

Efficient concurrent removal of sulfur and nitrogen content from complex oil mixtures by polyoxometalate-based composite materials

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Figure S5. Nitrogen removal of mixed model oil and $\ln(C_i/C_0)$ as a function of the reaction time at different temperatures; reaction conditions: H₂O₂ = 0.096 mL, [bmim]BF₄ = 1 mL, mixed model oil = 5 mL (S = 1000 ppm, N = 100 ppm), H₂O₂/DBT/Tris-LDH-LaW₁₀ = 120:20:1.

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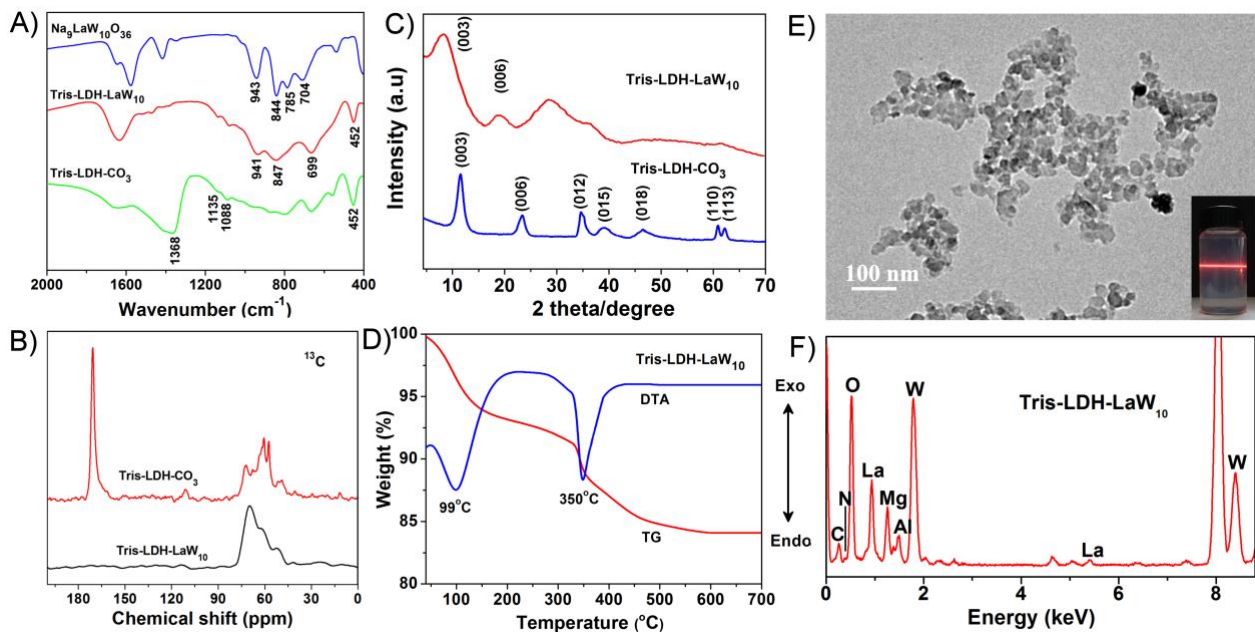


Figure S1. (A) FT-IR spectra of Tris-LDH-CO₃, Tris-LDH-LaW₁₀, Na₉LaW₁₀O₃₆, (B) ¹³C CP/MAS NMR spectra of Tris-LDH-CO₃ and Tris-LDH-LaW₁₀, (C) The XRD patterns of Tris-LDH-CO₃ and Tris-LDH-LaW₁₀, (D) TG-DTA of Tris-LDH-LaW₁₀, (E) HRTEM image of Tris-LDH-LaW₁₀, (F) EDX of Tris-LDH-LaW₁₀.

