

Supporting Information

Conducting films based on single-component molecular metals

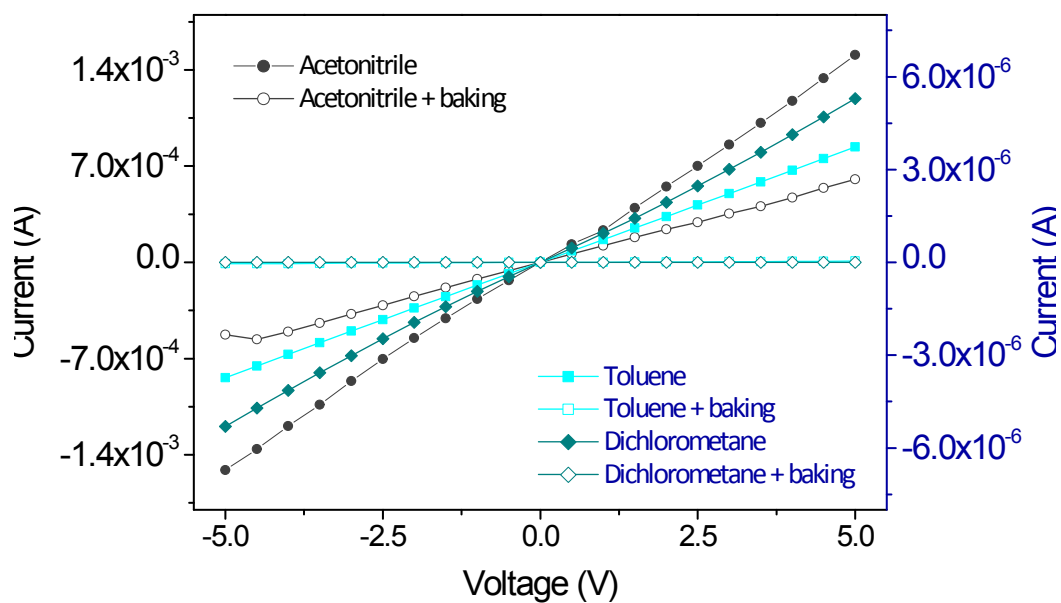


Fig. S1 *I-V* curves for unbaked and baked  $[\text{Au}(\alpha\text{-tpdt})_2]$  films prepared from different solvents.

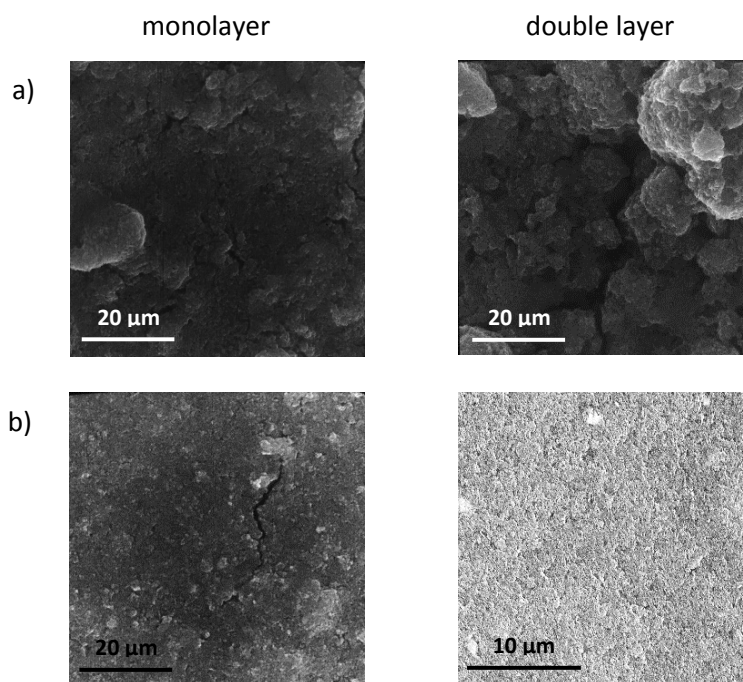
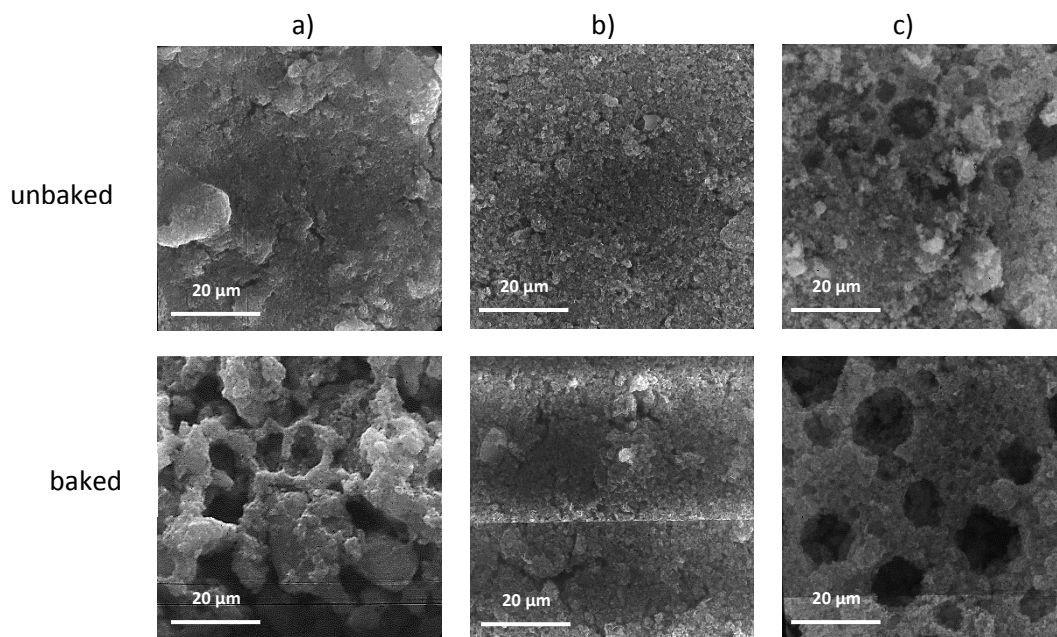
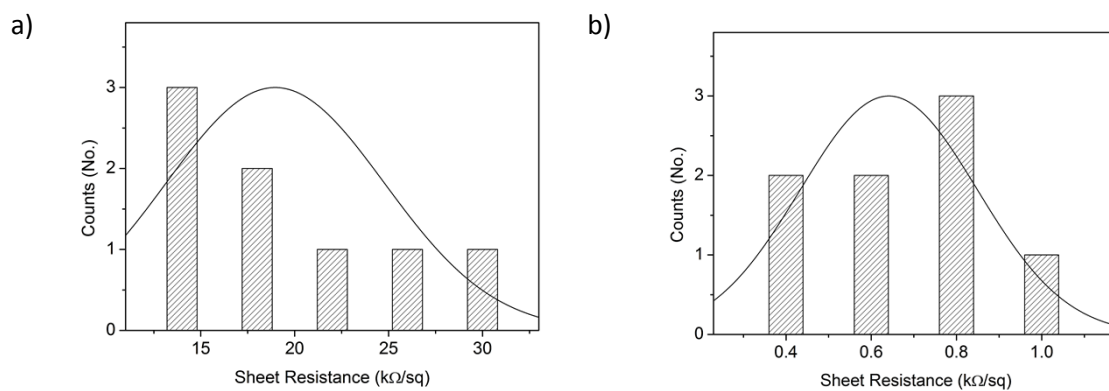


