Electronic Supplementary Material (ESI) for Nanoscale.

Supporting Information

Dense monolayer films of atomically precise graphene nanoribbons on metallic substrates enabled by direct contact transfer of molecular precursors

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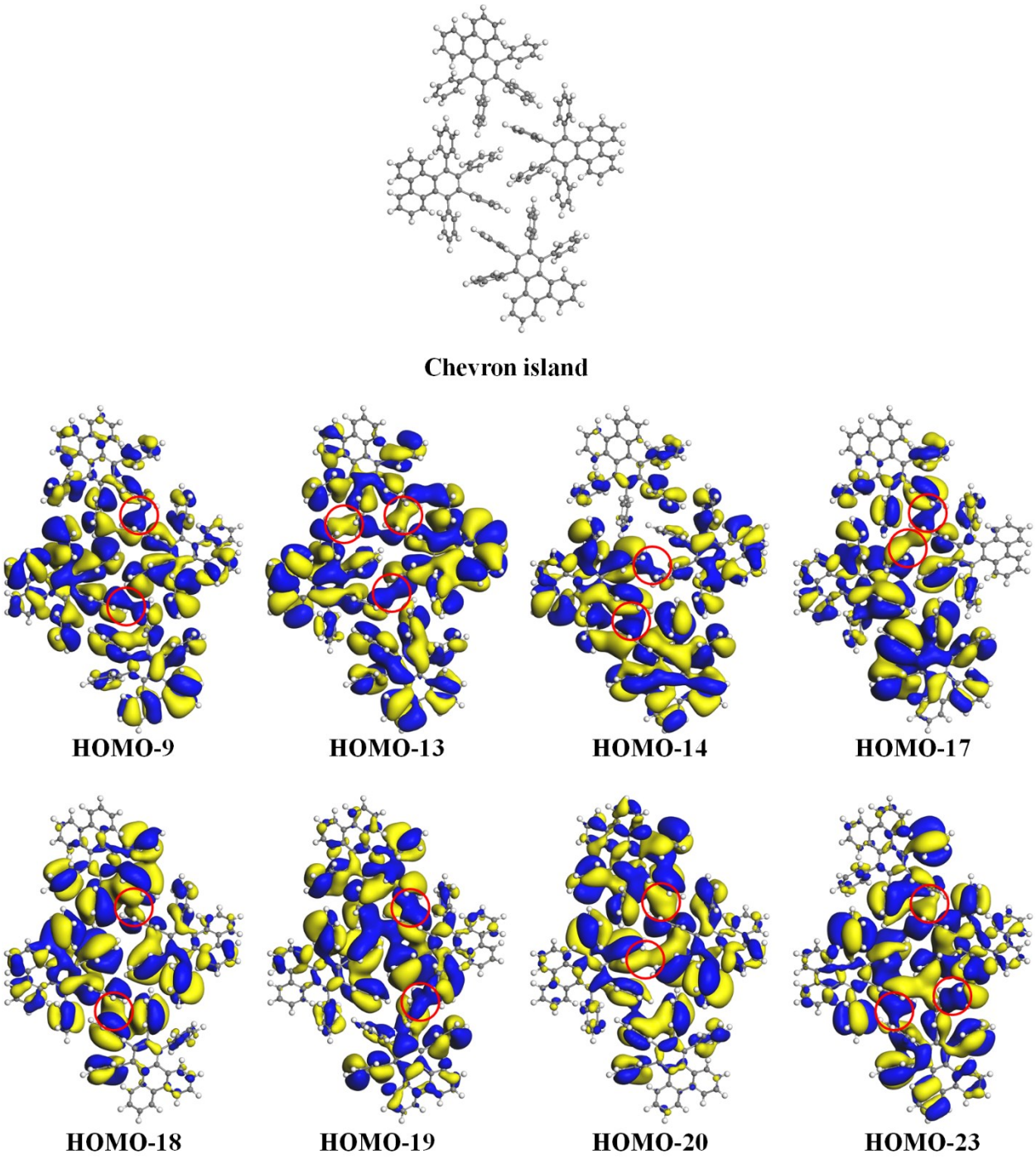

Figure S1. The structure of a tetrameric island of the chevron GNR precursors and its molecular orbitals. The π-π interactions are highlighted by red circles.

