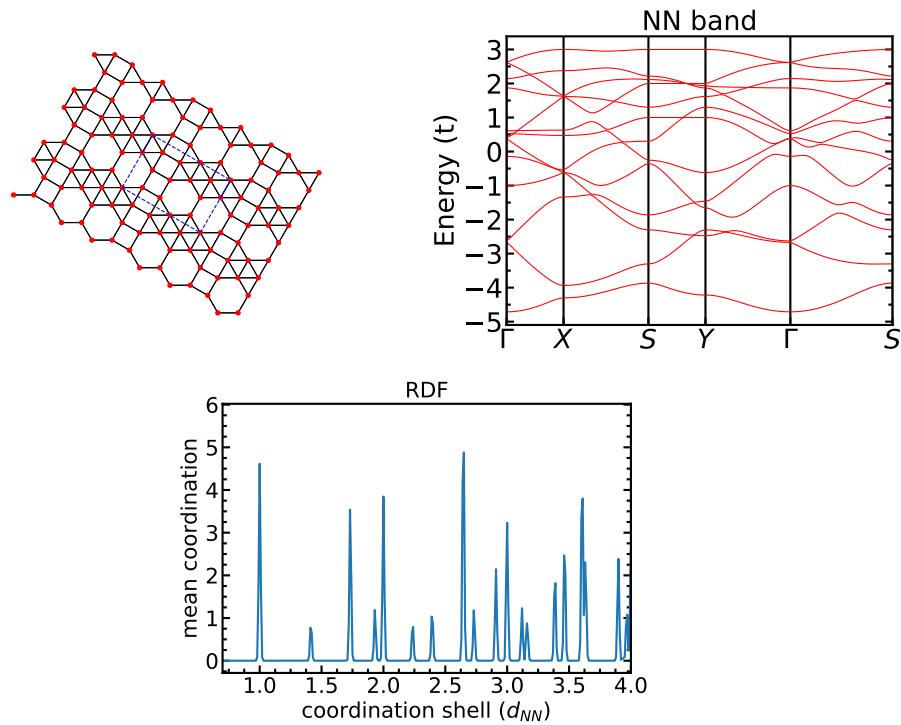


FIG. S199. t5199 lattice framework, nearest neighbors band structure and radial distribution function.

t5200

Tiling reference number t5200 with space-group ' $Cmmm$ ' (65) and 16 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 t5200 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	2	0	0	4	0

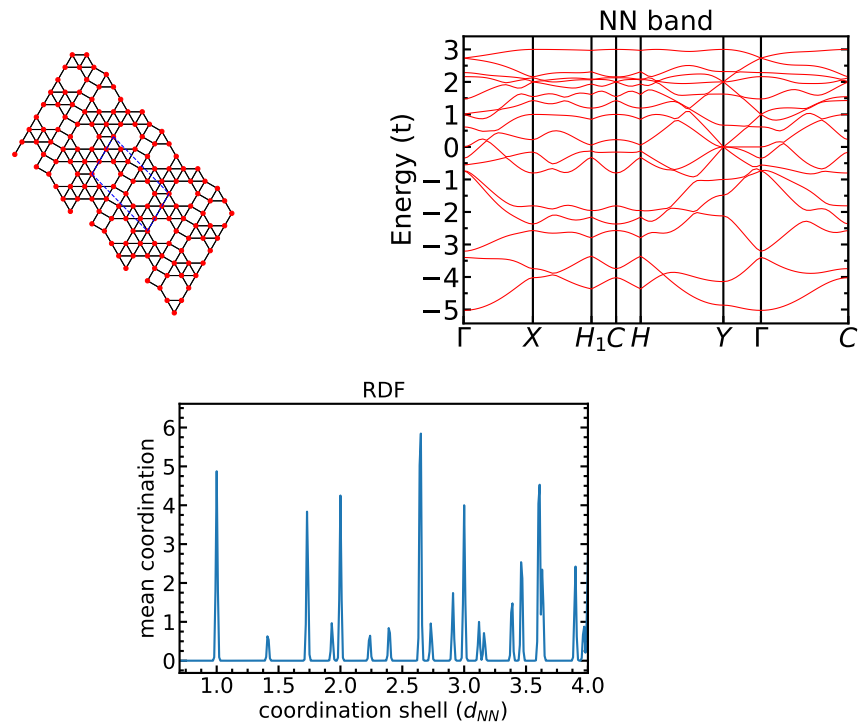


FIG. S200. t5200 lattice framework, nearest neighbors band structure and radial distribution function.

t5201

Tiling reference number t5201 with space-group ' $Amm2'$ ' (38) and 18 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 t5201 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	8	0	6	0	0	4	0

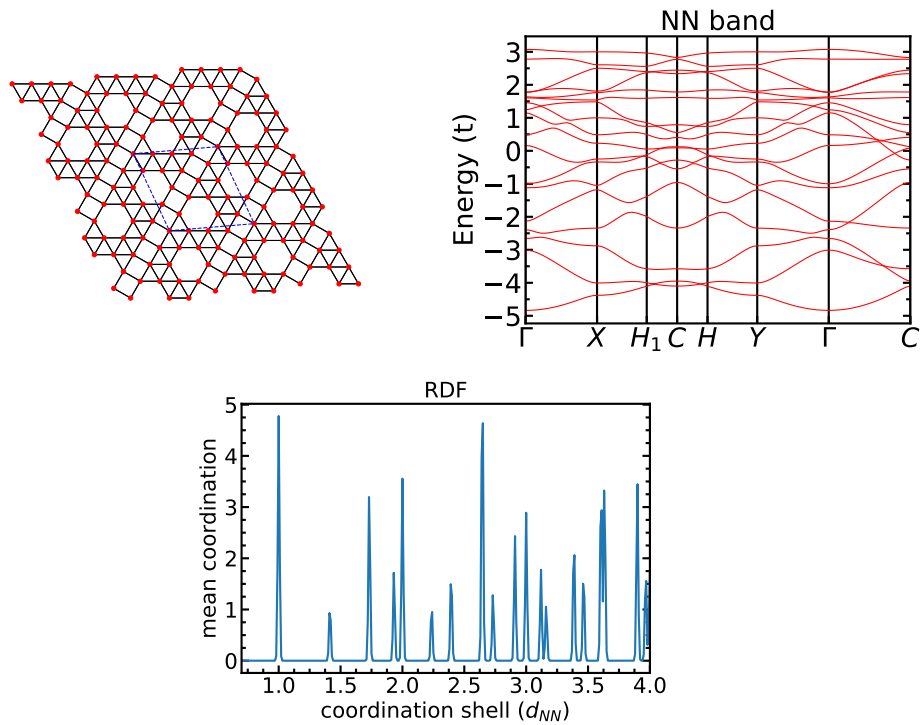


FIG. S201. t5201 lattice framework, nearest neighbors band structure and radial distribution function.

t5202

Tiling reference number t5202 with space-group ' $Cmmm$ ' (65) and 18 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 t5202 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	4	0	0	4	0

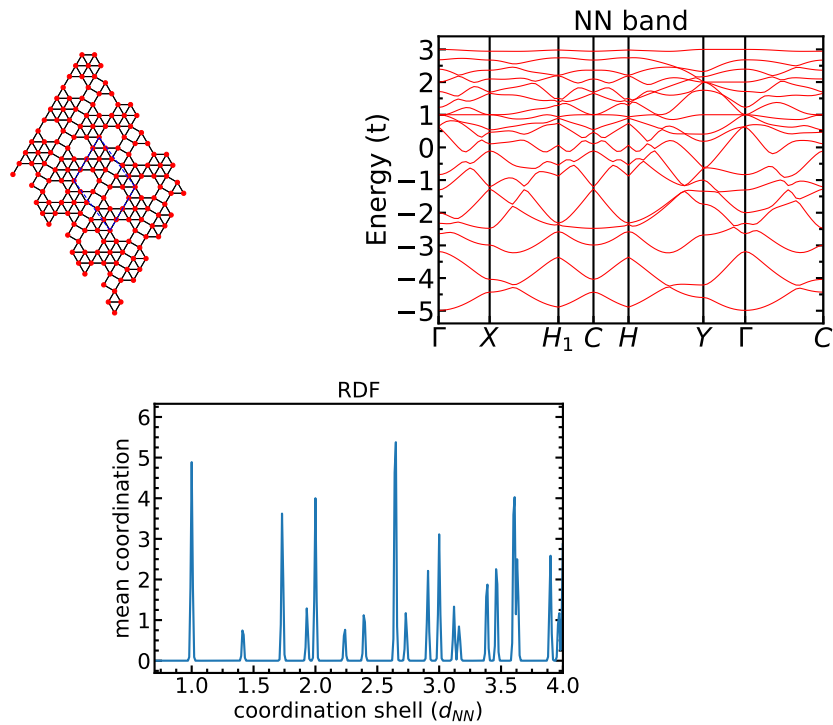


FIG. S202. t5202 lattice framework, nearest neighbors band structure and radial distribution function.

t5203

Tiling reference number t5203 with space-group ' $Pmma'$ ' (51) and 18 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 t5203 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	4	0	0	4	0

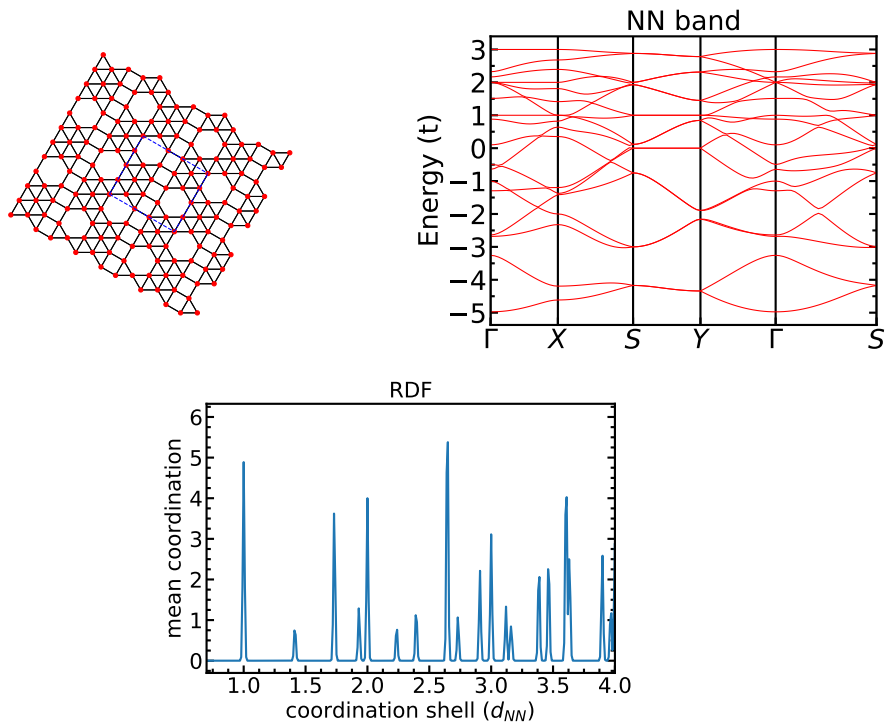


FIG. S203. t5203 lattice framework, nearest neighbors band structure and radial distribution function.

t5204

Tiling reference number t5204 with space-group ' $Amm2'$ ' (38) and 14 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 t5204 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	8	0	0	4	0

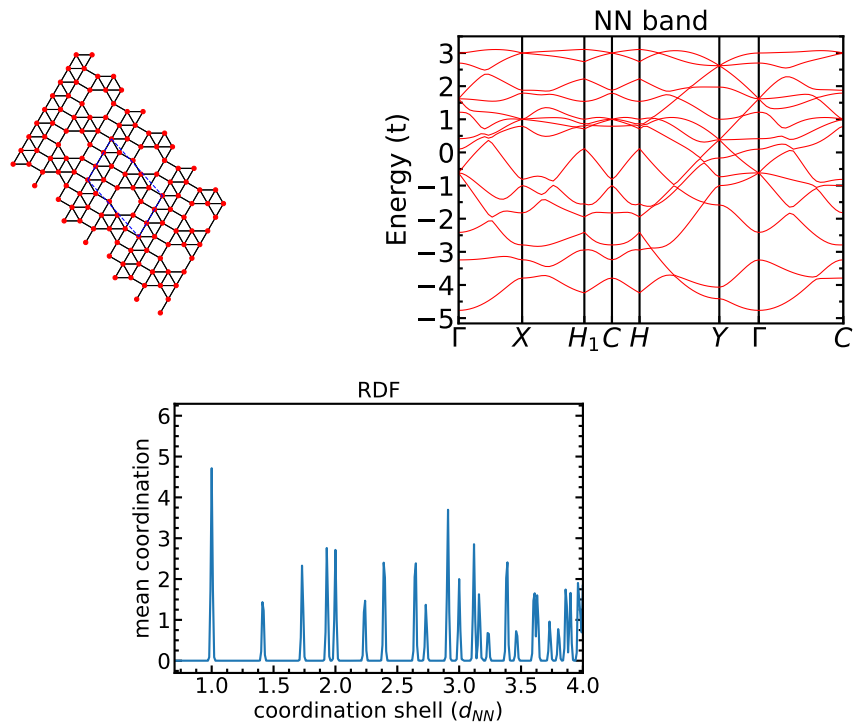


FIG. S204. t5204 lattice framework, nearest neighbors band structure and radial distribution function.

t5205

Tiling reference number t5205 with space-group ' $P2/m'$ ' (10) and 16 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 t5205 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	4	0	4	0	0	8	0

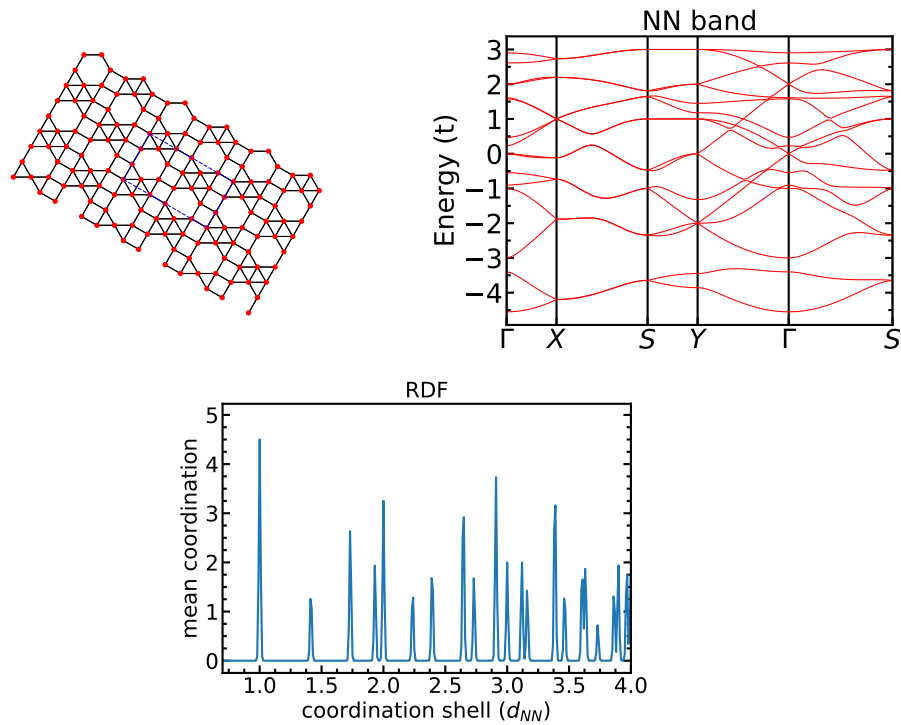


FIG. S205. t5205 lattice framework, nearest neighbors band structure and radial distribution function.

t5206

Tiling reference number t5206 with space-group ' $Amm2'$ ' (38) and 14 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 t5206 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	0	2	0	0	4	0

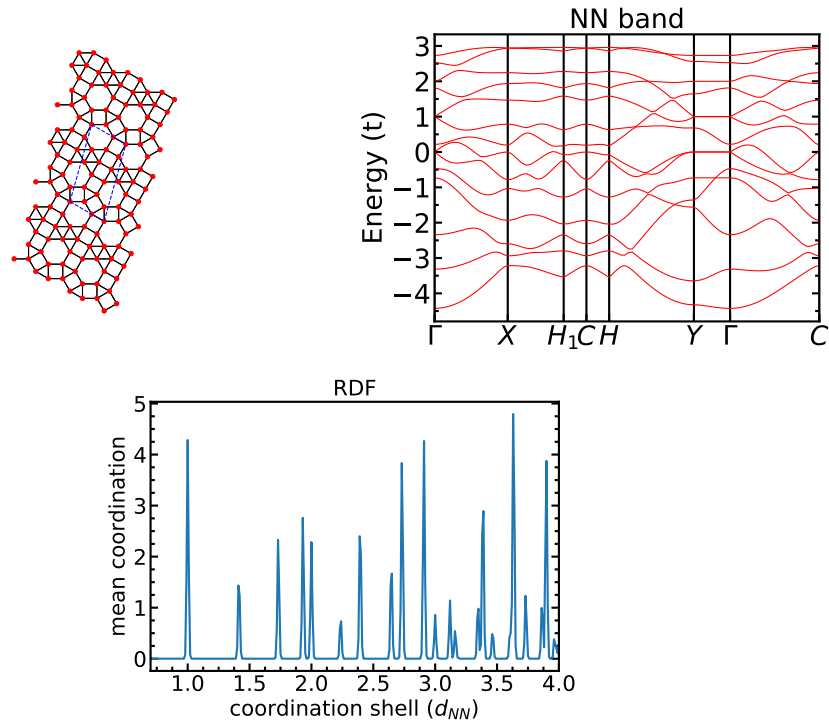


FIG. S206. t5206 lattice framework, nearest neighbors band structure and radial distribution function.

t5207

Tiling reference number t5207 with space-group ' $Amm2'$ ' (38) and 48 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 t5207 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	0	0	12	24	0	0	0

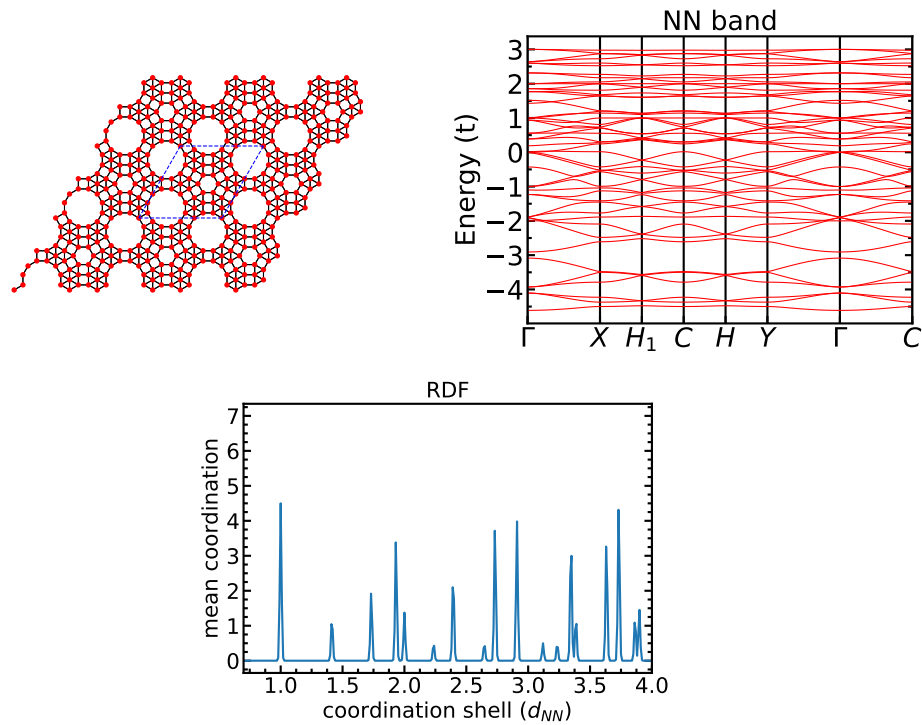


FIG. S207. t5207 lattice framework, nearest neighbors band structure and radial distribution function.

t5208

Tiling reference number t5208 with space-group ' Pm' ' (6) and 42 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 t5208 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	0	24	0	0	0	0

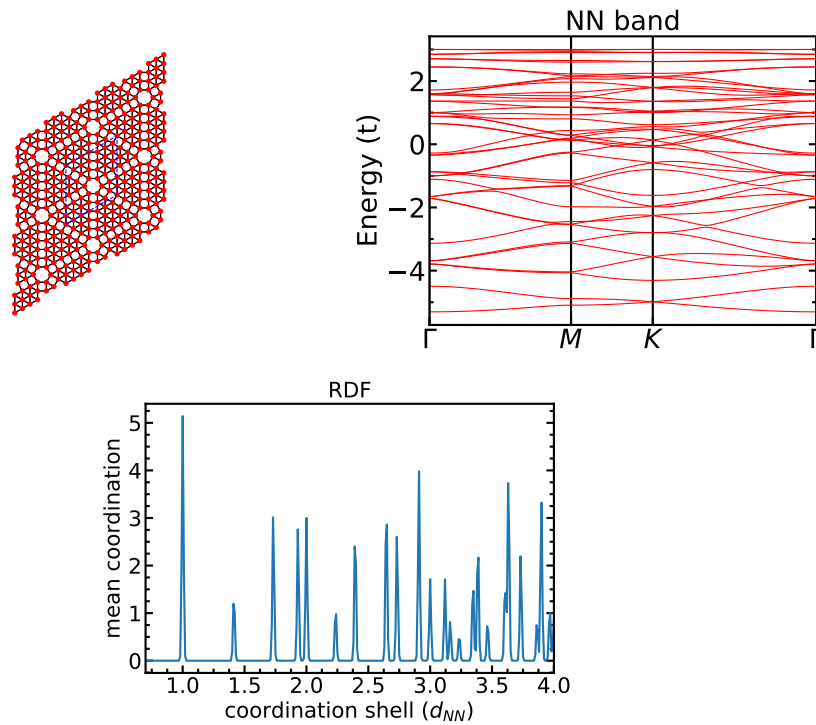


FIG. S208. t5208 lattice framework, nearest neighbors band structure and radial distribution function.

t5209

Tiling reference number t5209 with space-group ' $Amm2'$ ' (38) and 38 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 t5209 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	18	0	0	0	0

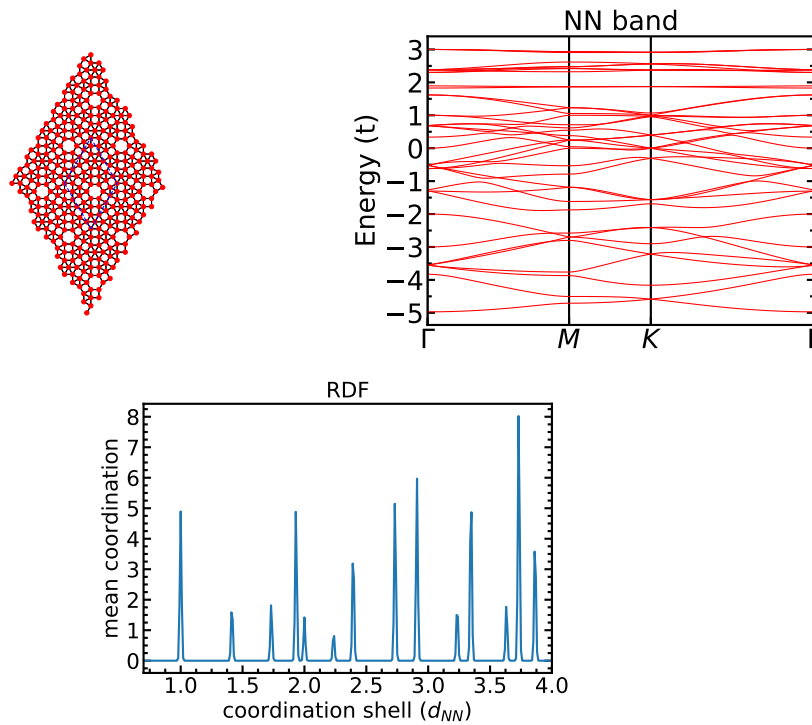


FIG. S209. t5209 lattice framework, nearest neighbors band structure and radial distribution function.

t5210

Tiling reference number t5210 with space-group ' $Amm2'$ ' (38) and 37 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 t5210 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	6	18	0	0	0	0

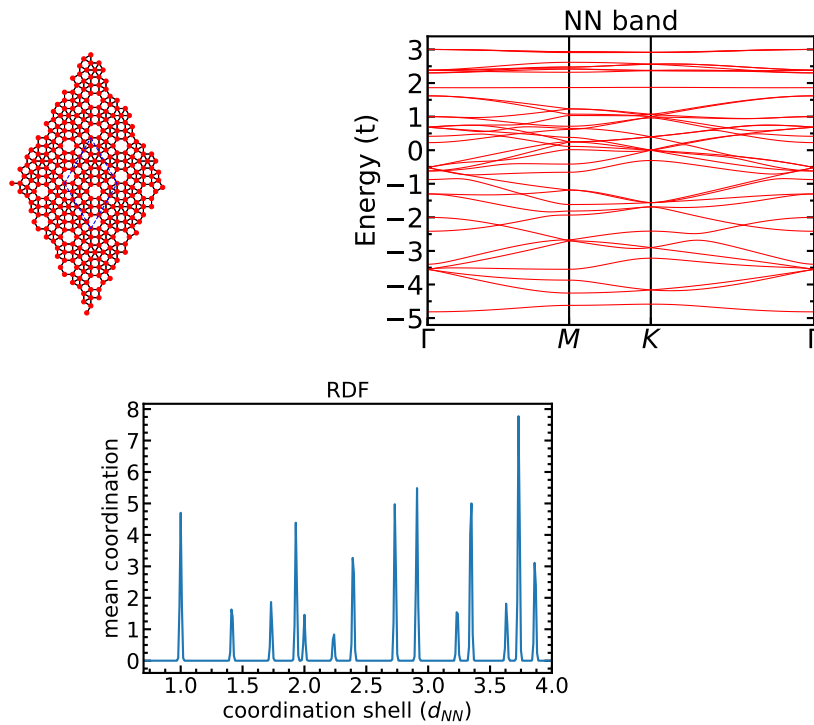


FIG. S210. t5210 lattice framework, nearest neighbors band structure and radial distribution function.

t5211

Tiling reference number t5211 with space-group ' $Cmmm$ ' (65) and 54 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 t5211 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	0	24	12	0	0	0

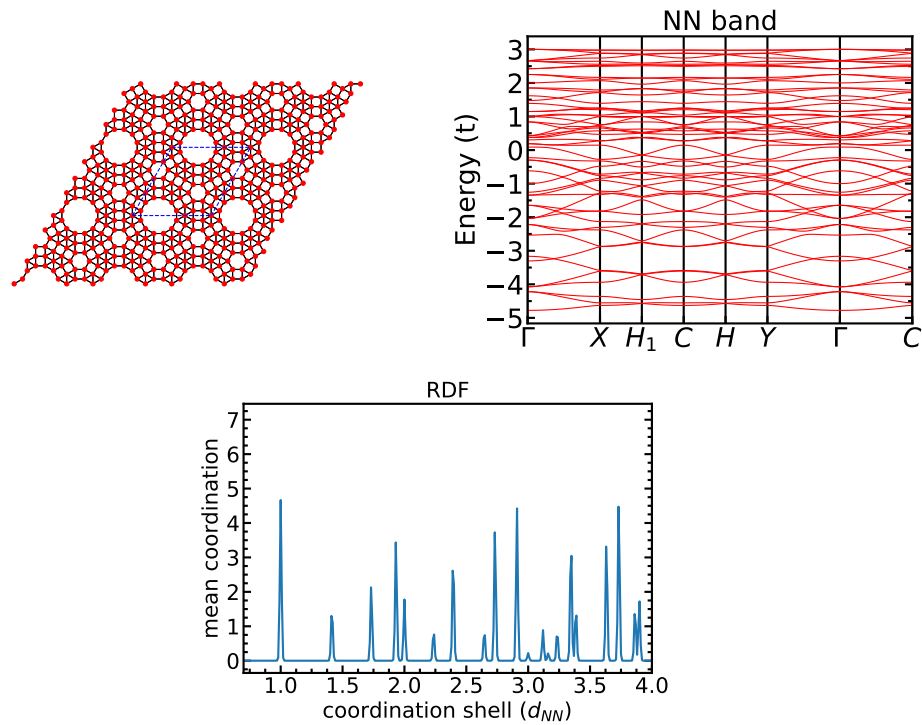


FIG. S211. t5211 lattice framework, nearest neighbors band structure and radial distribution function.

t5212

Tiling reference number t5212 with space-group ' $Amm2'$ ' (38) and 37 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 t5212 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	18	6	0	0	0	0

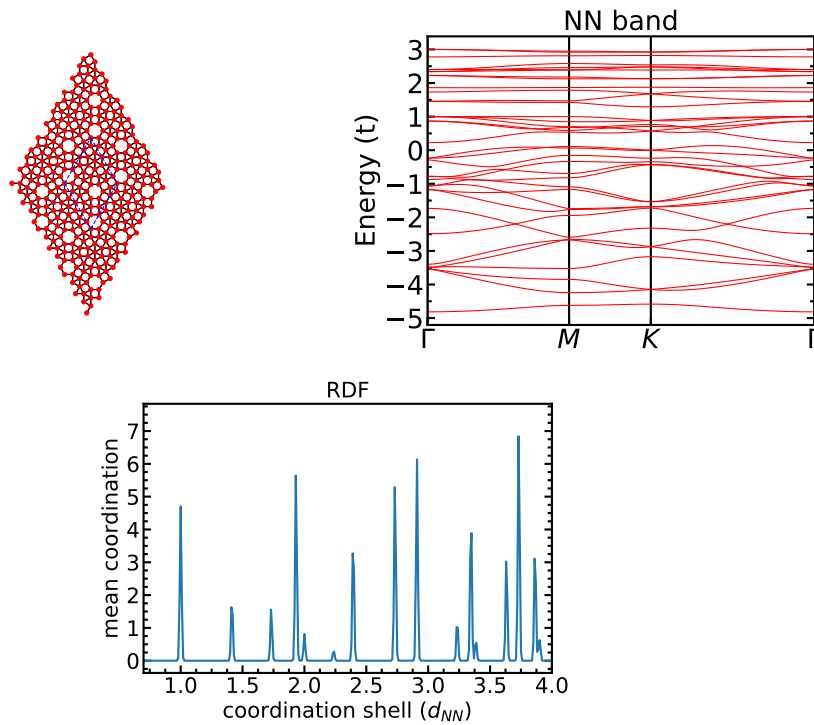


FIG. S212. t5212 lattice framework, nearest neighbors band structure and radial distribution function.

t5213

Tiling reference number t5213 with space-group ' $Amm2'$ ' (38) and 48 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 t5213 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	0	12	0	24	0	0	0

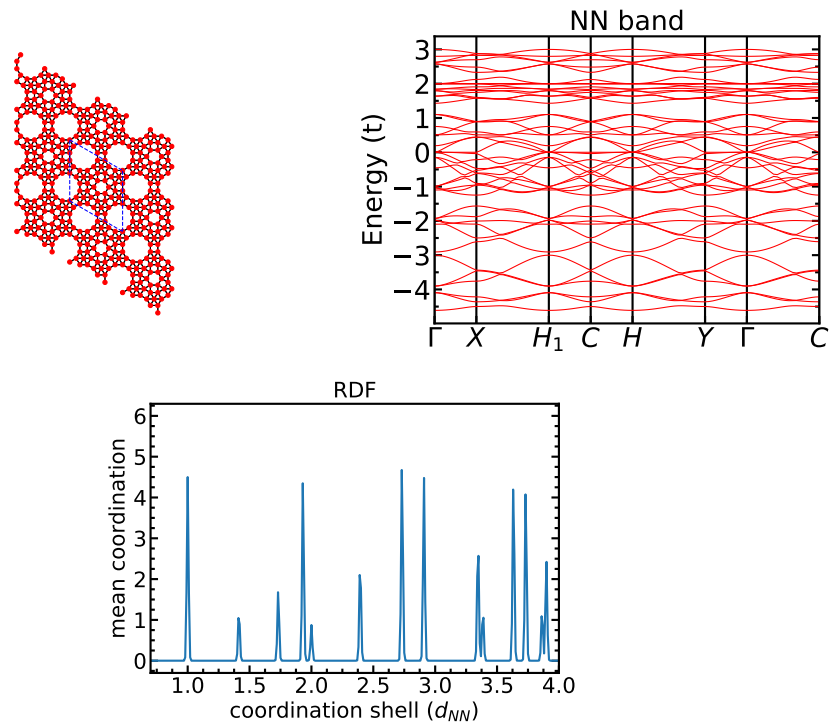


FIG. S213. t5213 lattice framework, nearest neighbors band structure and radial distribution function.

t5214

Tiling reference number t5214 with space-group '*Amm2*' (38) and 42 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 t5214 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	12	12	0	0	0	0

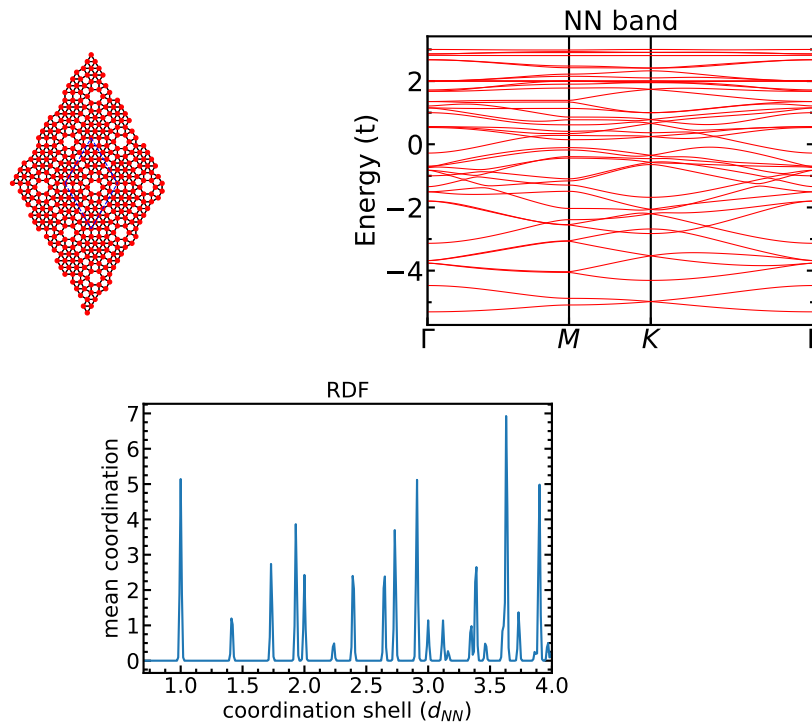


FIG. S214. t5214 lattice framework, nearest neighbors band structure and radial distribution function.

t5215

Tiling reference number t5215 with space-group ' $Amm2'$ ' (38) and 38 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 t5215 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	24	6	0	0	0	0

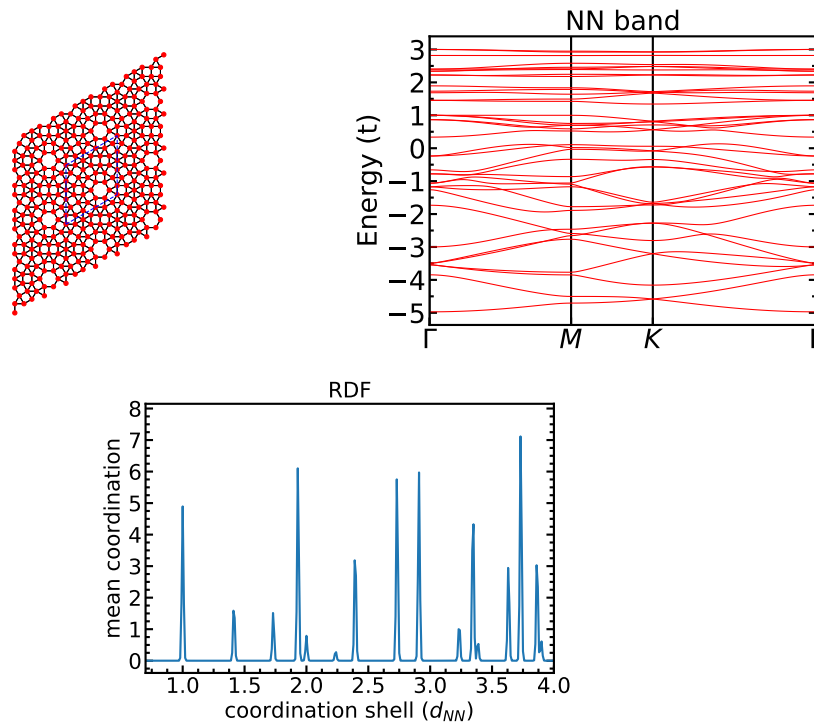


FIG. S215. t5215 lattice framework, nearest neighbors band structure and radial distribution function.

