

Photodegradation of Rhodamine B over a novel photocatalyst of feather keratin decorated CdS under visible light irradiation

Qizhao Wang,^{*[a]} Juhong Lian,^[a] Qiong Ma,^[a] Yan Bai,^[a] Jinhui Tong,^[a] Junbo Zhong,^[c]

Rongmin Wang,^[a] Haohao Huang,^{*[b]} and Bitao Su^[a]

^aCollege of Chemistry and Chemical Engineering, Key Laboratory of Eco-Environment-Related Polymer Materials, Ministry of Education of China, Northwest Normal University, Lanzhou 730070, China

^bCollege of Materials Science and Engineering, South China University of Technology, Guangzhou, 510640, China

^cKey Laboratory of Green Catalysis of Sichuan Institutes of High Education Institutes of Sichuan, College of Chemistry and Pharmaceutical Engineering, Sichuan University of Science and Engineering, Zigong, 643000, China

**Corresponding author. Tel: +86 931 7972677; Fax: +86 931 7975521.*

E-mail addresses: wangqizhao@163.com; qizhaosjtu@gmail.com(Q. Wang)

scuthhh@hotmail.com (H. Huang)

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Supplementary

Additional Figures and Discussions

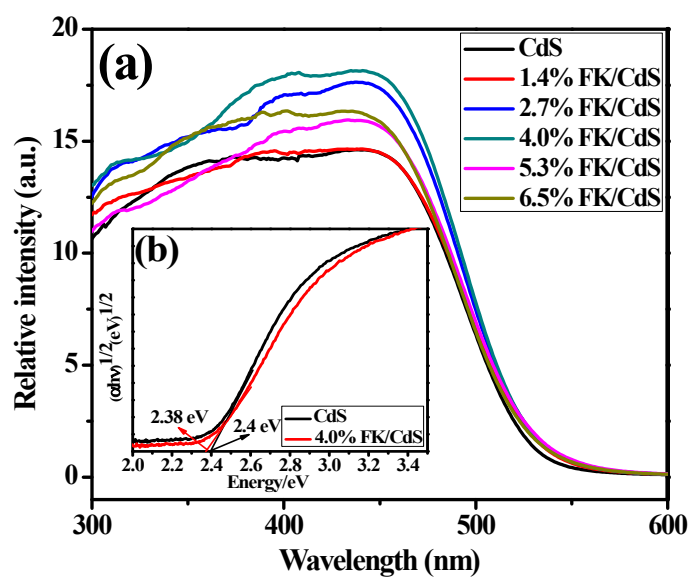


Figure S1. UV-vis diffuse reflectance spectra of the samples with various amounts of FK (a); band gap evaluation from the plots of $(\alpha h\nu)^{1/2}$ versus photon energy ($h\nu$) (b).