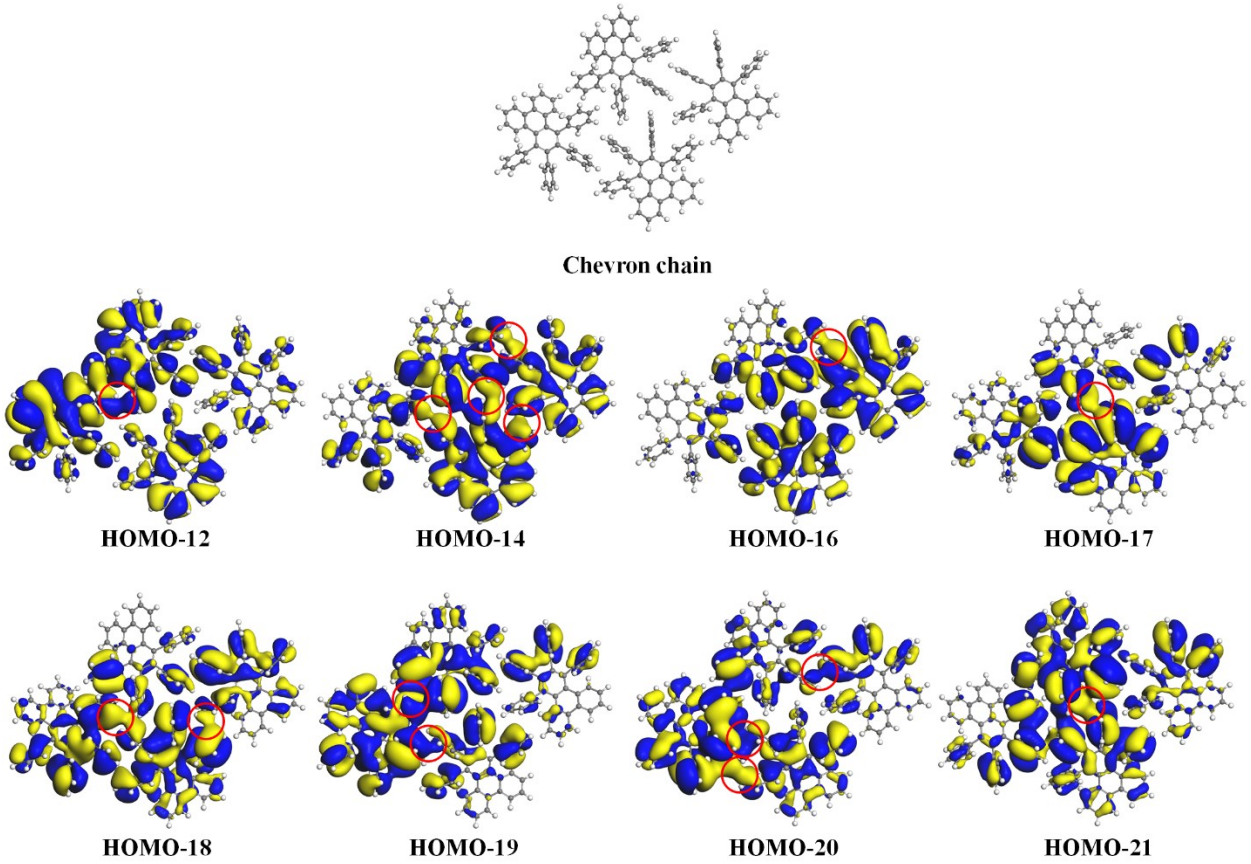

Figure S2. The structure of the fragment of the chain of chevron GNR precursors and its molecular orbitals. The π-π interactions are highlighted by red circles.

