

Supporting Information

**Magnetically Separable Iron Oxide
Nanostructures-TiO₂ Nanofibers Hierarchical
Heterostructures: Controlled Fabrication and
Photocatalytic Activity**

Hengguo Wang¹, Xiaoliang Fei¹, Ling Wang², Yapeng Li¹, Shufei Xu¹, Mingda Sun¹,

Lei Sun¹, Chaoqun Zhang¹, Yaoxian Li¹, Qingbiao Yang^{1*} and Yen Wei³

¹ Department of Chemistry, Jilin University, Changchun, 130021, P. R. China

² State Key Laboratory of Supramolecular Structure and Materials, Jilin University,
Changchun 130012, P. R. China

³ Department of Chemistry, Drexel University, Philadelphia, PA 19104, USA

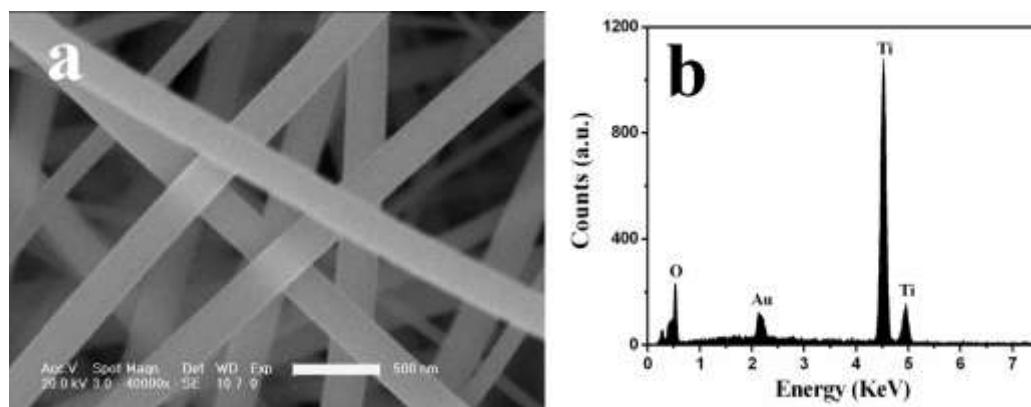


Figure S1. FESEM image of pure TiO_2 nanofibers (a) and EDX spectra of pure TiO_2 nanofibers (b).

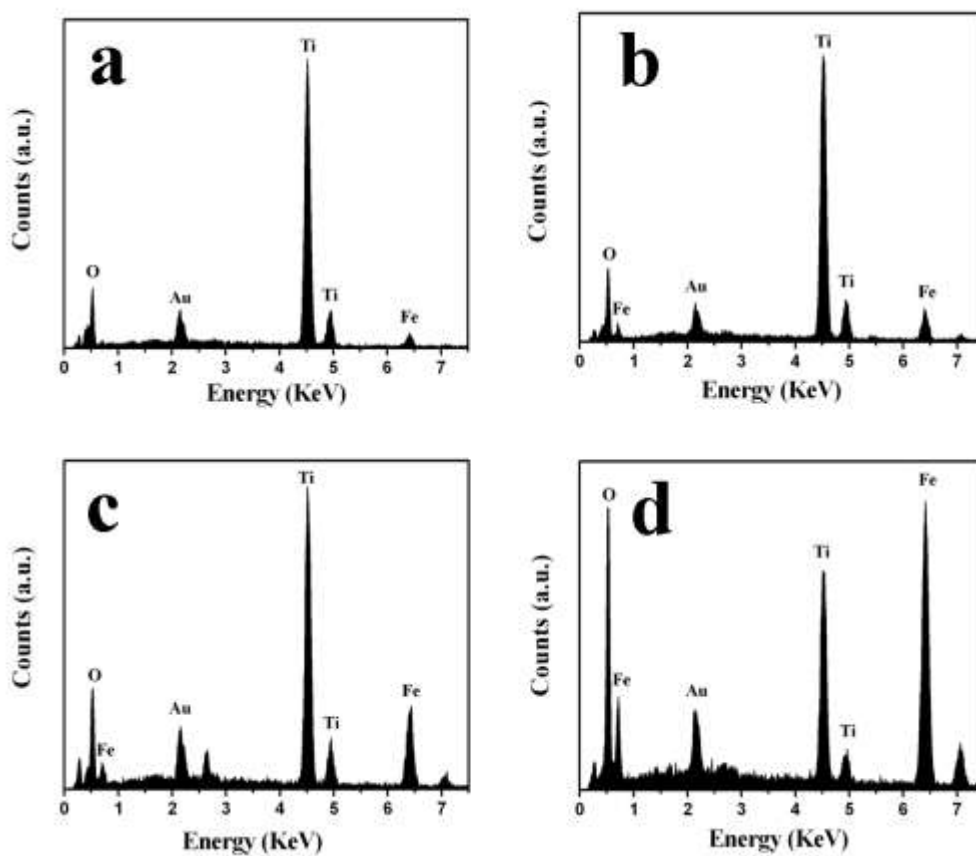


Figure S2. EDX spectra of α -Fe₂O₃/TiO₂ hierarchical heterostructures a₁ (a), a₂ (b), a₃ (c) and a₄ (d).