t5216

Tiling reference number t5216 with space-group ' $Amm2'$ ' (38) and 36 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 t5216 vertex types

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

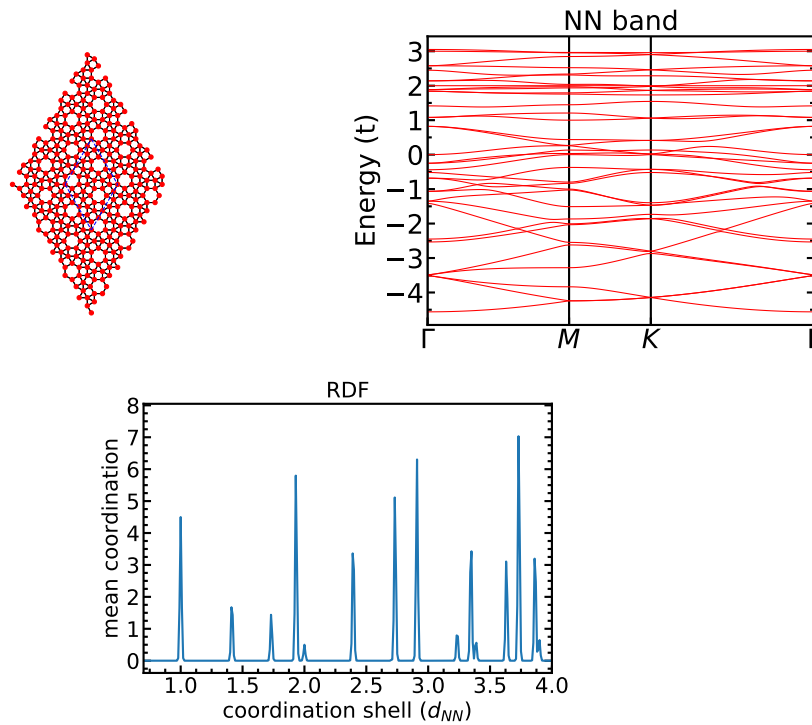


FIG. S216. t5216 lattice framework, nearest neighbors band structure and radial distribution function.

t5217

Tiling reference number t5217 with space-group ' Pm' ' (6) and 42 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 t5217 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	0	0	0	18	0	0	1	11	12	0	0	0

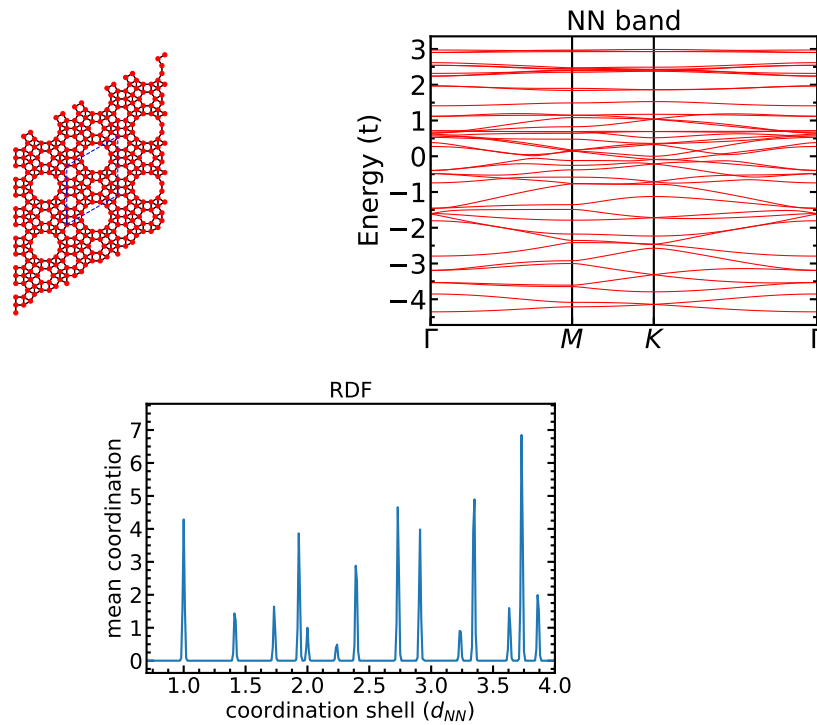


FIG. S217. t5217 lattice framework, nearest neighbors band structure and radial distribution function.

t5218

Tiling reference number t5218 with space-group ' $Pmm2'$ ' (25) and 13 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 t5218 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	0	0	0	0	0

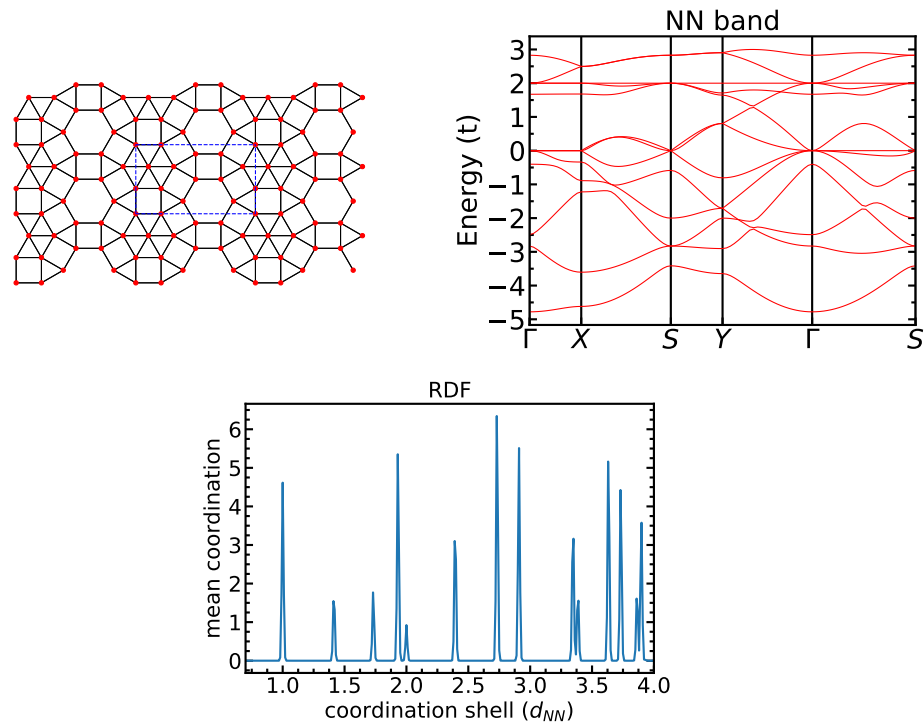


FIG. S218. t5218 lattice framework, nearest neighbors band structure and radial distribution function.

t5219

Tiling reference number t5219 with space-group ' Pm' ' (6) and 14 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 t5219 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	0	0	0	0	0

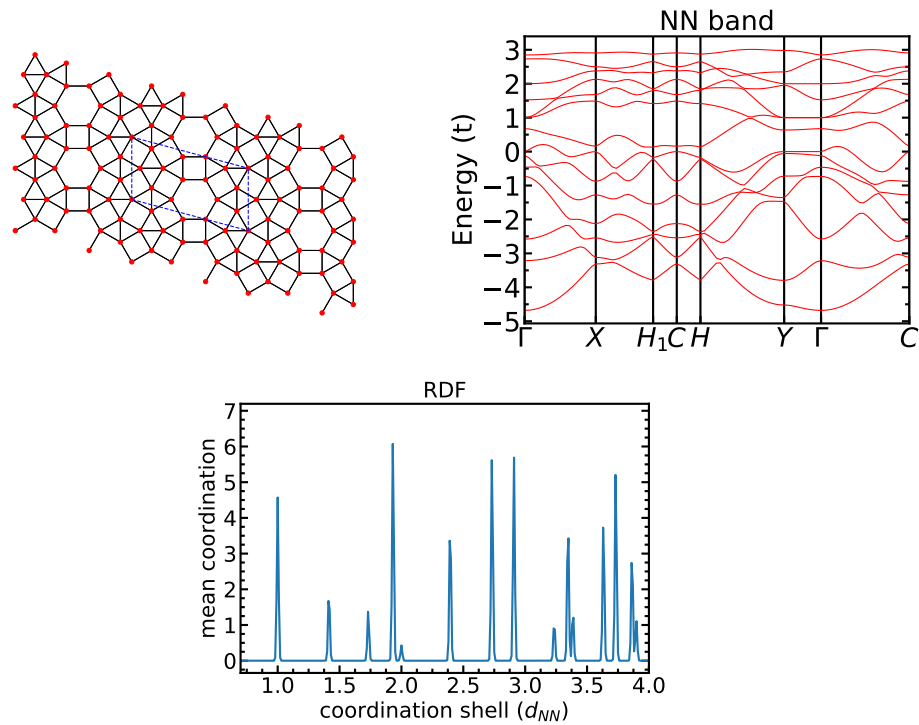


FIG. S219. t5219 lattice framework, nearest neighbors band structure and radial distribution function.

t5220

Tiling reference number t5220 with space-group ' $Amm2'$ ' (38) and 16 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 t5220 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	2	0	0	0	0

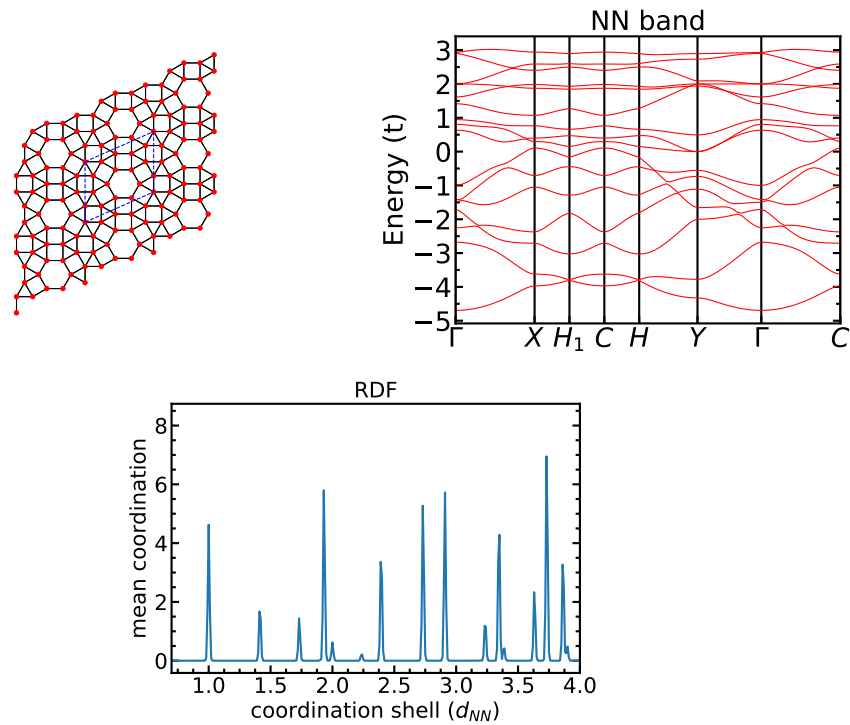


FIG. S220. t5220 lattice framework, nearest neighbors band structure and radial distribution function.

t5221

Tiling reference number t5221 with space-group ' Pm' ' (6) and 14 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 t5221 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	2	0	0	0	0

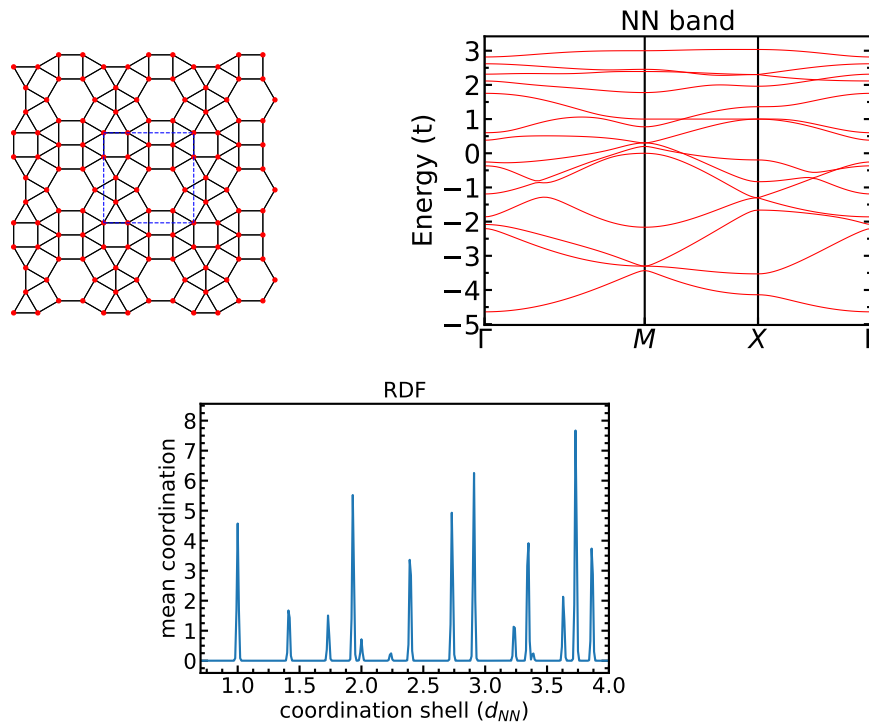


FIG. S221. t5221 lattice framework, nearest neighbors band structure and radial distribution function.

t5222

Tiling reference number t5222 with space-group ' $Amm2'$ ' (38) and 16 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 t5222 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	4	0	0	0	0

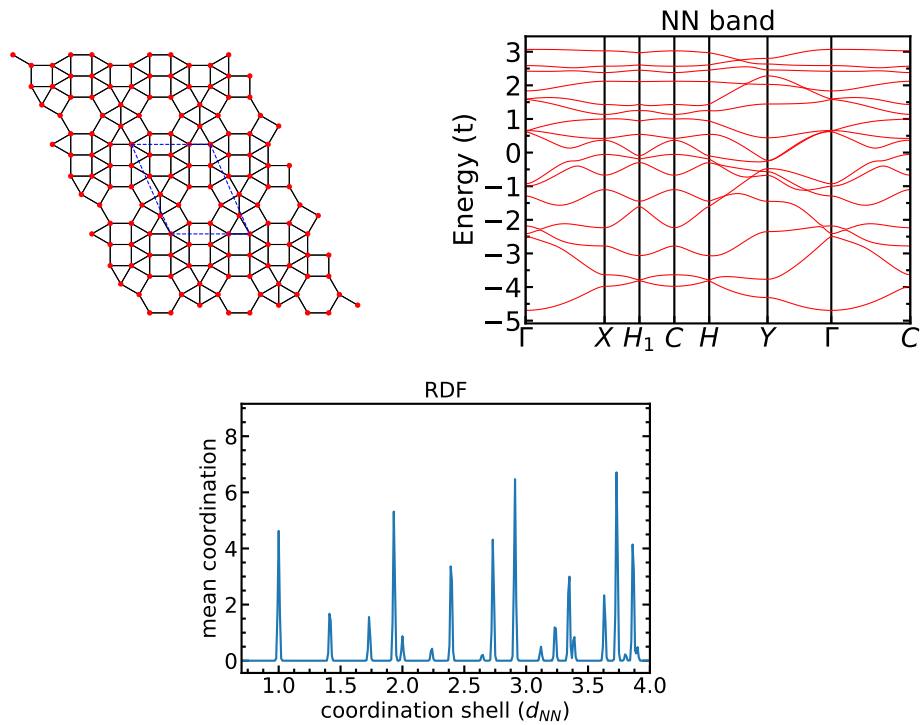


FIG. S222. t5222 lattice framework, nearest neighbors band structure and radial distribution function.

t5223

Tiling reference number t5223 with space-group ' Pm' ' (6) and 42 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 t5223 vertex types

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

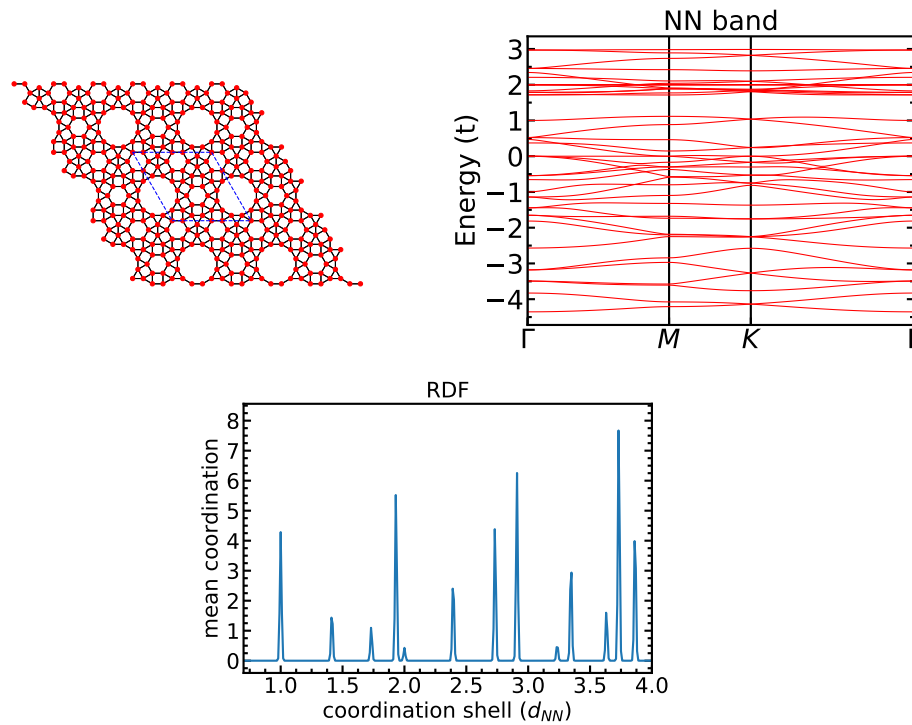


FIG. S223. t5223 lattice framework, nearest neighbors band structure and radial distribution function.

t5224

Tiling reference number t5224 with space-group ' $Cmmm$ ' (65) and 16 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 t5224 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	6	0	0	0	4

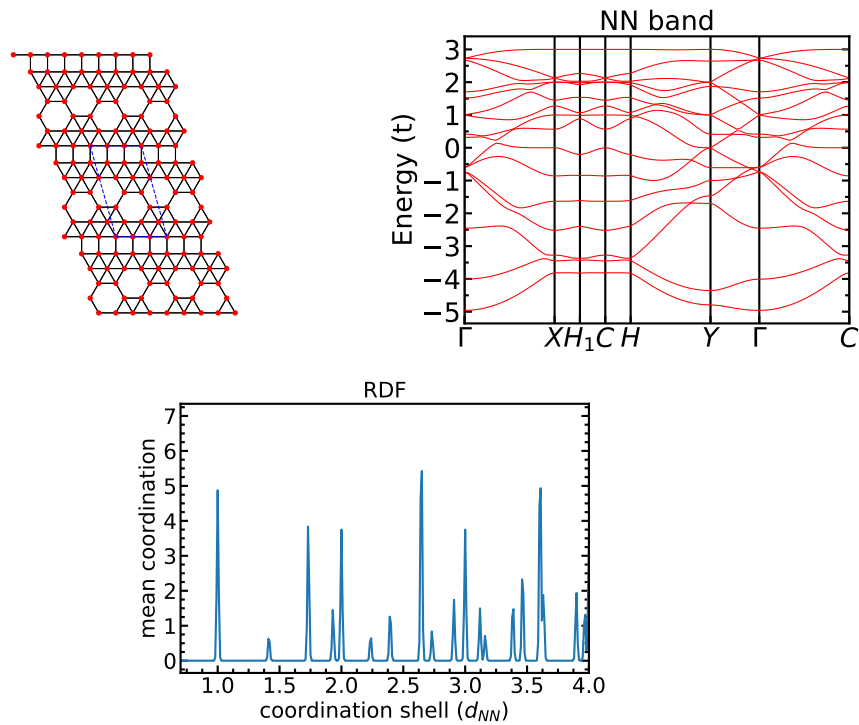


FIG. S224. t5224 lattice framework, nearest neighbors band structure and radial distribution function.

t5225

Tiling reference number t5225 with space-group ' $Cmmm$ ' (65) and 13 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 t5225 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	4	0	0	0	0	0	4

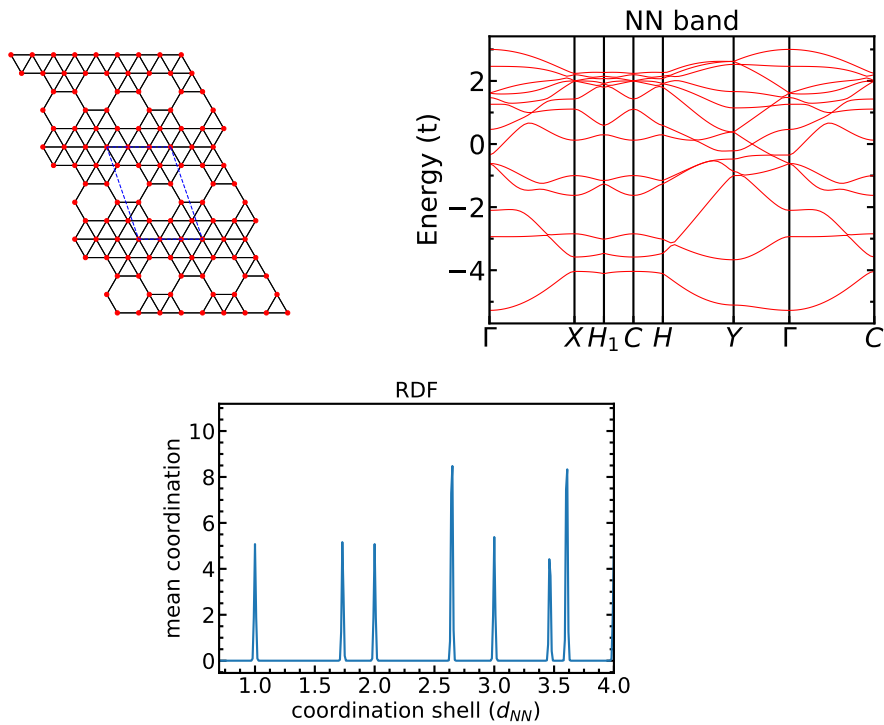


FIG. S225. t5225 lattice framework, nearest neighbors band structure and radial distribution function.

t5226

Tiling reference number t5226 with space-group ' $Pmma'$ ' (51) and 16 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 t5226 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	4	0	0	0	0	0	4

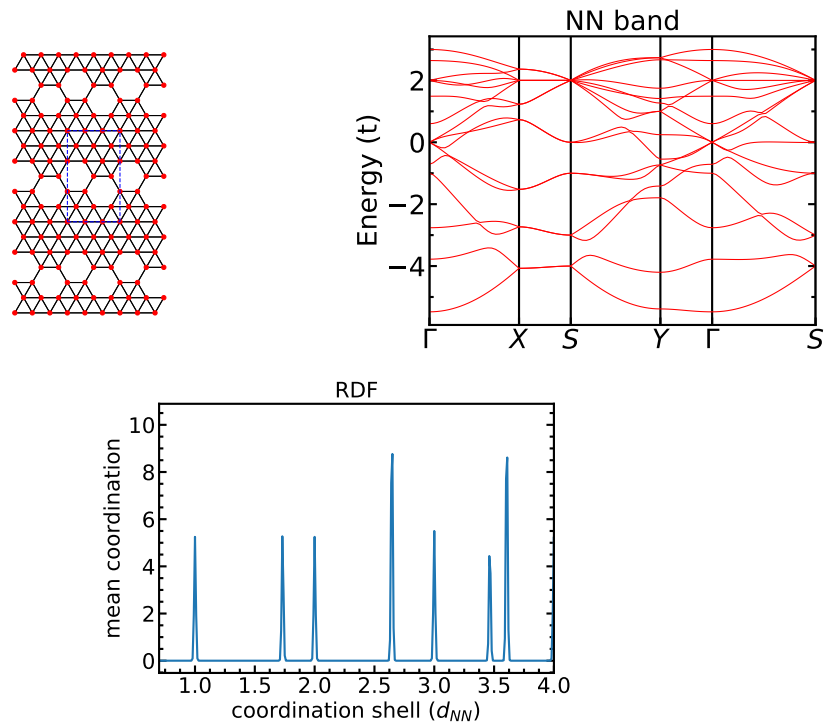


FIG. S226. t5226 lattice framework, nearest neighbors band structure and radial distribution function.

t5227

Tiling reference number t5227 with space-group ' $Amm2'$ ' (38) and 31 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 t5227 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	6	0	0	0	0	0	12

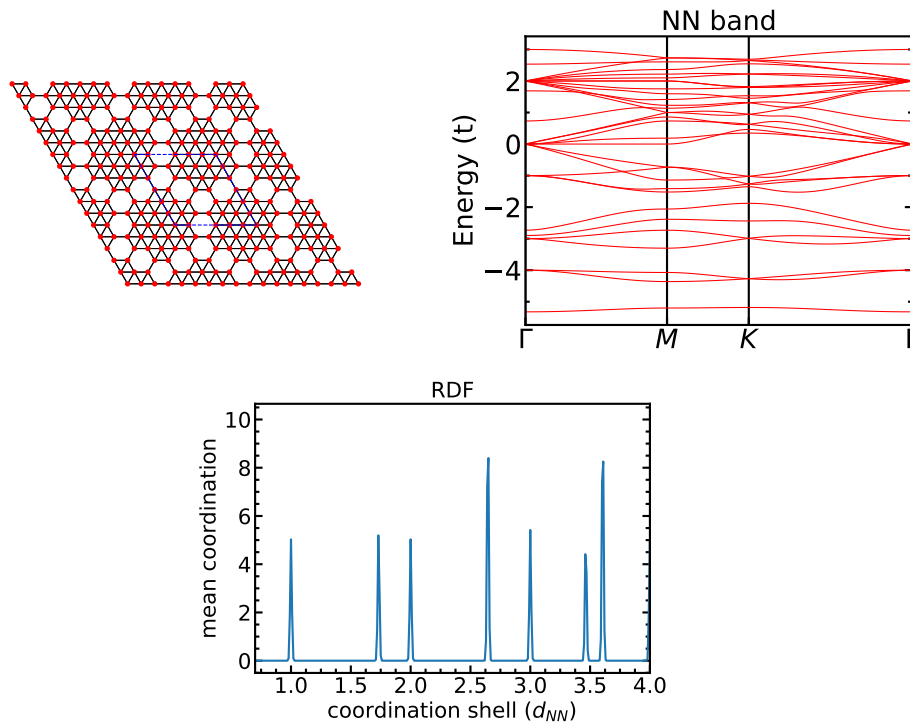


FIG. S227. t5227 lattice framework, nearest neighbors band structure and radial distribution function.

t5228

Tiling reference number t5228 with space-group ' $P - 6m2'$ ' (187) and 21 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 t5228 vertex types

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

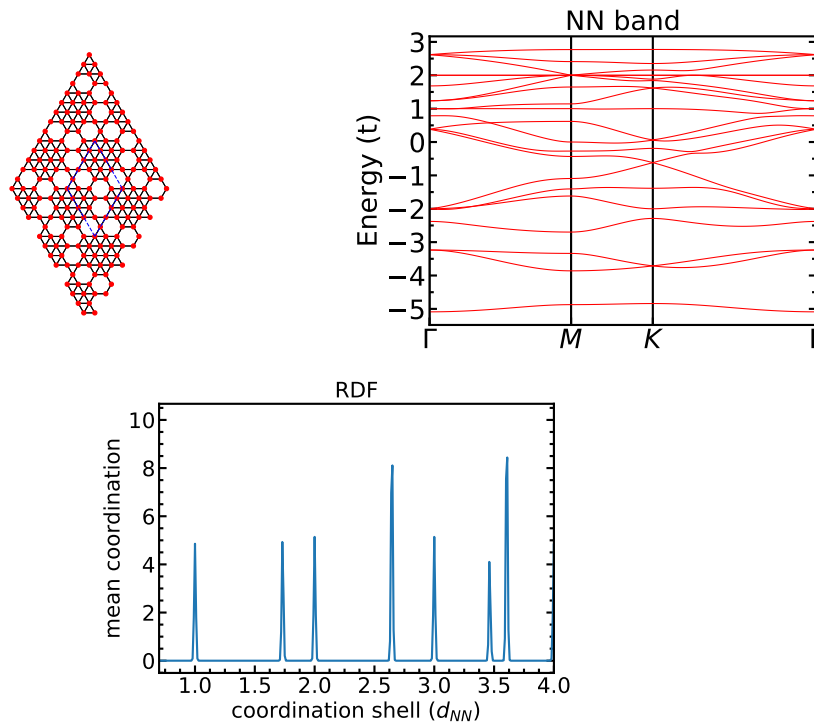


FIG. S228. t5228 lattice framework, nearest neighbors band structure and radial distribution function.

t5229

Tiling reference number t5229 with space-group ' $P - 62m'$ ' (189) and 23 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 t5229 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	12	0	0	0	0	0	6

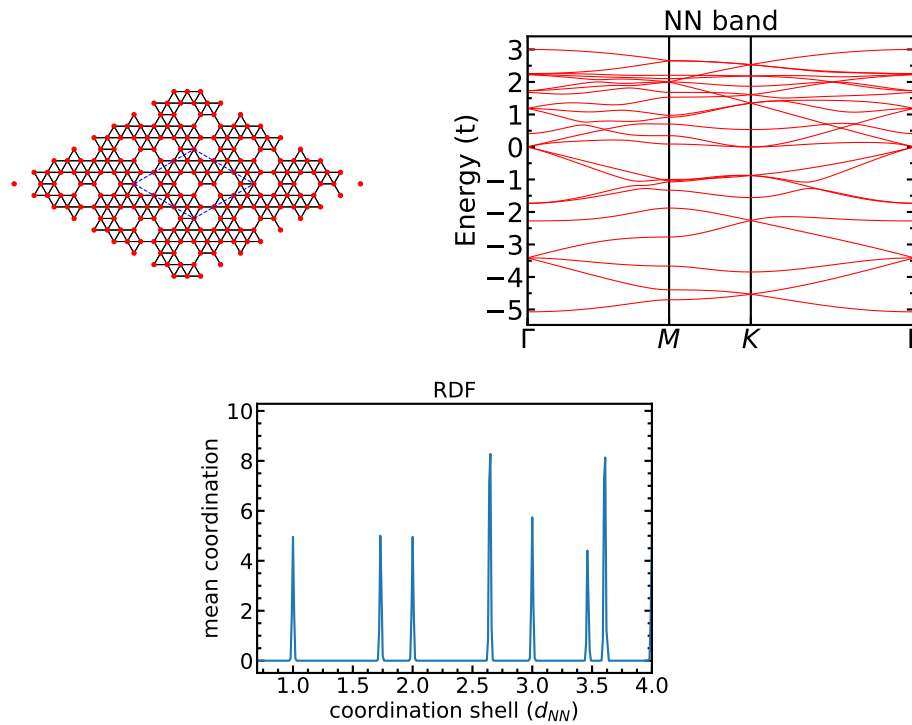


FIG. S229. t5229 lattice framework, nearest neighbors band structure and radial distribution function.

t5230

Tiling reference number t5230 with space-group ' Pm' ' (6) and 22 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 t5230 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	6	0	0	0	0	0	12

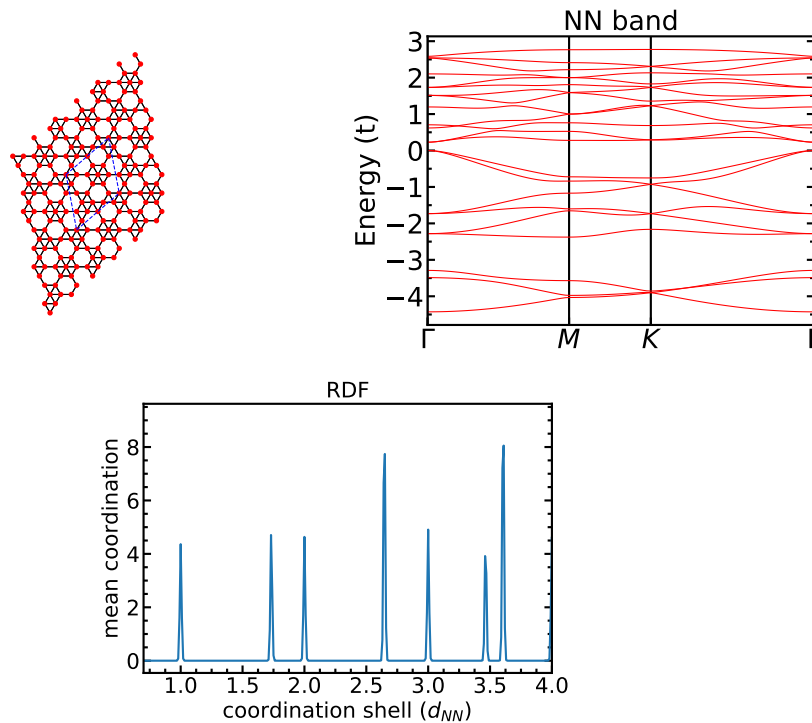


FIG. S230. t5230 lattice framework, nearest neighbors band structure and radial distribution function.

t5231

Tiling reference number t5231 with space-group ' $P6/m'$ ' (175) and 25 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 t5231 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	12	0	0	0	0	0	12

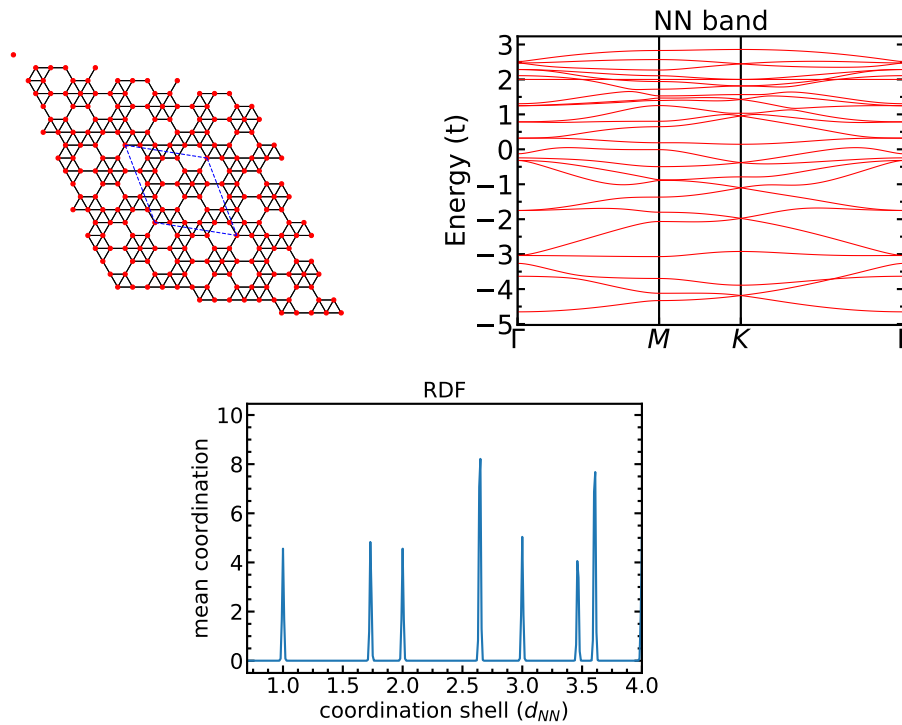


FIG. S231. t5231 lattice framework, nearest neighbors band structure and radial distribution function.

t5232

Tiling reference number t5232 with space-group ' $P - 62m'$ ' (189) and 22 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 t5232 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	6	0	0	0	0	0	12

