Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.
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Supporting information

Direct Photopolymerization and Lithography of Multilayer Conjugated Polymer Nanofilms for High Performance Memristors

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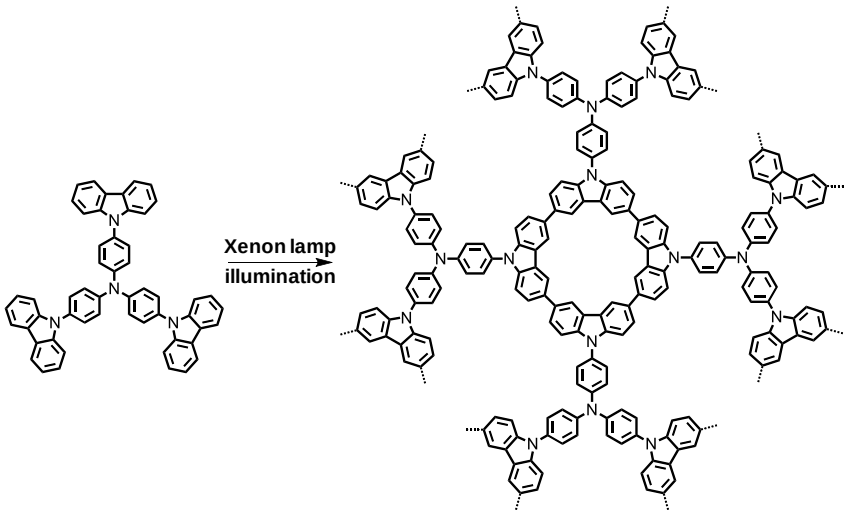
Scheme S1. Synthesis of CMP nanofilms.



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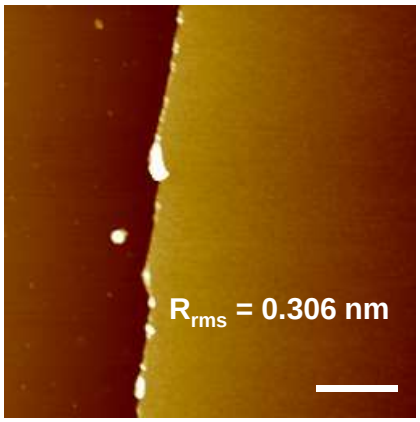

Fig. S1 The roughness of CMP nanofilms. Scale bar: 2 μm.

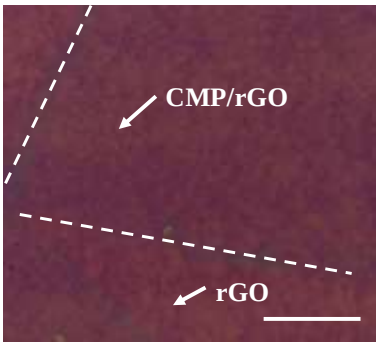

Fig. S2 Synthesis of CMP nanofilms on rGO substrates. The region surrounded by a dotted white line was covered with CMP/rGO. Scale bar: 100 μm.

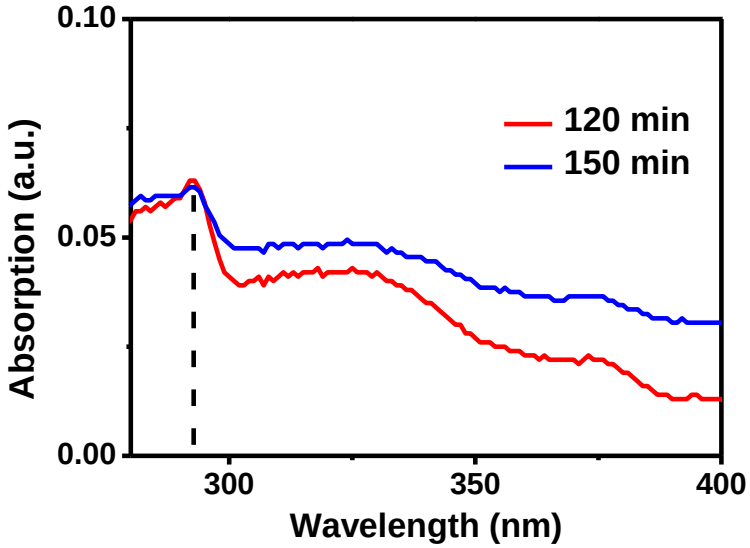

Fig. S3 The absorption spectra of the dichloromethane solution after washing the monomer films which were irradiated for 120 min (red line) and 150 min (blue line).

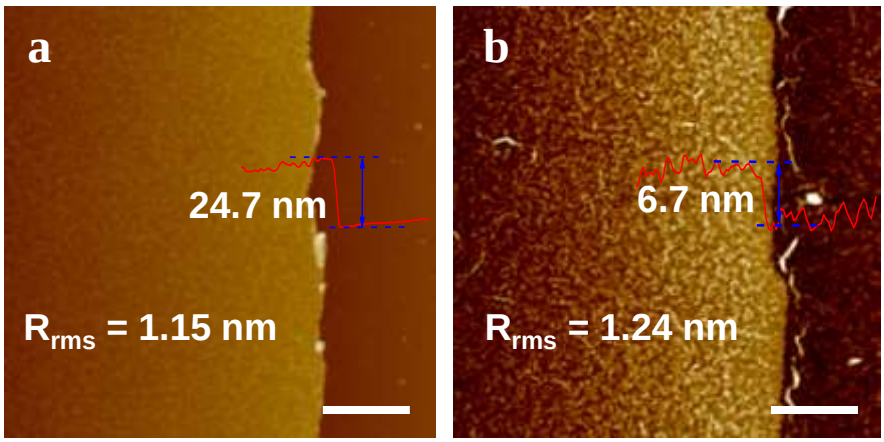

Fig. S4 The AFM images of the (a) bilayer CMP nanofilm and (b) third layer CMP nanofilm. Scale bars: 1 μm.

It is found that the thickness of the bilayer CMP film is 24.7 nm. Since the single layer film with a thickness of 18.3 nm, we can obtain the thickness of the second layer is 6.4 nm.

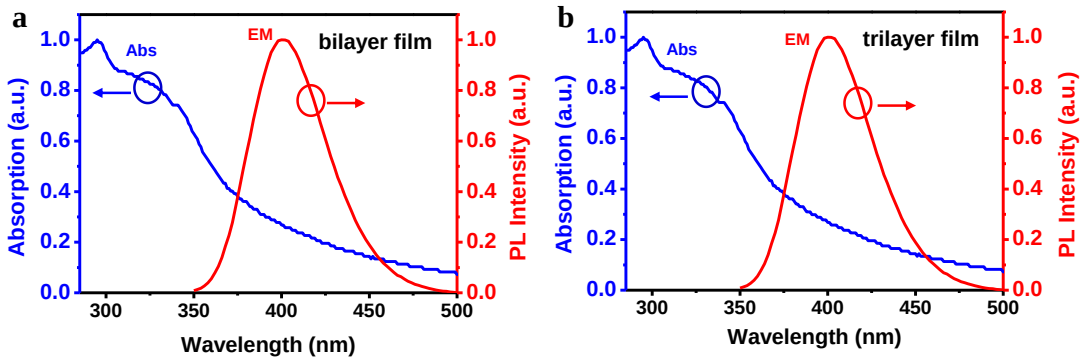

Fig. S5 The UV-vis absorption (blue line) and PL spectra (red line) of the (a) bilayer and (b) trilayer CMP nanofilms.