Supplementary Information

A highly sensitive persulfate sensor based on hybrid nanocomposite with silicomolybdate doping poly(3,4-ethylenedioxythiophene) on multi-walled carbon nanotubes

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Figures

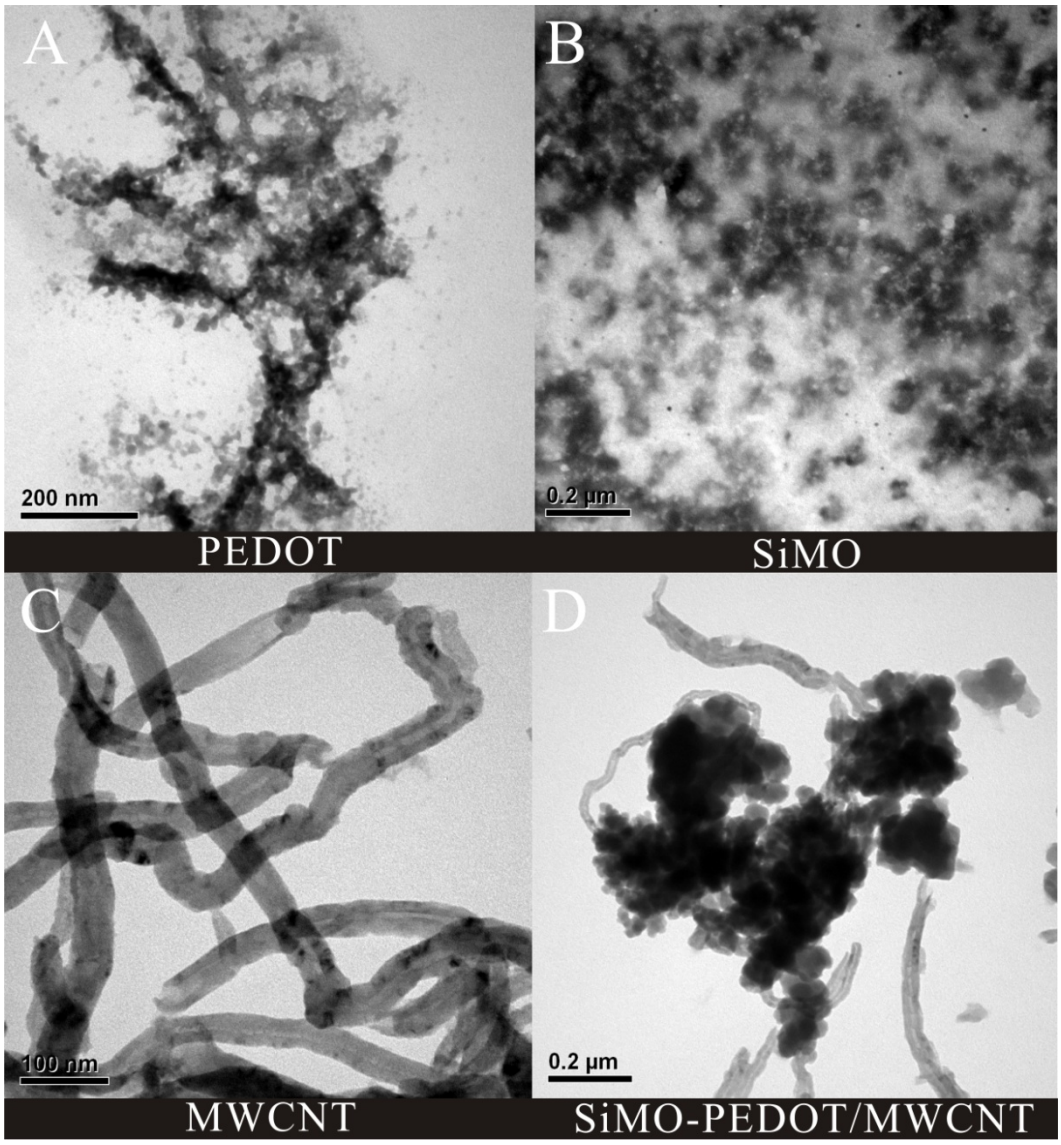

Fig. S1 TEM images of (A) PEDOT, (B) SiMO, (C) MWCNT, and (D) SiMO-PEDOT/MWCNT coated Cu-net (300 mesh regular grid).

