

Supplementary Information (SI)

MIL-88A(Fe) rod-like metal-organic framework decorated with tungstophosphate polyoxoanions and nickel ferrite nanoparticles for the removal of antibiotics from water

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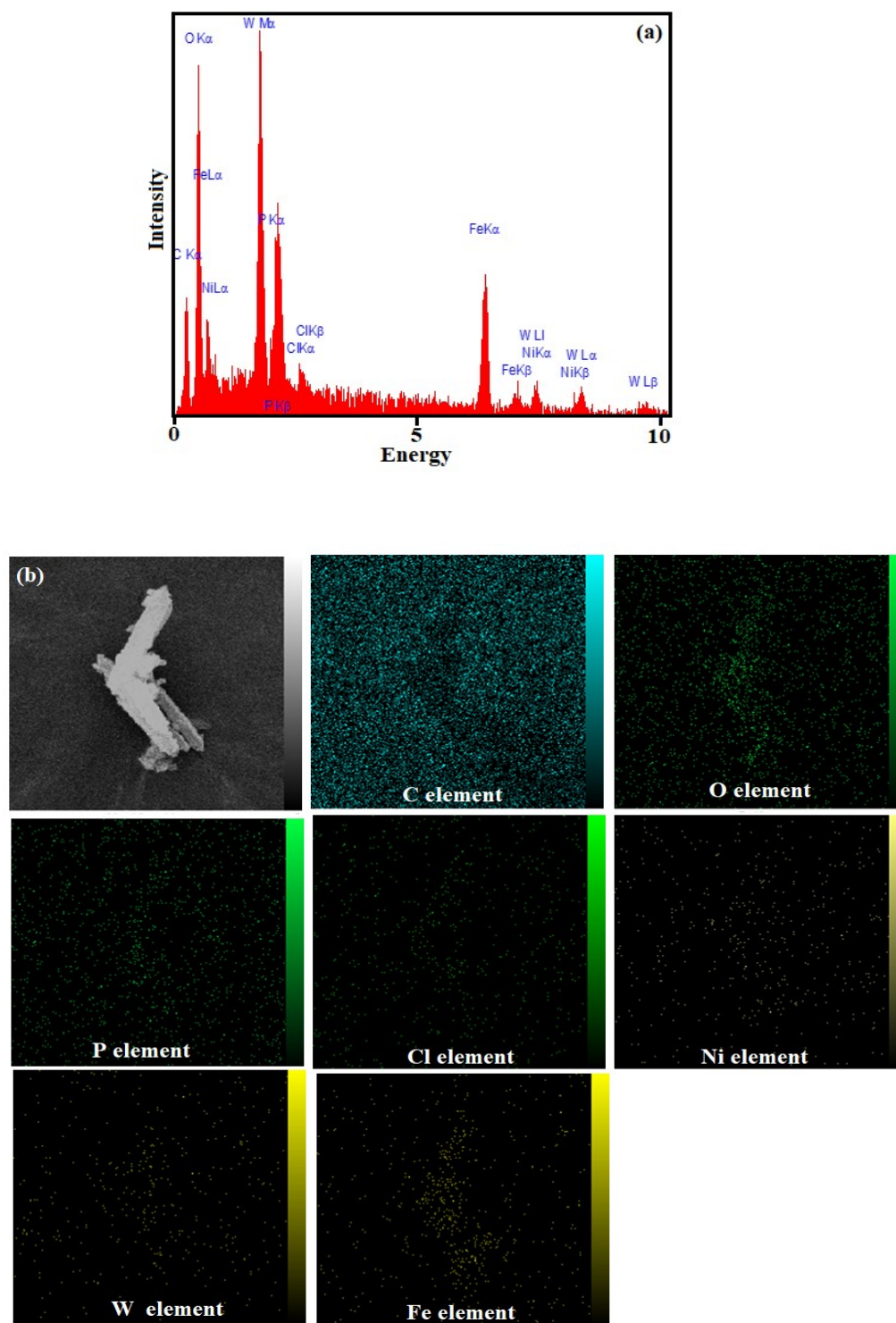


Fig. 1S. (a) EDX spectrum and (b) representative SEM photographs of the POT/NiFe₂O₄/MIL-88A(Fe) with corresponding EDX elemental mappings.

