Supporting Information

In-site synthesis inorganic-framework molecular imprinting TiO_2/CdS heterostructure for photoelectrochemical sensing of bisphenol A

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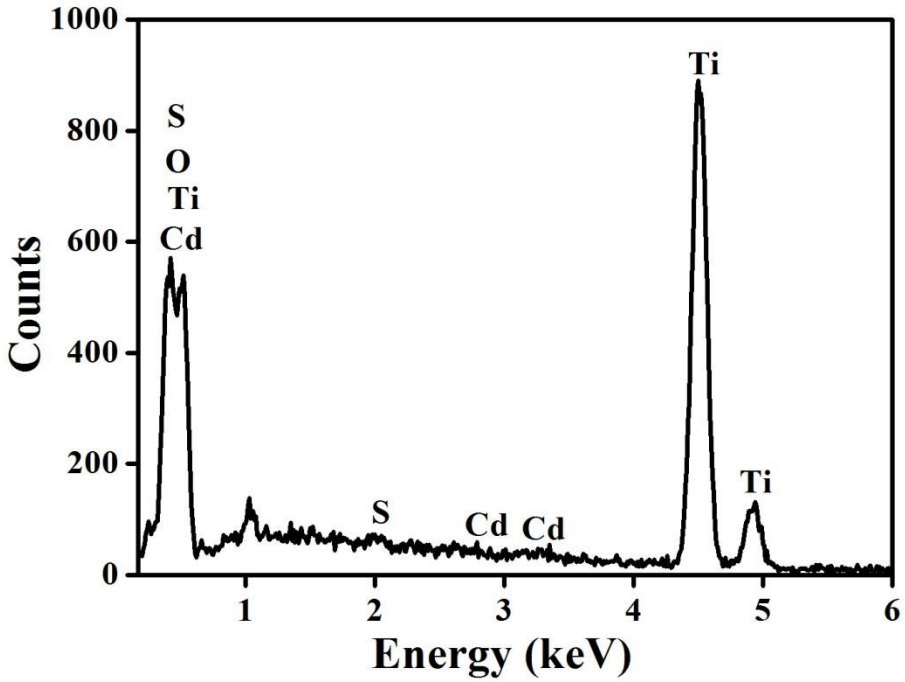

Fig. S1. EDS spectra of MI-TiO_2/CdS composite

In this work, all EIS data were treated and analyzed using the software of Zview2. The simulated equivalent circuit (Fig. S2) is composed of four elements, including solution resistance (R_s), charge-transfer resistance (R_{ct}), constant-phase element (CPE), and Warburg impedance (W_o). Also, each electrochemical measurement was repeated at least three times and tested with different electrodes to ensure the accuracy of the experimental data.

