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Supporting information for

"Electronic structures of multilayer two-dimensional silicon carbide

with oriented misalignment"

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Fig. S1 Schematics of the atomic structure of bilayer 2d-SiC with oriented misalignment. The rotation angle is 27.8°. The commensuration cell is marked by the dashed lines, with the primitive vectors for the super-lattice denoted as t_1 and t_2 , respectively. The atom number in the commensuration cell in each layer is N = 26.



Fig. S2 Schematics of the atomic structure of bilayer 2d-SiC with oriented misalignment. The rotation angle is 21.8°. The commensuration cell is marked by the dashed lines, with the primitive vectors for the super-lattice denoted as t_1 and t_2 , respectively. The atom number in the commensuration cell in each layer is N = 14.



Fig. S3 Schematics of the atomic structure of bilayer 2d-SiC with oriented misalignment. The rotation angle is 38.2° . The commensuration cell is marked by the dashed lines, with the primitive vectors for the super-lattice denoted as t_1 and t_2 , respectively. The atom number in the commensuration cell in each layer is N = 14.



Fig. S4 Schematics of the atomic structure of bilayer 2d-SiC with oriented misalignment. The rotation angle is 13.2°. The commensuration cell is marked by the dashed lines, with the primitive vectors for the super-lattice denoted as t_1 and t_2 , respectively. The atom number in the commensuration cell in each layer is N = 38.



Fig. S5 Schematics of the atomic structure of bilayer 2d-SiC with oriented misalignment. The rotation angle is 46.8°. The commensuration cell is marked by the dashed lines, with the primitive vectors for the super-lattice denoted as t_1 and t_2 , respectively. The atom number in the commensuration cell in each layer is N = 38.



Fig. S6 Schematics of the atomic structure of bilayer 2d-SiC with oriented misalignment. The rotation angle is 17.9°. The commensuration cell is marked by the dashed lines, with the primitive vectors for the super-lattice denoted as t_1 and t_2 , respectively. The atom number in the commensuration cell in each layer is N = 62.



Fig. S7 Schematics of the atomic structure of bilayer 2d-SiC with oriented misalignment. The rotation angle is 42.1°. The commensuration cell is marked by the dashed lines, with the primitive vectors for the super-lattice denoted as t_1 and t_2 , respectively. The atom number in the commensuration cell in each layer is N = 62.