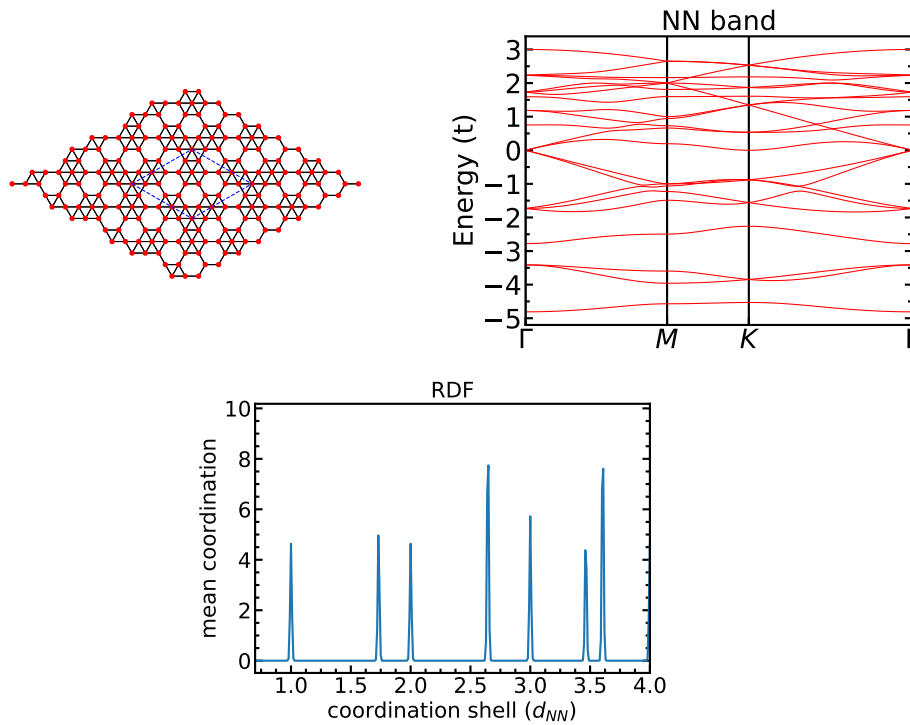


FIG. S232. t5232 lattice framework, nearest neighbors band structure and radial distribution function.

t5233

Tiling reference number t5233 with space-group ' $P2/m'$ ' (10) 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 t5233 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	0	0	0	0	6

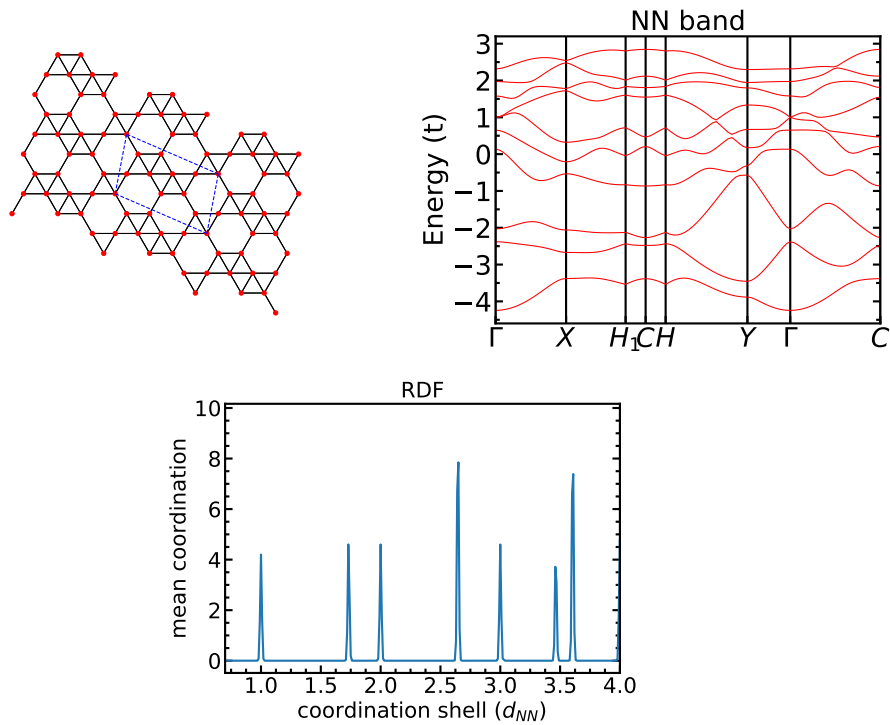


FIG. S233. t5233 lattice framework, nearest neighbors band structure and radial distribution function.

t5234

Tiling reference number t5234 with space-group ' $P2/m'$ ' (10) and 10 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 t5234 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	0	0	0	0	4

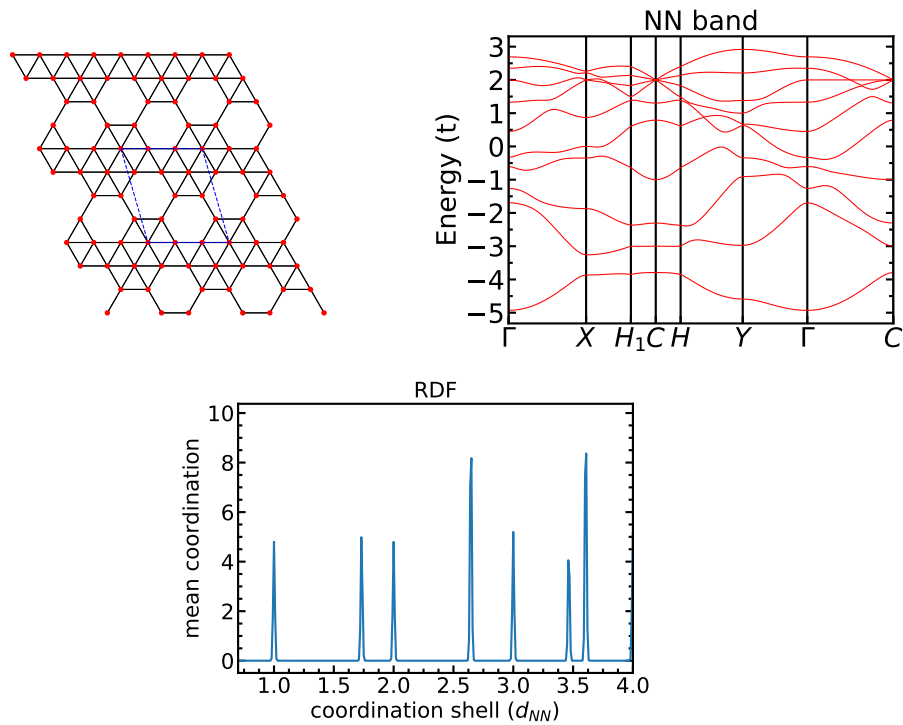


FIG. S234. t5234 lattice framework, nearest neighbors band structure and radial distribution function.

t5235

Tiling reference number t5235 with space-group ' $P6/m'$ ' (175) and 30 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 t5235 vertex types

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

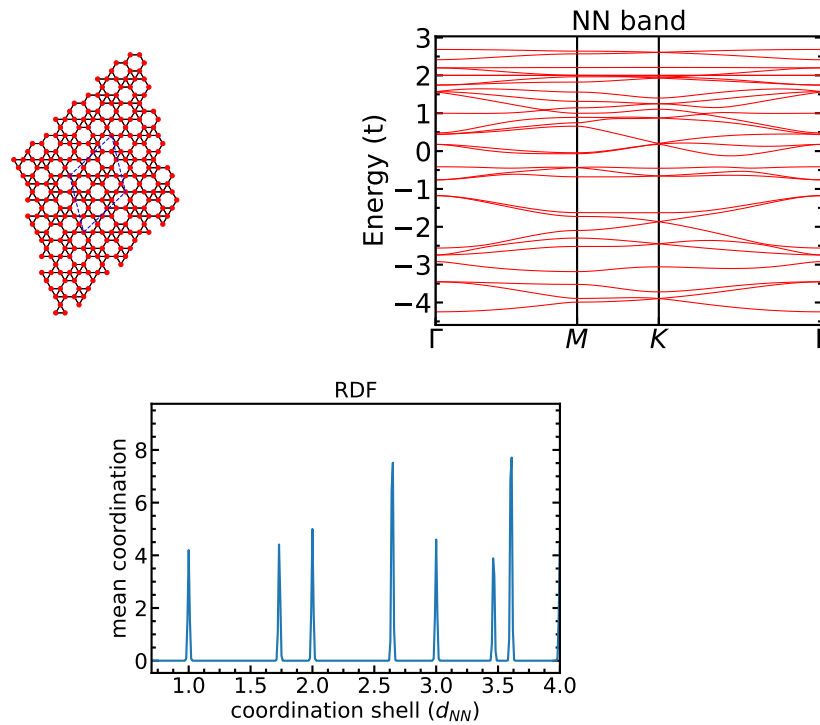


FIG. S235. t5235 lattice framework, nearest neighbors band structure and radial distribution function.

t5236

Tiling reference number t5236 with space-group ' $P-6'$ ' (174) and 15 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 t5236 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	6	0	0	0	0	0	6

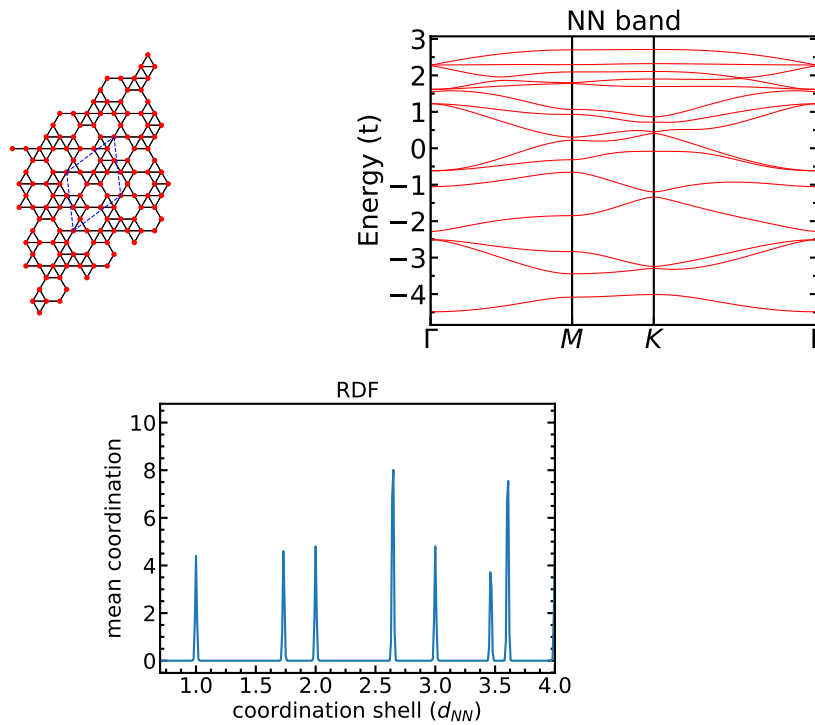


FIG. S236. t5236 lattice framework, nearest neighbors band structure and radial distribution function.

t5237

Tiling reference number t5237 with space-group '*Pbam*' (55) and 20 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 t5237 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

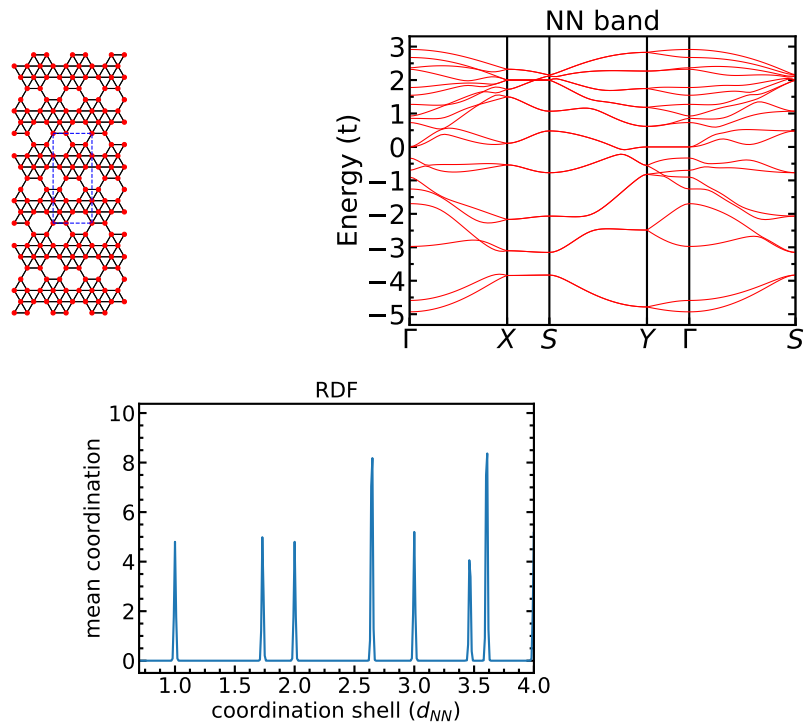


FIG. S237. t5237 lattice framework, nearest neighbors band structure and radial distribution function.

t5238

Tiling reference number t5238 with space-group ' $Cmmm$ ' (65) and 12 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 t5238 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	0	6

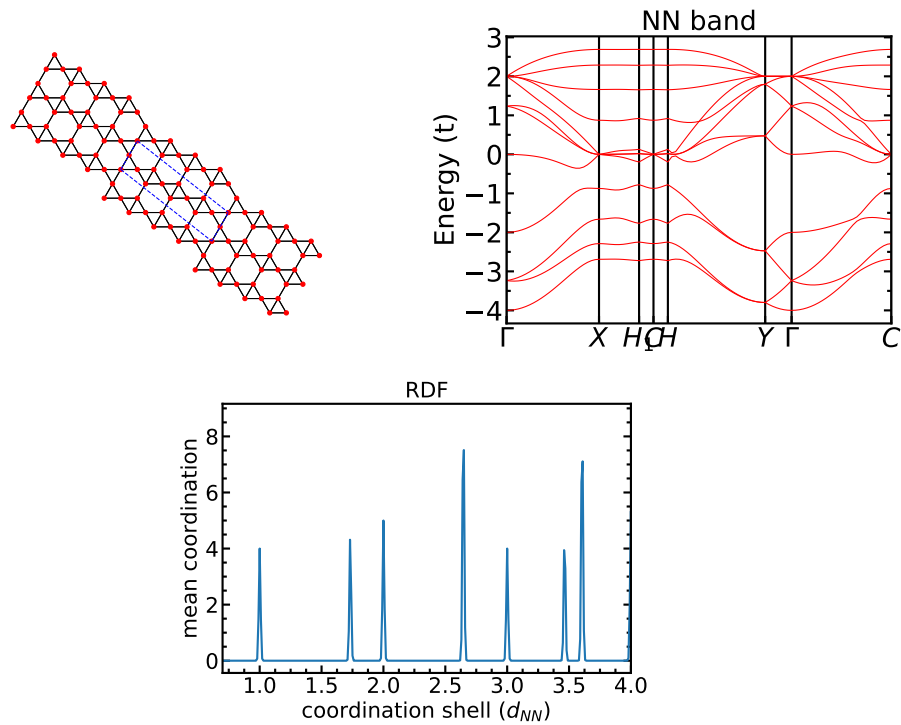


FIG. S238. t5238 lattice framework, nearest neighbors band structure and radial distribution function.

t5239

Tiling reference number t5239 with space-group ' $Cmmm$ ' (65) and 12 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 t5239 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	0	0	0	0	0	0	2

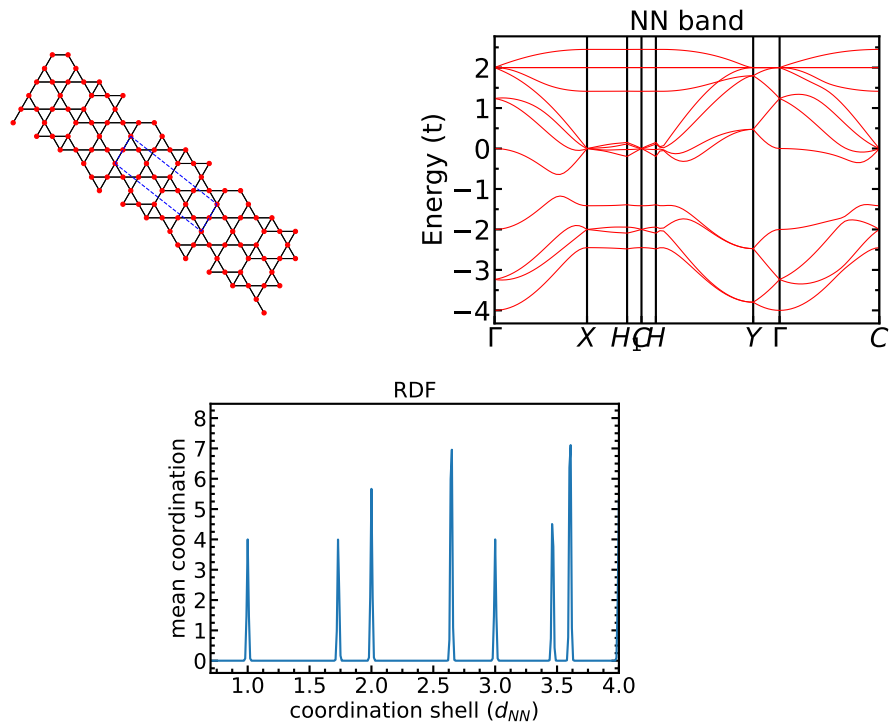


FIG. S239. t5239 lattice framework, nearest neighbors band structure and radial distribution function.

t5240

Tiling reference number t5240 with space-group ' $Pmmm$ ' (47) and 12 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 t5240 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	4	0	4	0	0	0	2

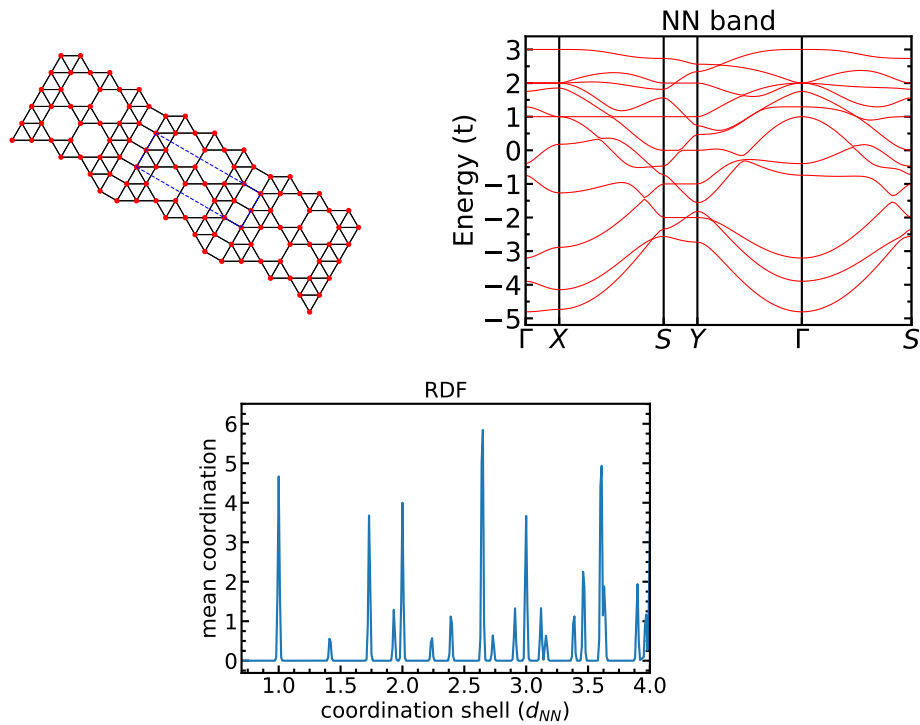


FIG. S240. t5240 lattice framework, nearest neighbors band structure and radial distribution function.

t5241

Tiling reference number t5241 with space-group ' $P2/m'$ ' (10) and 12 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 t5241 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	4	0	4	0	0	0	2

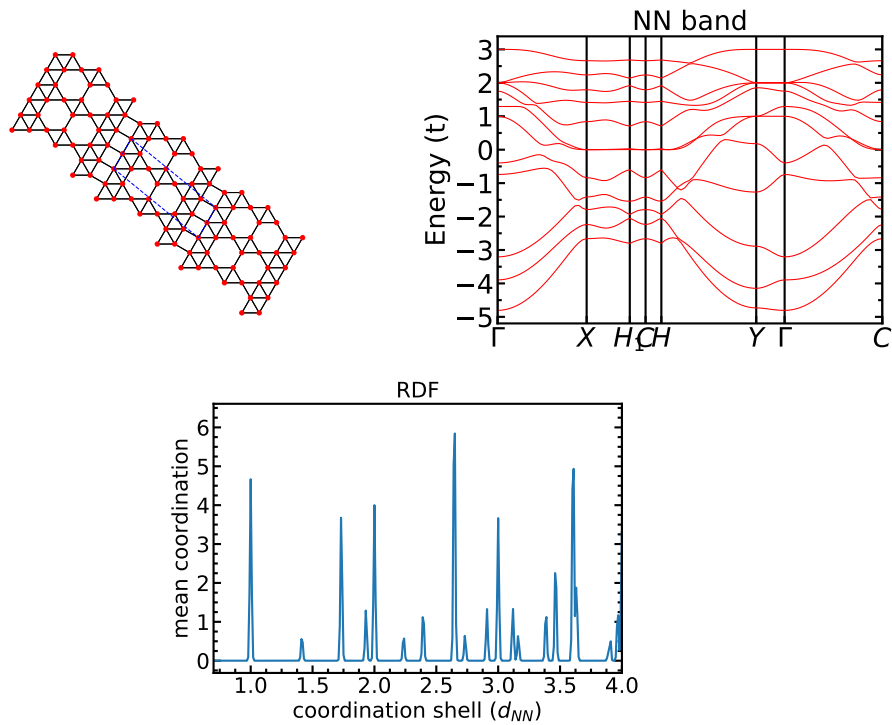


FIG. S241. t5241 lattice framework, nearest neighbors band structure and radial distribution function.

t5242

Tiling reference number t5242 with space-group ' $Pmmm$ ' (47) and 10 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 t5242 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	4	0	0	0	0	0	2

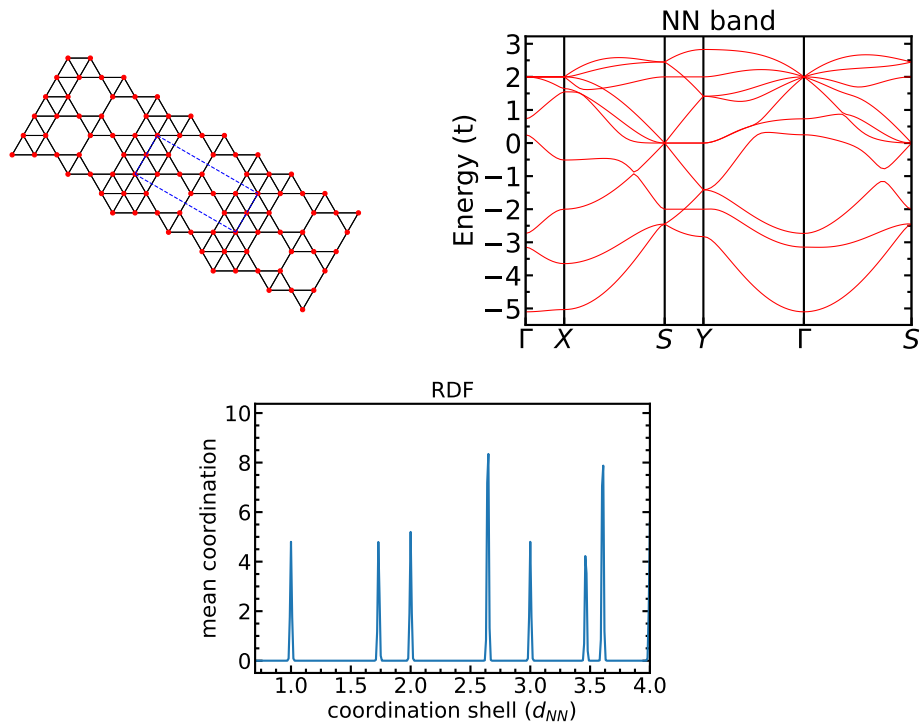


FIG. S242. t5242 lattice framework, nearest neighbors band structure and radial distribution function.

t5243

Tiling reference number t5243 with space-group ' $Cmmm$ ' (65) and 10 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 t5243 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	0	0	0	0	6

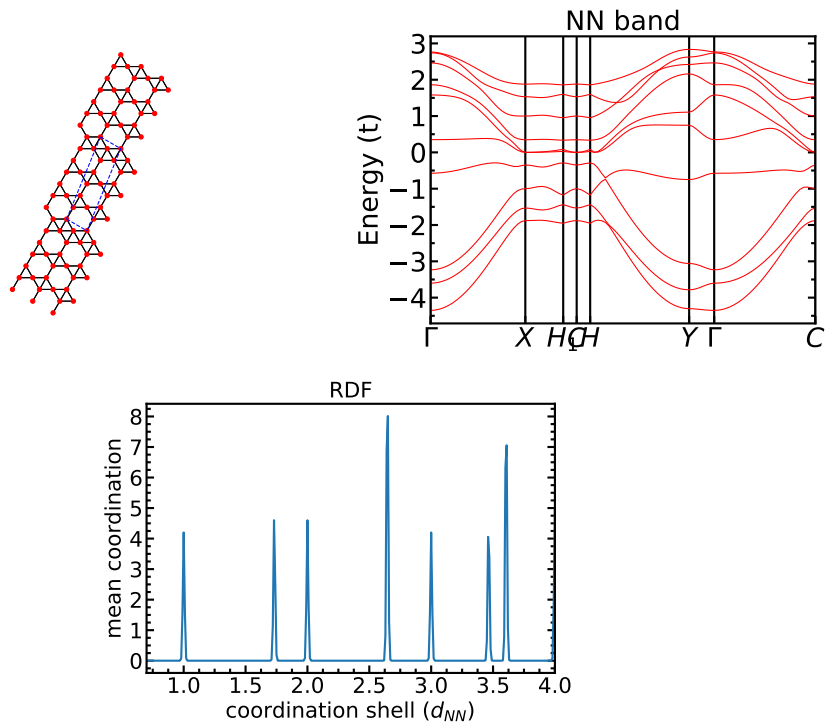


FIG. S243. t5243 lattice framework, nearest neighbors band structure and radial distribution function.

t5244

Tiling reference number t5244 with space-group ' $Pmmm$ ' (47) and 12 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 t5244 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	0	4

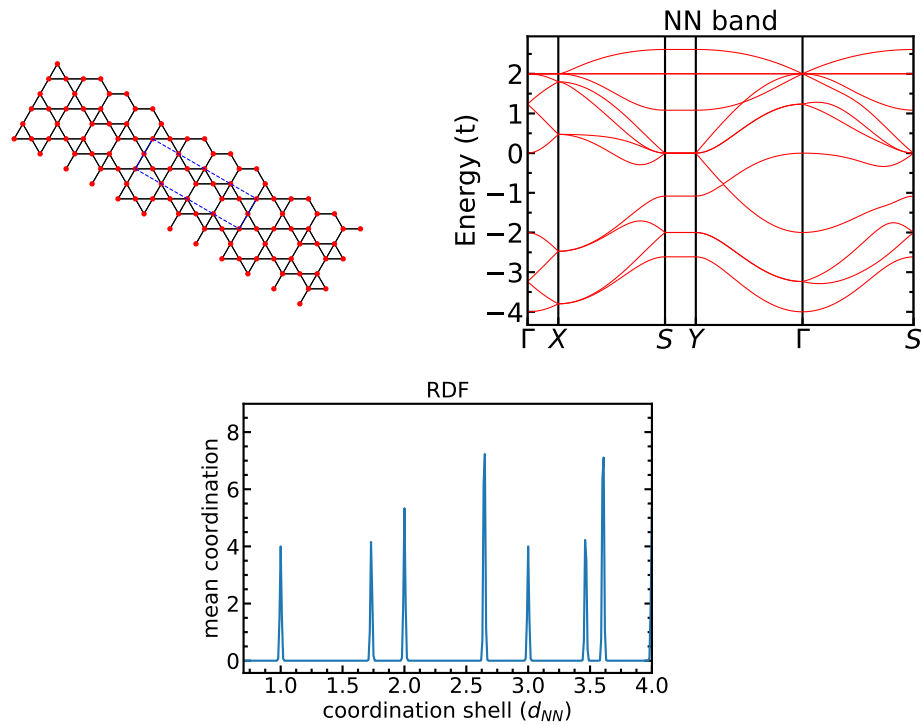


FIG. S244. t5244 lattice framework, nearest neighbors band structure and radial distribution function.

t5245

Tiling reference number t5245 with space-group ' $Cmmm$ ' (65) and 13 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 t5245 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

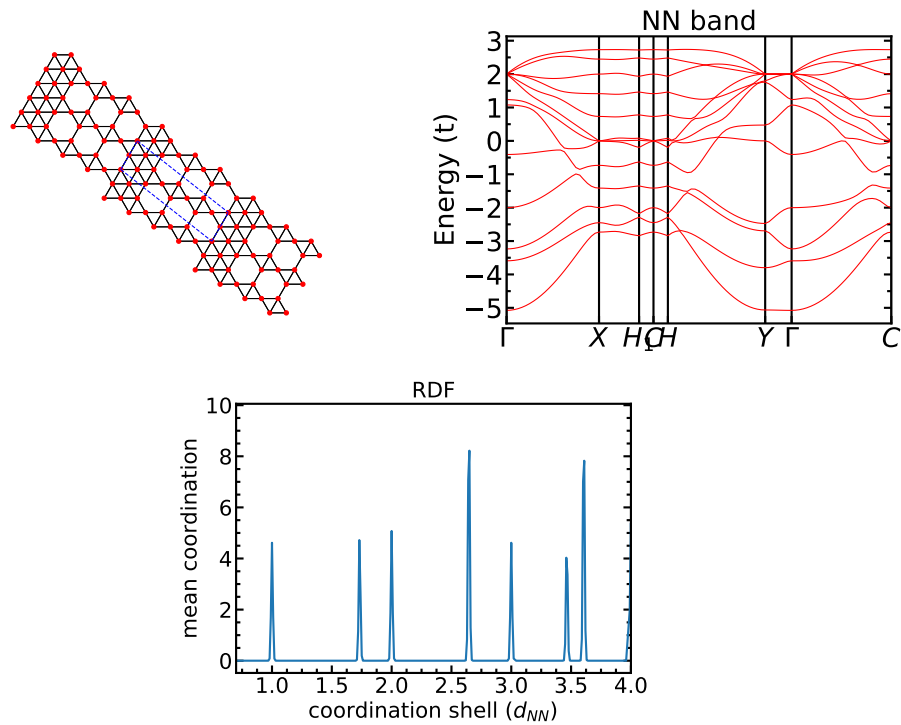


FIG. S245. t5245 lattice framework, nearest neighbors band structure and radial distribution function.

t5246

Tiling reference number t5246 with space-group ' $P6/m'$ ' (175) and 25 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 t5246 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	6

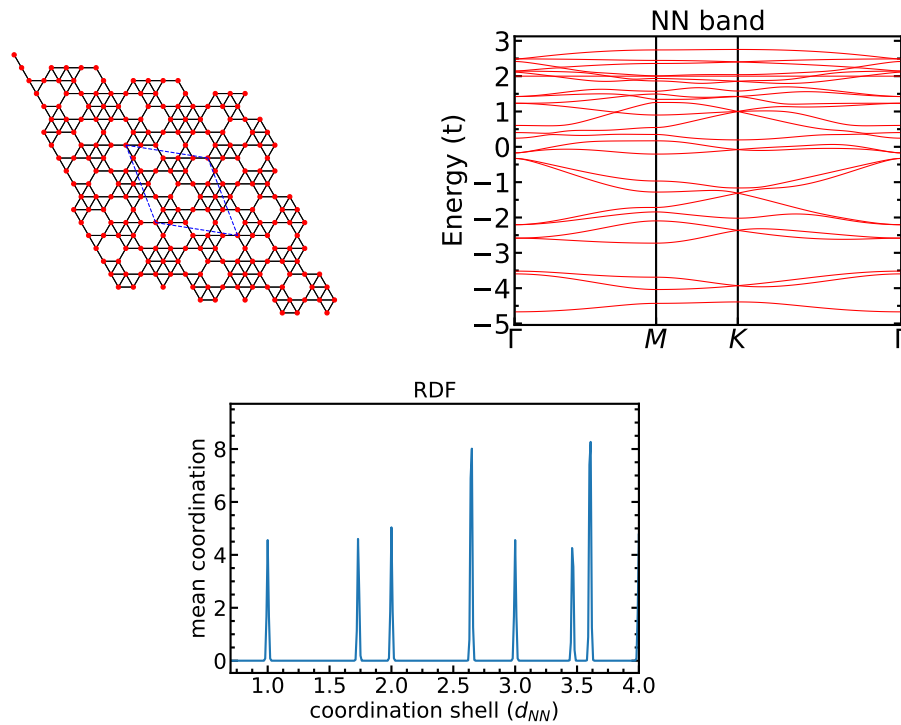


FIG. S246. t5246 lattice framework, nearest neighbors band structure and radial distribution function.

t5247

Tiling reference number t5247 with space-group ' $Cmmm$ ' (65) and 13 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 t5247 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	6	0	0	0	0	0	4

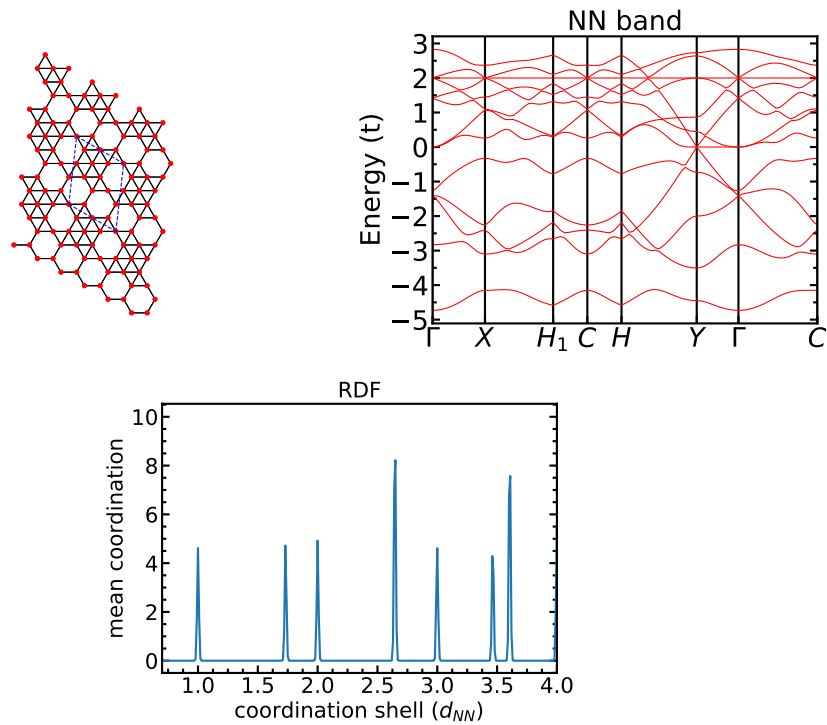


FIG. S247. t5247 lattice framework, nearest neighbors band structure and radial distribution function.

t5248

Tiling reference number t5248 with space-group ' Pm' ' (6) and 13 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 t5248 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	6	0	0	0	0	0	4

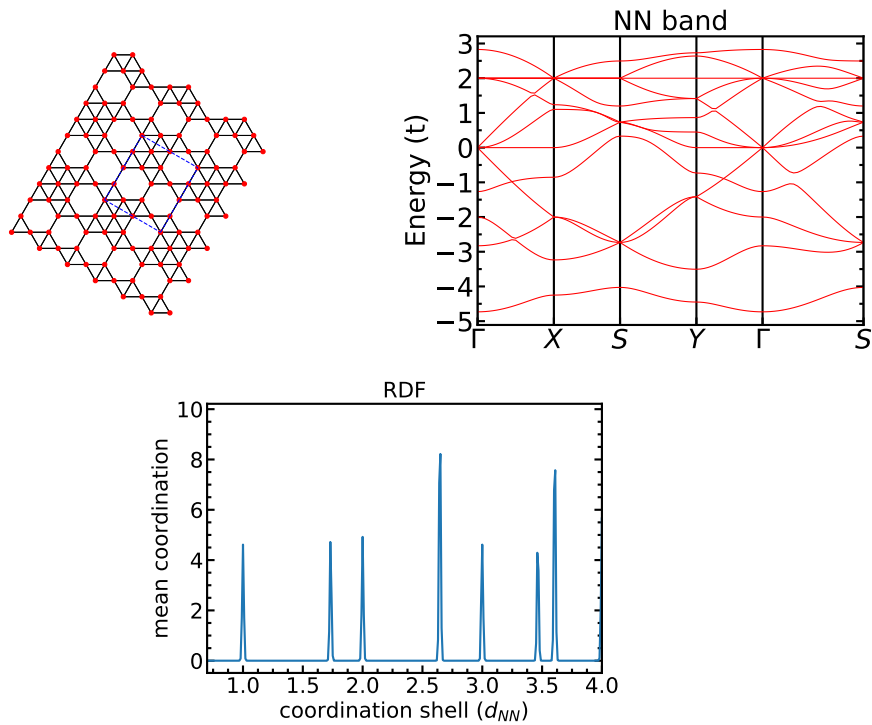


FIG. S248. t5248 lattice framework, nearest neighbors band structure and radial distribution function.

