

水蒸汽浴 FeS₂ 高效 Fenton 降解甲草胺

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Water Steam Bathed FeS₂ for Highly-Efficient Fenton Degradation of Alachlor

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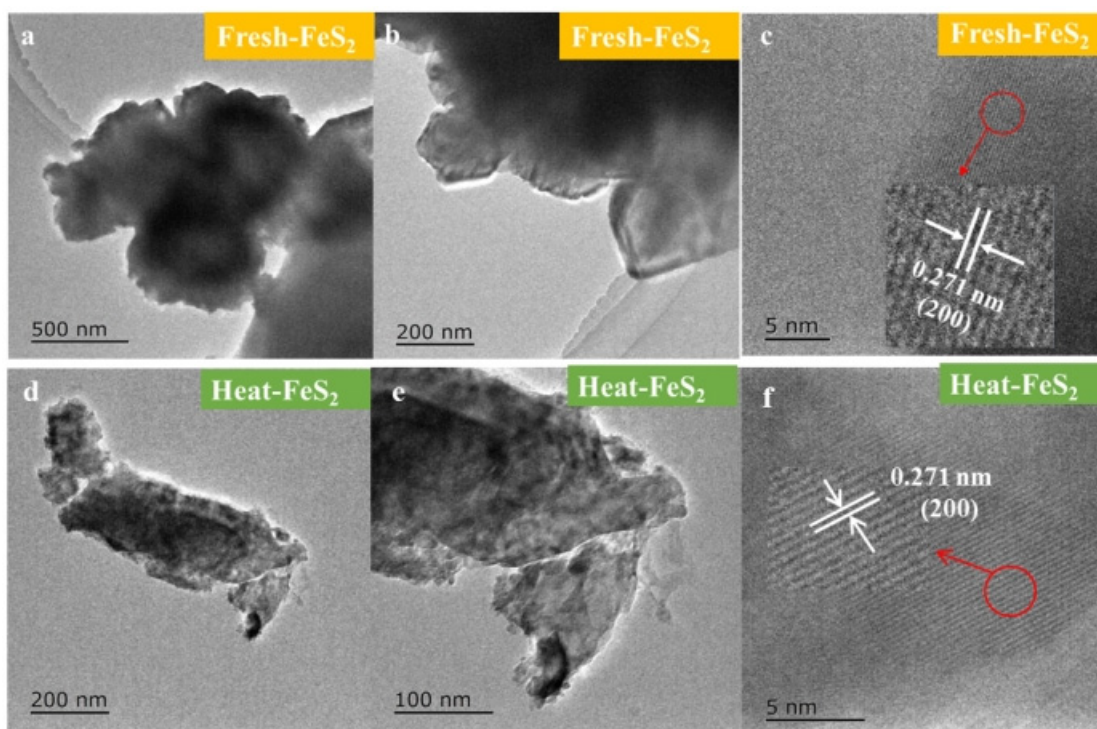


Fig. S1 (a-c) TEM images of Fresh-FeS₂ and (d-f) Heat-FeS₂.

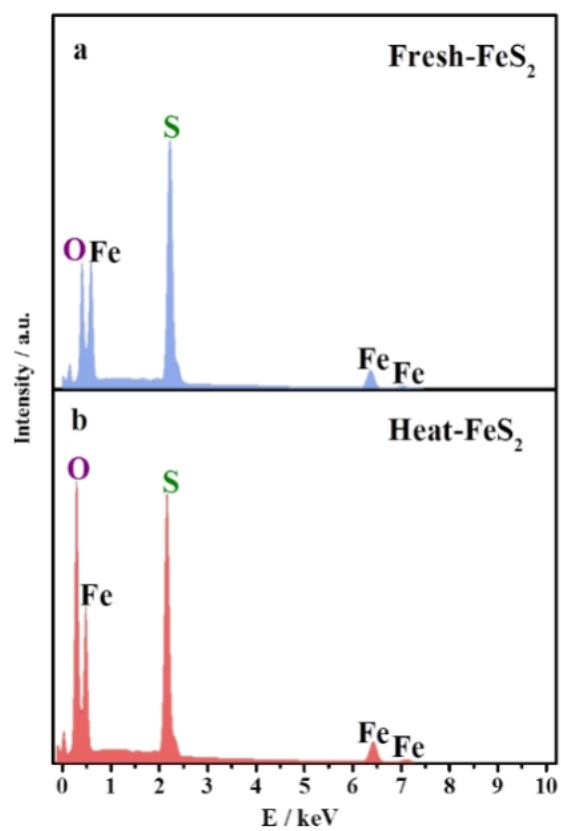


Fig. S2 (a) EDS results of Fresh-FeS₂ and (b) Heat-FeS₂.