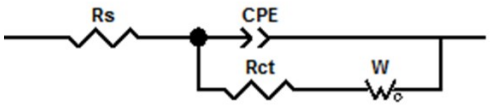

Fig. S2 The equivalent circuit

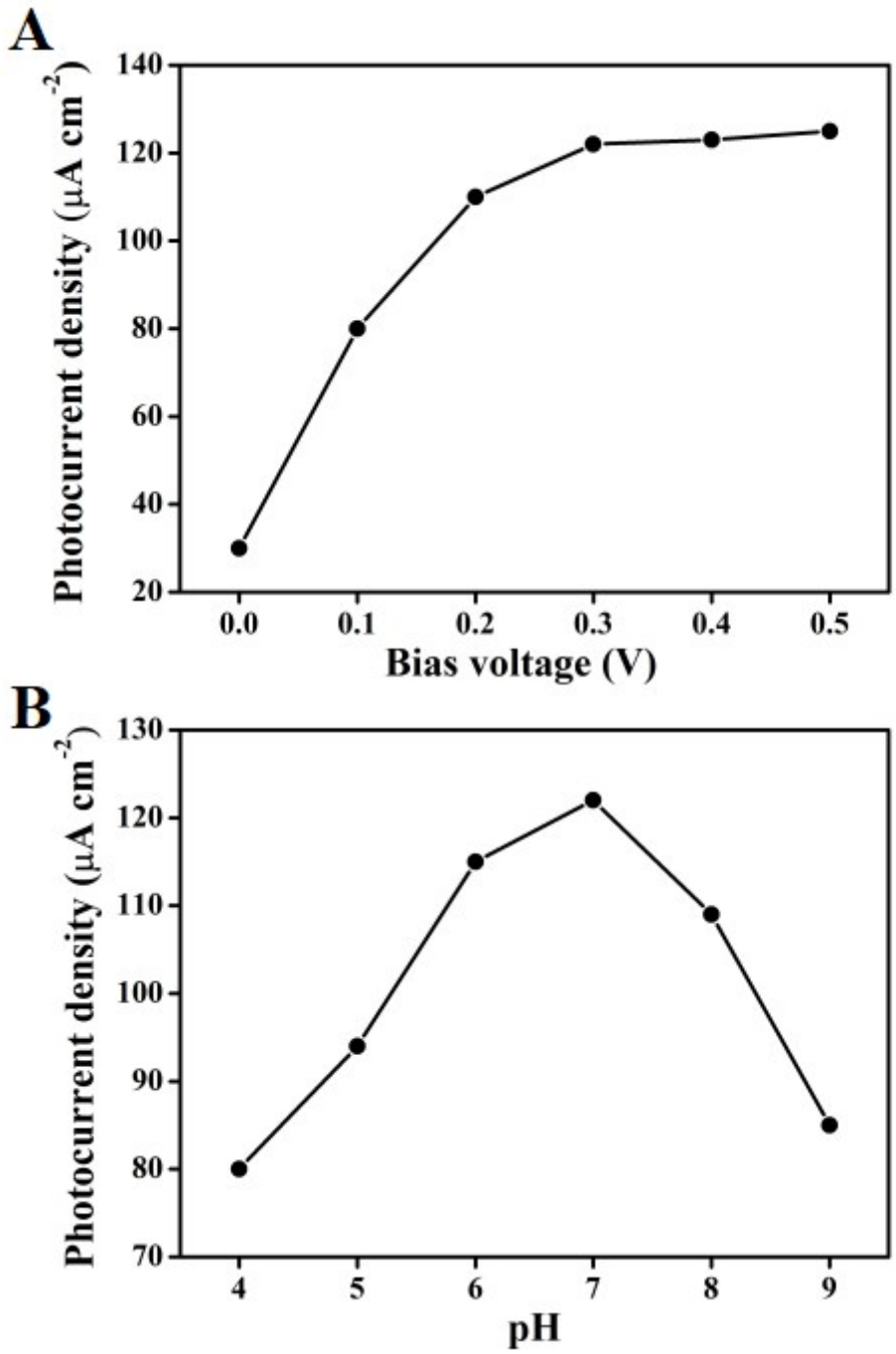

Fig. S3. Photocurrent responses at the different bias potential (A) and pH value (B).

Table. 1. Comparison of different methods for bisphenol A determination.

Methods	Analytical range	LOD	Ref.
EC sensor	0.01-20 μmol·L^{-1}	3.0 nmol·L^{-1}	[1]
ECL sensor	2.28×10^{-8}-2.28×10^{-2}mol·L^{-1}	7.53×10^{-9} mol·L^{-1}	[2]
SERS	1.0×10^{-8}-1.0×10^{-3} mol·L^{-1}	4.3×10^{-9} mol·L^{-1}	[3]
PEC Aptasensor	5×10^{-11}-5×10^{-5} g L^{-1}	1.6×10^{-11} g L^{-1}	[4]
PEC	0.01-30.0 nmol·L^{-1}	0.004 nmol·L^{-1}	[5]
This work	1-100 pmol·L^{-1}	0.5 pmol·L^{-1}	

References

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