

Fabrication of Carbon Nanotube-Multiporphyrin Array Composites as Light-Sensitizer for Photocurrent Generation, Photochromism of Viologen and Catalytic Degradation of Methyl Orange

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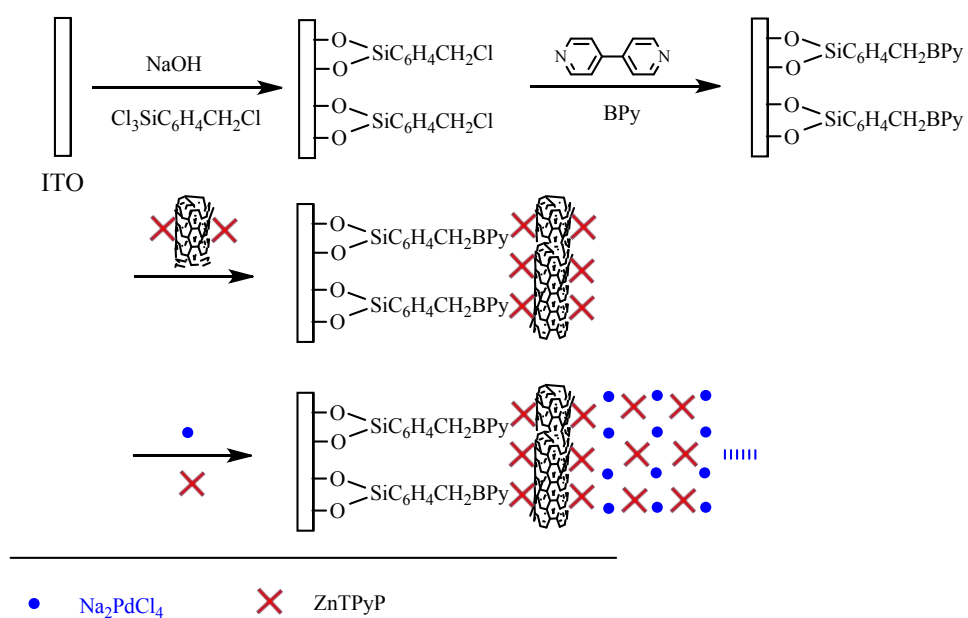


Figure S1 Schematic drawing for the layer-by-layer assembly of MWNT-TBen@(ZnTPyP-Pd)₃ multilayers on the ITO electrode surface.

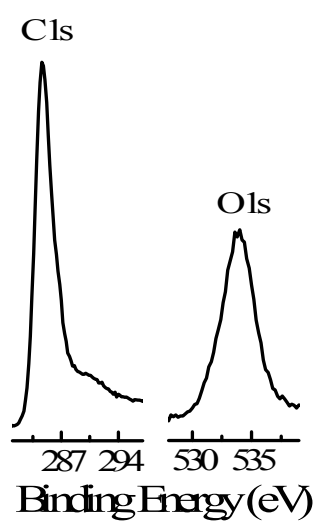


Figure S2. High resolution XPS spectra of the precursor of MWNT-OH.

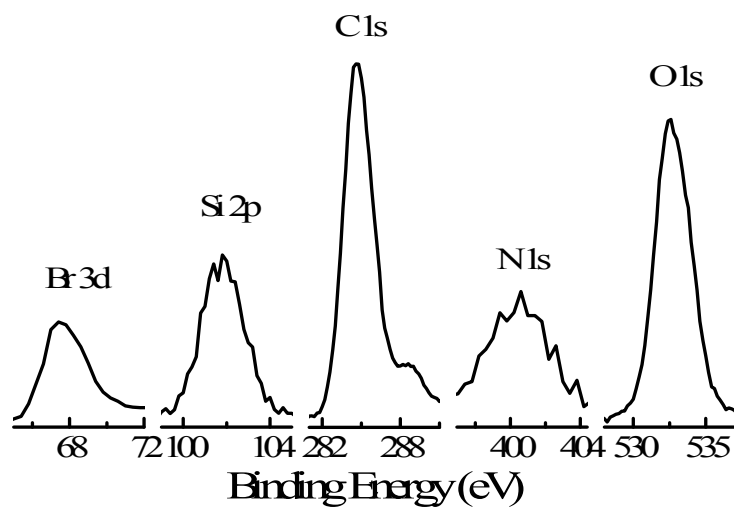


Figure S3 High resolution XPS spectra of the MWNT-TBenBr nano-hybrids.