t5249

Tiling reference number t5249 with space-group ' $P6/m'$ ' (175) and 30 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 t5249 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	18	0	0	0	0	0	6

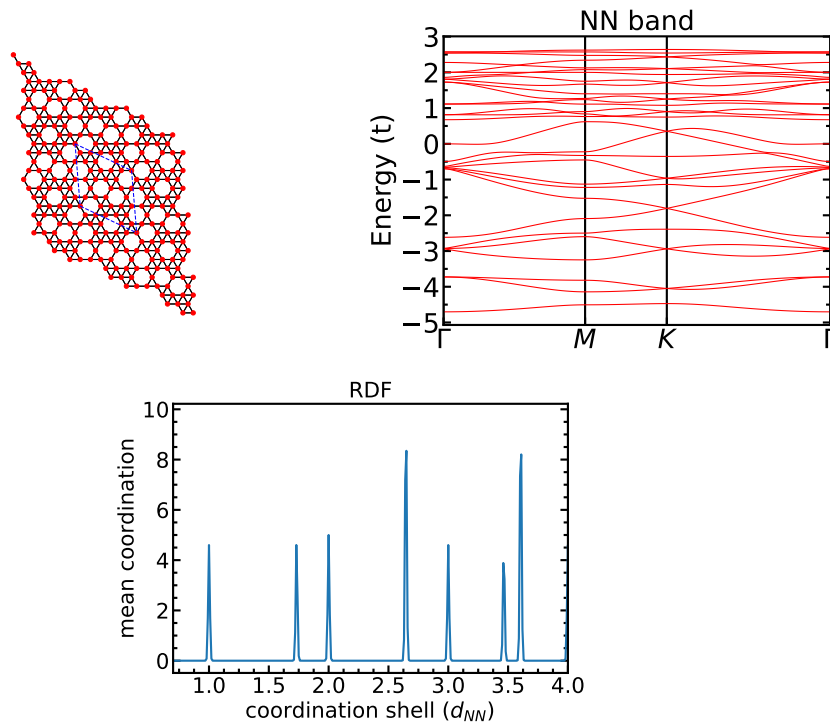


FIG. S249. t5249 lattice framework, nearest neighbors band structure and radial distribution function.

t5250

Tiling reference number t5250 with space-group ' $P2/m'$ ' (10) and 8 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 t5250 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	4	0	0	0	0	0	2

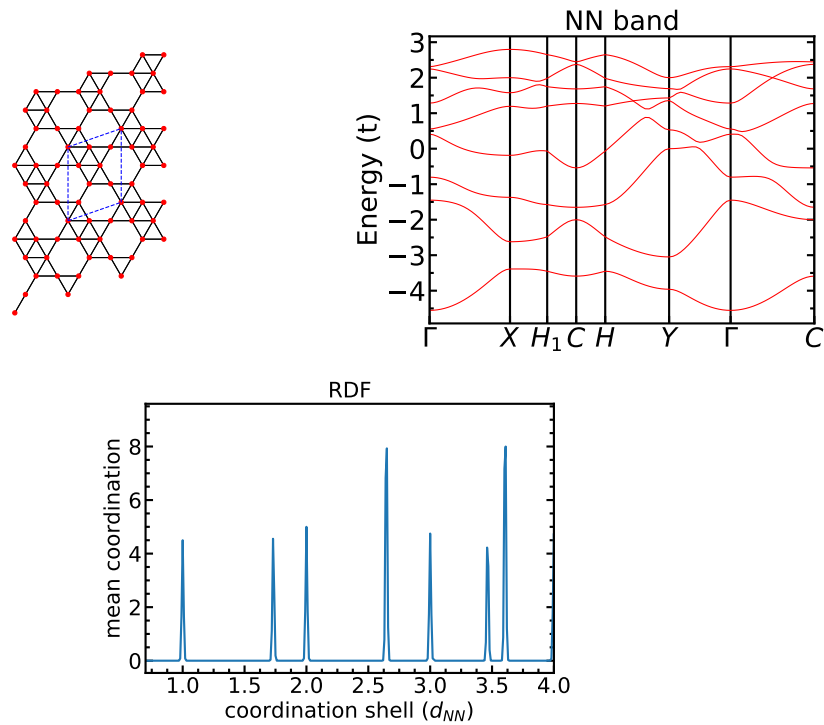


FIG. S250. t5250 lattice framework, nearest neighbors band structure and radial distribution function.

t5251

Tiling reference number t5251 with space-group ' $P2/m'$ ' (10) and 9 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 t5251 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	6	0	0	0	0	0	2

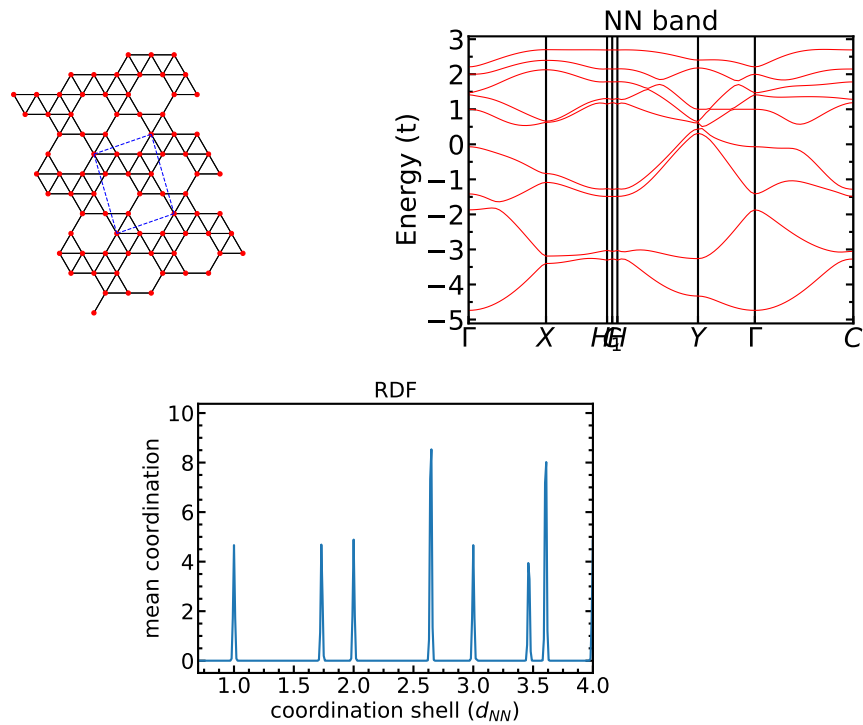


FIG. S251. t5251 lattice framework, nearest neighbors band structure and radial distribution function.

t5252

Tiling reference number t5252 with space-group ' $Cmmm$ ' (65) and 13 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 t5252 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	6	0	0	0	0	0	4

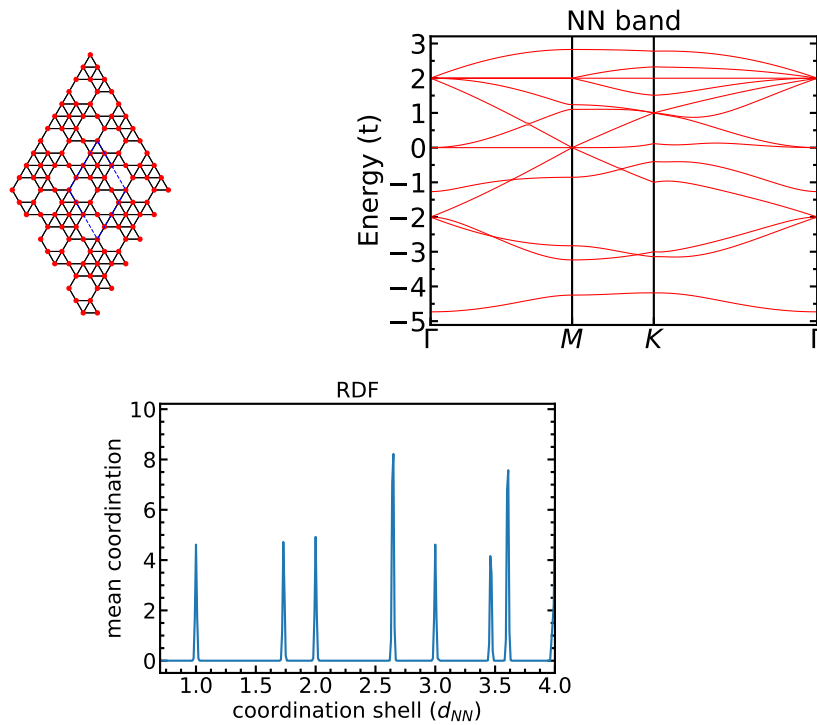


FIG. S252. t5252 lattice framework, nearest neighbors band structure and radial distribution function.

t5253

Tiling reference number t5253 with space-group ' $Pmmm'$ ' (47) and 8 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 t5253 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	0	0	0	0	4

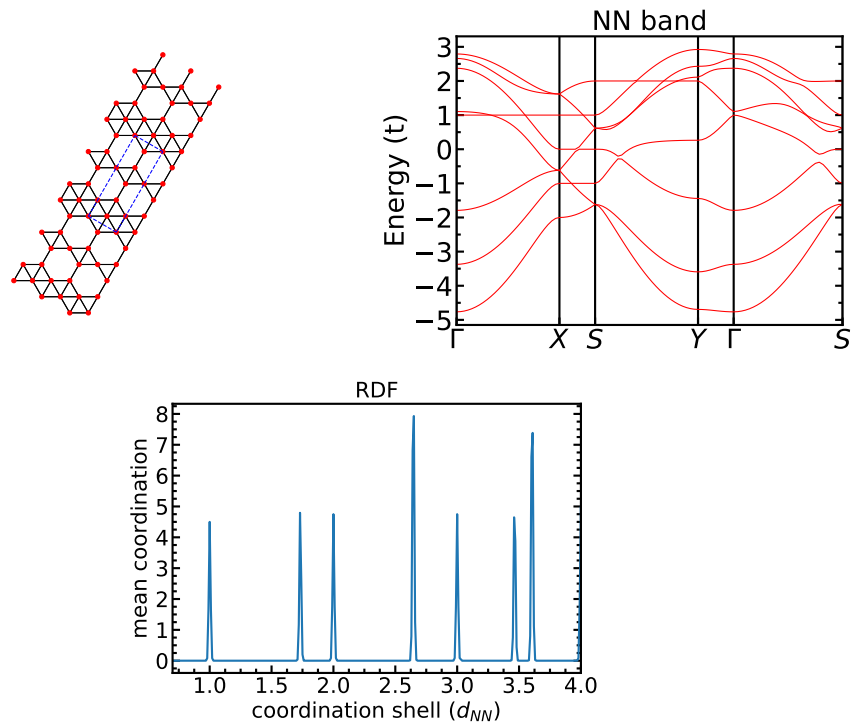


FIG. S253. t5253 lattice framework, nearest neighbors band structure and radial distribution function.

t5254

Tiling reference number t5254 with space-group ' $Cmmm$ ' (65) and 9 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 t5254 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	0	0	0	0	4

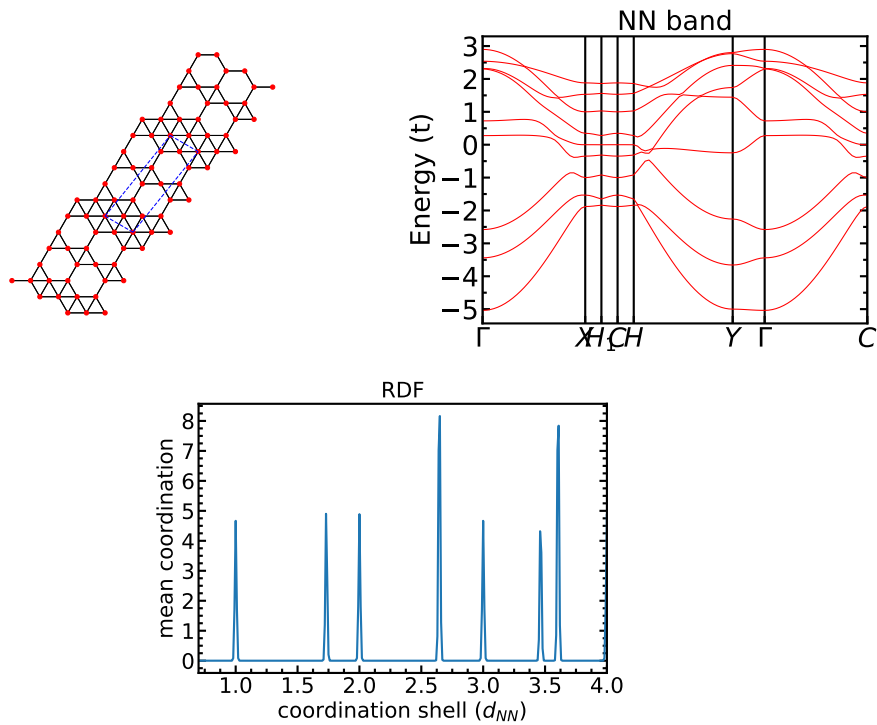


FIG. S254. t5254 lattice framework, nearest neighbors band structure and radial distribution function.

t5255

Tiling reference number t5255 with space-group ' $Pmma'$ ' (51) and 16 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 t5255 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

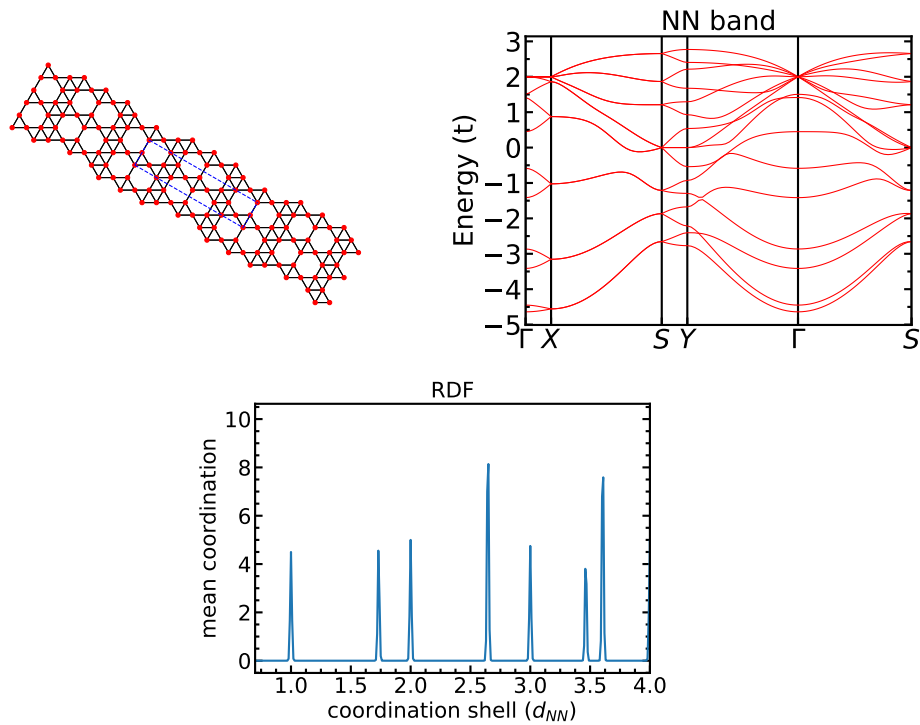


FIG. S255. t5255 lattice framework, nearest neighbors band structure and radial distribution function.

t5256

Tiling reference number t5256 with space-group ' $Pmmm'$ ' (47) and 9 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 t5256 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	2	0	0	0	0	0	2

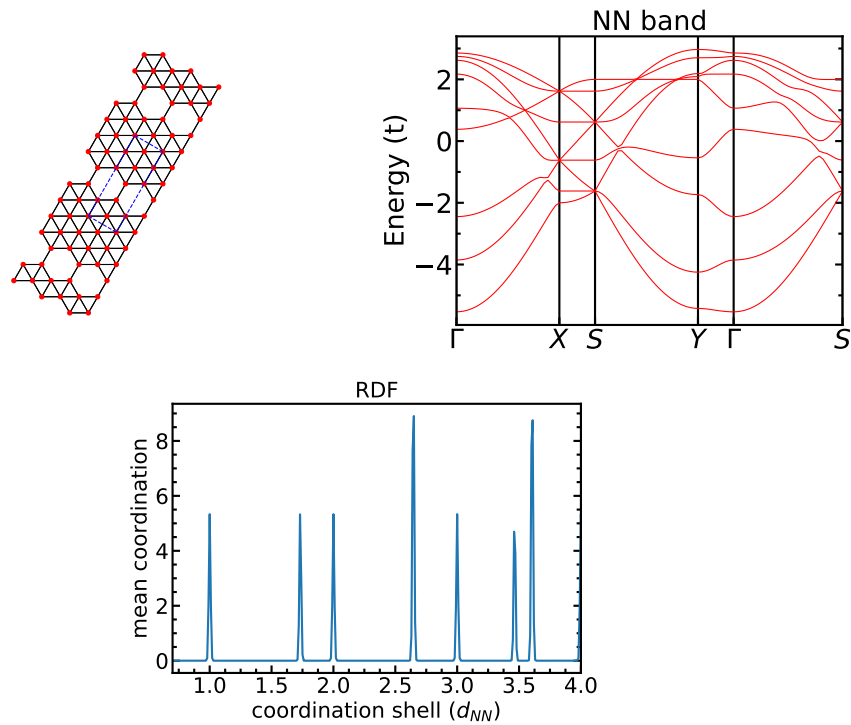


FIG. S256. t5256 lattice framework, nearest neighbors band structure and radial distribution function.

t5257

Tiling reference number t5257 with space-group '*Amm2'* (38) and 10 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 t5257 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	2	0	0	0	0	0	2

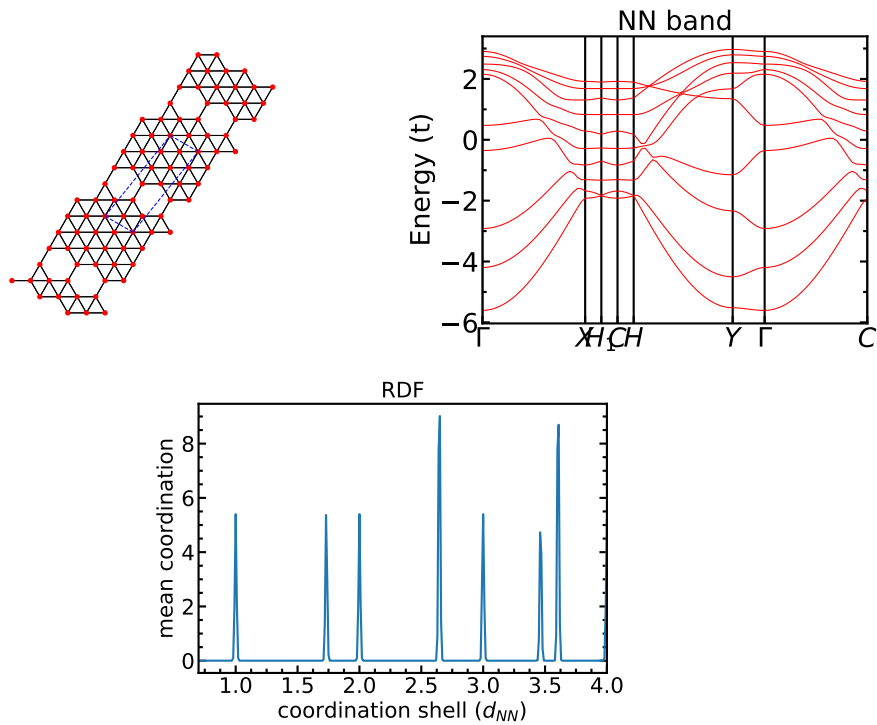


FIG. S257. t5257 lattice framework, nearest neighbors band structure and radial distribution function.

t5258

Tiling reference number t5258 with space-group ' $Cmmm$ ' (65) and 13 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 t5258 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	8	0	0	0	0	0	2

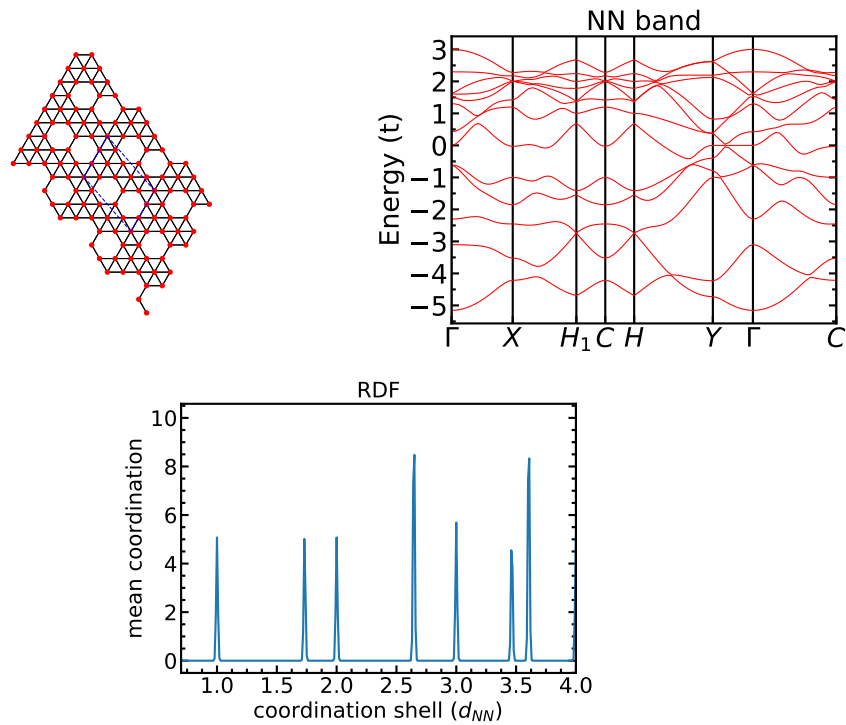


FIG. S258. t5258 lattice framework, nearest neighbors band structure and radial distribution function.

t5259

Tiling reference number t5259 with space-group ' $Cmmm$ ' (65) and 13 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 t5259 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	8	0	0	0	0	0	2

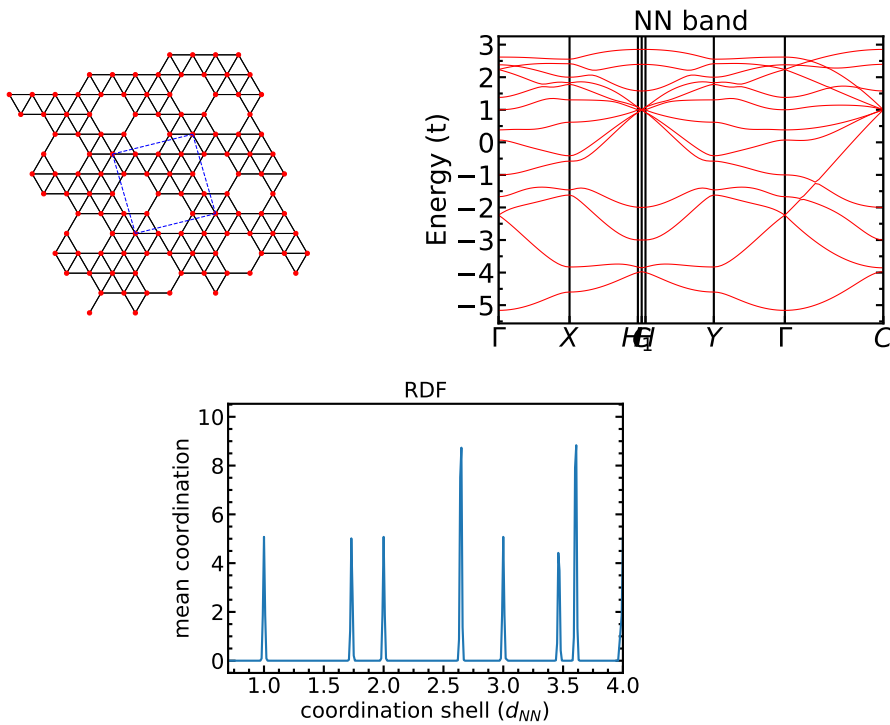


FIG. S259. t5259 lattice framework, nearest neighbors band structure and radial distribution function.

t5260

Tiling reference number t5260 with space-group ' $Amm2'$ ' (38) and 14 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 t5260 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	2

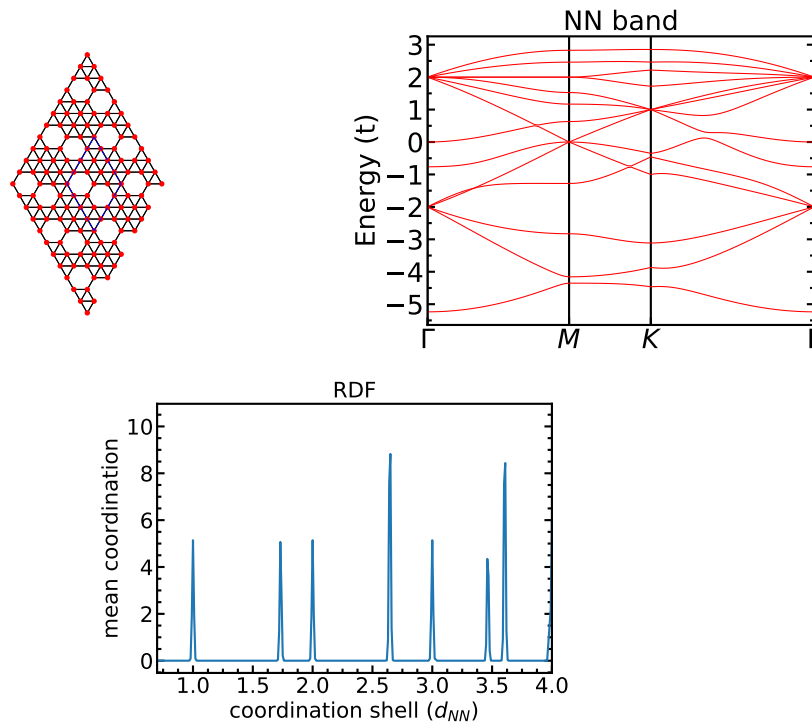


FIG. S260. t5260 lattice framework, nearest neighbors band structure and radial distribution function.

t5261

Tiling reference number t5261 with space-group ' $P2/m'$ ' (10) and 9 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 t5261 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	6	0	0	0	0	0	2

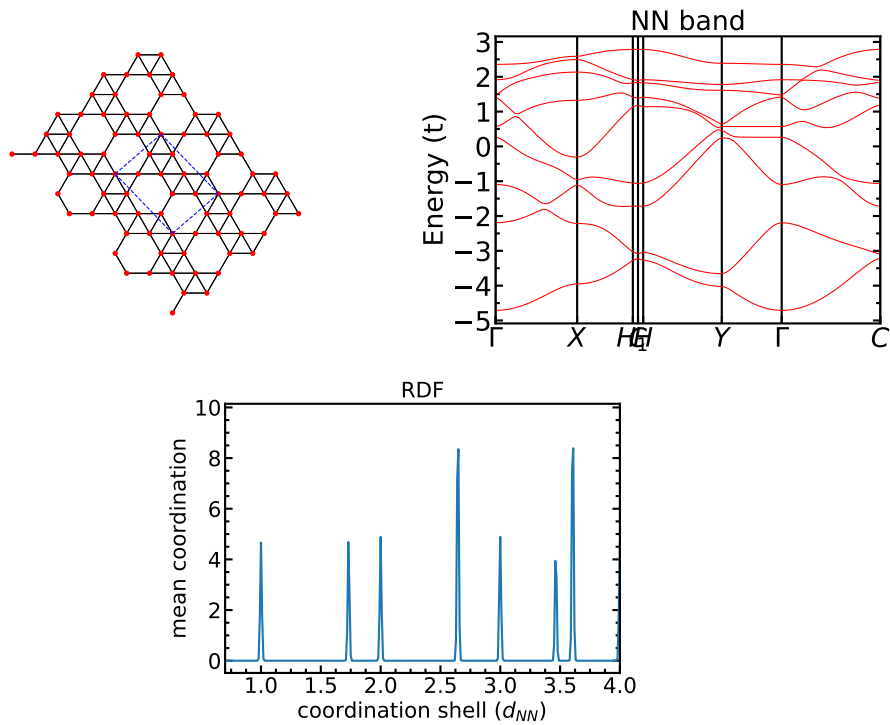


FIG. S261. t5261 lattice framework, nearest neighbors band structure and radial distribution function.

t5262

Tiling reference number t5262 with space-group ' $P2/m'$ ' (10) and 10 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 t5262 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	8	0	0	0	0	0	2

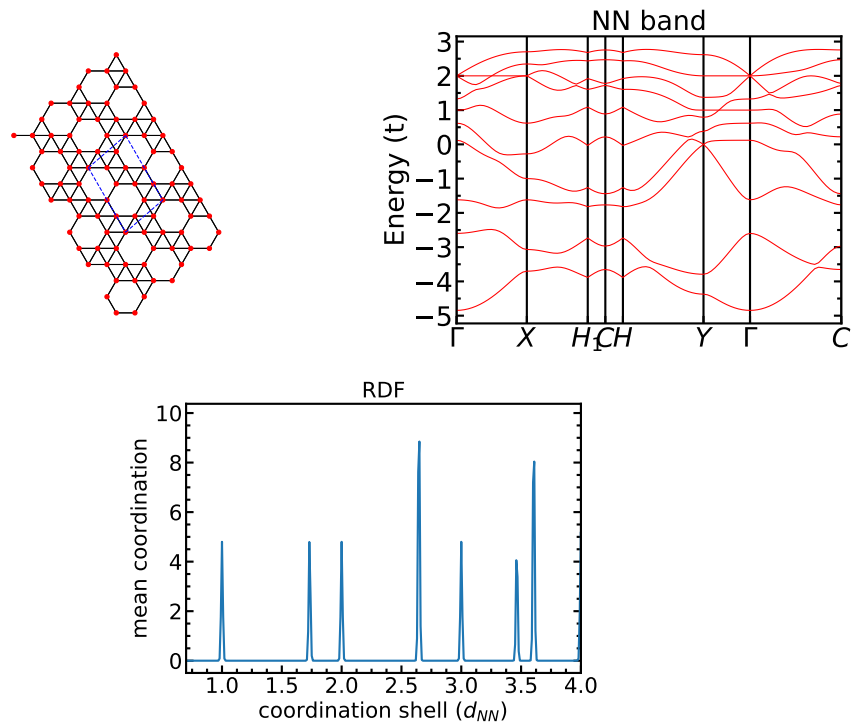


FIG. S262. t5262 lattice framework, nearest neighbors band structure and radial distribution function.

t5263

Tiling reference number t5263 with space-group '*Pbam*' (55) and 20 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 t5263 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	16	0	0	0	0	0	4

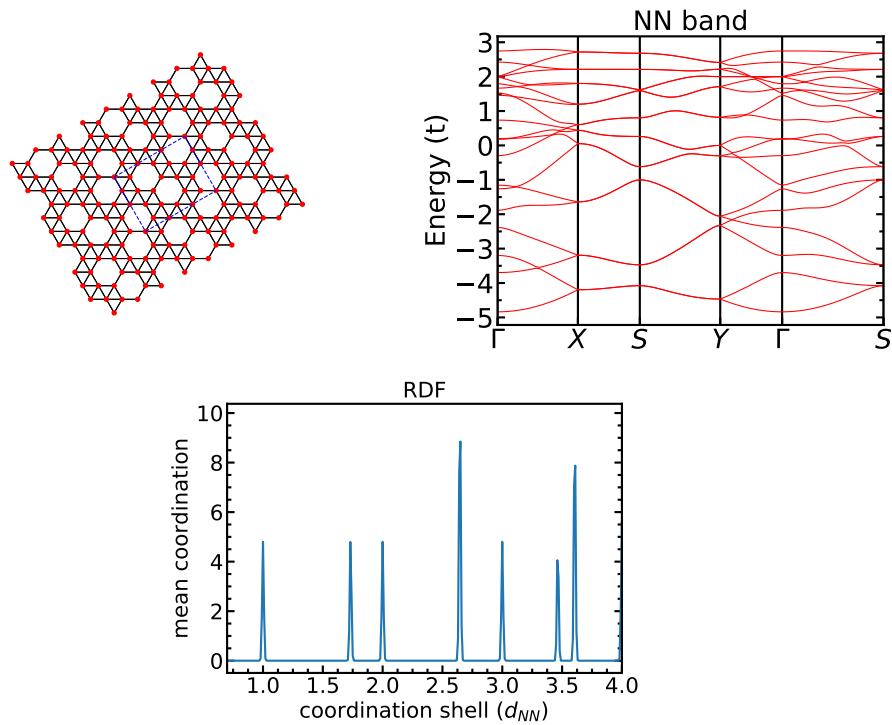


FIG. S263. t5263 lattice framework, nearest neighbors band structure and radial distribution function.

t5264

Tiling reference number t5264 with space-group ' $Cmmm'$ ' (65) and 9 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 t5264 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	4	0	0	0	0	0	4

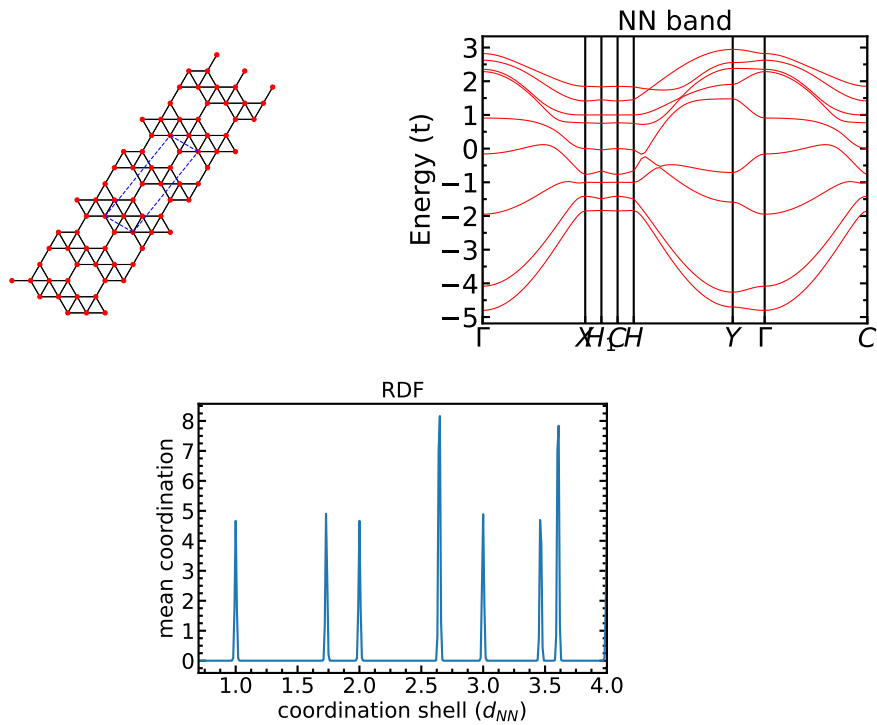


FIG. S264. t5264 lattice framework, nearest neighbors band structure and radial distribution function.

t5265

Tiling reference number t5265 with space-group ' $Pmma'$ (51) and 10 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 t5265 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	0	0	0	0	4

