

Support information for

Enhanced Fe(III)/Fe(II) Redox Cycle for Persulfate Activation by Reducing Sulfur Species

Fujian Yang ^{1,†}, Cheng Yin ^{2,†}, Mengqiao Zhang ¹, Jiangwei Zhu ³, Xiuyuan Ai ¹, Wenchao Shi ^{1,*} and Guilong Peng ^{1,*}

¹ State Key Laboratory of Silkworm Genome Biology, Key Laboratory of Sericultural Biology and Genetic Breeding, Ministry of Agriculture and Rural Affairs, College of Sericulture, Textile and Biomass Sciences, Southwest University, Chongqing 400715, China

² Chongqing Monitoring Station, Water Quality Monitoring Network of National Urban Water Supply, Chongqing 400060, China

³ Co-Innovation Center for Sustainable Forestry in Southern China, Nanjing Forestry University, Nanjing 210037, China

* Correspondence: shiwenchaoyes@126.com (W.S.); pengguilong@swu.edu.cn (G.P.)

[†] These authors contribute equally to this work.

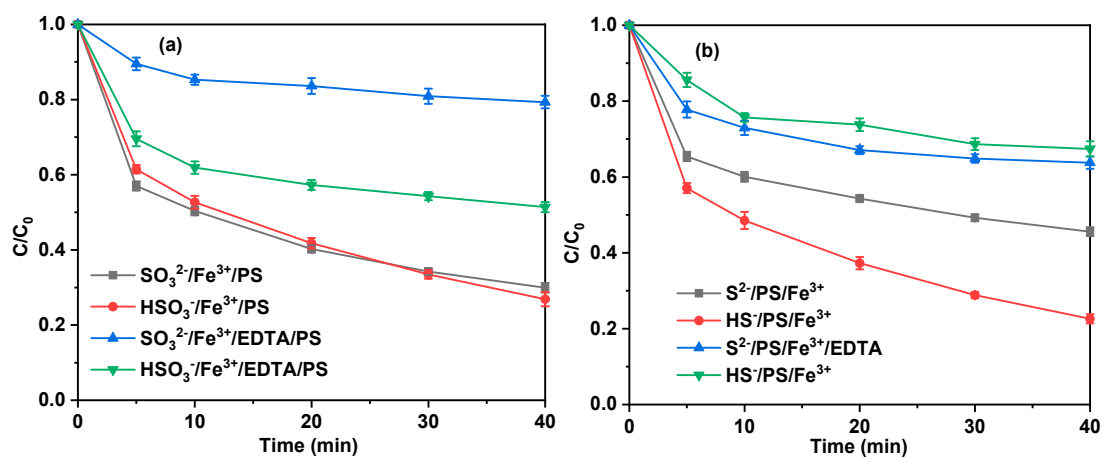


Figure S1. Effect of EDTA on BPA removal in $SO_3^{2-}/Fe(III)/PS$ and $HSO_3^-/Fe(III)/PS$ systems (a) and $S^{2-}/Fe(III)/PS$ and $HS^-/Fe(III)/PS$ systems (b). Reaction conditions: $[EDTA] = 1.0 \text{ m mol/L}$, $[Fe(III)] = 1.0 \text{ mM}$, $[S(-II)] = [S(IV)] = 1.0 \text{ mM}$, $[PS] = 4 \text{ mM}$, $[BPA] = 10.0 \text{ mg/L}$.

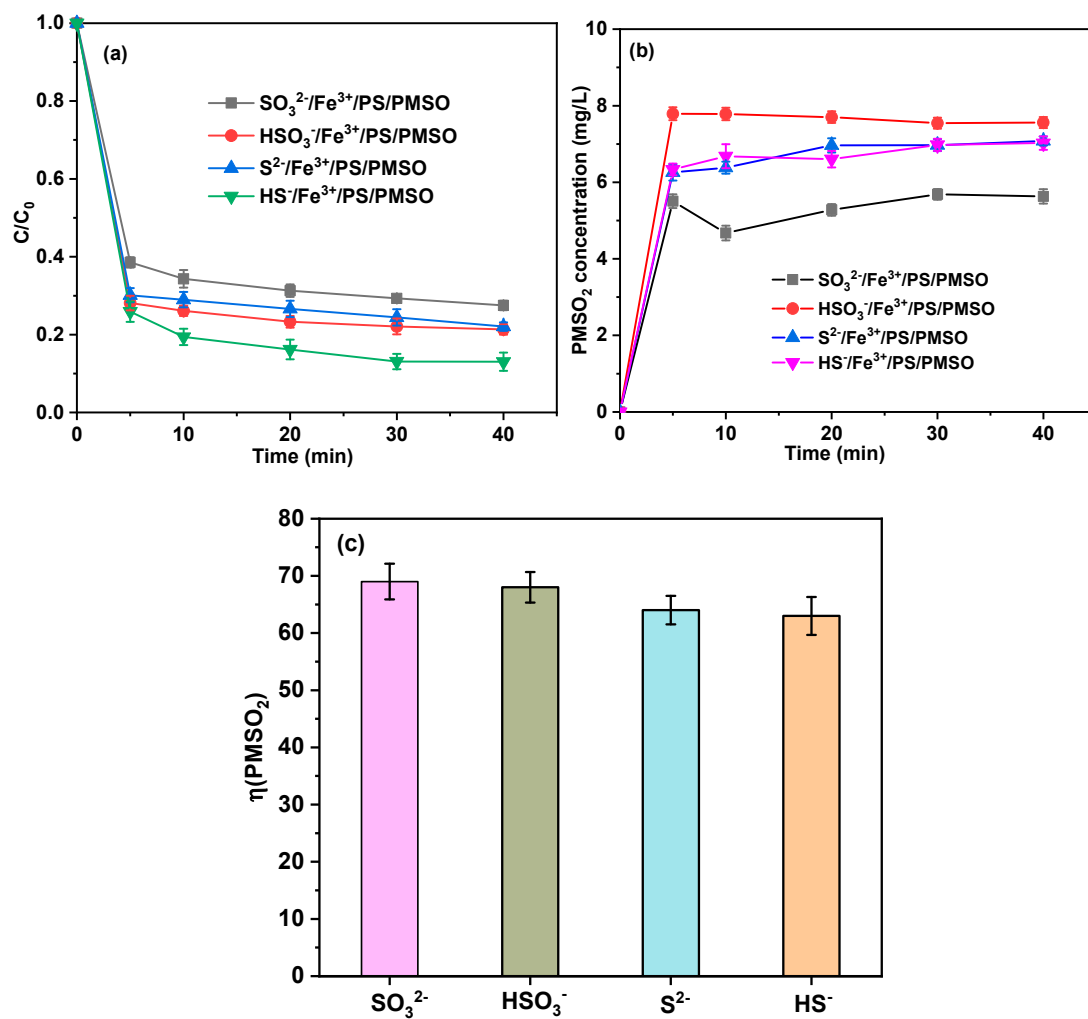


Figure S2. PMSO depletion (a), PMSO₂ generation(b) and the yield of PMSO₂ (c). Reaction conditions: (a) PMSO: 10 mg/L, PS: 4 mmol/L, $[\text{Fe}^{3+}] = 1 \text{ mmol/L}$, $[\text{SO}_3^{2-}] = [\text{HSO}_3^-] = [\text{S}^{2-}] = [\text{HS}^-] = 1 \text{ mmol/L}$ and reaction time of 40 min.