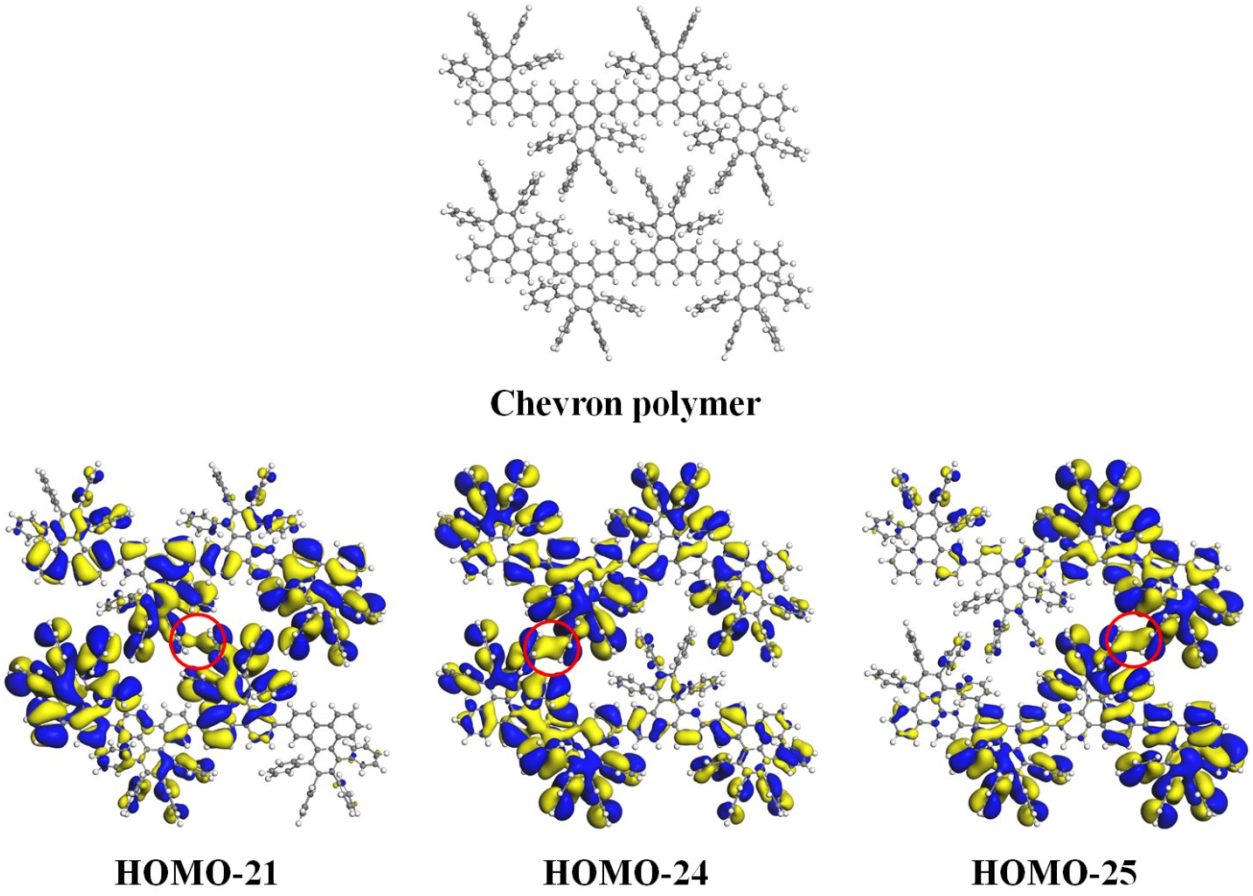

Figure S3. The structure of the assembly of chevron polymers **2** and its molecular orbitals. The π-π interactions are highlighted by red circles.