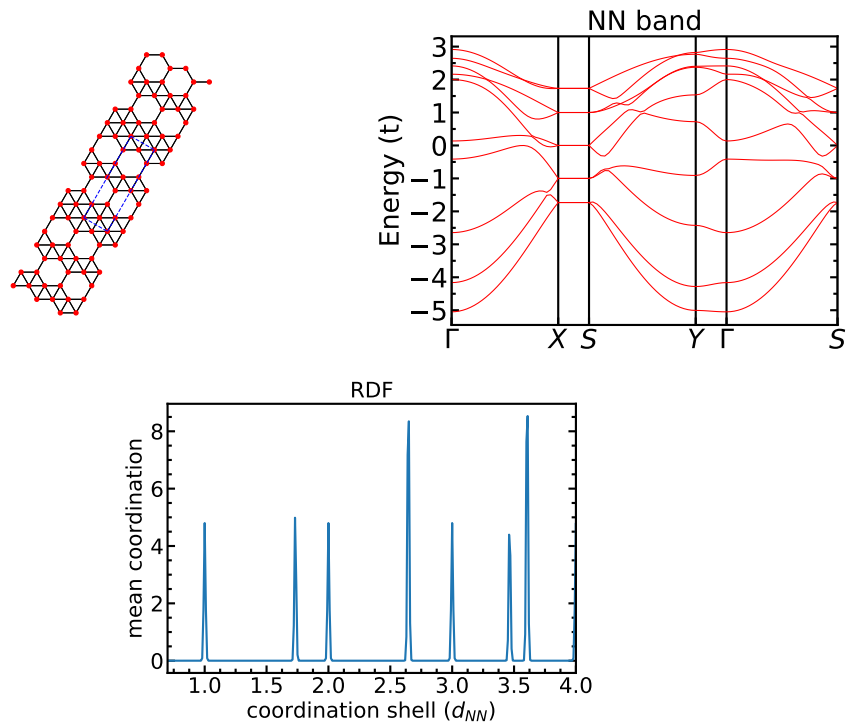


FIG. S265. t5265 lattice framework, nearest neighbors band structure and radial distribution function.

t5266

Tiling reference number t5266 with space-group ' $P6/mmm'$ ' (191) and 29 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 t5266 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	0	0	0	0	0	0	15	12	0	0	0	0	0	0

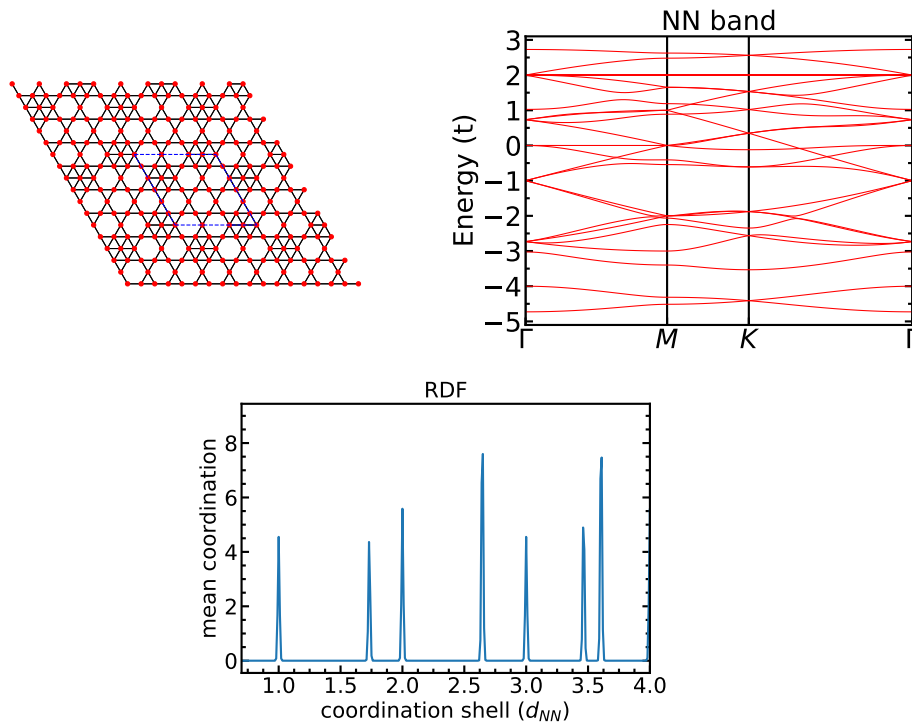


FIG. S266. t5266 lattice framework, nearest neighbors band structure and radial distribution function.

t5267

Tiling reference number t5267 with space-group ' $P6/m'$ ' (175) and 30 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 t5267 vertex types

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

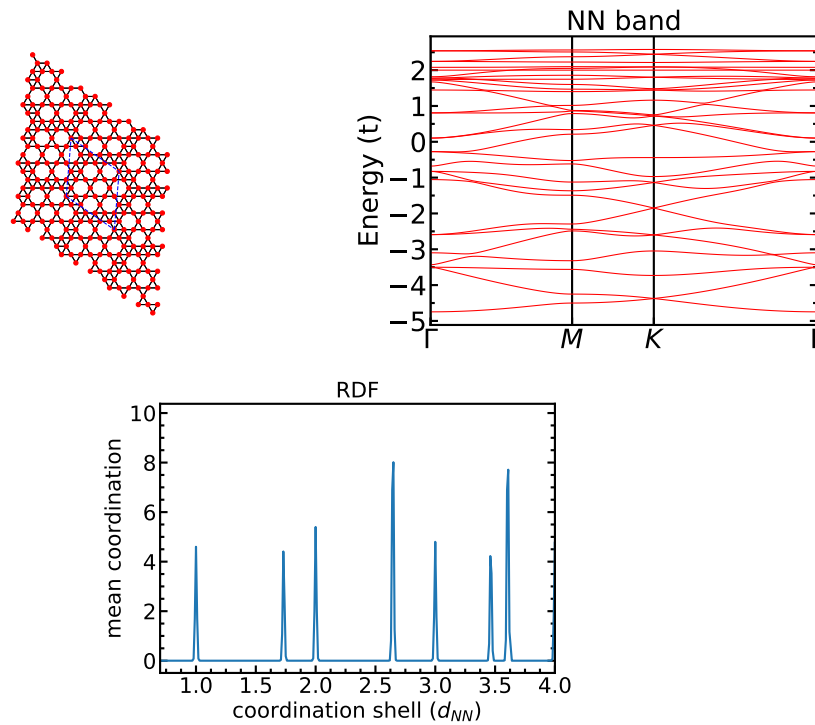


FIG. S267. t5267 lattice framework, nearest neighbors band structure and radial distribution function.

t5268

Tiling reference number t5268 with space-group ' $Amm2'$ ' (38) and 28 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 t5268 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	21	6	0	0	0	0	0	0

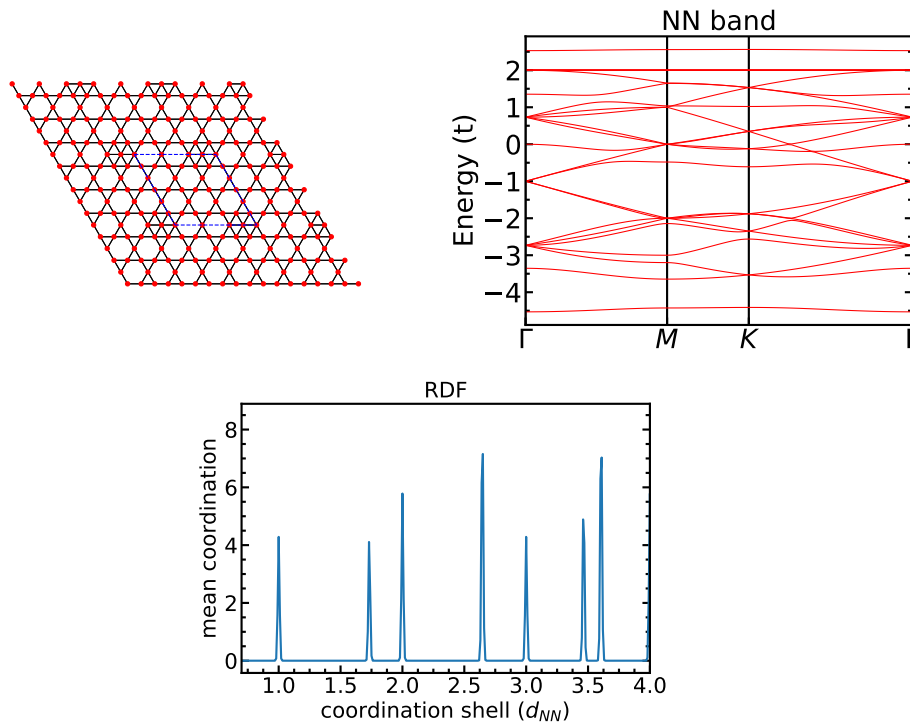


FIG. S268. t5268 lattice framework, nearest neighbors band structure and radial distribution function.

t5269

Tiling reference number t5269 with space-group ' $Cmmm$ ' (65) and 12 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 t5269 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	4	0	4	0	0	0	0

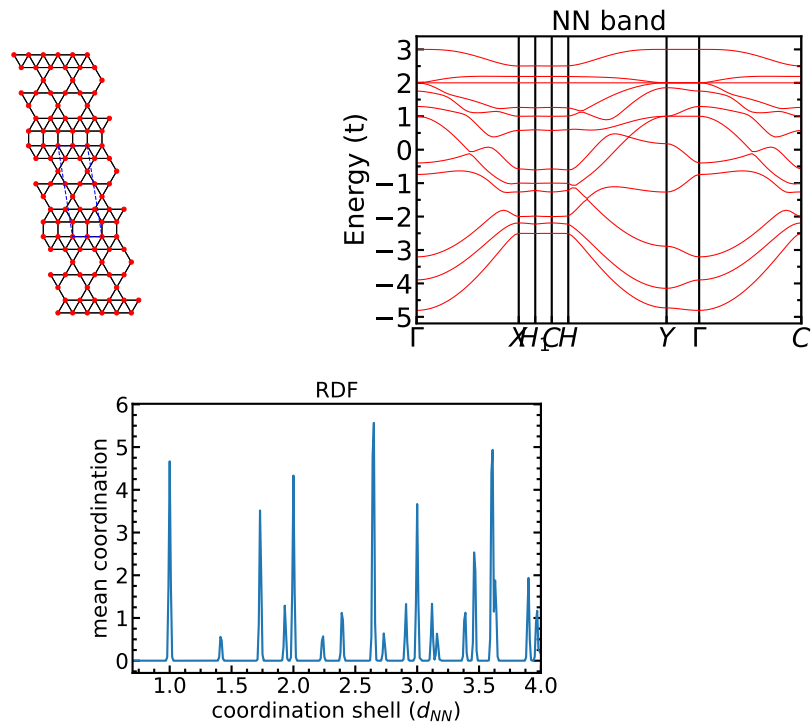


FIG. S269. t5269 lattice framework, nearest neighbors band structure and radial distribution function.

t5270

Tiling reference number t5270 with space-group ' $Pmma'$ ' (51) and 12 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 t5270 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	4	0	4	0	0	0	0

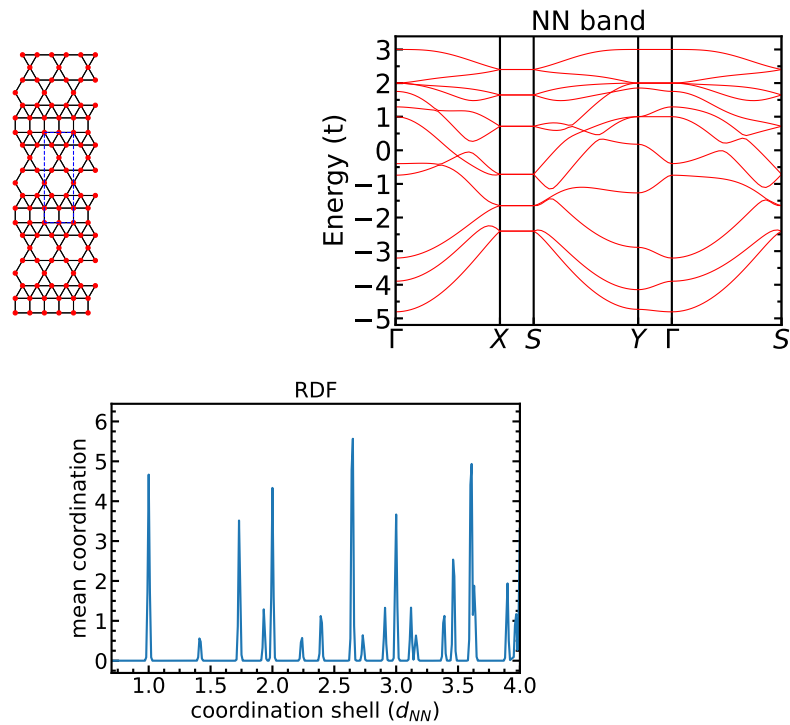


FIG. S270. t5270 lattice framework, nearest neighbors band structure and radial distribution function.

t5271

Tiling reference number t5271 with space-group ' $Cmmm$ ' (65) and 10 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 t5271 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	0

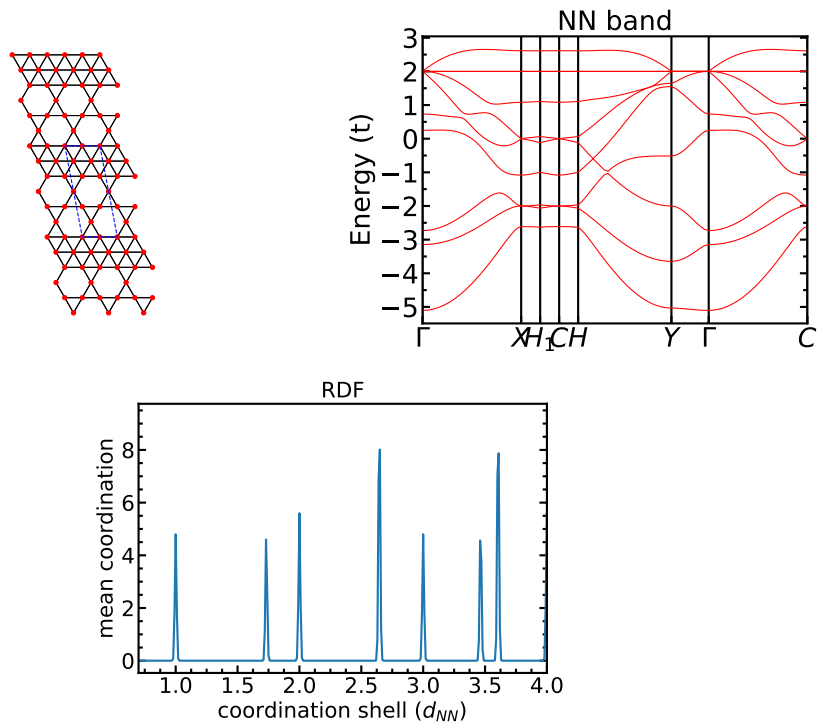


FIG. S271. t5271 lattice framework, nearest neighbors band structure and radial distribution function.

t5272

Tiling reference number t5272 with space-group ' $Cmmm$ ' (65) and 13 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 t5272 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

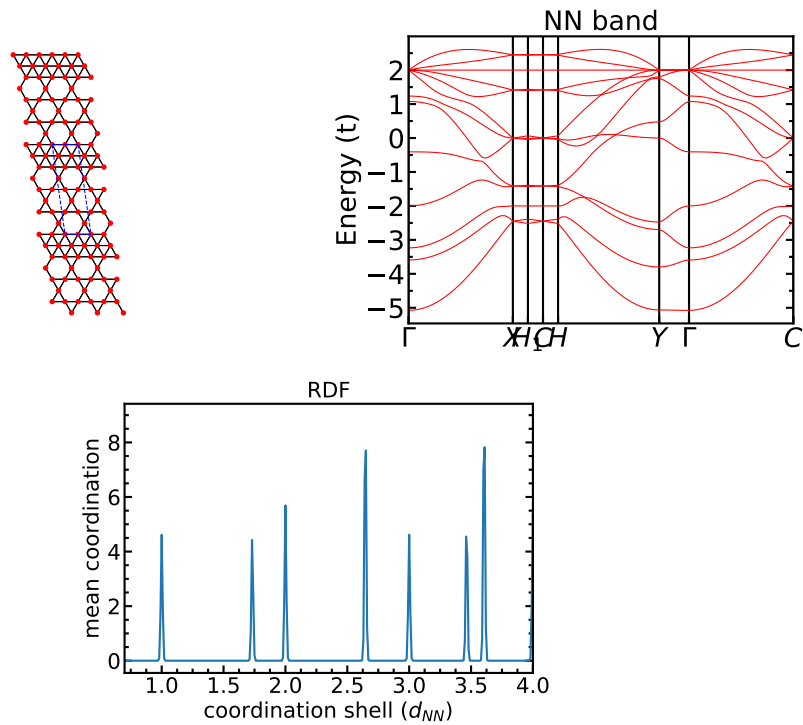


FIG. S272. t5272 lattice framework, nearest neighbors band structure and radial distribution function.

t5273

Tiling reference number t5273 with space-group ' $P6/m'$ ' (175) and 22 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 t5273 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0	0	0	0	0	0	15	6	0	0	0	0	0	0

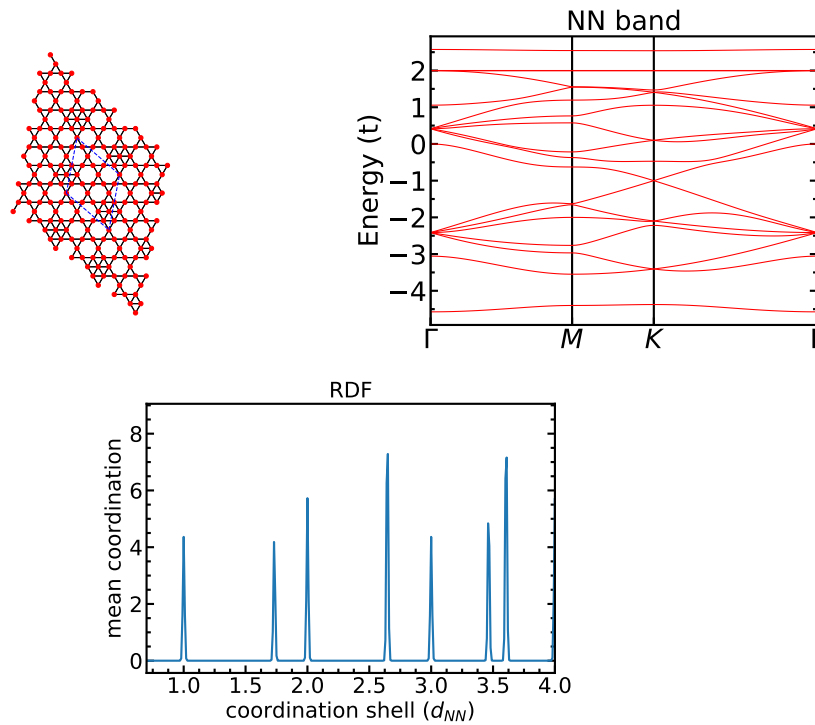


FIG. S273. t5273 lattice framework, nearest neighbors band structure and radial distribution function.

t5274

Tiling reference number t5274 with space-group ' $Amm2'$ (38) and 24 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 t5274 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
9	0	0	0	0	0	0	3	12	0	0	0	0	0	0

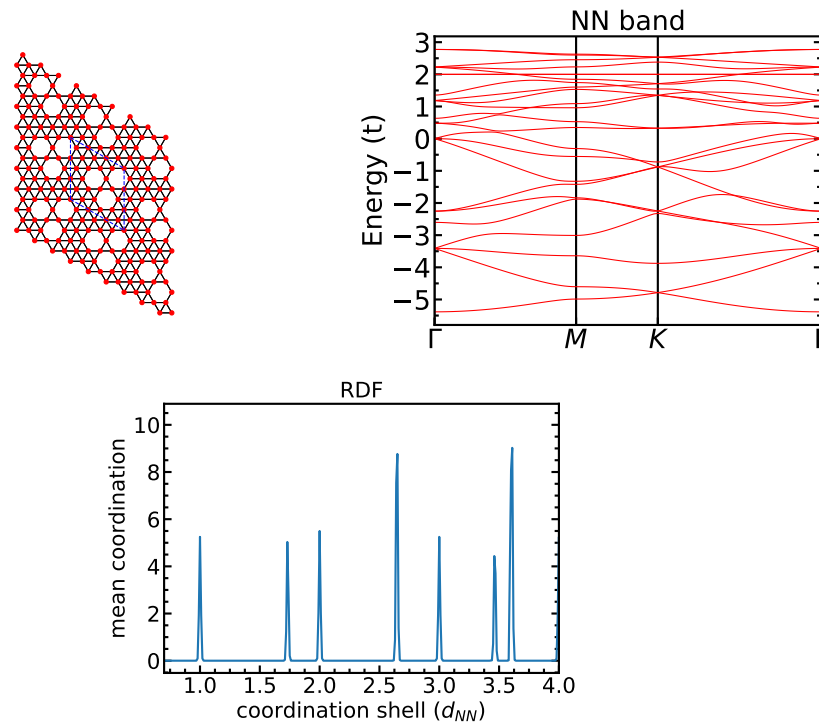


FIG. S274. t5274 lattice framework, nearest neighbors band structure and radial distribution function.

t5275

Tiling reference number t5275 with space-group ' $Cmmm$ ' (65) and 13 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 t5275 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	8	0	0	0	0	0	0

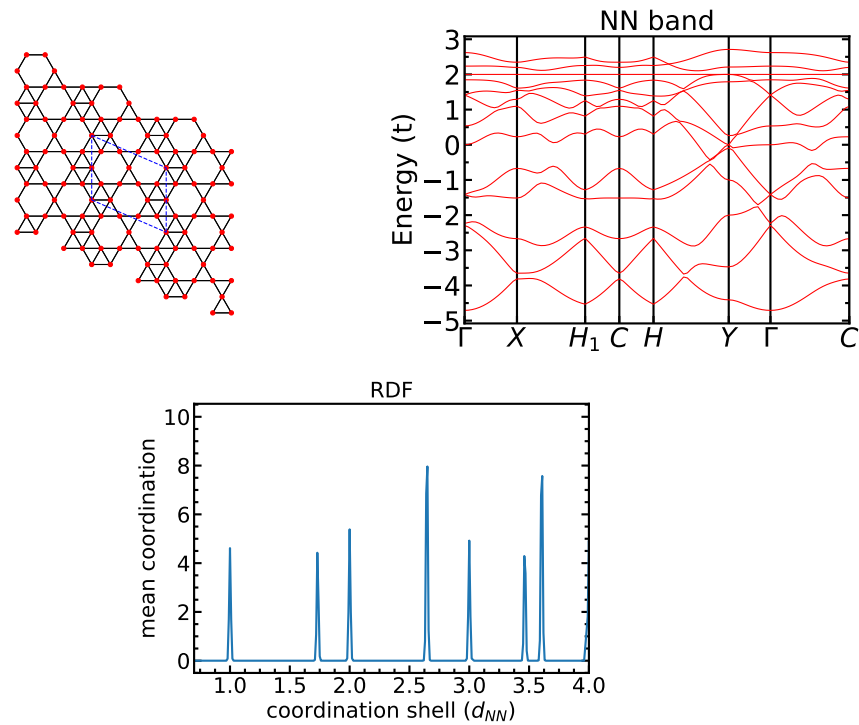


FIG. S275. t5275 lattice framework, nearest neighbors band structure and radial distribution function.

t5276

Tiling reference number t5276 with space-group $'P2/m'$ (10) and 8 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 t5276 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	4	0	0	0	0	0	0

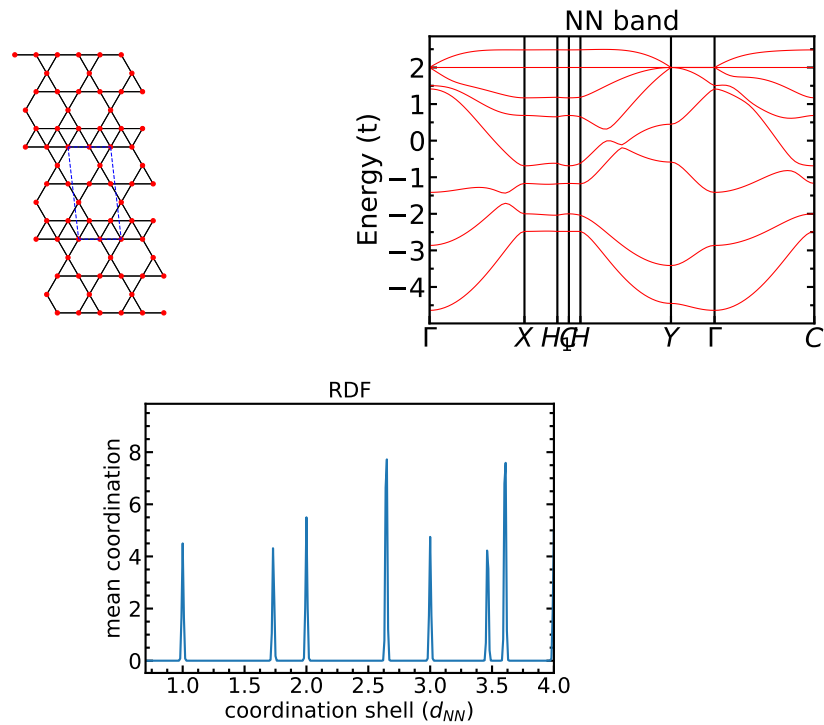


FIG. S276. t5276 lattice framework, nearest neighbors band structure and radial distribution function.

t5277

Tiling reference number t5277 with space-group ' $P2/m'$ ' (10) and 13 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 t5277 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	4	0	4	0	0	0	0

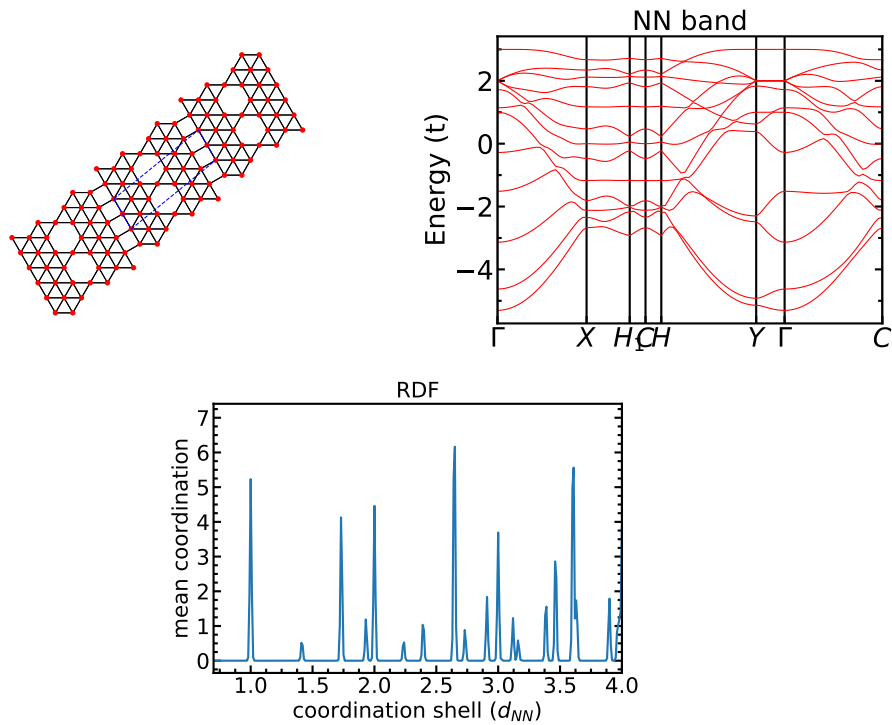


FIG. S277. t5277 lattice framework, nearest neighbors band structure and radial distribution function.

t5278

Tiling reference number t5278 with space-group ' $Pmmm$ ' (47) and 13 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 t5278 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	4	0	4	0	0	0	0

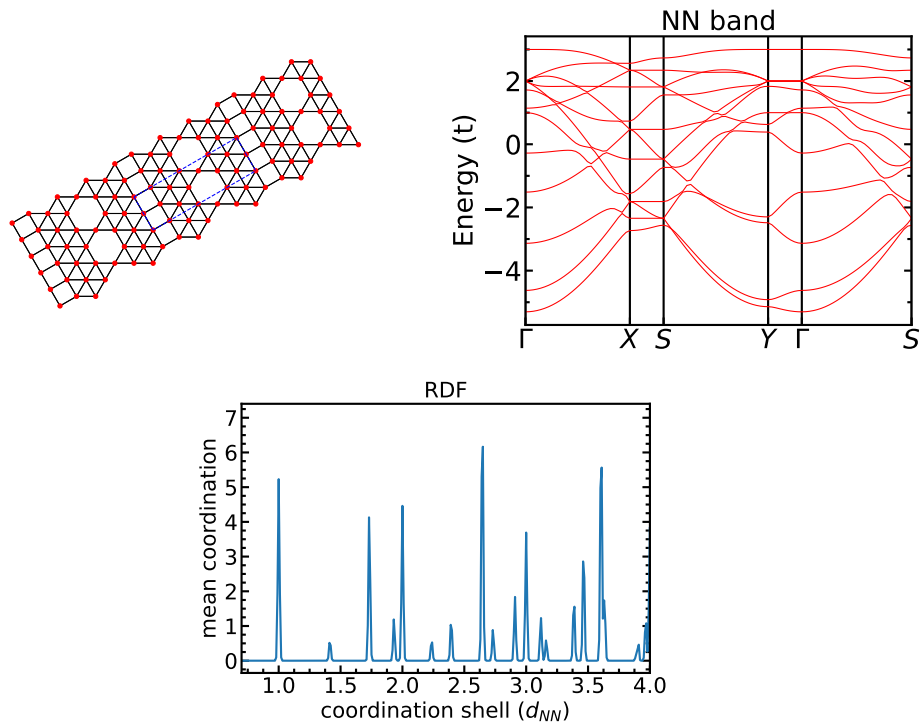


FIG. S278. t5278 lattice framework, nearest neighbors band structure and radial distribution function.

t5279

Tiling reference number t5279 with space-group ' $Cmmm$ ' (65) and 11 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 t5279 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	4	0	0	0	0	0	0

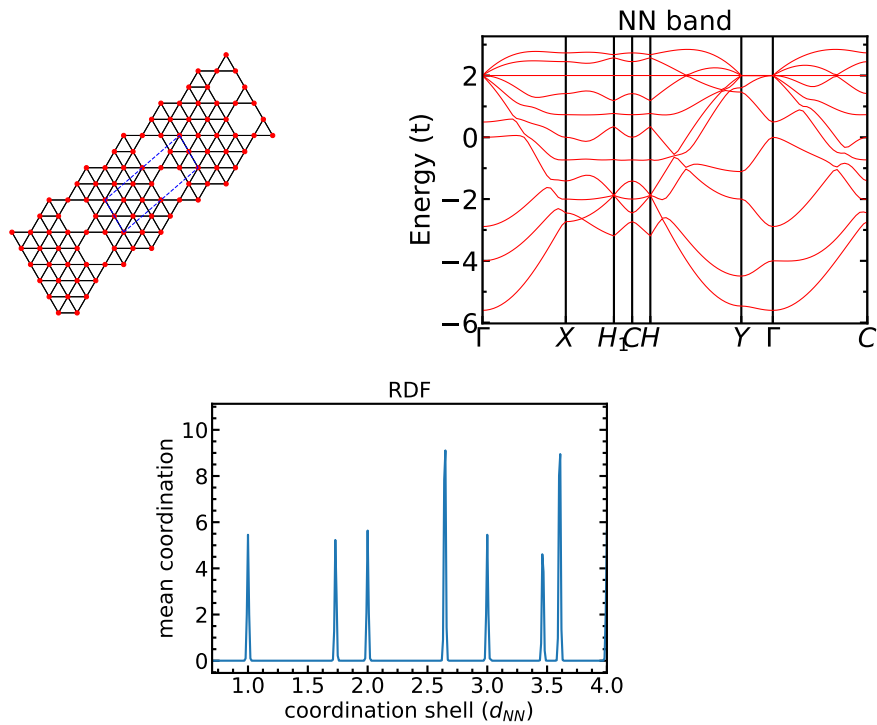


FIG. S279. t5279 lattice framework, nearest neighbors band structure and radial distribution function.

t5280

Tiling reference number t5280 with space-group ' $Pmmm$ ' (47) and 11 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 t5280 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	4	0	0	0	0	0	0

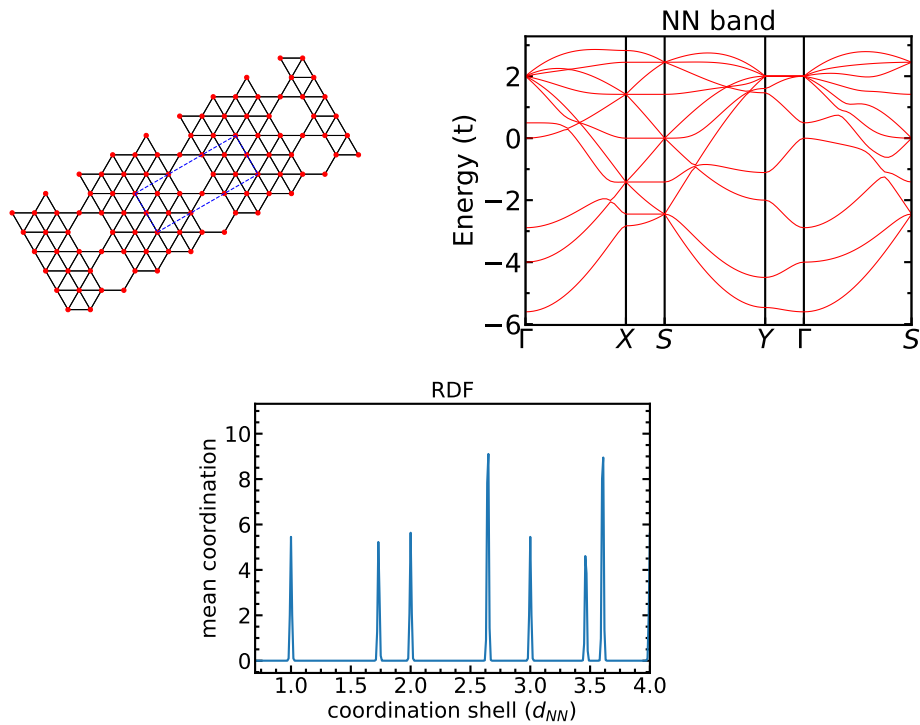


FIG. S280. t5280 lattice framework, nearest neighbors band structure and radial distribution function.

t5281

Tiling reference number t5281 with space-group ' $Cmmm$ ' (65) and 13 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 t5281 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	10	0	0	0	0	0	0

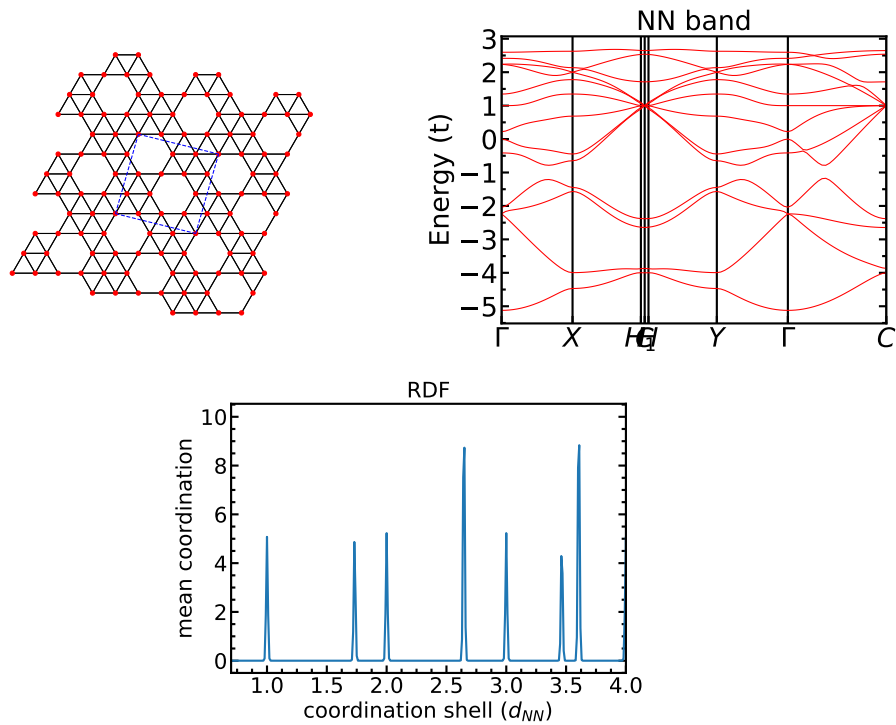


FIG. S281. t5281 lattice framework, nearest neighbors band structure and radial distribution function.