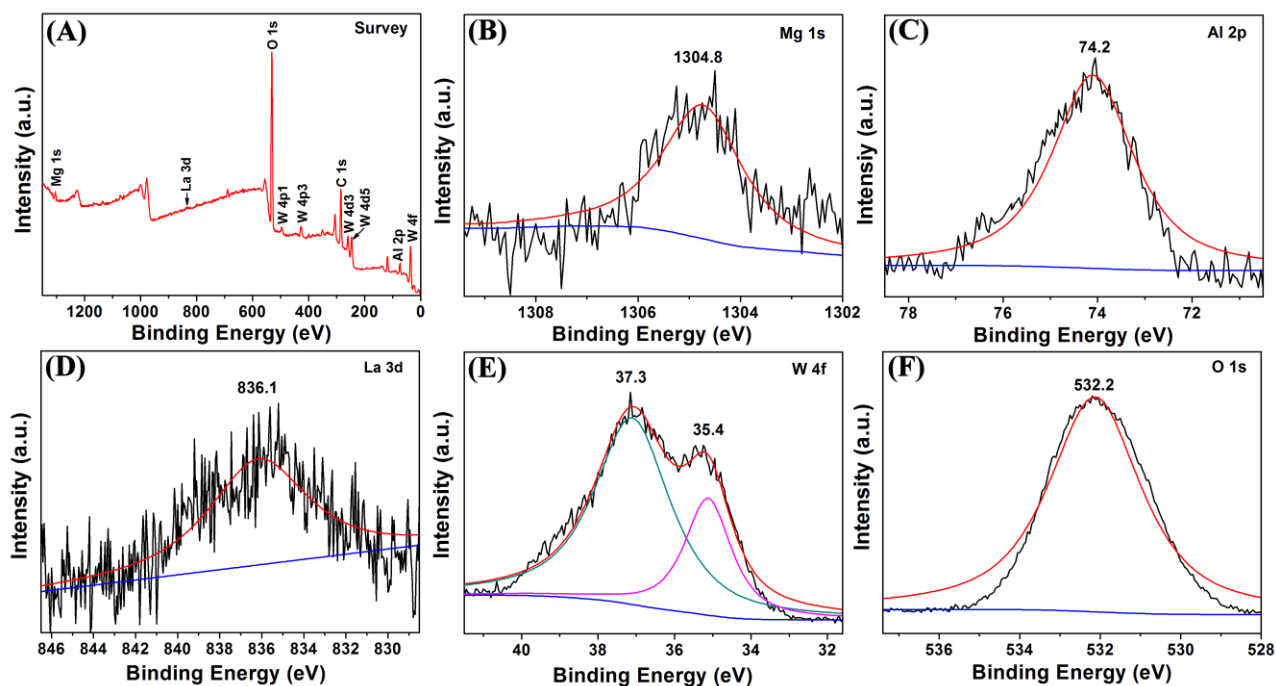


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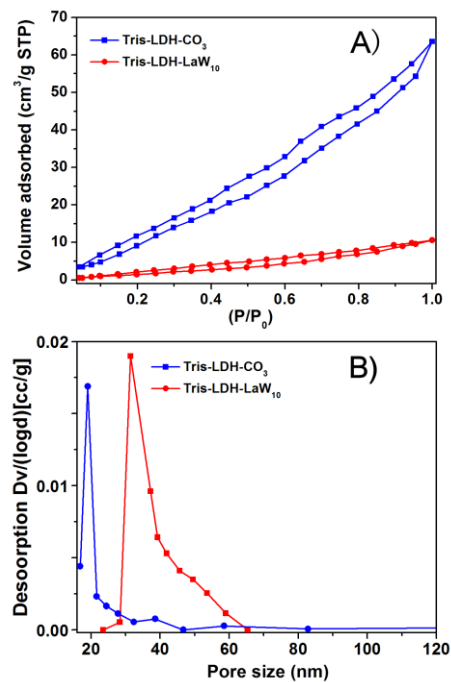


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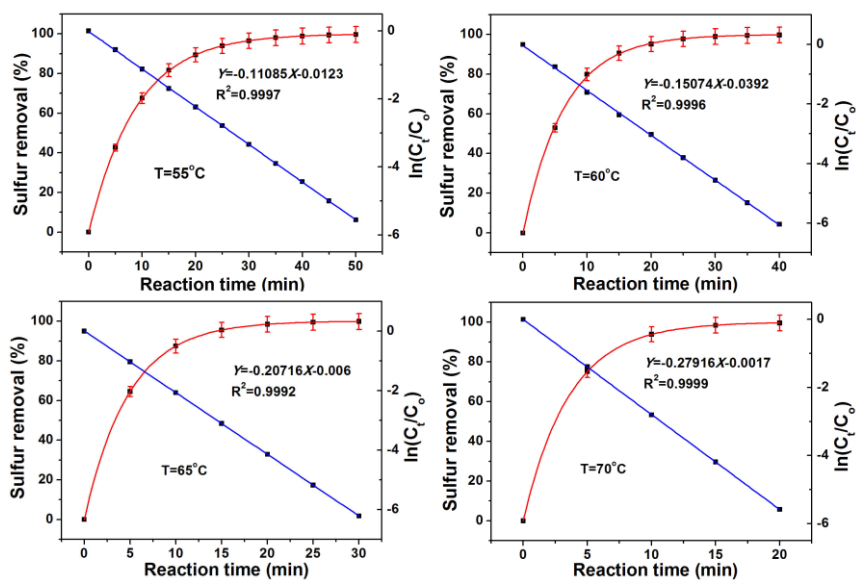