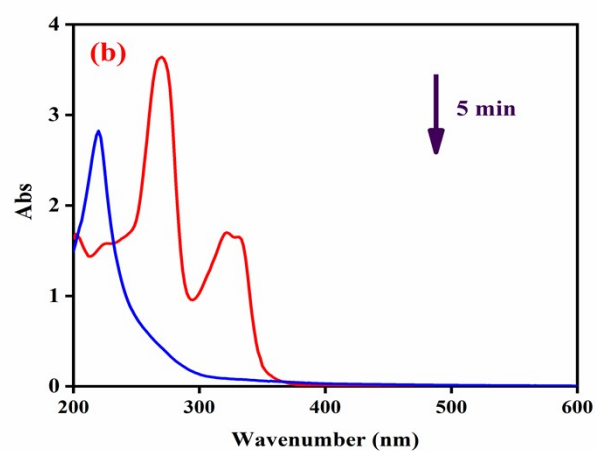
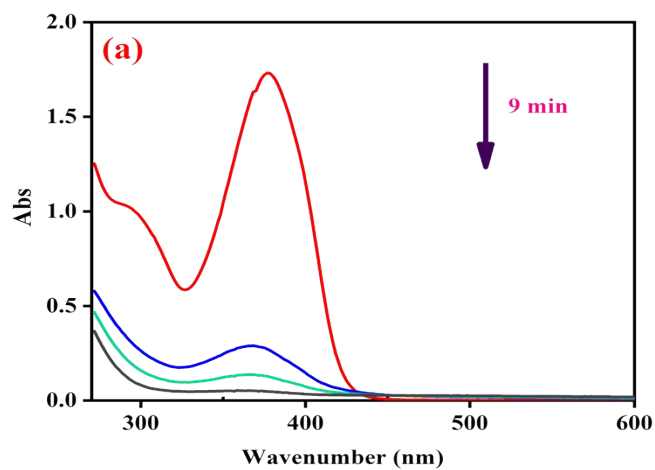


Fig. 2S. UV-Vis spectral for 0.4 g L⁻¹ POT/NiFe₂O₄/MIL-88A(Fe) at different time intervals: (a) TC and (b) CIP