t5282

Tiling reference number t5282 with space-group ' $P - 62m'$ ' (189) and 21 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 t5282 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	18	0	0	0	0	0	0

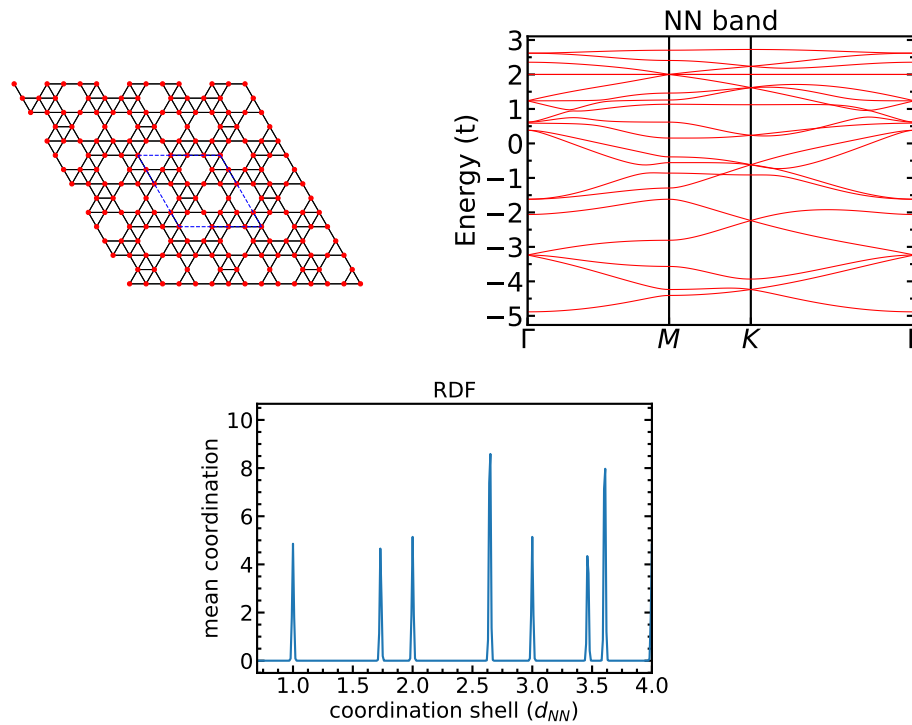


FIG. S282. t5282 lattice framework, nearest neighbors band structure and radial distribution function.

t5283

Tiling reference number t5283 with space-group ' $Pmma'$ ' (51) and 18 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 t5283 vertex types

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

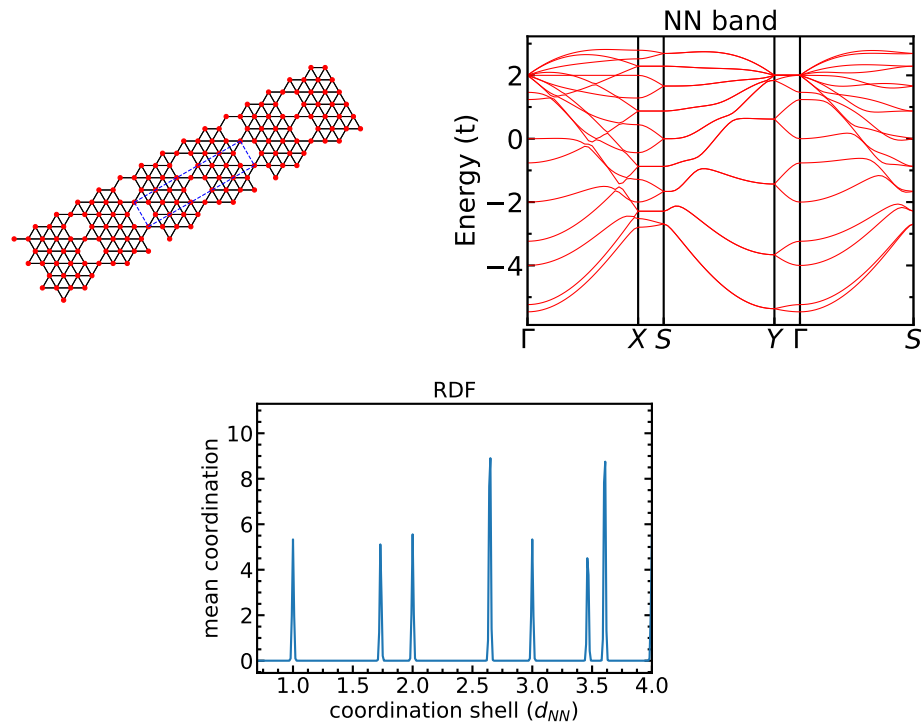


FIG. S283. t5283 lattice framework, nearest neighbors band structure and radial distribution function.

t5284

Tiling reference number t5284 with space-group ' $P2/m'$ ' (10) and 9 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 t5284 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	4	0	0	0	0	0	0

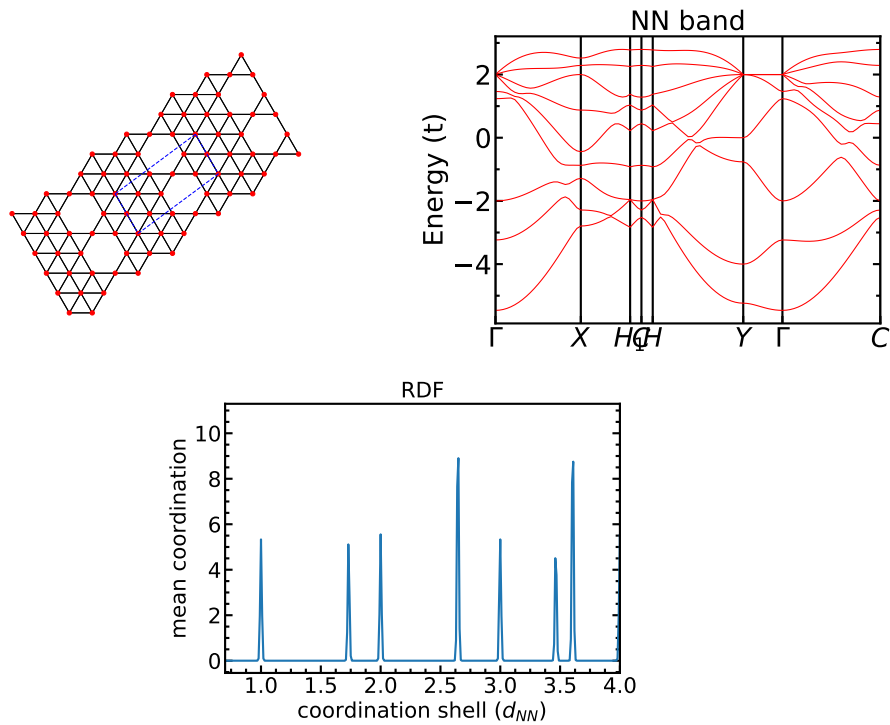


FIG. S284. t5284 lattice framework, nearest neighbors band structure and radial distribution function.

t5285

Tiling reference number t5285 with space-group ' Pm' ' (6) and 48 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 t5285 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	2	16	12	0	0	0

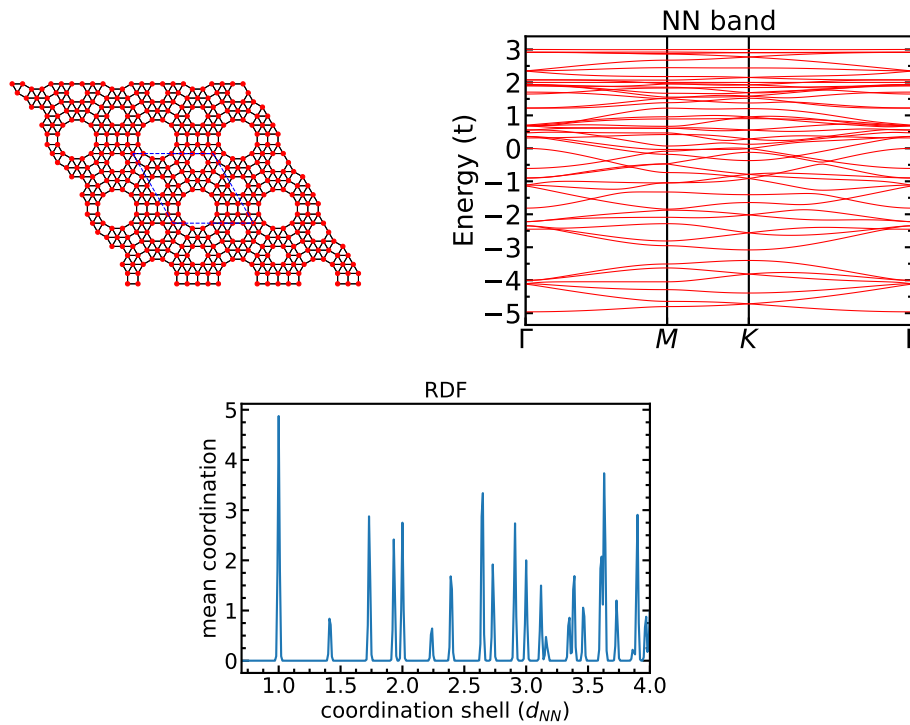


FIG. S285. t5285 lattice framework, nearest neighbors band structure and radial distribution function.

t5286

Tiling reference number t5286 with space-group ' $Amm2'$ (38) and 42 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 t5286 vertex types

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

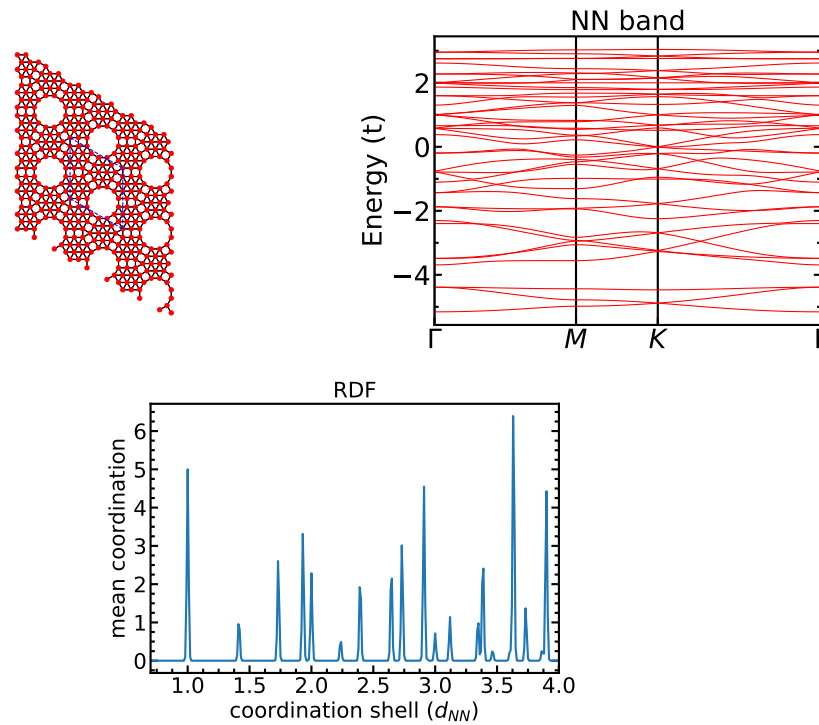


FIG. S286. t5286 lattice framework, nearest neighbors band structure and radial distribution function.

t5287

Tiling reference number t5287 with space-group ' Pm' ' (6) and 15 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 t5287 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	2	0	8	4	0	0

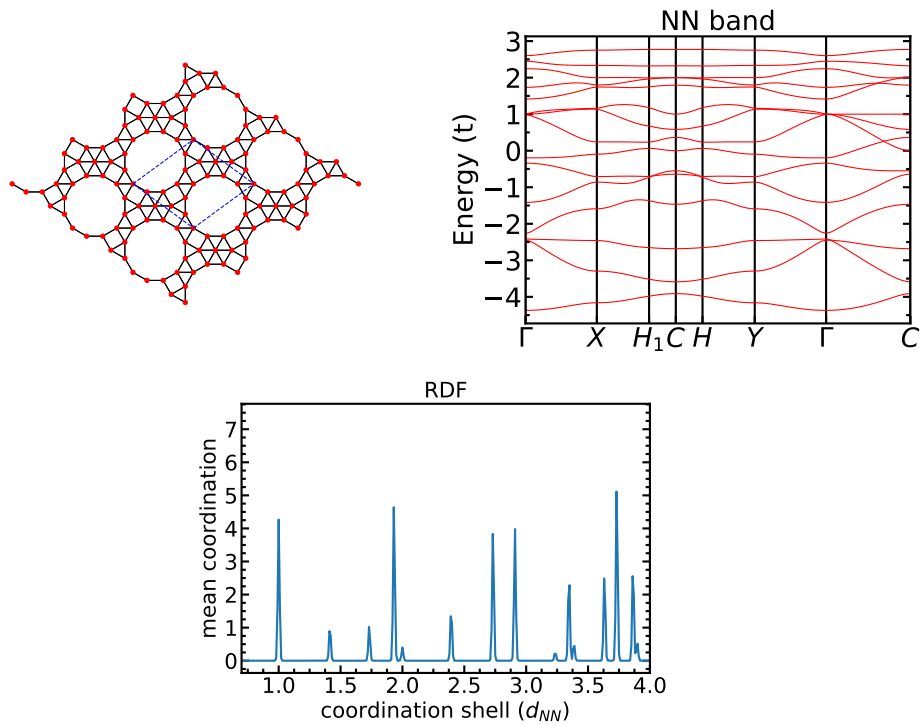


FIG. S287. t5287 lattice framework, nearest neighbors band structure and radial distribution function.

t5288

Tiling reference number t5288 with space-group ' $Amm2'$ ' (38) and 32 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 t5288 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	18	0	0	12	0	0

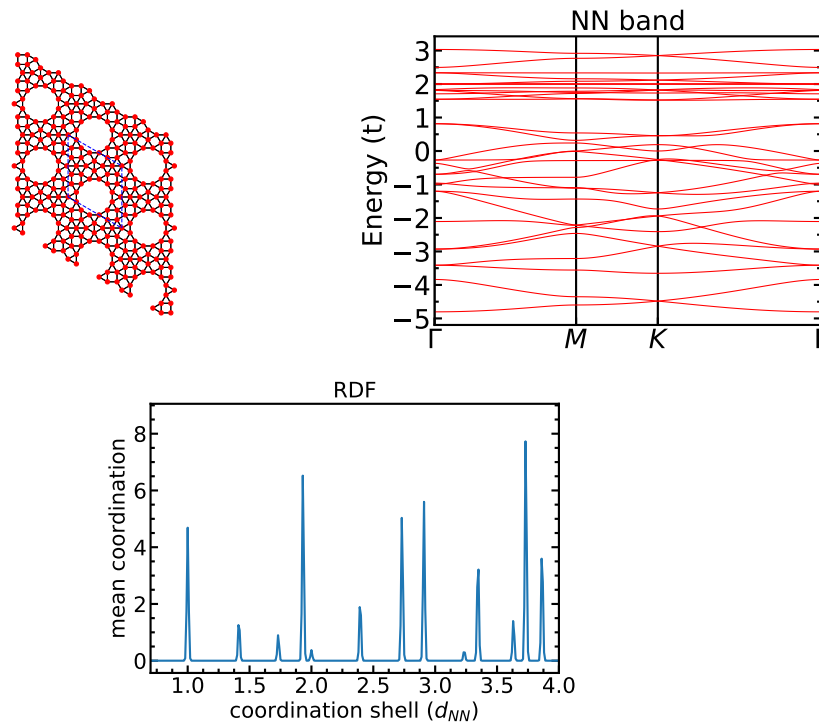


FIG. S288. t5288 lattice framework, nearest neighbors band structure and radial distribution function.

t5289

Tiling reference number t5289 with space-group ' $Pmmm$ ' (47) and 10 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 t5289 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	8	0	0	0	0

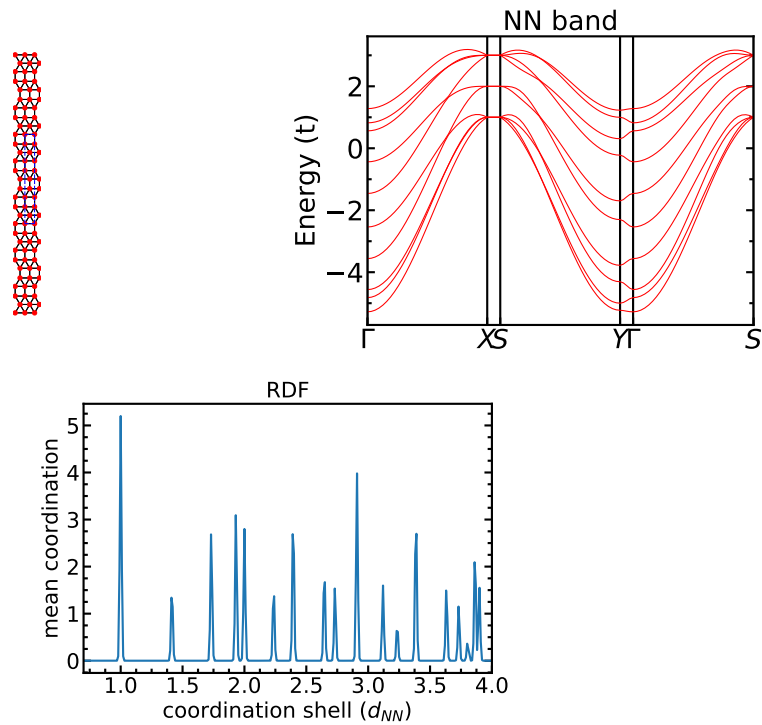


FIG. S289. t5289 lattice framework, nearest neighbors band structure and radial distribution function.

t5290

Tiling reference number t5290 with space-group ' $Pmm2'$ ' (25) and 9 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 t5290 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	6	0	0	0	0

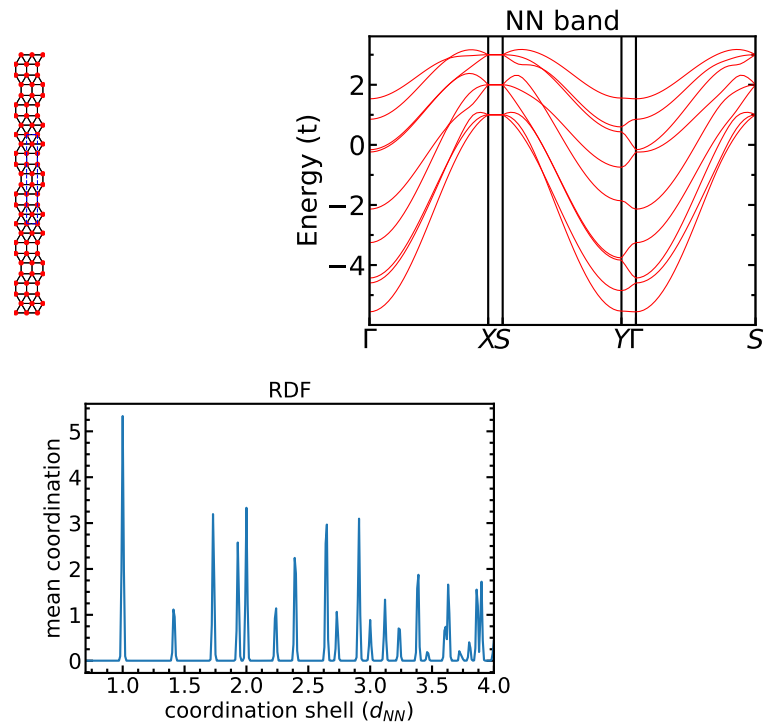


FIG. S290. t5290 lattice framework, nearest neighbors band structure and radial distribution function.

t5291

Tiling reference number t5291 with space-group ' $Cmmm$ ' (65) and 10 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 t5291 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	6	0	0	0	0

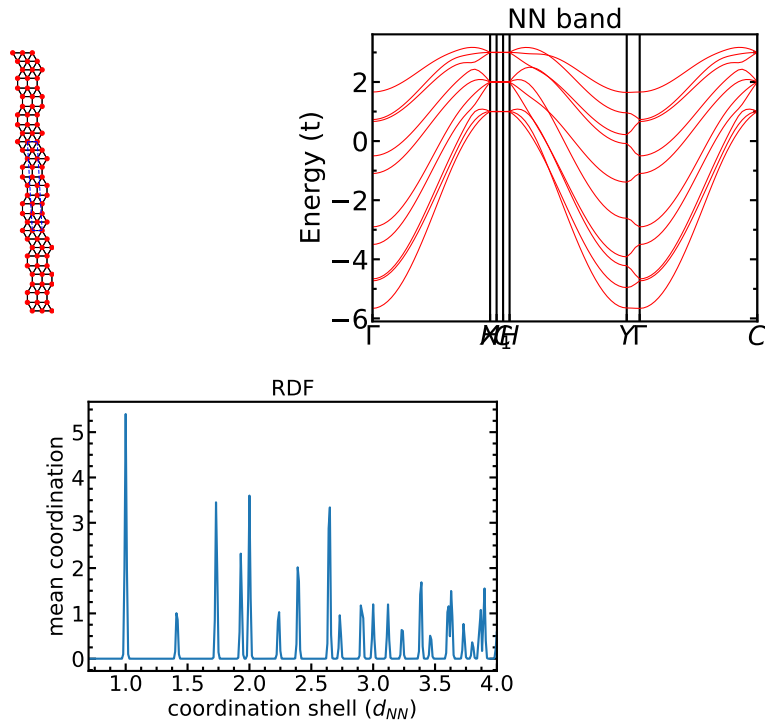


FIG. S291. t5291 lattice framework, nearest neighbors band structure and radial distribution function.

t5292

Tiling reference number t5292 with space-group ' $Cmmm$ ' (65) and 10 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 t5292 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	6	0	0	0	0

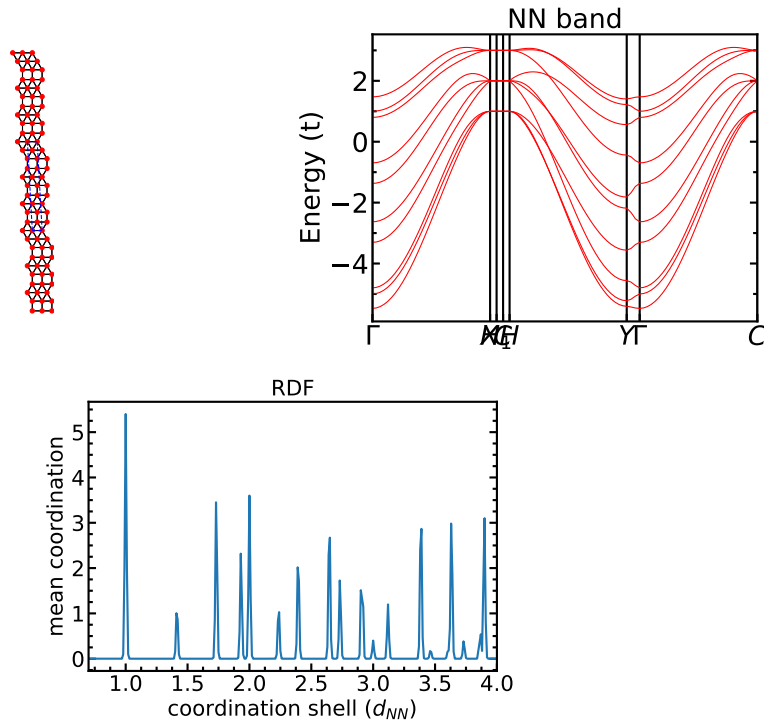


FIG. S292. t5292 lattice framework, nearest neighbors band structure and radial distribution function.

t5293

Tiling reference number t5293 with space-group ' $Cmmm$ ' (65) and 10 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 t5293 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	6	0	0	0	0

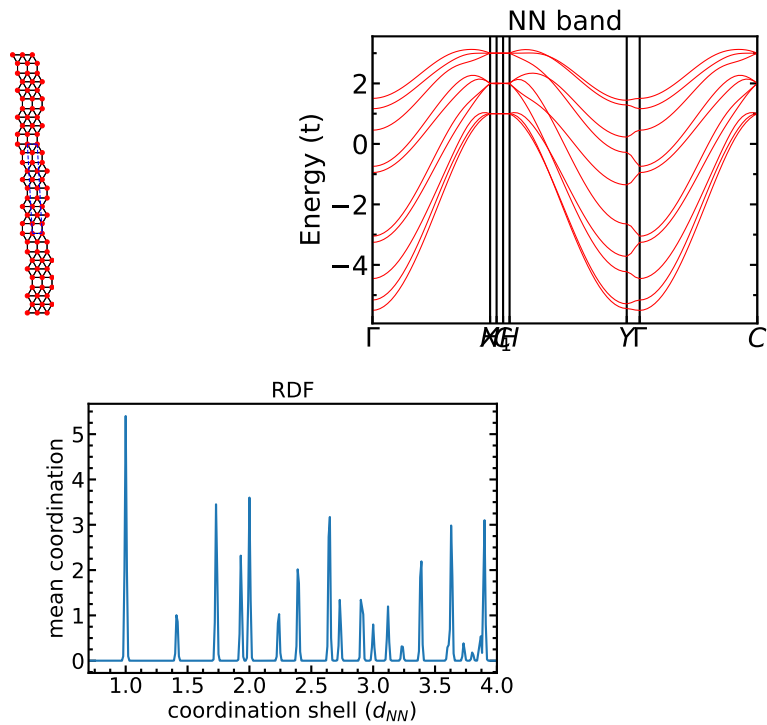


FIG. S293. t5293 lattice framework, nearest neighbors band structure and radial distribution function.

t5294

Tiling reference number t5294 with space-group ' $Pmmm$ ' (47) and 9 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 t5294 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	2	0	0	0	0

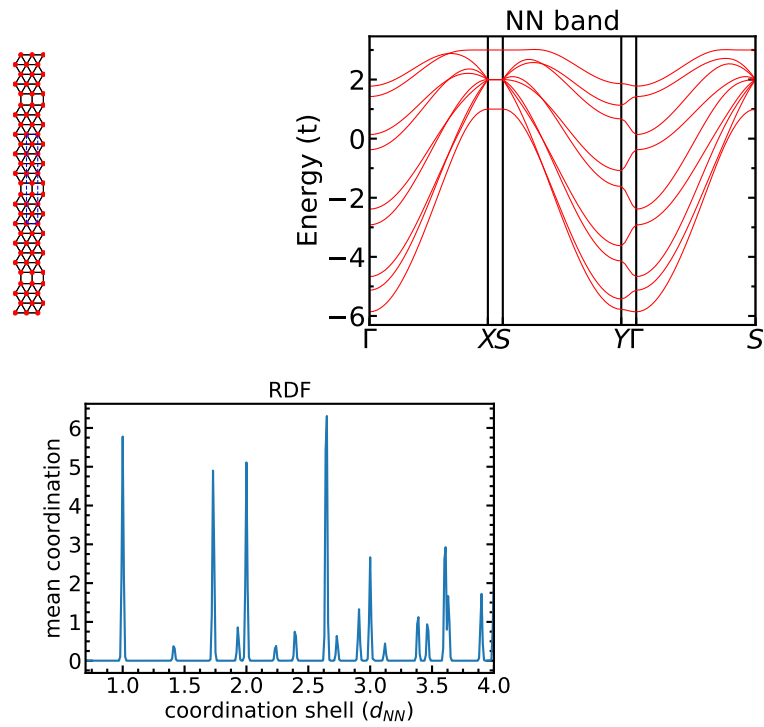


FIG. S294. t5294 lattice framework, nearest neighbors band structure and radial distribution function.

t5295

Tiling reference number t5295 with space-group ' $Cmmm$ ' (65) and 10 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 t5295 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	2	0	0	0	0

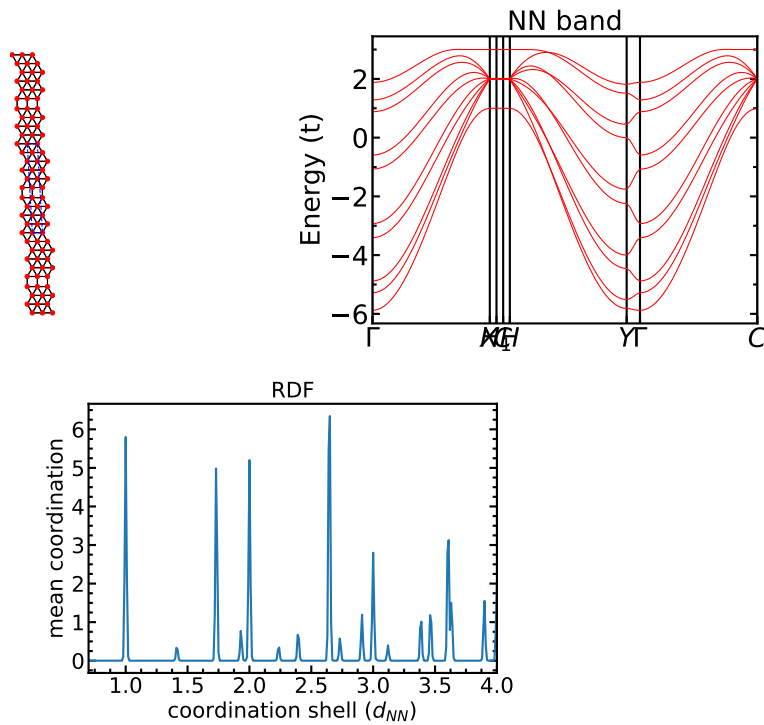


FIG. S295. t5295 lattice framework, nearest neighbors band structure and radial distribution function.

t5296

Tiling reference number t5296 with space-group ' $Pmmm$ ' (47) 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 t5296 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	6	0	0	0	0

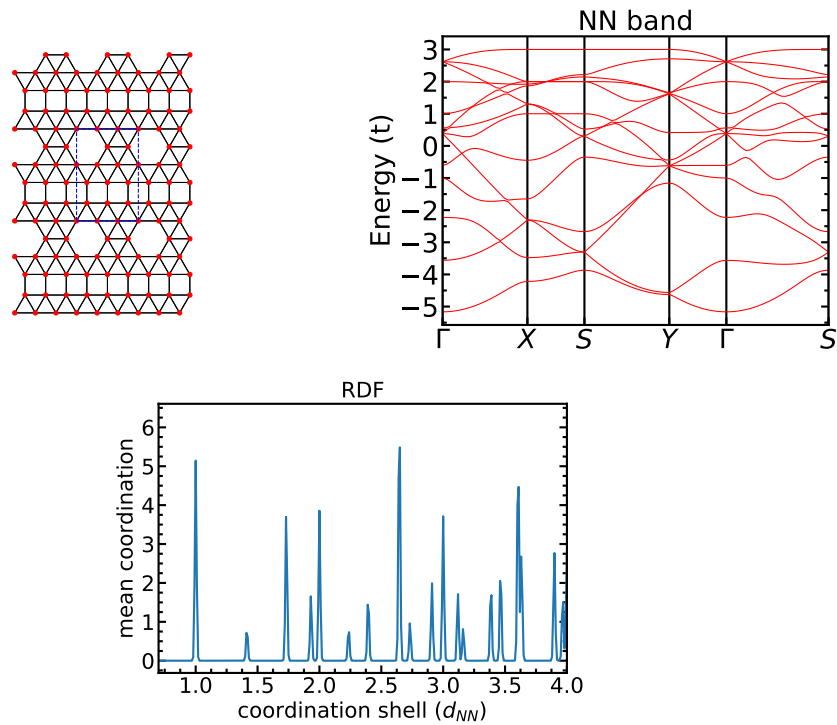


FIG. S296. t5296 lattice framework, nearest neighbors band structure and radial distribution function.

t5297

Tiling reference number t5297 with space-group ' Pm' ' (6) and 36 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 t5297 vertex types

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

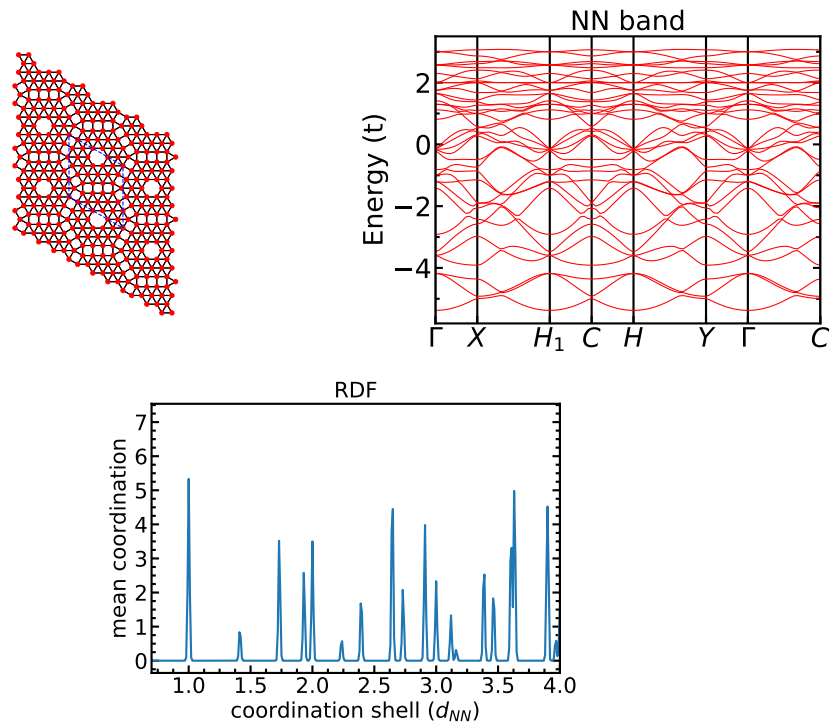


FIG. S297. t5297 lattice framework, nearest neighbors band structure and radial distribution function.

t5298

Tiling reference number t5298 with space-group ' Pm' ' (6) and 13 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 t5298 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	6	4	0	0	0	0

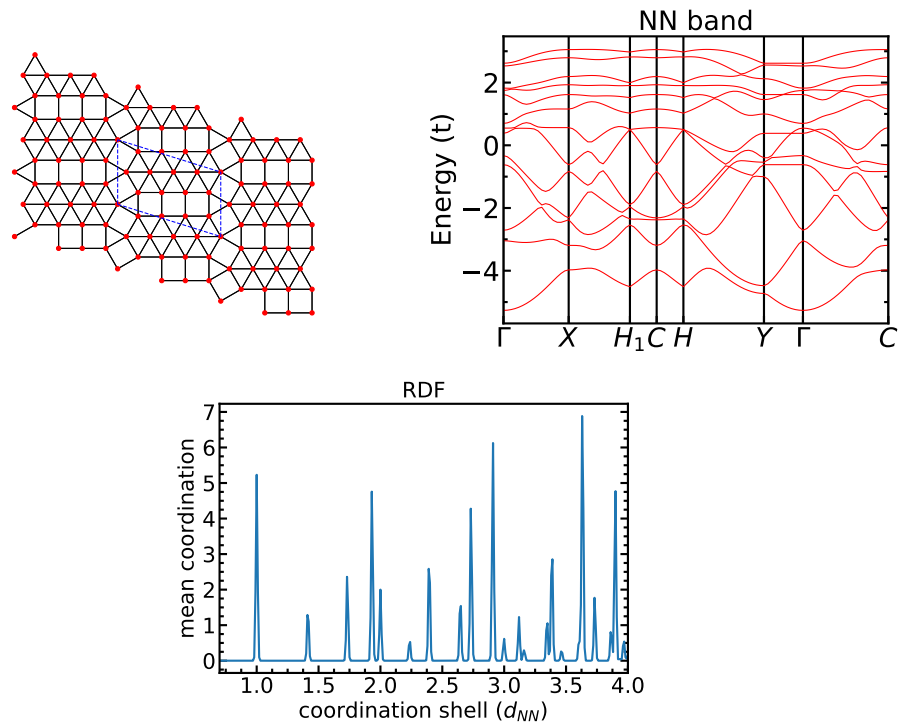


FIG. S298. t5298 lattice framework, nearest neighbors band structure and radial distribution function.

t5299

Tiling reference number t5299 with space-group ' $Amm2'$ ' (38) and 9 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 t5299 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	8	0	0	0	0