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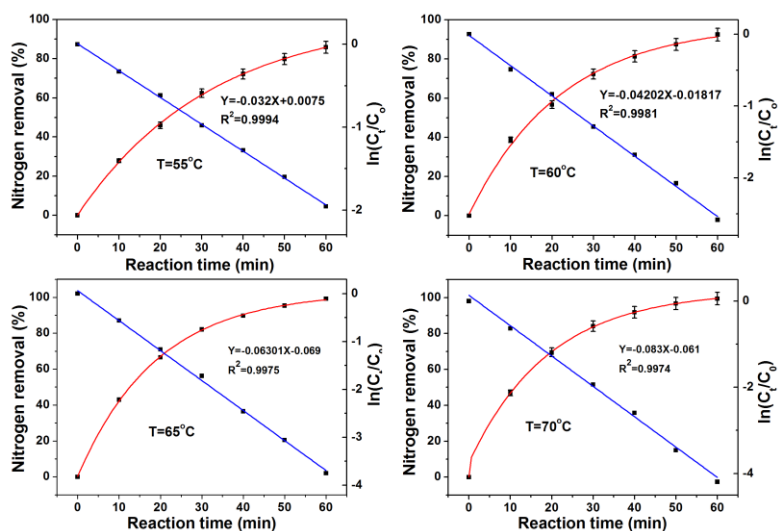


Figure S5. Nitrogen removal of mixed model oil and $\ln(C_t/C_0)$ as a function of the reaction time at different temperatures; reaction conditions: $H_2O_2 = 0.096$ mL, $[bmim]BF_4 = 1$ mL, mixed model oil = 5 mL (S = 1000 ppm, N = 100 ppm), $H_2O_2/DBT/Tris-LDH-LaW_{10} = 120:20:1$.

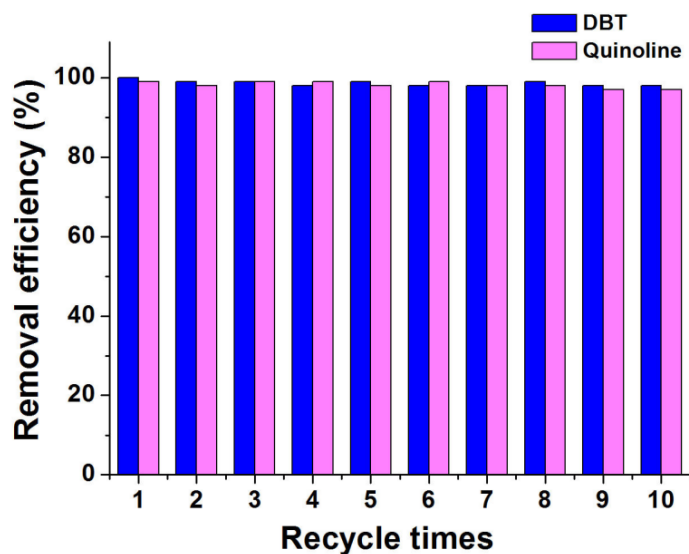


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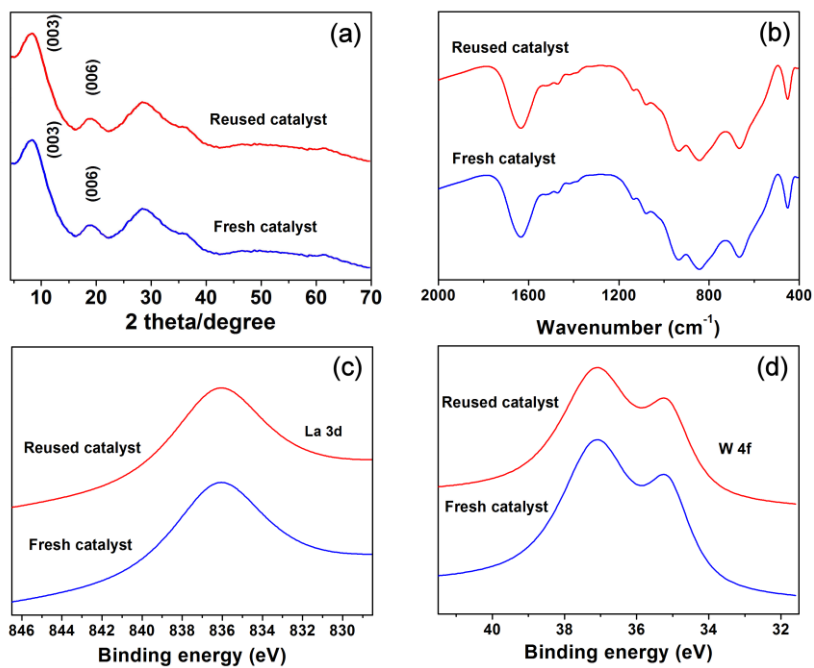


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