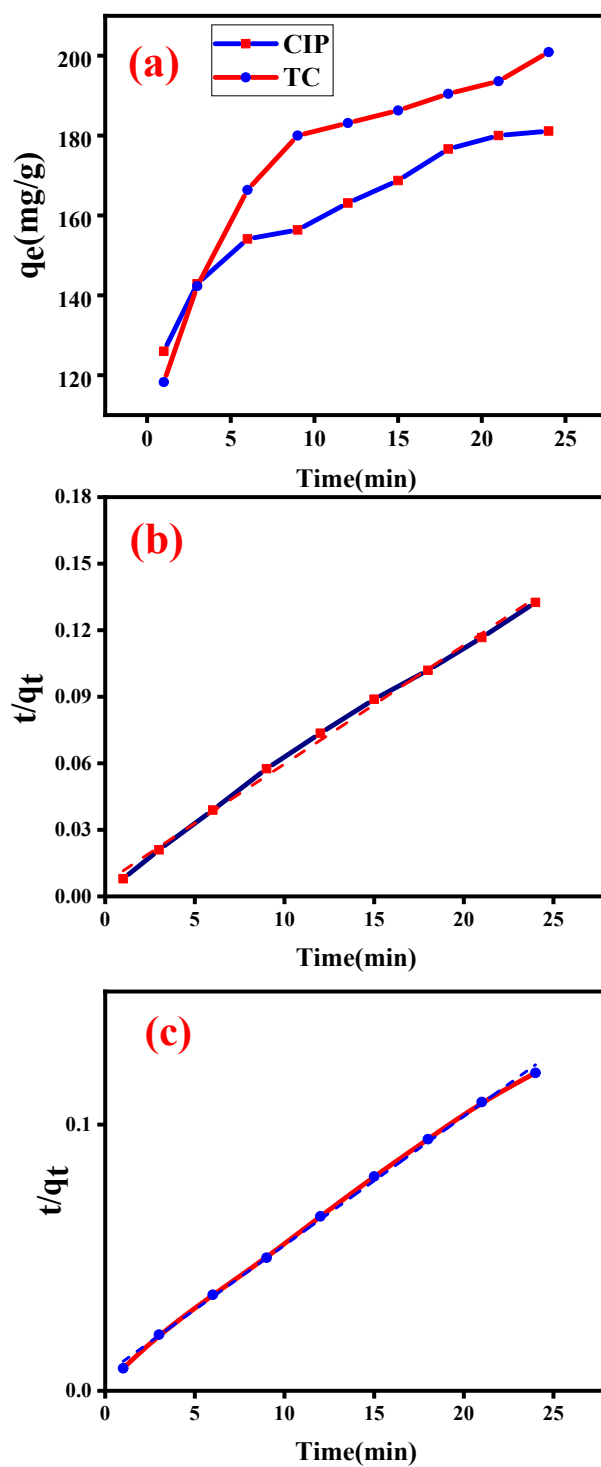


Fig. 3S. Adsorption kinetics of (a) CIP and TC, (b) linear fitting of adsorption kinetic CIP with pseudo-second-order kinetic model fit, and (c) linear fitting of adsorption kinetic TC with pseudo-second-order kinetic model fit

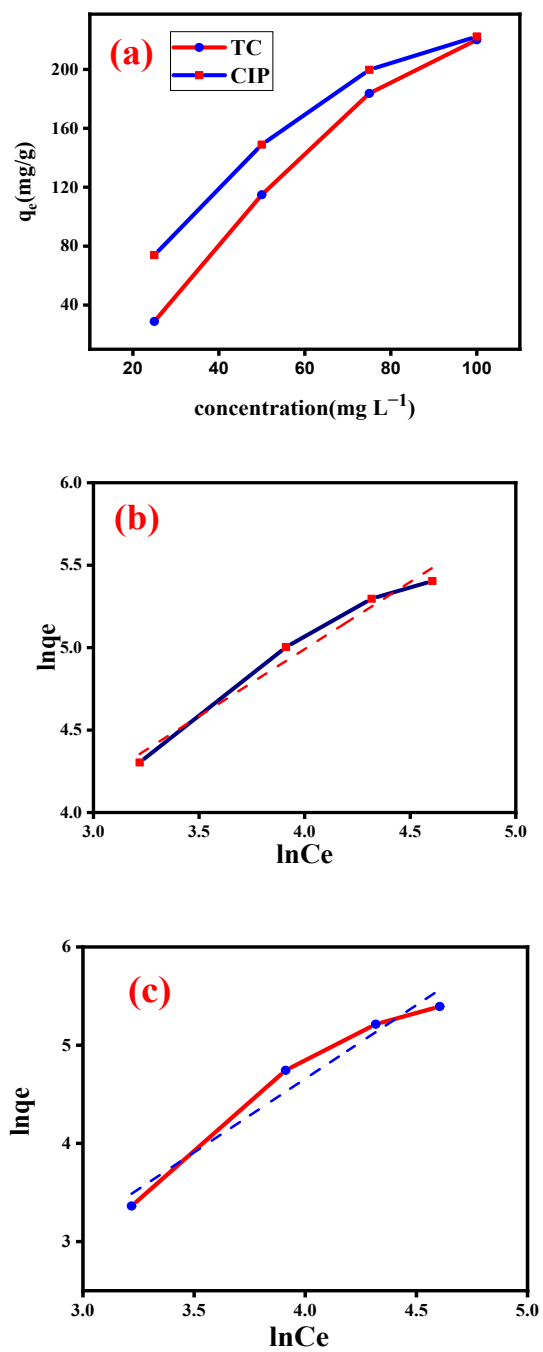


Fig. 4S. Adsorption isotherms of (a) CIP and TC, (b) linear fitting of Adsorption isotherm CIP with Freundlich isotherm model fit, and (c) linear fitting of Adsorption isotherm TC with Freundlich isotherm model fit