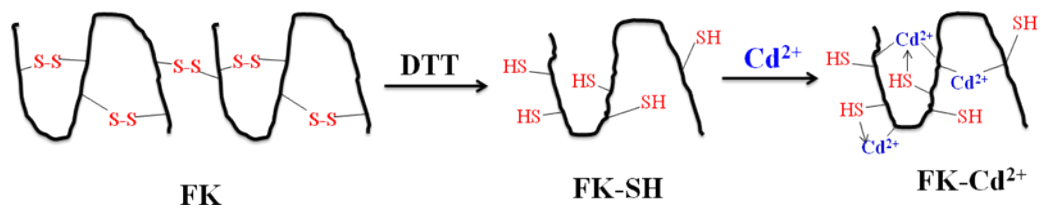


Figure S2. The structure of FK-Cd(II) complex

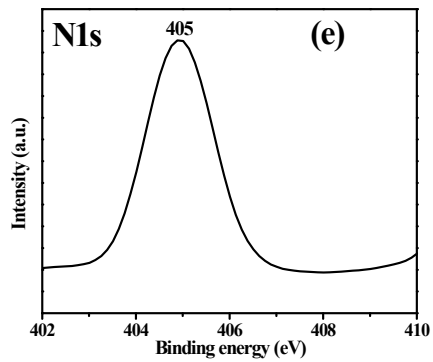
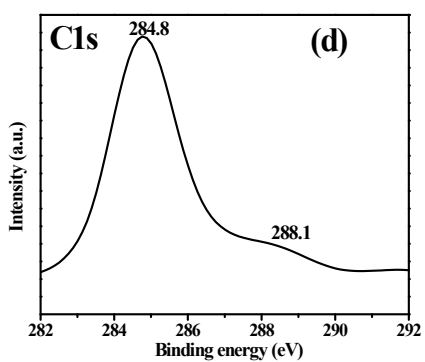
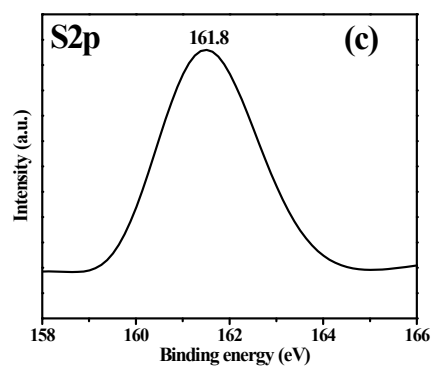
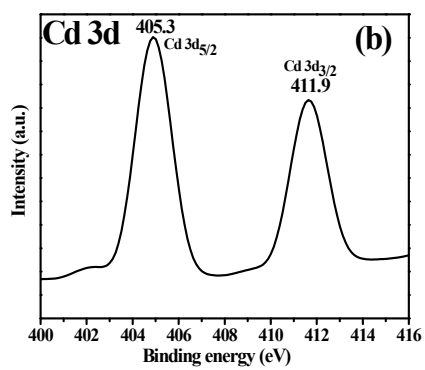
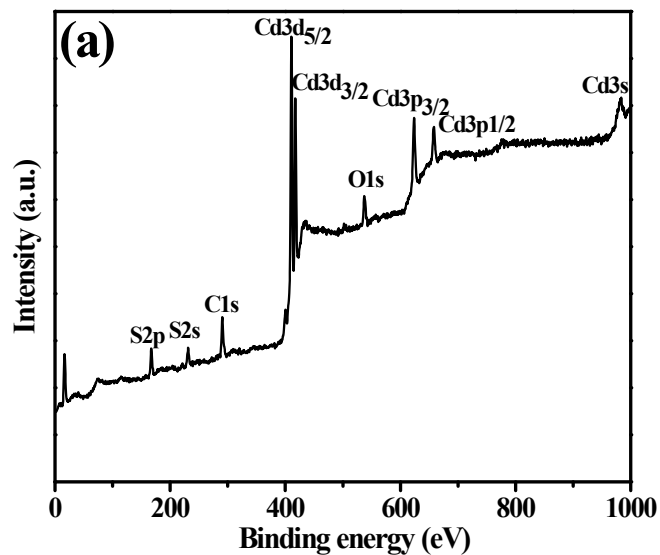


Figure S3. XPS of 4.0% FK/CdS photocatalyst (a) survey spectra; and high-resolution XPS spectra of: (b) Cd 3d; (c) S 2p; (d) C 1s; and (e) N 1s.

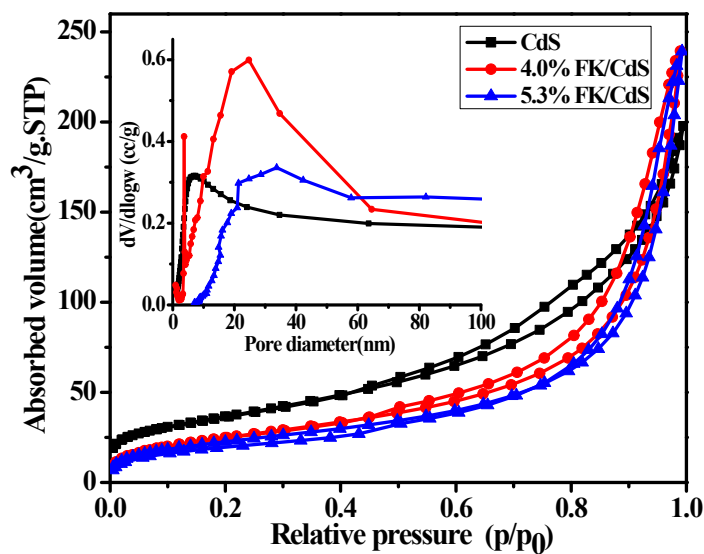


Figure S4. Nitrogen adsorption–desorption isotherms and the corresponding pore-size distribution curves (inset) for the CdS, 4.0% FK/CdS and 5.3% FK/CdS samples.