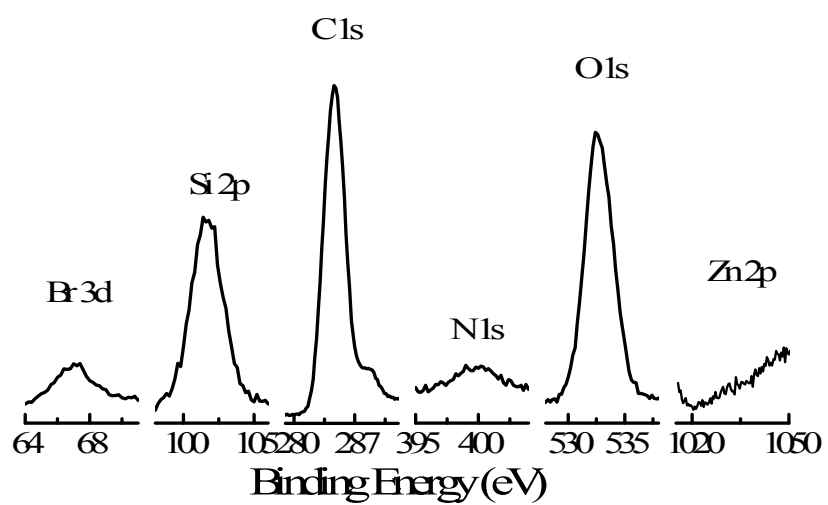


Figure S4 High resolution XPS spectra of the MWNT-TBen@ZnTPyP nano-cores.

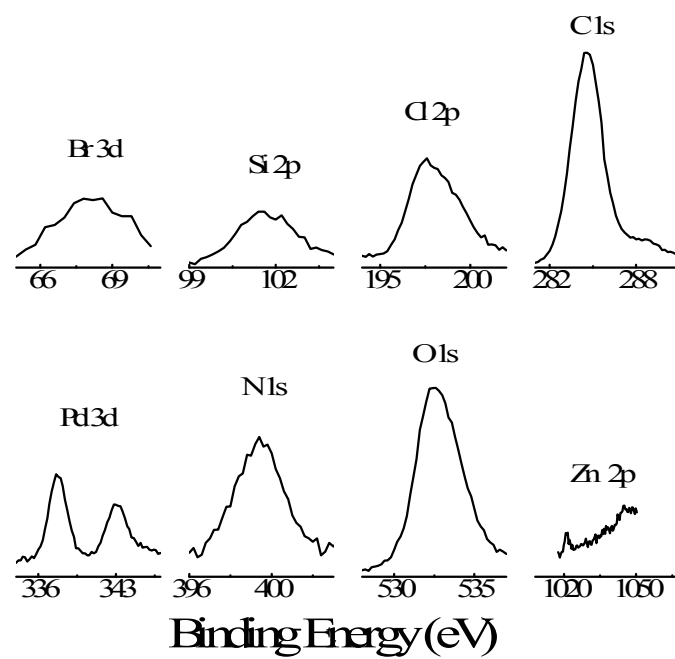


Figure S5 High resolution XPS spectra of MWNT-TBen@(ZnTPyP-Pd)₃ nano-composites.