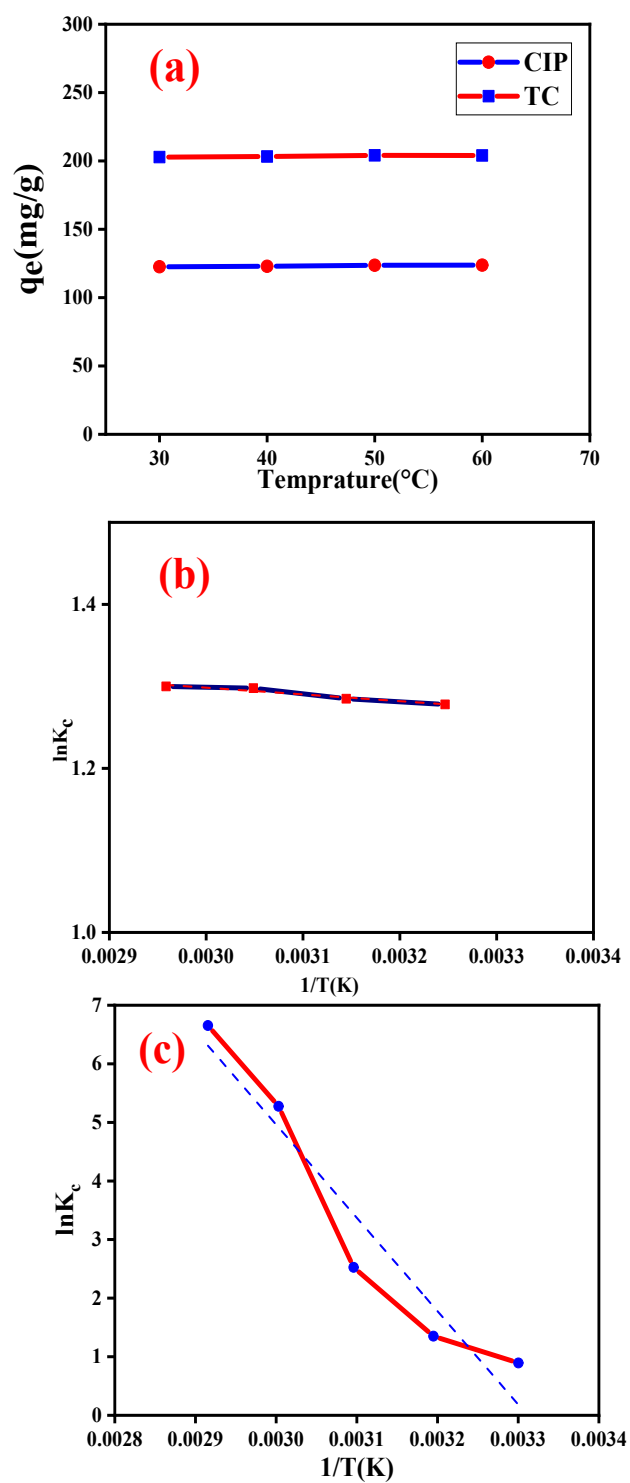


Fig. 5S. Adsorption thermodynamic of (a) CIP, (c) TC, and (b), (c) linear fitting of adsorption thermodynamic CIP, and TC