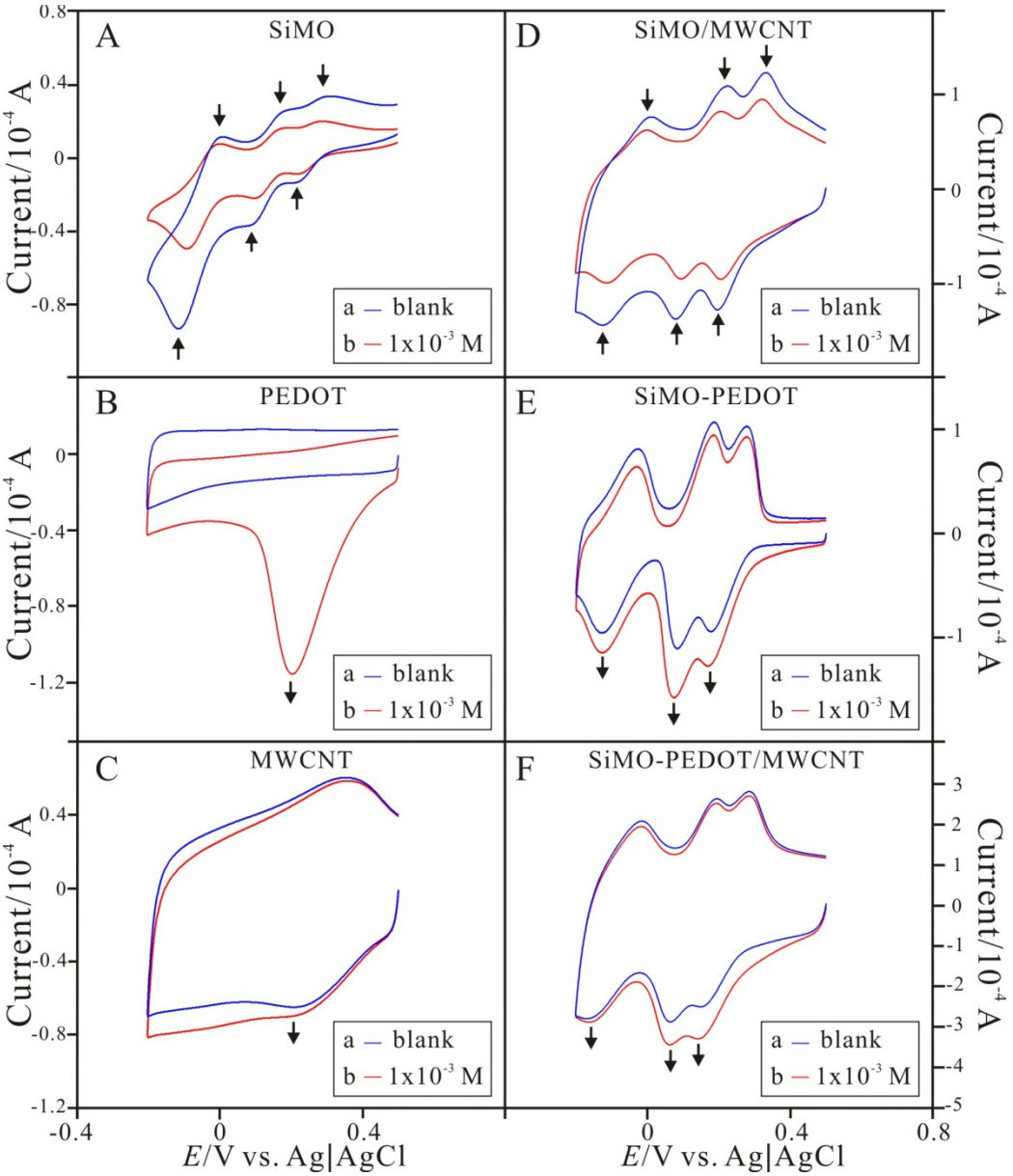

Fig. S2 Cyclic voltammograms of (A) SiMO, (B) PEDOT, (C) MWCNT, (D) SiMO/MWCNT, (E) SiMO-PEDOT, and (F) SiMO-PEDOT/MWCNT modified GCEs examined in sulphuric solution (pH 1.5) containing [$Na_2S_2O_8$] = (a) blank and (b) 1×10^{-3} M, respectively. Scan rate = 0.1 Vs^{-1}.

Tables

Table S1 The relative standard deviation estimated in five SiMO-PEDOT/MWCNT modified electrodes.

Electrode	Added(mM)	Found [a](mM)
1	1	1.07
2	1	0.99
3	1	0.98
4	1	1.06
5	1	1.02
R.S.D.		3.9%

[a] Estimated in three measurements.

Table S2 The relative standard deviation estimated in ten measurements of $S_2O_8^{2-}$ at one SiMO-PEDOT/MWCNT electrode.

No.	Added(mM)	Found(mM)
1	1	1.08
2	1	1.06
3	1	1.05
4	1	1.03
5	1	0.99
6	1	0.99
7	1	0.98
8	1	0.97
9	1	0.97
10	1	0.96
R.S.D.		4.3%