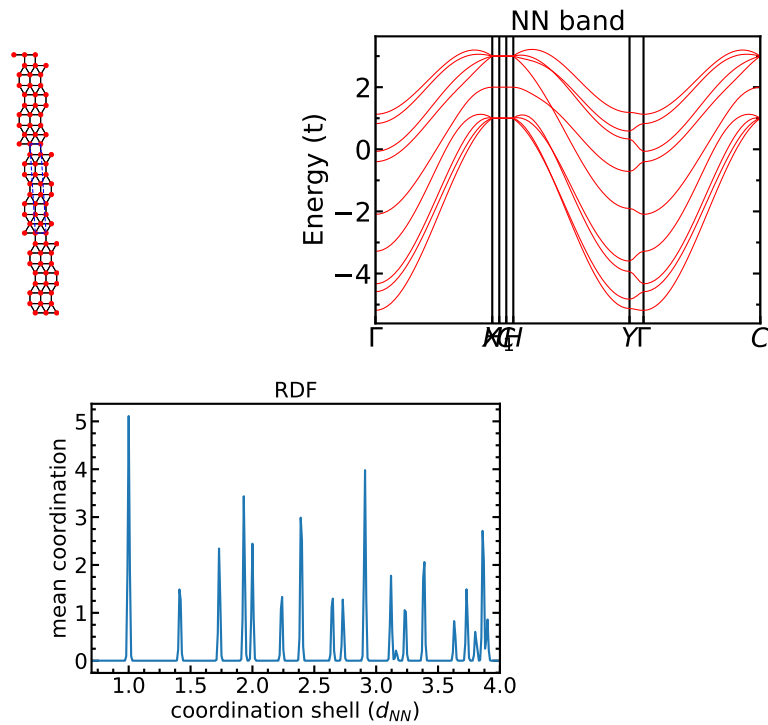


FIG. S299. t5299 lattice framework, nearest neighbors band structure and radial distribution function.

t5300

Tiling reference number t5300 with space-group ' $Pmma'$ (51) and 10 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 t5300 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	8	0	0	0	0

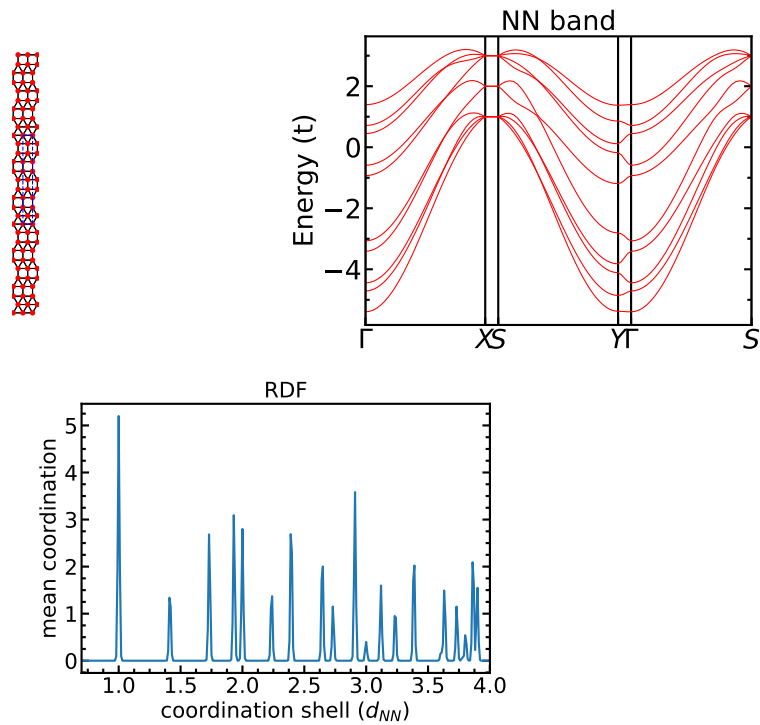


FIG. S300. t5300 lattice framework, nearest neighbors band structure and radial distribution function.

t5301

Tiling reference number t5301 with space-group ' $Cmmm$ ' (65) and 9 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 t5301 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	4	0	0	0	0

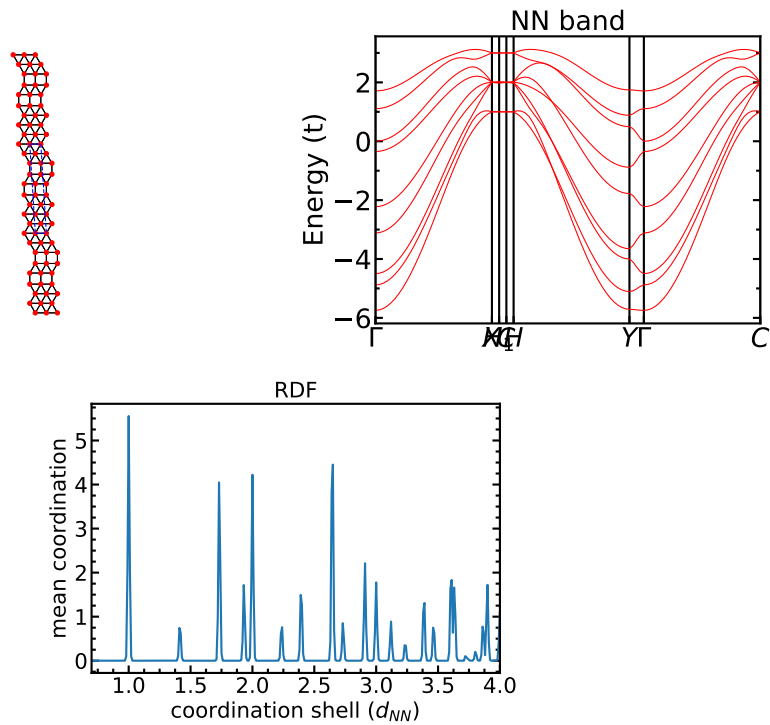


FIG. S301. t5301 lattice framework, nearest neighbors band structure and radial distribution function.

t5302

Tiling reference number t5302 with space-group ' $Pmma'$ (51) and 10 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 t5302 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

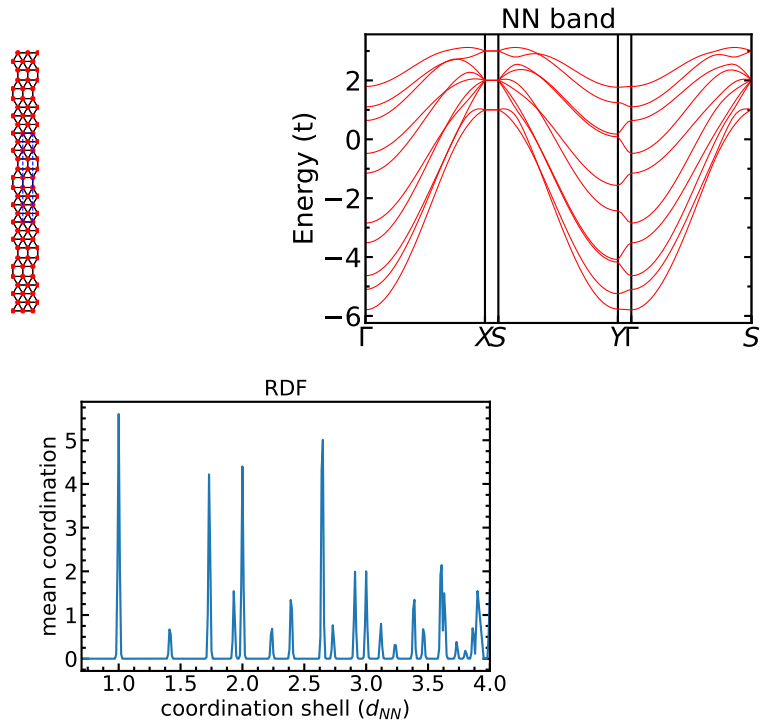


FIG. S302. t5302 lattice framework, nearest neighbors band structure and radial distribution function.

t5303

Tiling reference number t5303 with space-group ' $Pmmm'$ ' (47) and 8 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 t5303 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	4	0	0	0	0

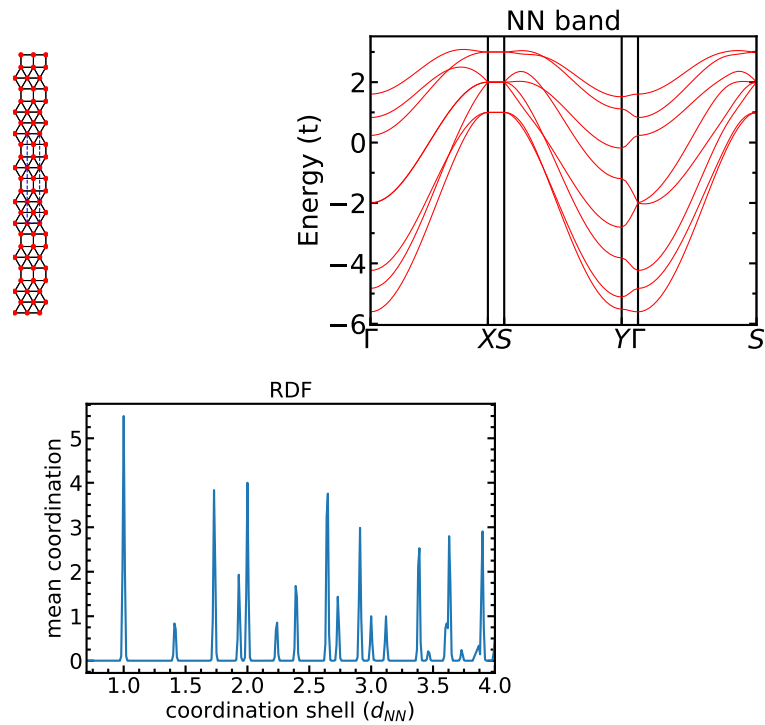


FIG. S303. t5303 lattice framework, nearest neighbors band structure and radial distribution function.

t5304

Tiling reference number t5304 with space-group ' $Amm2'$ ' (38) and 9 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 t5304 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	4	0	0	0	0

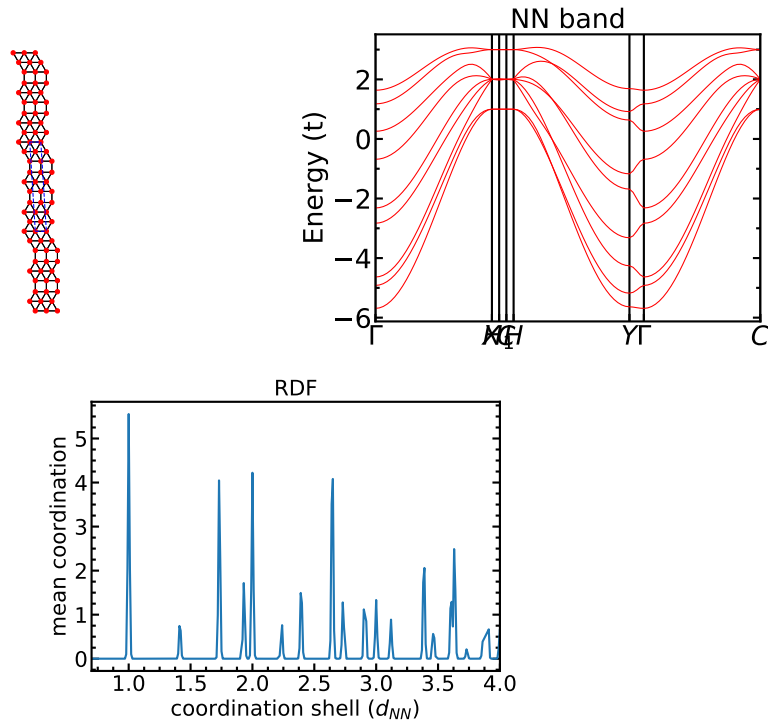


FIG. S304. t5304 lattice framework, nearest neighbors band structure and radial distribution function.

t5305

Tiling reference number t5305 with space-group ' $Cmmm$ ' (65) and 9 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 t5305 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	4	0	0	0	0

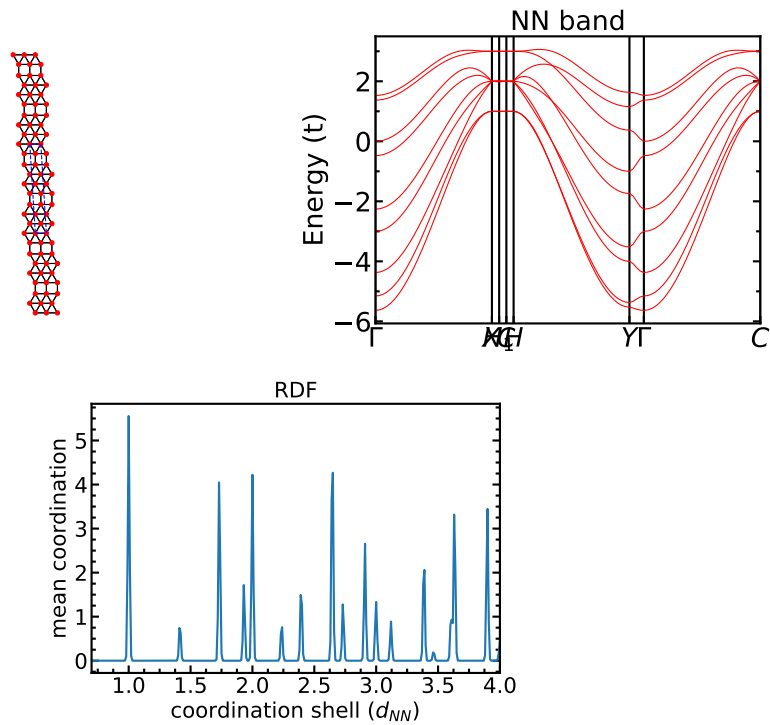


FIG. S305. t5305 lattice framework, nearest neighbors band structure and radial distribution function.

t5306

Tiling reference number t5306 with space-group ' $Pmma'$ (51) and 10 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 t5306 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

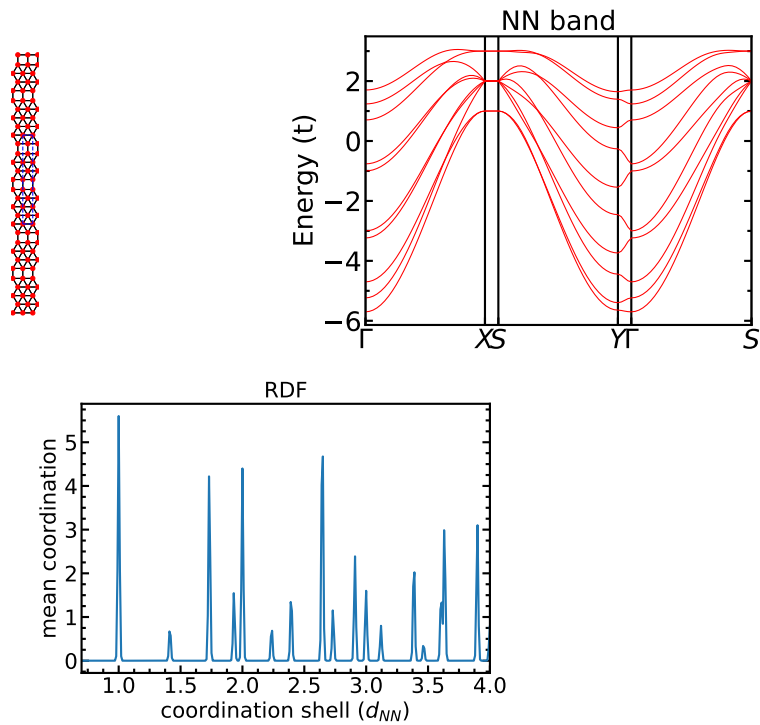


FIG. S306. t5306 lattice framework, nearest neighbors band structure and radial distribution function.

t5307

Tiling reference number t5307 with space-group ' $Cmmm$ ' (65) and 31 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 t5307 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	6	18	0	0	0	0

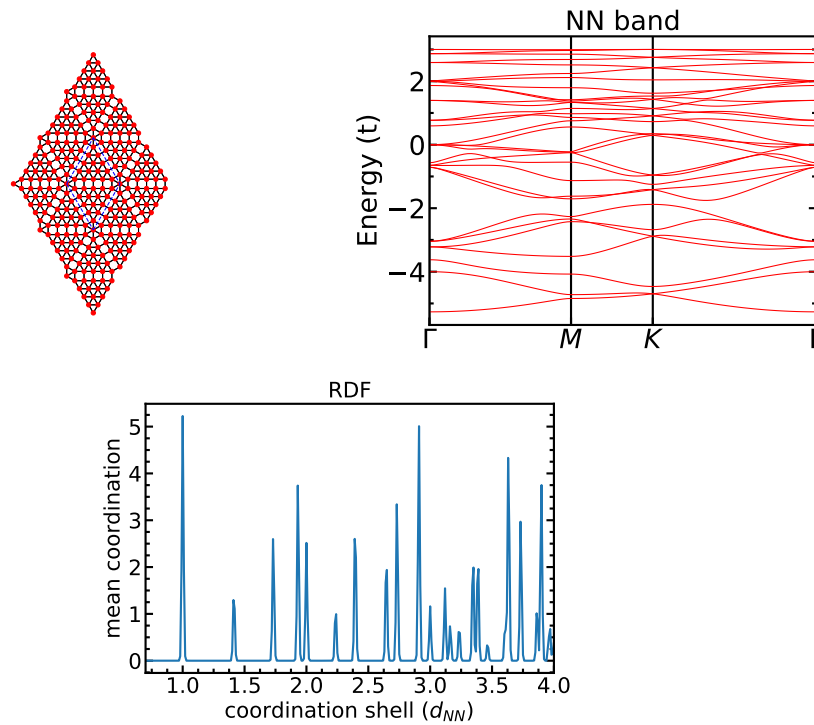


FIG. S307. t5307 lattice framework, nearest neighbors band structure and radial distribution function.

t5308

Tiling reference number t5308 with space-group ' $P2/m'$ ' (10) and 10 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 t5308 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	6	0	0	0	0

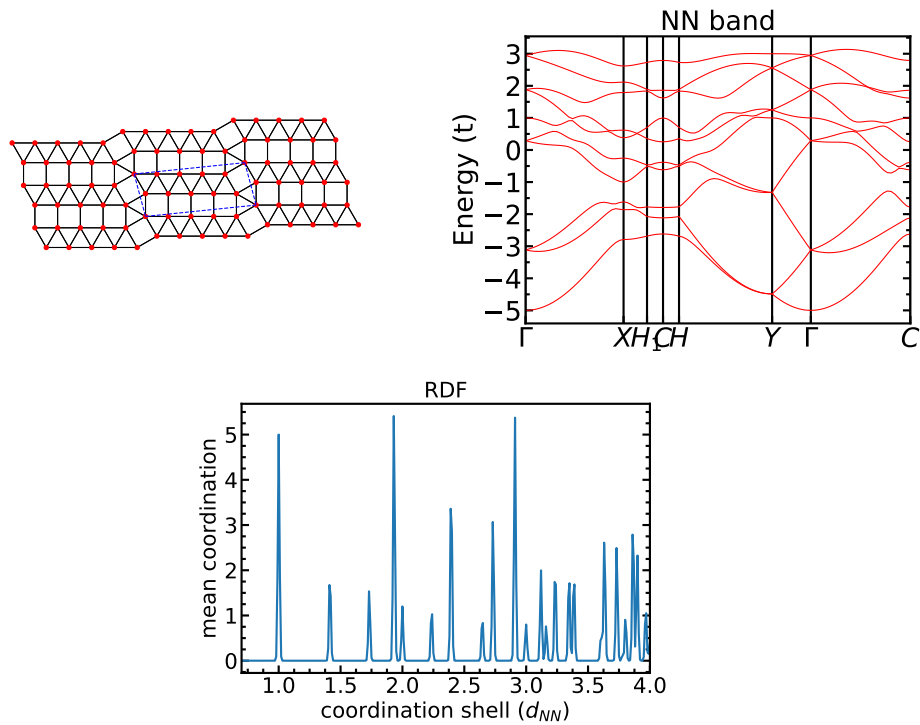


FIG. S308. t5308 lattice framework, nearest neighbors band structure and radial distribution function.

t5309

Tiling reference number t5309 with space-group $'Pmc2'_1$ (26) 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 t5309 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	5	15	0	0	0	0

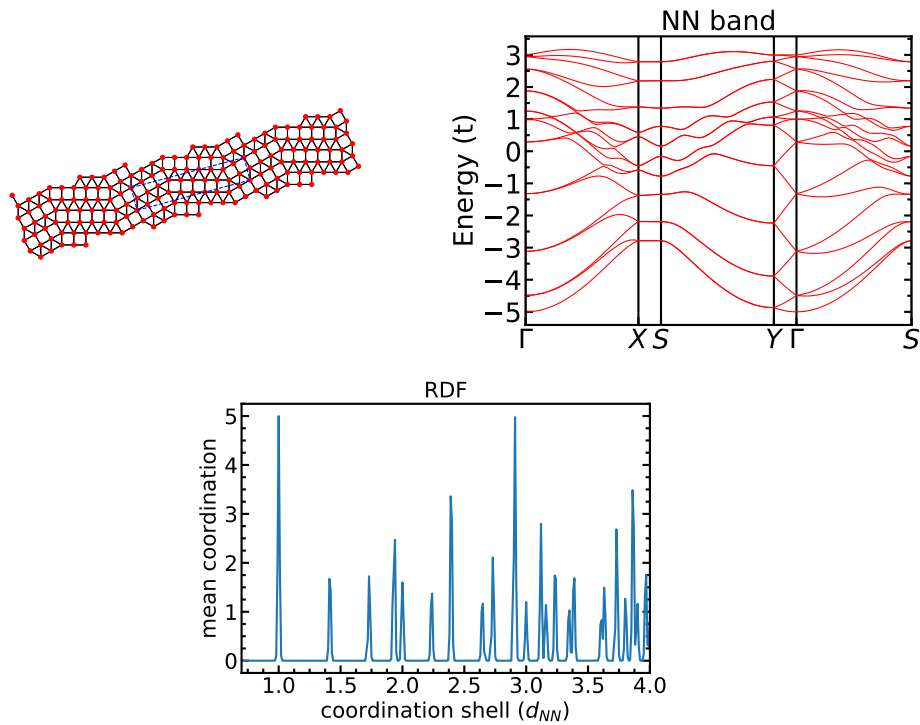


FIG. S309. t5309 lattice framework, nearest neighbors band structure and radial distribution function.

t5310

Tiling reference number t5310 with space-group ' $P2/m'$ ' (10) and 10 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 t5310 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	6	0	0	0	0

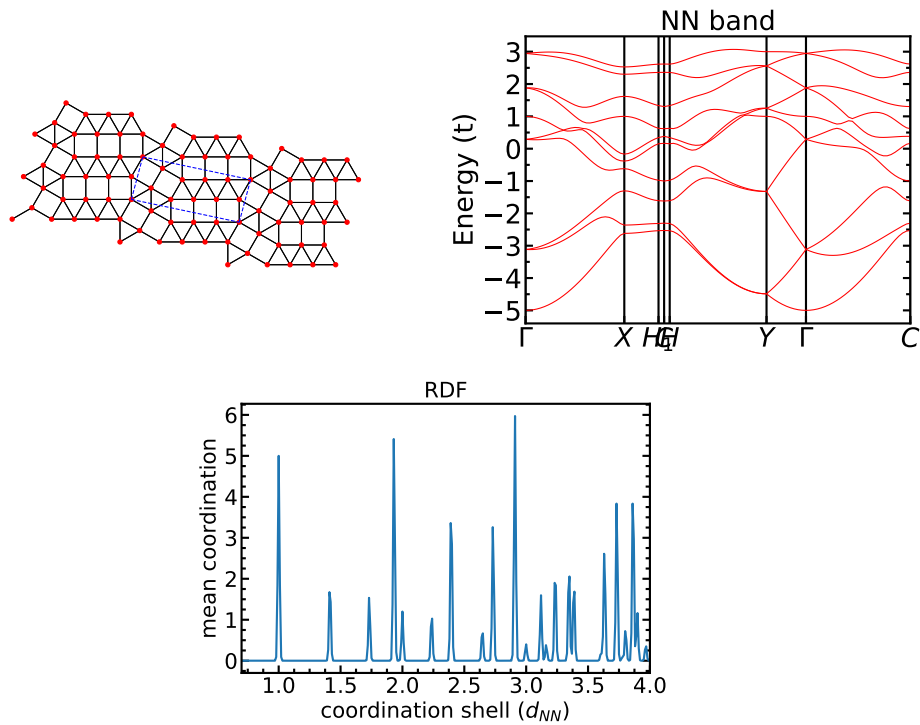


FIG. S310. t5310 lattice framework, nearest neighbors band structure and radial distribution function.

t5311

Tiling reference number t5311 with space-group ' $P2/m'$ ' (10) and 20 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 t5311 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	12	8	0	0	0	0

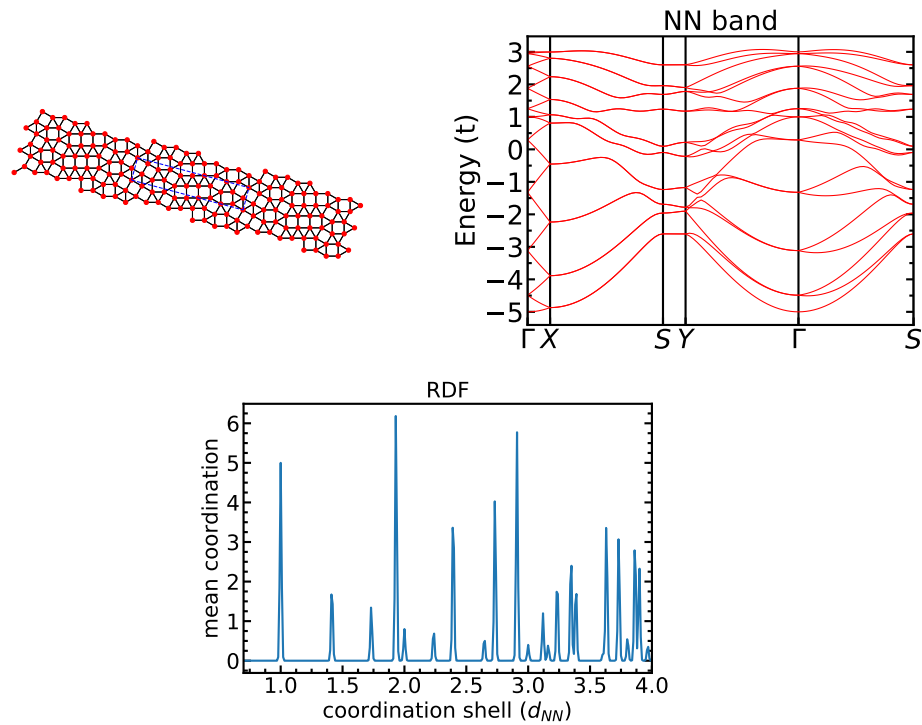


FIG. S311. t5311 lattice framework, nearest neighbors band structure and radial distribution function.

t5312

Tiling reference number t5312 with space-group ' Pm' ' (6) and 10 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 t5312 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	2	0	0	0	0

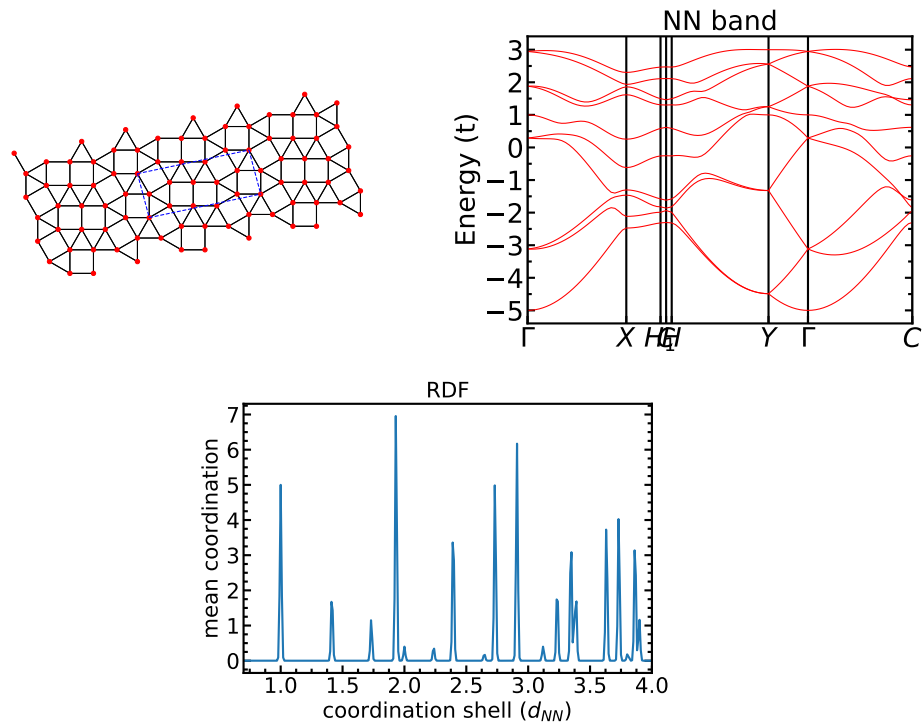


FIG. S312. t5312 lattice framework, nearest neighbors band structure and radial distribution function.

t5313

Tiling reference number t5313 with space-group ' $Amm2'$ ' (38) and 28 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 t5313 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	12	12	0	0	0	0

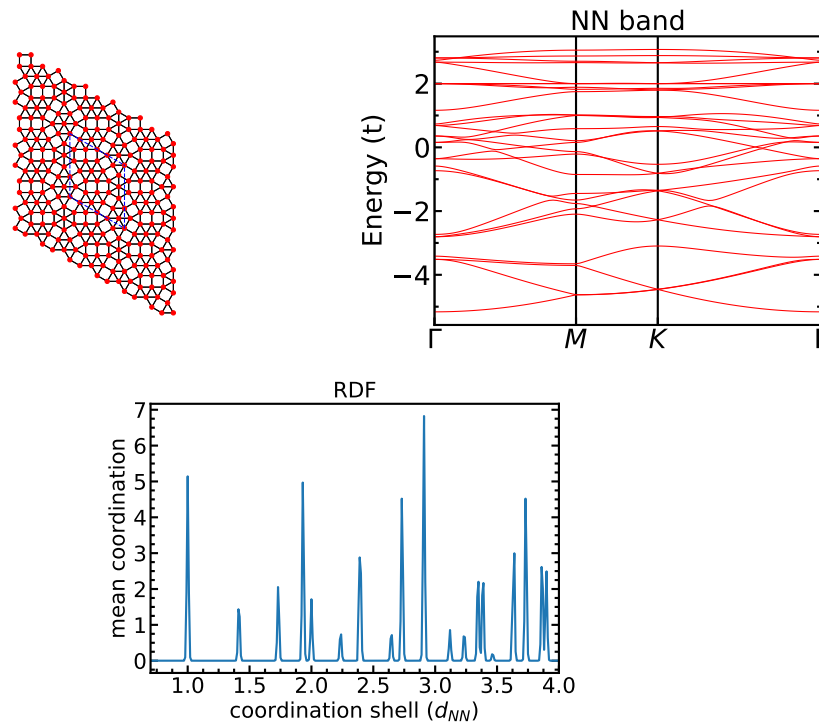


FIG. S313. t5313 lattice framework, nearest neighbors band structure and radial distribution function.

t5314

Tiling reference number t5314 with space-group ' $Amm2'$ ' (38) and 30 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 t5314 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	12	12	0	0	0	0

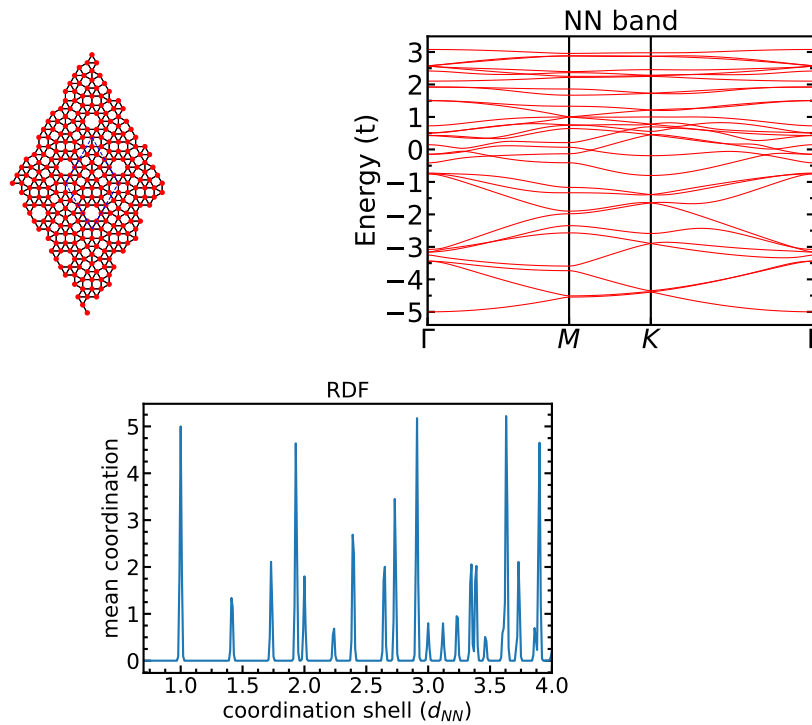


FIG. S314. t5314 lattice framework, nearest neighbors band structure and radial distribution function.

t5315

Tiling reference number t5315 with space-group ' Pm' ' (6) and 20 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 t5315 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	13	7	0	0	0	0

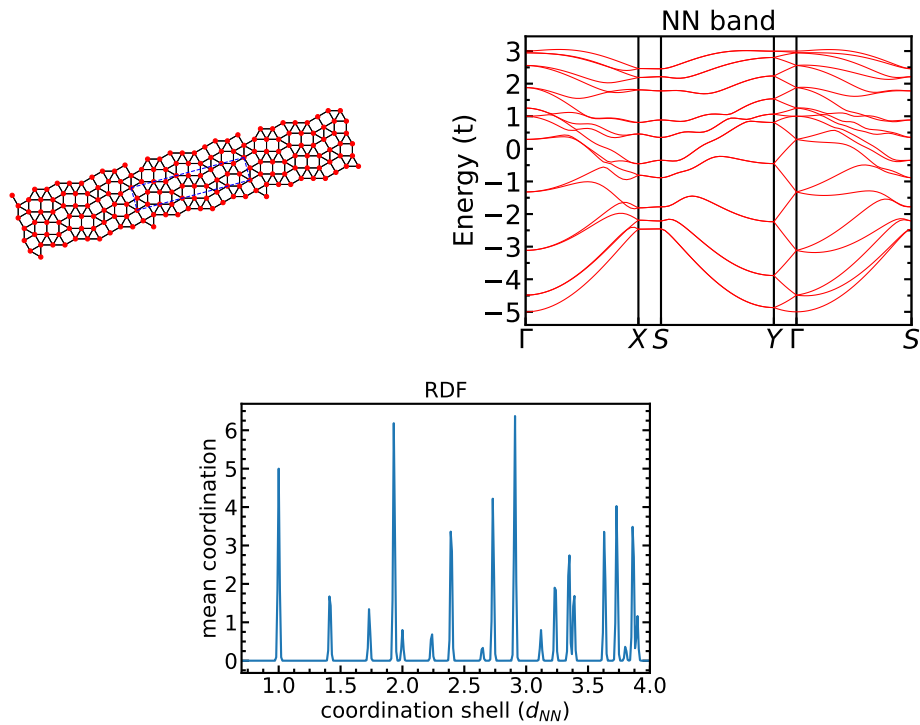


FIG. S315. t5315 lattice framework, nearest neighbors band structure and radial distribution function.

t5316

Tiling reference number t5316 with space-group ' $Cmmm$ ' (65) and 31 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 t5316 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	6	0	0	0	0