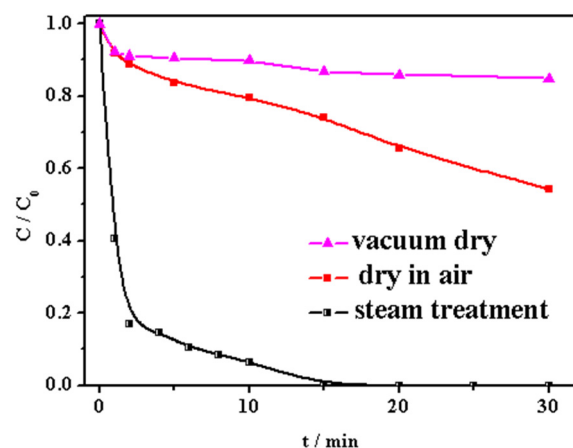


Fig. S3 Degradation ofalachlor by FeS₂ catalysts prepared with different heat treatment methods.

Reaction conditions: [FeS₂] 0.5 g·L⁻¹, [H₂O₂]₀ 0.8 mmol·L⁻¹, [alachlor]₀ 0.074 mmol·L⁻¹, pH₀ 6.3.

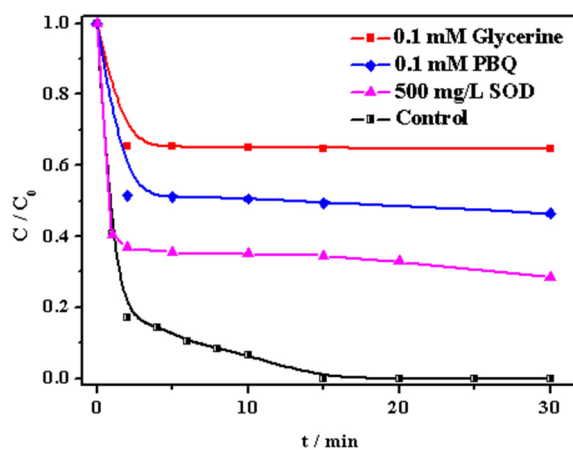


Fig. S4 Effect of quenching agents on the removal of ACL in Heat-FeS₂ Fenton system.

Reaction conditions: [FeS₂] 0.5 g·L⁻¹, [H₂O₂]₀ 0.8 mmol·L⁻¹, [ACL]₀ 0.074 mmol·L⁻¹, pH₀ 6.3.

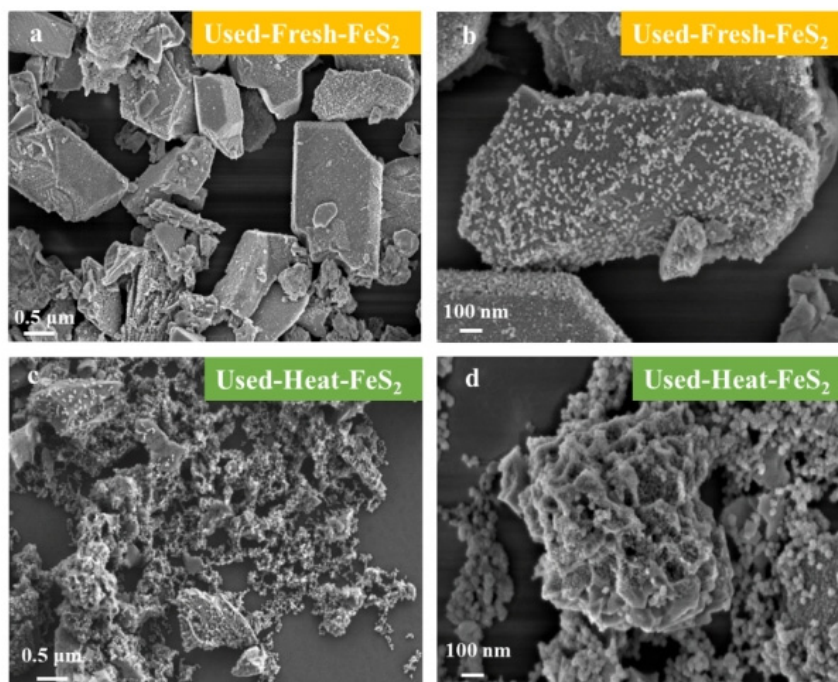


Fig. S5 SEM images of used Fresh-FeS₂ and used Heat-FeS₂.