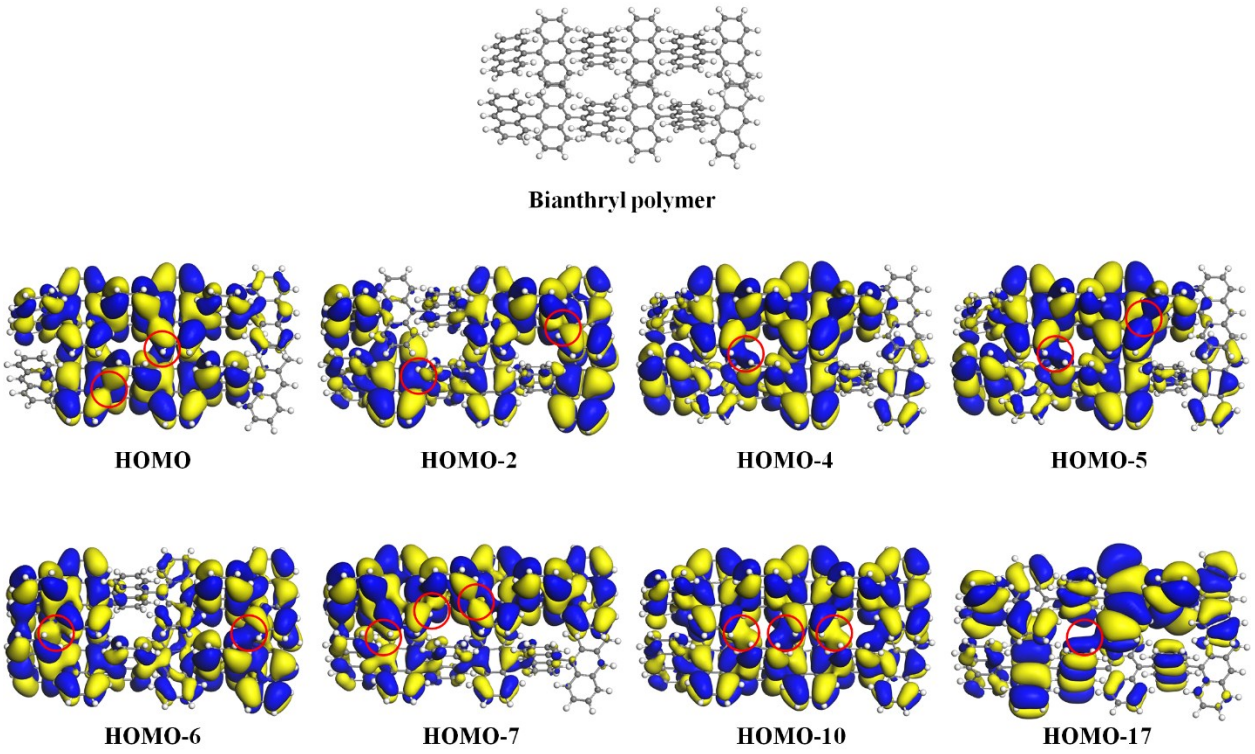

Figure S4. The structure of the assembly of bianthryl polymers **5** and its molecular orbitals. The π-π interactions are highlighted by red circles.

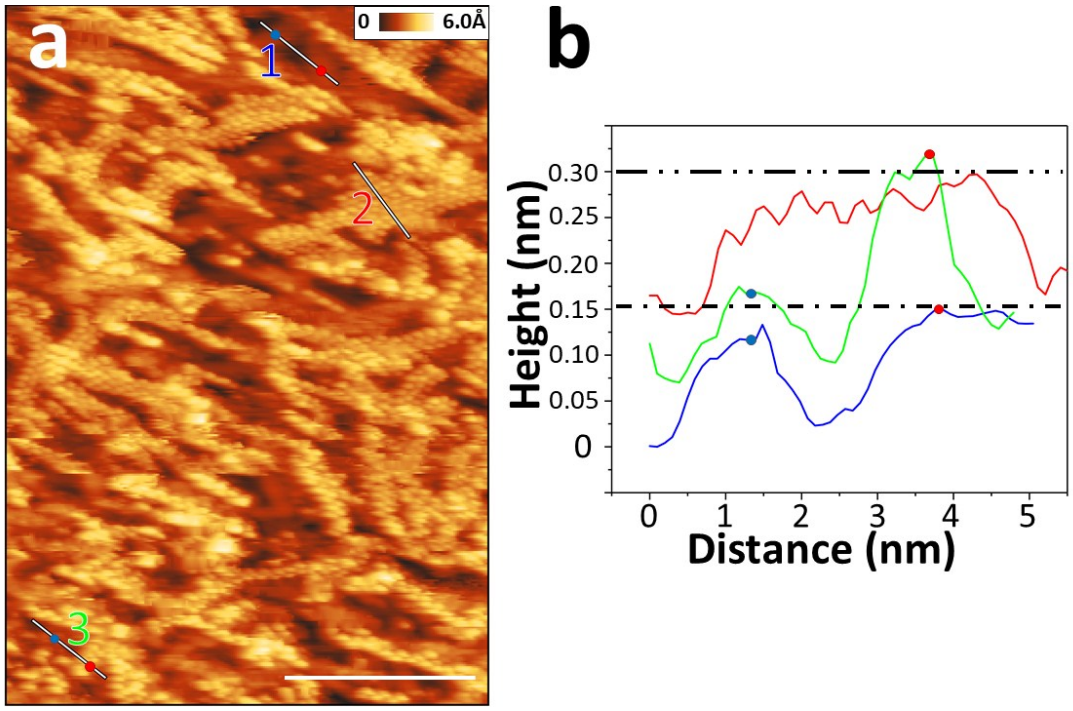

Figure S5. Multiple layers of polymer 5 chains. (a) This STM image is indicative of the state of the sample after DCT deposition of DBBA on Au(111) followed by annealing to approximately 200 °C. Scale bar is 10 nm. Scan parameters: 1.5 V, 500 pA. **(b)** Height profiles corresponding to three line traces in panel (a): blue – trace 1, red – trace 2, green – trace 3. Approximate values for the peak heights for lower-layer and higher-layer polymers are indicated by the dashed horizontal lines. Profile 1 is a trace across only lower-level polymers. The corresponding profile is shown in blue, and red and blue spots indicate each of two polymers the trace crosses. Profile 2 is a trace across a cluster of polymers in the top layer. Its trace is indicated in red. Profile 3 is a trace that crosses one polymer each in the lower and higher layers. The lower polymer is indicated with a blue dot, and the higher polymer with a red dot.