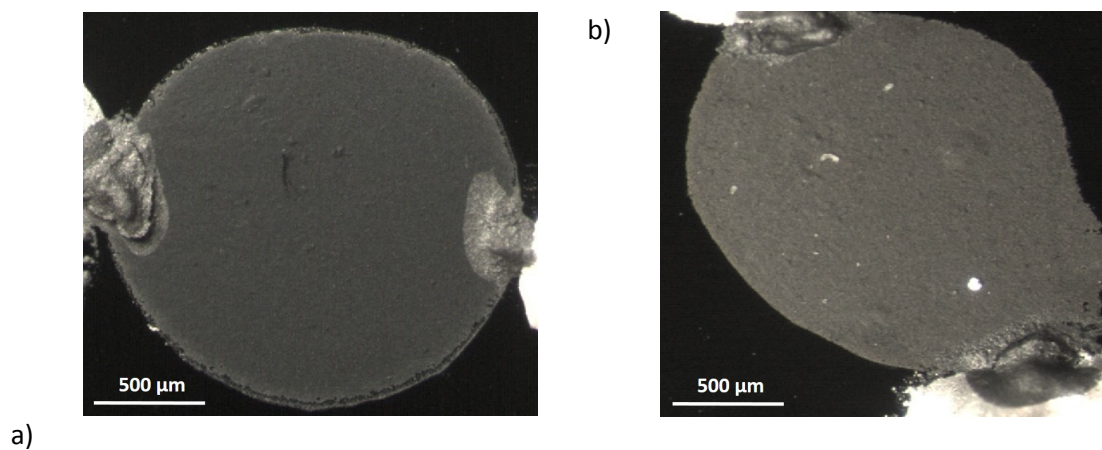
Fig. S2 SEM images of  $[\text{Au}(\alpha\text{-tpdt})_2]$  films prepared with: (a) acetonitrile, and (b) dichlorobenzene.



**Fig. S3** Effect of baking on  $[\text{Au}(\alpha\text{-tpdt})_2]$  films prepared from different solvents: (a) acetonitrile, (b) toluene, and (c) dichloromethane.



**Fig. S4** Histogram of sheet resistance values of: (a)  $[\text{Au}(\alpha\text{-tpdt})_2]$ , and (b)  $[\text{Ni}(\text{dttd})_2]$ .



**Fig. S5** Optical images of: (a)  $[\text{Au}(\alpha\text{-tpdt})_2]$ , and (b)  $[\text{Ni}(\text{dttd})_2]$ .