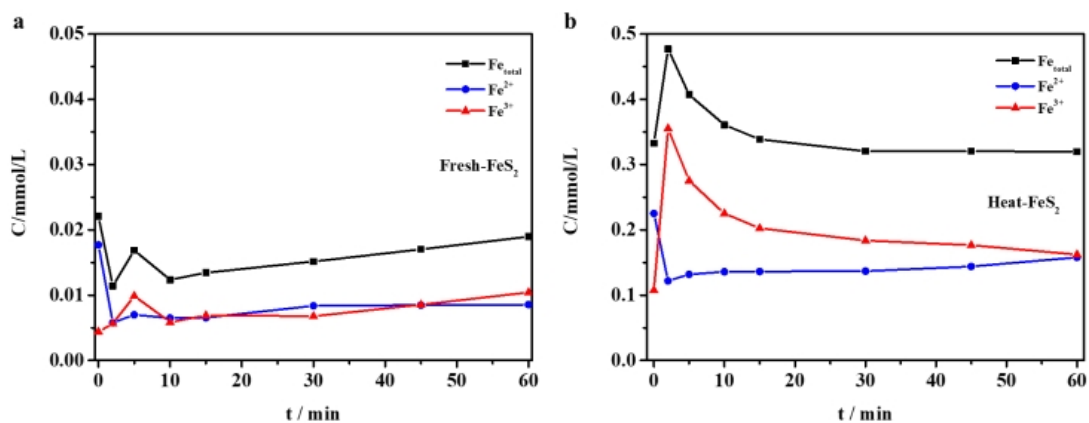


Fig. S6 Concentration of dissolved ferrous, ferric, and total iron ions: (a) Fresh-FeS₂, (b) Heat-FeS₂.

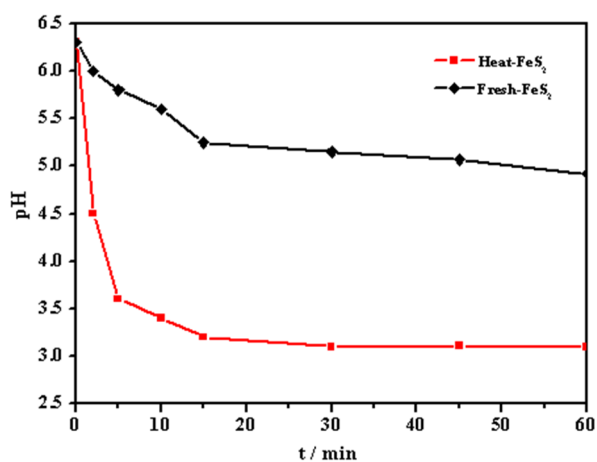


Fig. S7 pH change during degradation ofalachlor in Fresh-FeS₂/H₂O₂ and Heat-FeS₂/H₂O₂ systems.

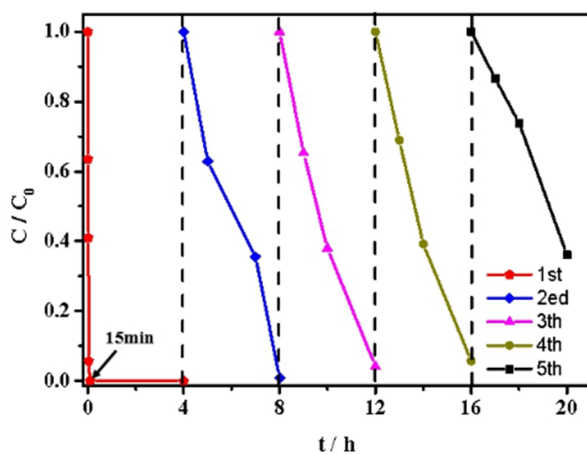


Fig. S8 Degradation ofalachlor by using recycled Heat-FeS₂ as a Fenton catalyst.

Reaction conditions: [Heat-FeS₂] 0.5 g·L⁻¹, [H₂O₂]₀ 0.8 mmol·L⁻¹, [alachlor]₀ 0.074 mmol·L⁻¹, pH₀ 6.3.