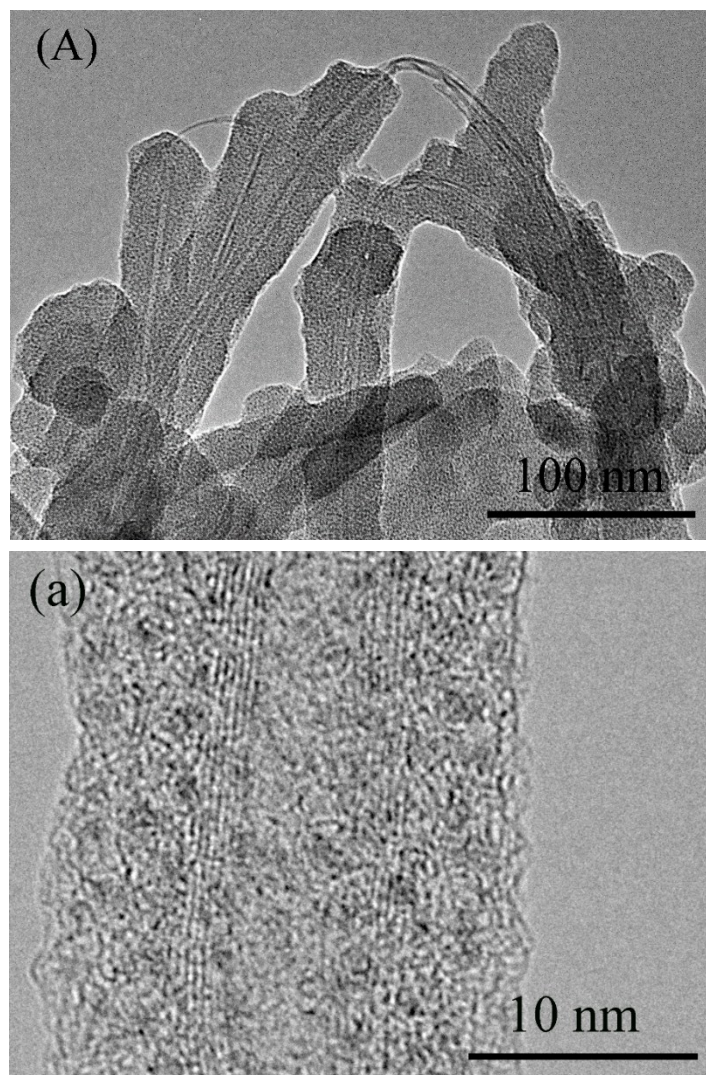


Figure S6 (A) FE-TEM image of MWNT-TBen@(ZnTPyP-Pd)₆ nano-composites, and (a) the enlarged image of (A).

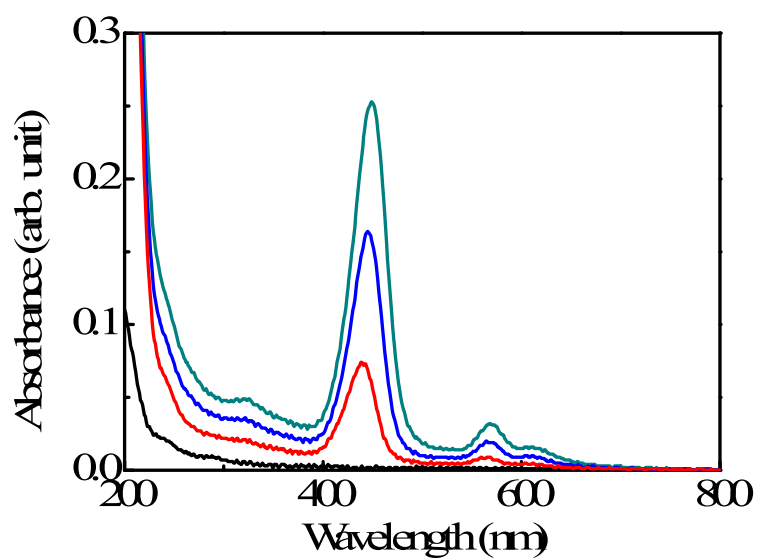


Figure S7 UV-vis absorption spectra of quartz substrates covered with layers of pyridyl substituents and MWNT-TBen@(ZnTPyP-Pd)_n multilayers. Bottom up: monolayer of bipyridyl, and then one to three layers of MWNT-TBen@(ZnTPyP-Pd)_n (n = 1, 2, 3).

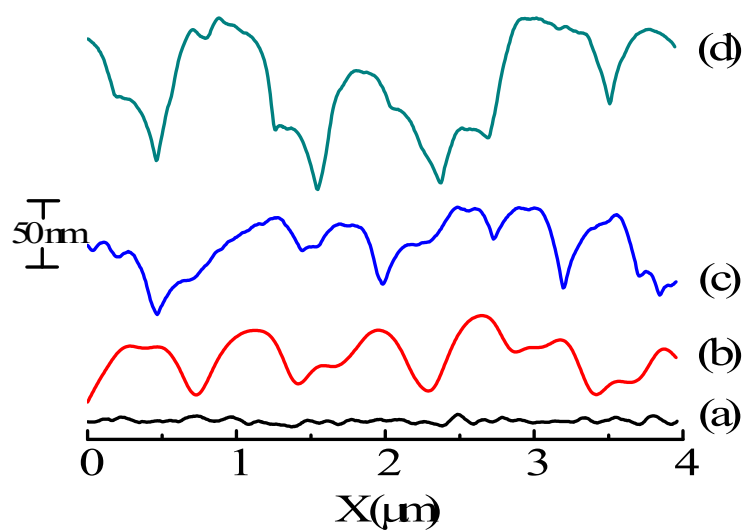


Figure S8 Height profiles obtained from the AFM images of (a) PySH, (b) MWNT-TBen@ZnTPyP, (c) MWNT-TBen@(ZnTPyP-Pd)₂, and (d) MWNT-TBen@(ZnTPyP-Pd)₄ multilayers on the gold surfaces.