

Electronic Supplementary Information (ESI)

A promising carbon fibers-based photocatalyst with hierarchical structure for dye degradation

Chen Gu, Sen Xiong, Zhaoxiang Zhong*, Yong Wang, Weihong Xing*

State Key Laboratory of Materials-Oriented Chemical Engineering, National Engineering
Research Center for Special Separation Membrane, Nanjing Tech University, Nanjing
210009, China

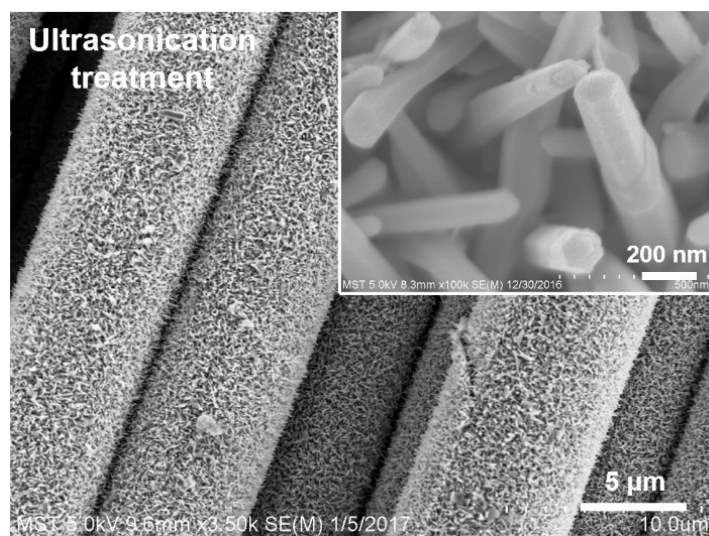


Fig. S1 The SEM image of ZnO/CFs after an ultrasonication oscillation challenge at 150 W for 10 min.

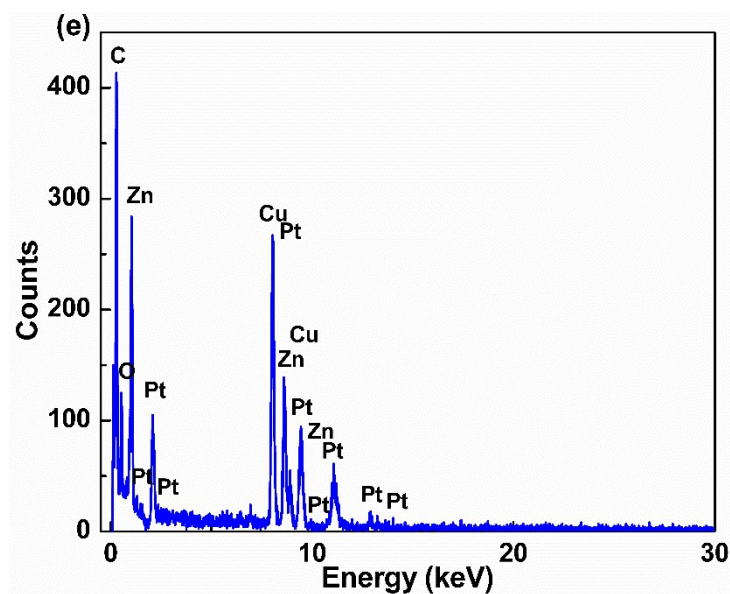


Fig. S2 EDS spectrum of the Pt@ZnO NRs/CFs.

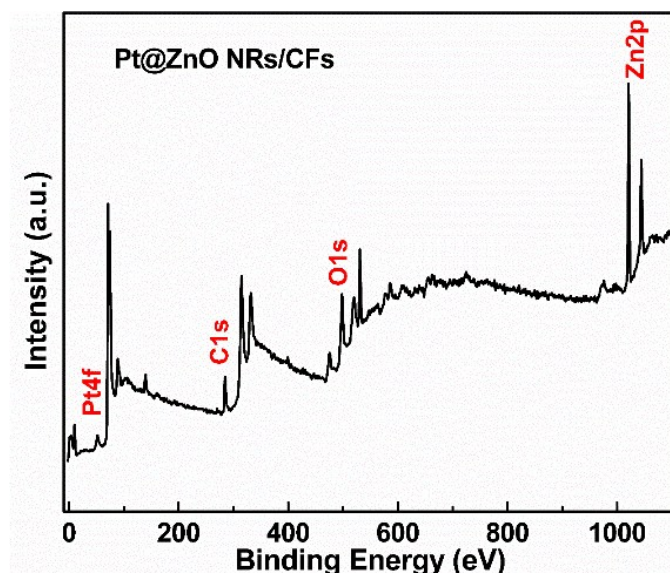


Fig. S3 XPS survey spectra of Pt@ZnO NRs/CFs.

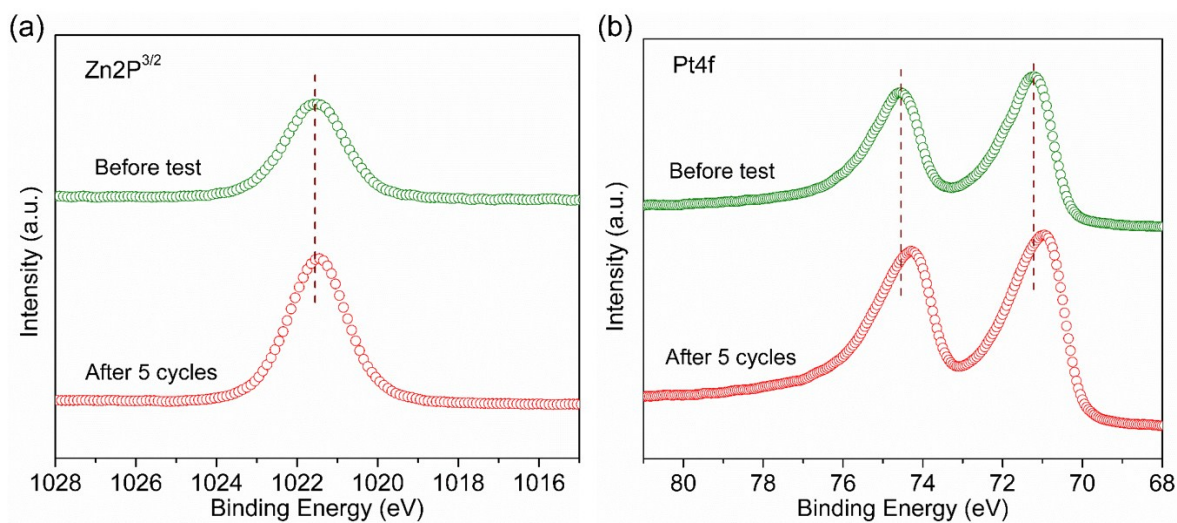


Fig. S4 XPS spectra of Pt@ZnO NRs/CFs samples: (a) Before test and (b) After 5 cycles.

Table S1 The binding energy and the ratio of Pt with different valence.

Valence states (Pt)	Pt ⁰ (eV)		Pt ²⁺ (eV)	
	4f7/2	4f5/2	4f7/2	4f5/2
Binding energy	71.10	74.70	72.60	75.95
Ratio of different valence states (%) (Pt ⁰ /Pt ²⁺)				81.93/18.07