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Supplementary Information

High-performance phosphide/carbon counter electrode for both iodide and organic redox couples in dye-sensitized solar cells

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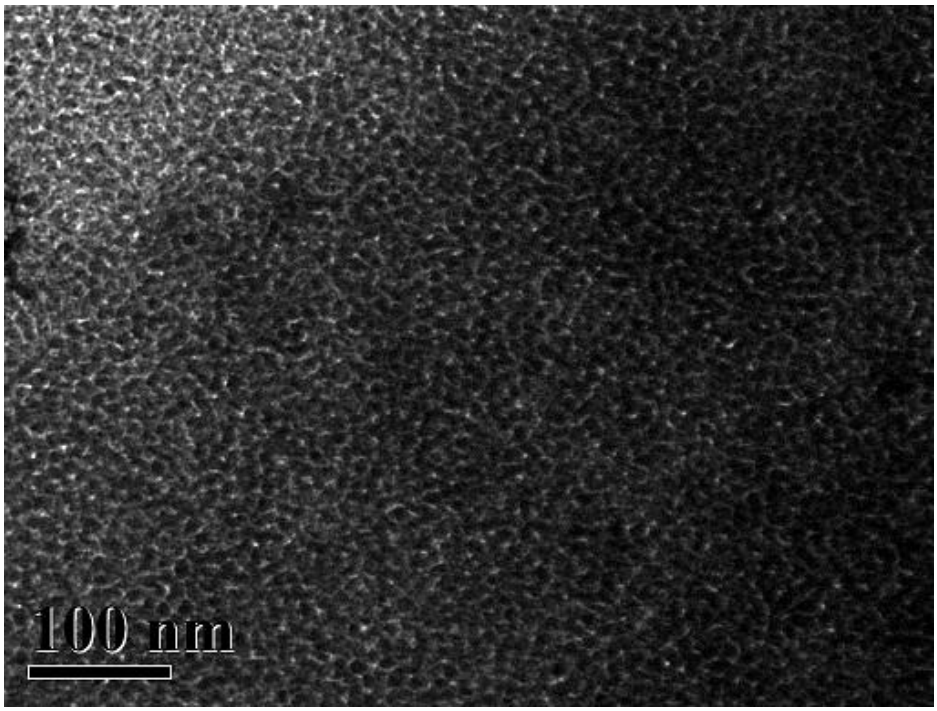
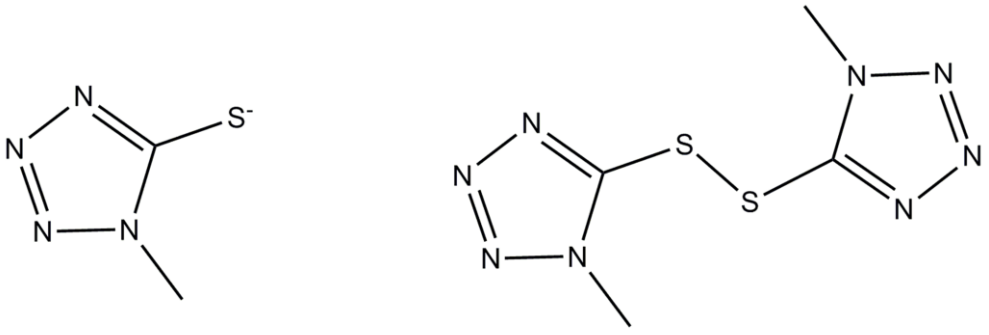


Fig. S1 TEM image of mesoporous carbon (MC)



T^- T_2

Fig. S2 Chemical structure of the redox couple of disulfide/thiolate (T_2/T^-)

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Table S1. Photovoltaic parameters of the T_2/T^- based DSCs using MC, Ni_5P_4, Ni_5P_4/C and Pt counter electrodes and EIS parameters of the T_2/T^- based symmetrical cells using two identical MC, Ni_5P_4, Ni_5P_4/C, and Pt electrodes

CE	V_{oc}/V	J_{sc}/mA cm^{-2}	FF	PCE/%	R_s/Ω	R_{ct}/Ω	Z_N/Ω
Pt	0.62	11.12	0.49	3.38	8.04	42.5	35.8
Ni_5P_4/C	0.63	11.81	0.64	4.75	23.4	13.5	56.6
Ni_5P_4	0.63	11.40	0.54	3.87	20.5	40.3	95.4
MC	0.63	12.88	0.54	4.40	18.9	18.7	130.5