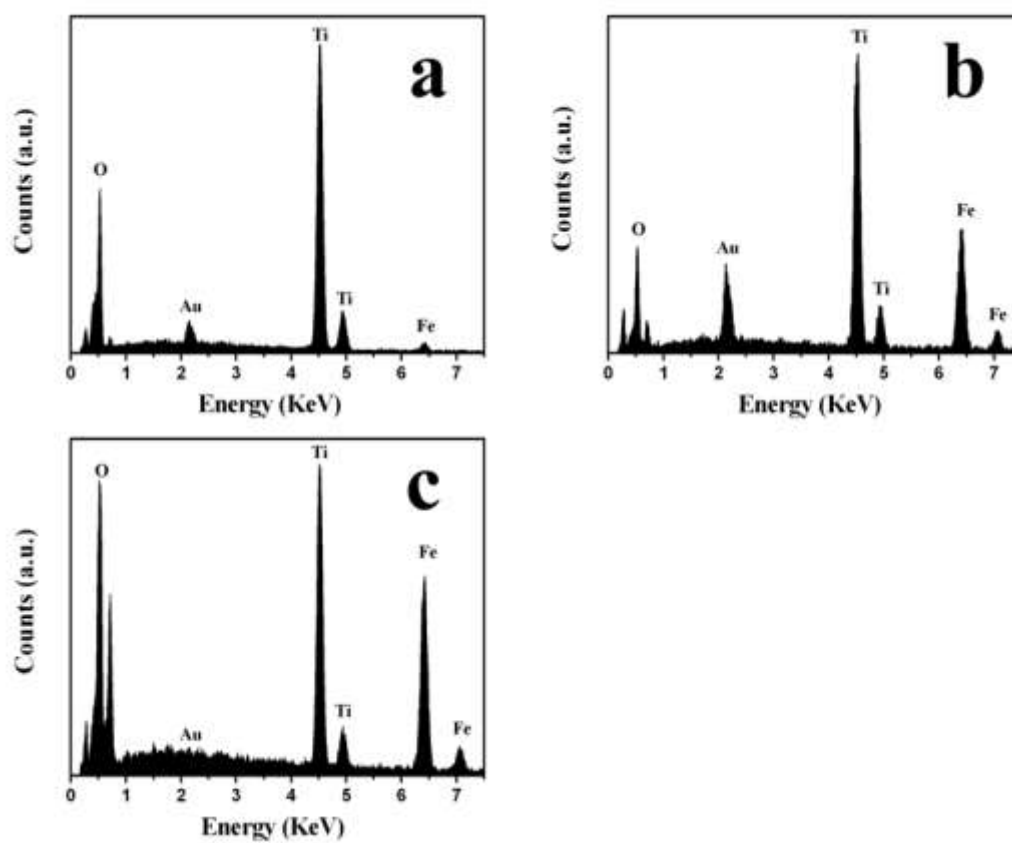


Figure S3. EDX spectra of Fe₃O₄/TiO₂ hierarchical heterostructures b₁ (a), b₂ (b) and b₃ (c).

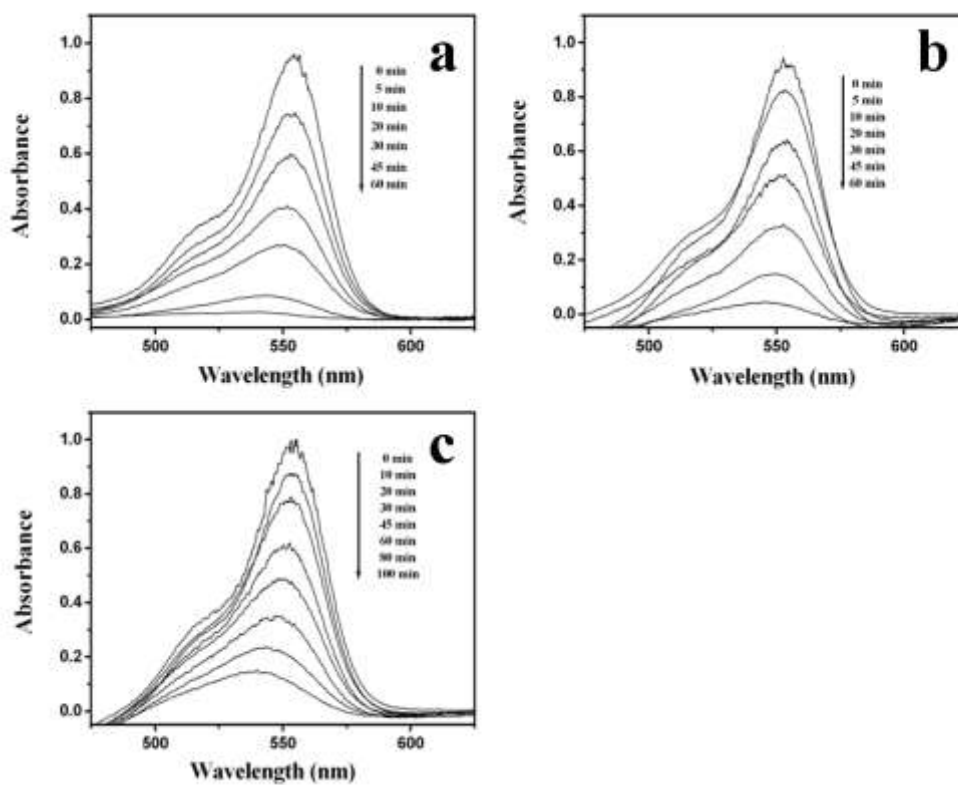


Figure S4. UV-vis spectral changes of RhB aqueous solution in the presence of pure TiO₂ nanofibers, α -Fe₂O₃/TiO₂ hierarchical heterostructures a₁ and Fe₃O₄/TiO₂ hierarchical heterostructures b₁.