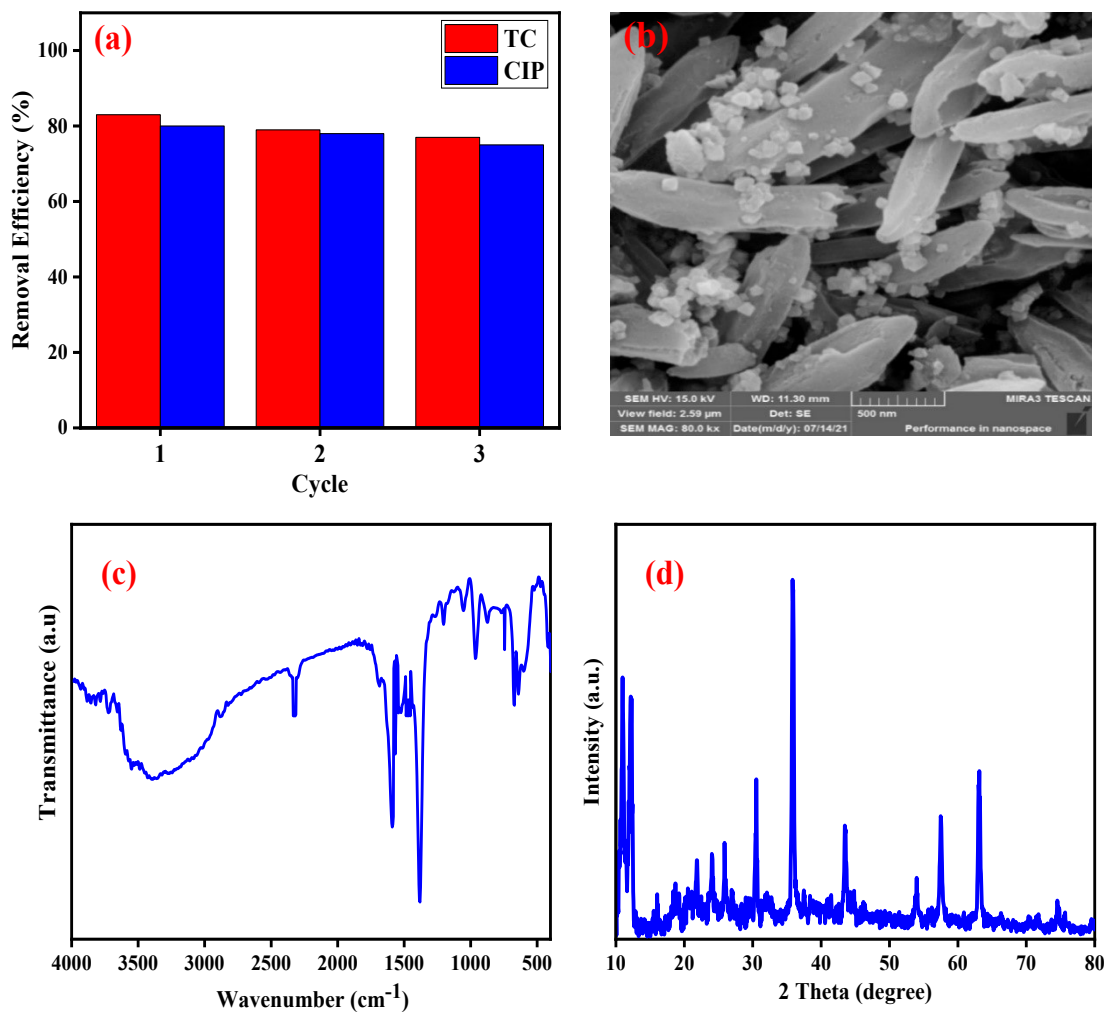


Fig. 6S. (a) Reusability of the POT/ NiFe_2O_4 /MIL-88A(Fe) nanocomposite in the removal of TC and CIP antibiotics, (b) SEM image, (c) FT-IR spectrum and (d) XRD pattern of the fresh and recovered nanocomposite after three runs