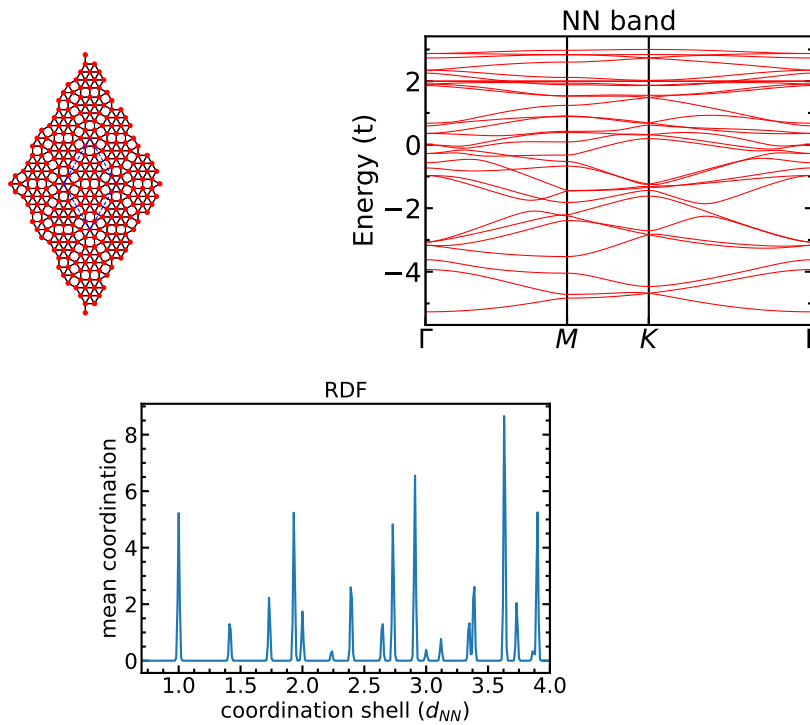


FIG. S316. t5316 lattice framework, nearest neighbors band structure and radial distribution function.

t5317

Tiling reference number t5317 with space-group ' $Cmmm$ ' (65) and 14 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 t5317 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	4	0	0	0	0

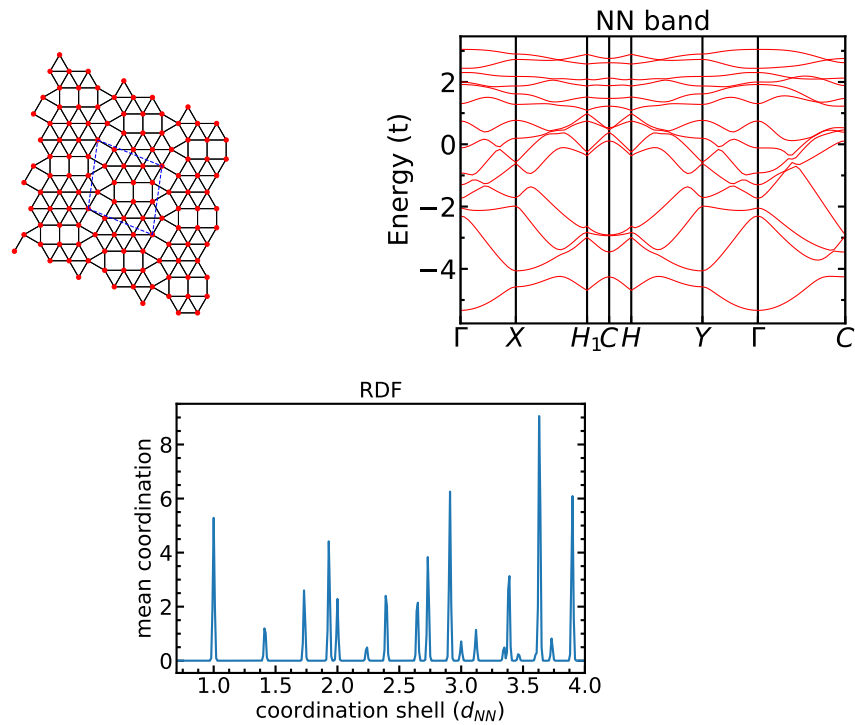


FIG. S317. t5317 lattice framework, nearest neighbors band structure and radial distribution function.

t5318

Tiling reference number t5318 with space-group ' Pm' ' (6) and 30 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 t5318 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	28	0	0	0	0	0

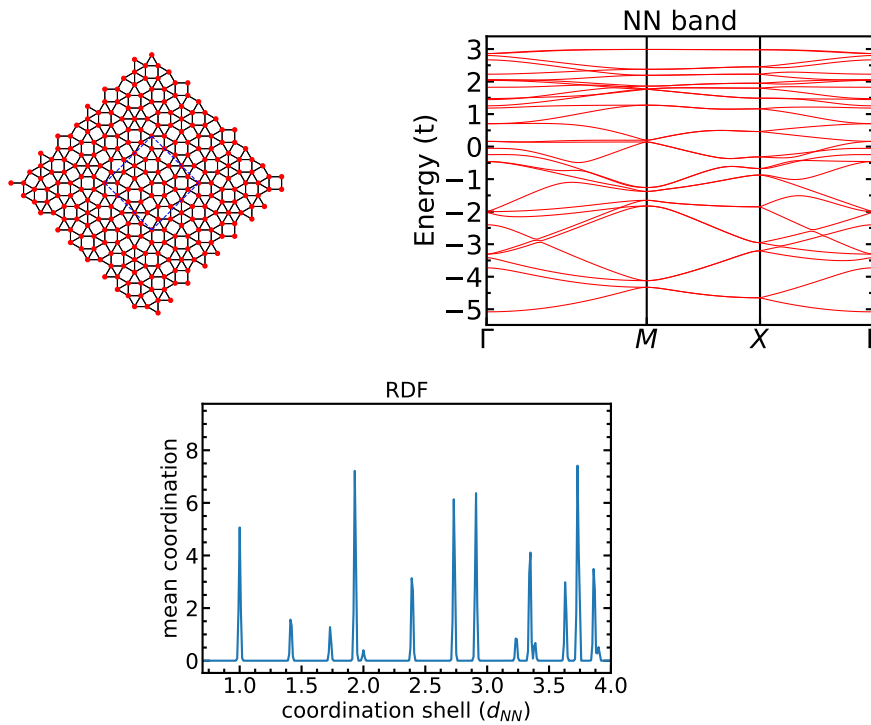


FIG. S318. t5318 lattice framework, nearest neighbors band structure and radial distribution function.

t5319

Tiling reference number t5319 with space-group ' $Pmm2'$ ' (25) and 11 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 t5319 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	10	0	0	0	0	0

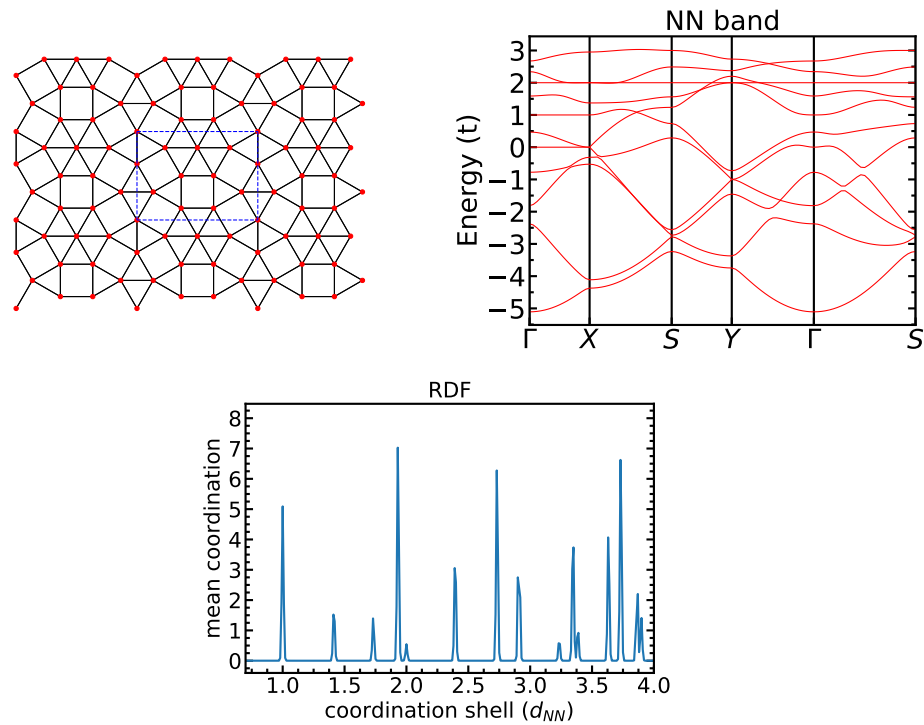


FIG. S319. t5319 lattice framework, nearest neighbors band structure and radial distribution function.

t5320

Tiling reference number t5320 with space-group ' Pm' ' (6) and 26 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 t5320 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	6	0	0	0	0	0	0

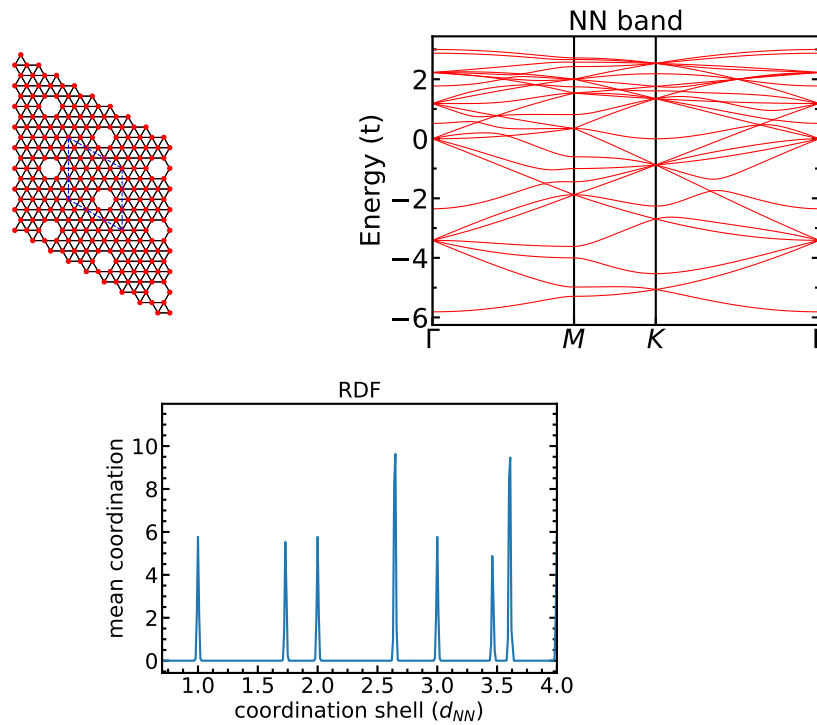


FIG. S320. t5320 lattice framework, nearest neighbors band structure and radial distribution function.

t5321

Tiling reference number t5321 with space-group ' $P6/m'$ ' (175) and 30 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 t5321 vertex types

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

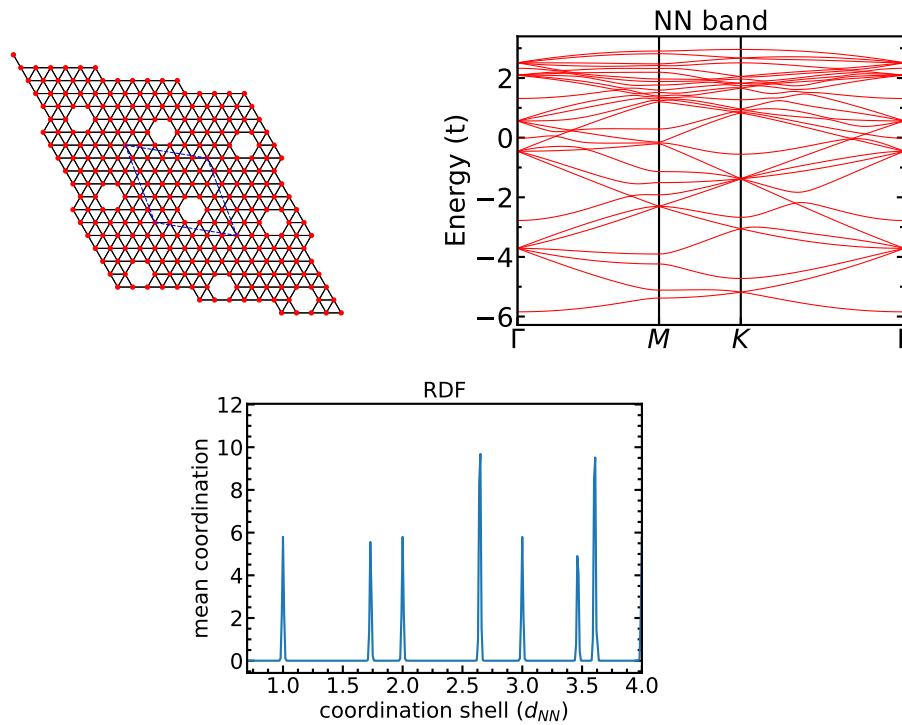


FIG. S321. t5321 lattice framework, nearest neighbors band structure and radial distribution function.

t5322

Tiling reference number t5322 with space-group ' Pm' ' (6) and 27 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 t5322 vertex types

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
21	0	0	0	0	0	0	0	6	0	0	0	0	0	0

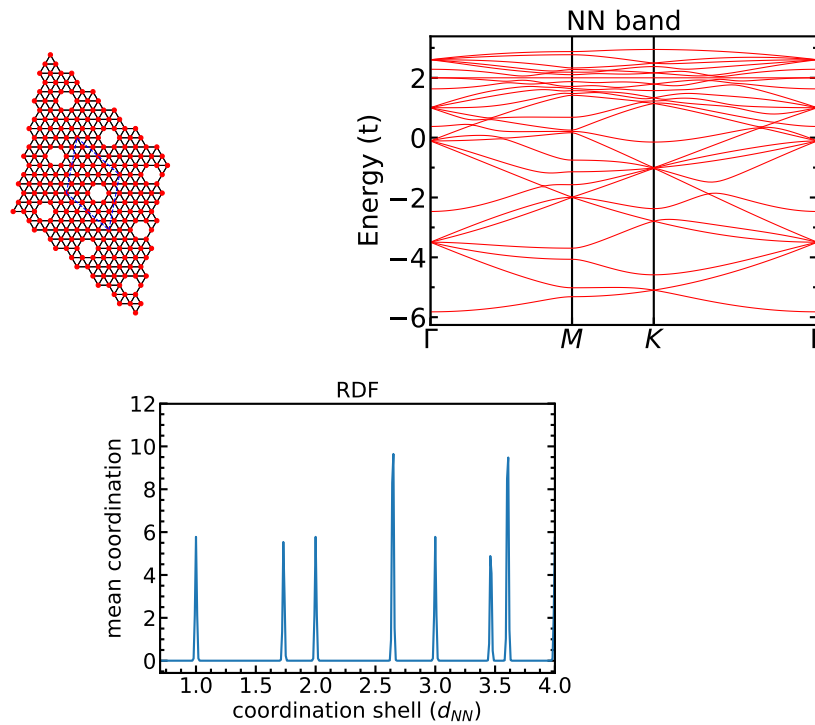


FIG. S322. t5322 lattice framework, nearest neighbors band structure and radial distribution function.

t5323

Tiling reference number t5323 with space-group ' Pm' ' (6) and 24 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 t5323 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	18	0	0	0	0	0	0

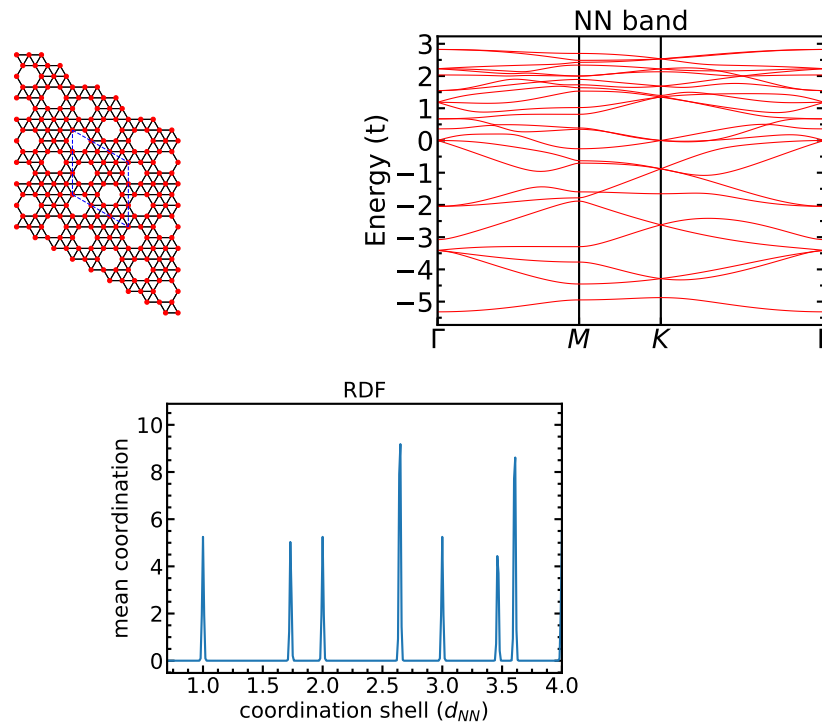


FIG. S323. t5323 lattice framework, nearest neighbors band structure and radial distribution function.

t5324

Tiling reference number t5324 with space-group ' $Pmma'$ ' (51) and 18 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 t5324 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	0

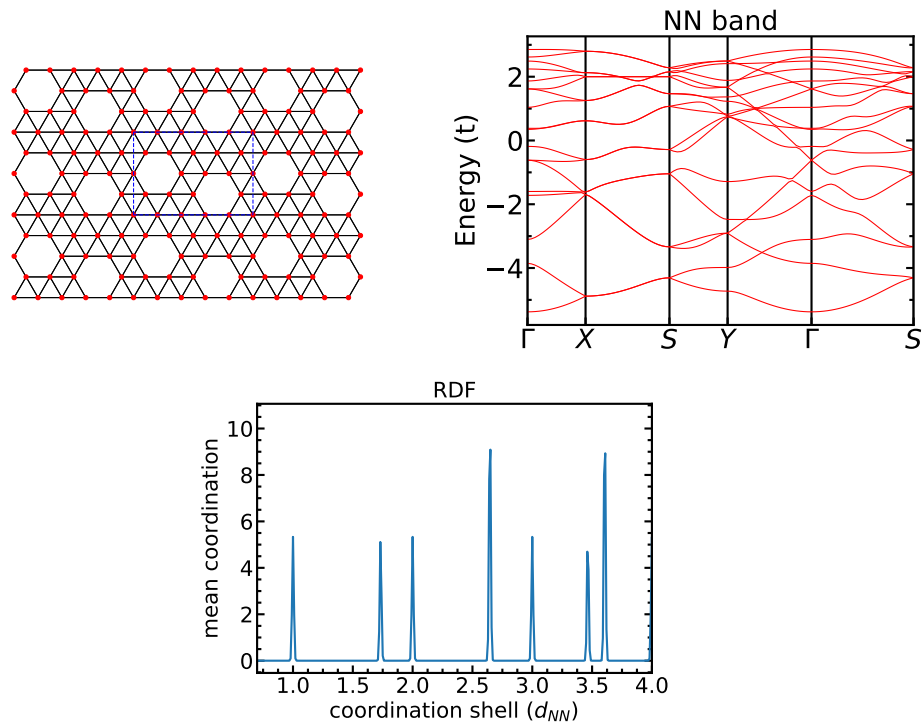


FIG. S324. t5324 lattice framework, nearest neighbors band structure and radial distribution function.

t5325

Tiling reference number t5325 with space-group ' $Cmmm$ ' (65) and 14 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 t5325 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	6	0	0	0	0	0	0

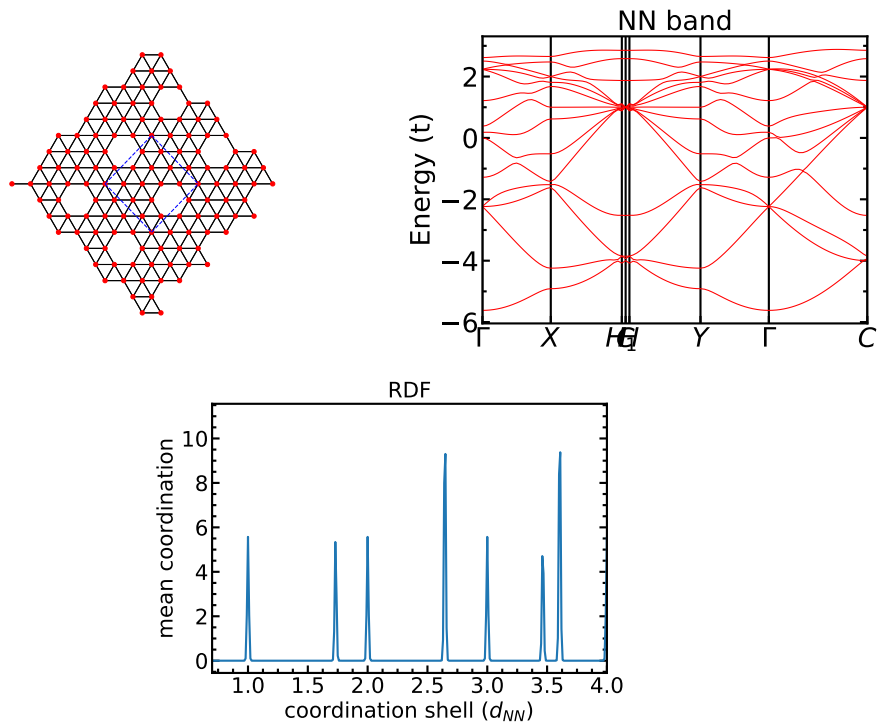


FIG. S325. t5325 lattice framework, nearest neighbors band structure and radial distribution function.

t5326

Tiling reference number t5326 with space-group ' $Pmmm$ ' (47) 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 t5326 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

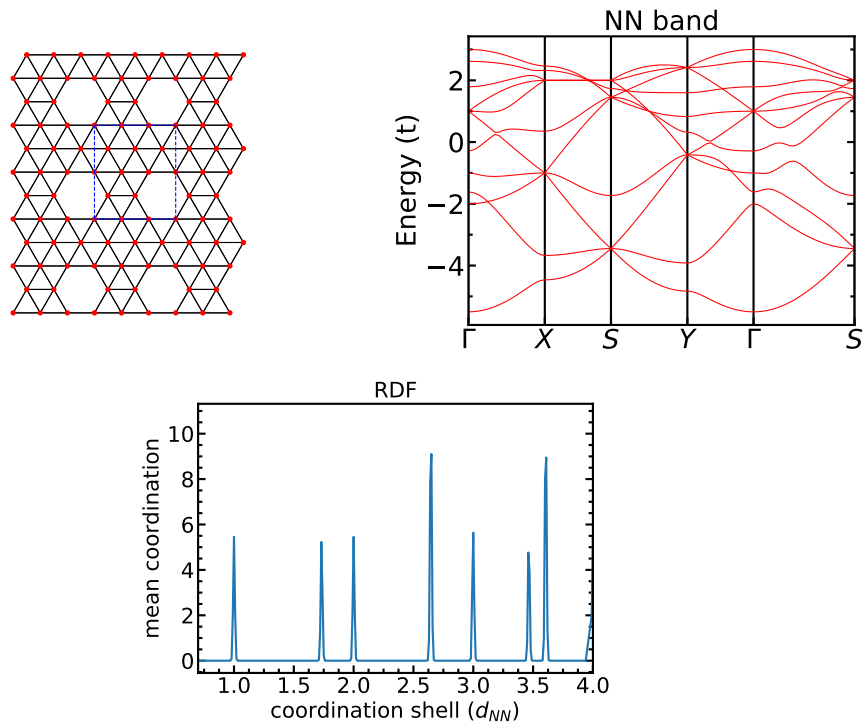


FIG. S326. t5326 lattice framework, nearest neighbors band structure and radial distribution function.

t5327

Tiling reference number t5327 with space-group ' $Cmmm$ ' (65) and 14 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 t5327 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	6	0	0	0	0	0	0

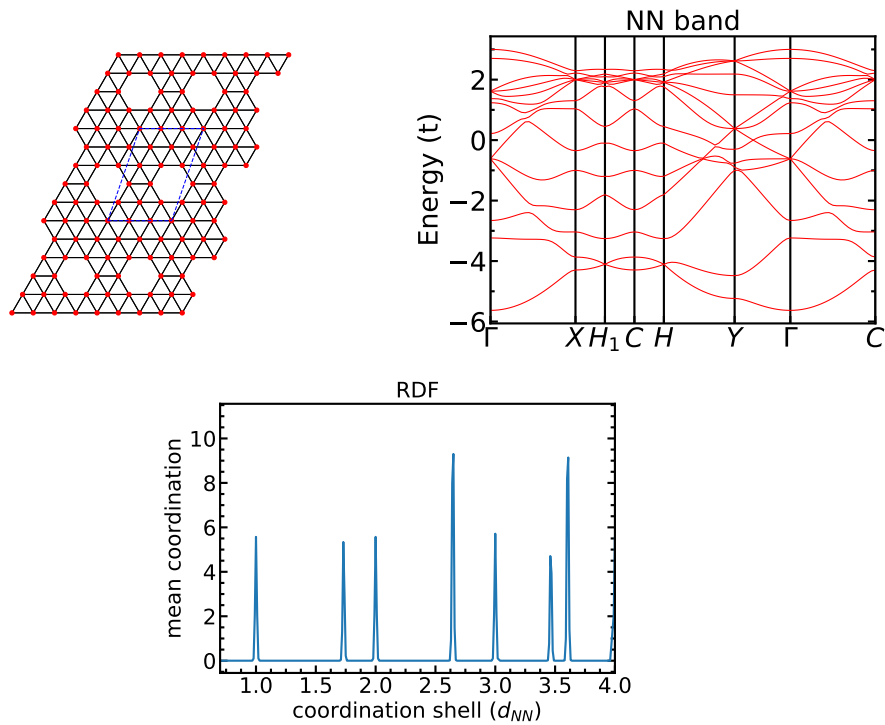


FIG. S327. t5327 lattice framework, nearest neighbors band structure and radial distribution function.

t5328

Tiling reference number t5328 with space-group ' Pm' ' (6) and 25 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 t5328 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	12	0	0	0	0	0	0

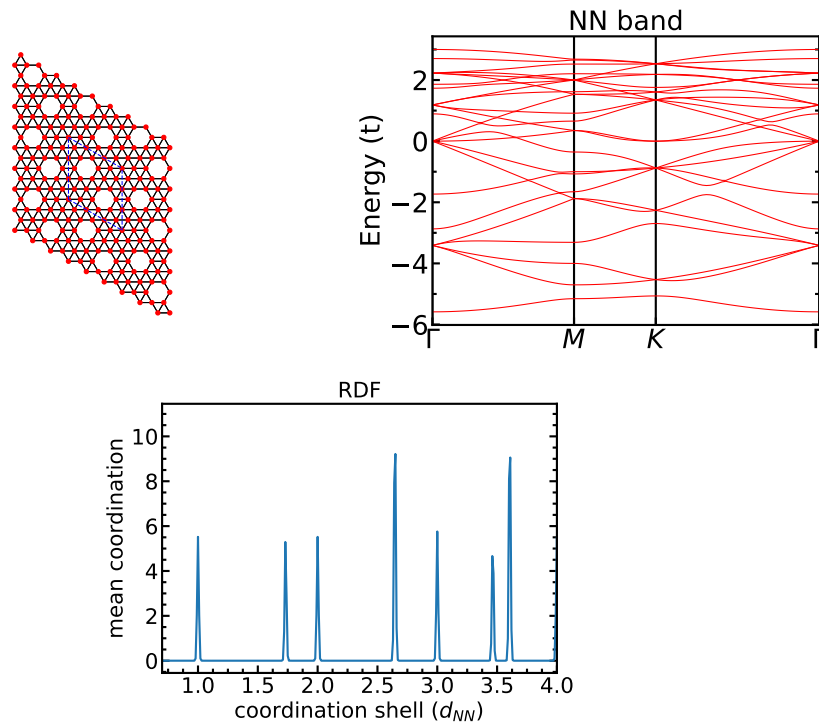


FIG. S328. t5328 lattice framework, nearest neighbors band structure and radial distribution function.

t5329

Tiling reference number t5329 with space-group ' $Pmma'$ ' (51) and 16 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 t5329 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	12	0	0	0	0	0	0

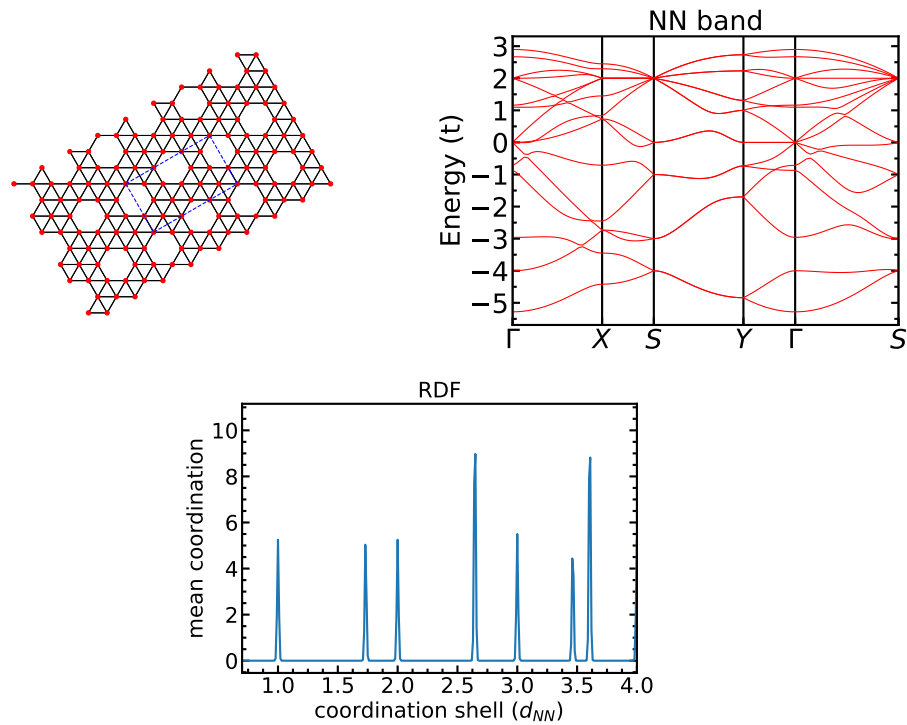


FIG. S329. t5329 lattice framework, nearest neighbors band structure and radial distribution function.

t5330

Tiling reference number t5330 with space-group ' $P2/m'$ ' (10) and 9 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 t5330 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	0	0	0	0	0	0

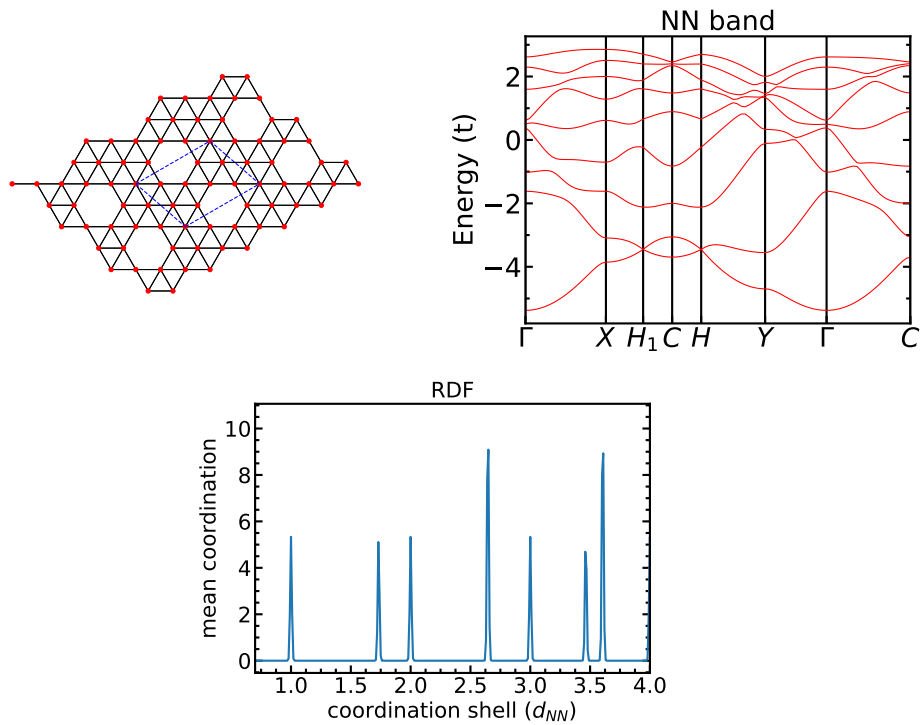


FIG. S330. t5330 lattice framework, nearest neighbors band structure and radial distribution function.

t5331

Tiling reference number t5331 with space-group ' $P2/m'$ ' (10) and 10 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 t5331 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	6	0	0	0	0	0	0

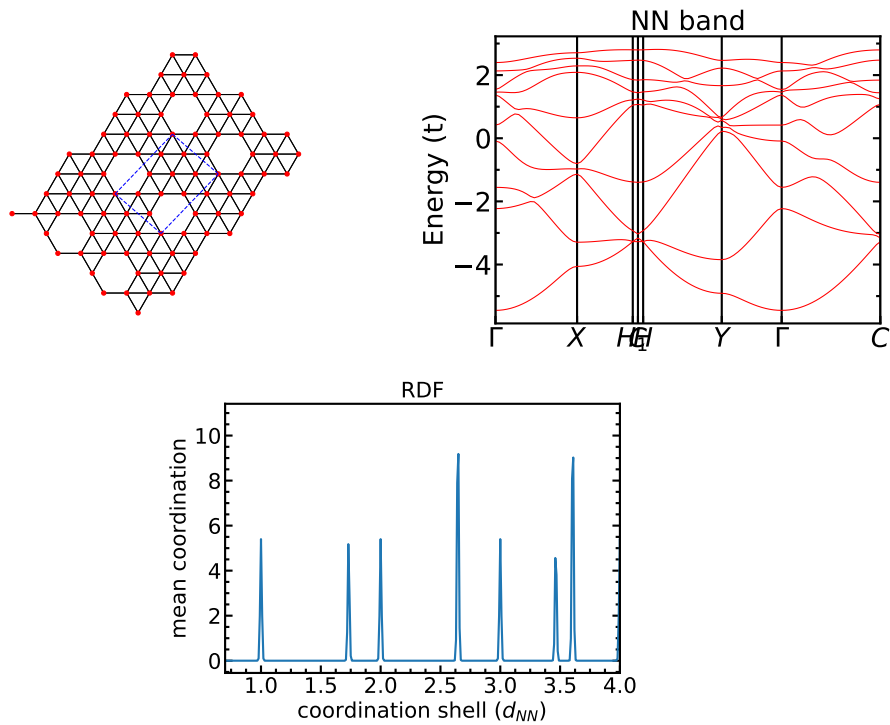


FIG. S331. t5331 lattice framework, nearest neighbors band structure and radial distribution function.

t5332

Tiling reference number t5332 with space-group ' Pm' ' (6) and 25 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 t5332 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	18	0	0	0	0	0	0

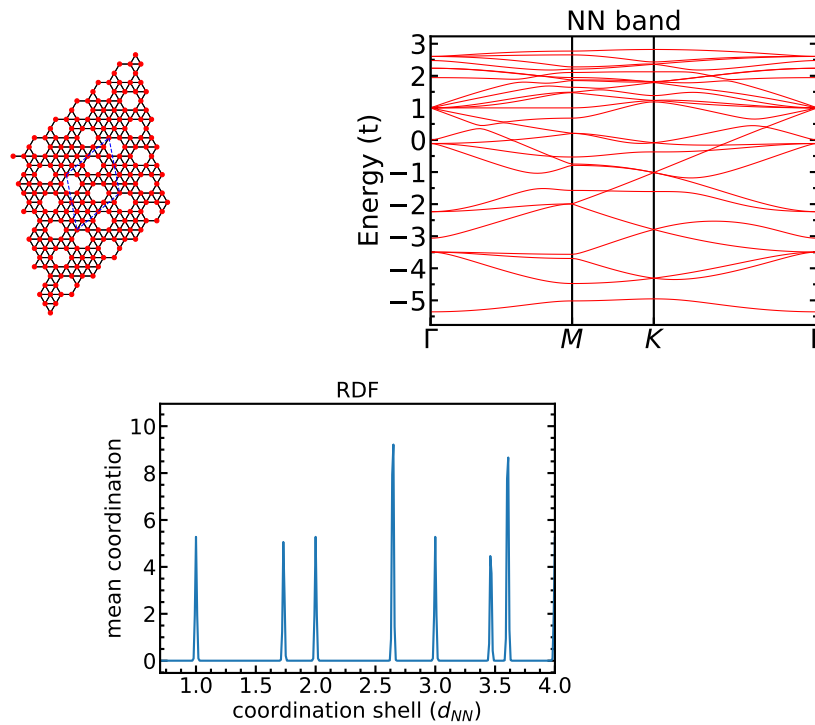


FIG. S332. t5332 lattice framework, nearest neighbors band structure and radial distribution function.

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