

Self-assembly of Biosurfactant-inorganic Hybrid Nanoflowers as Efficient Catalysts for Degradation of Cationic Dyes

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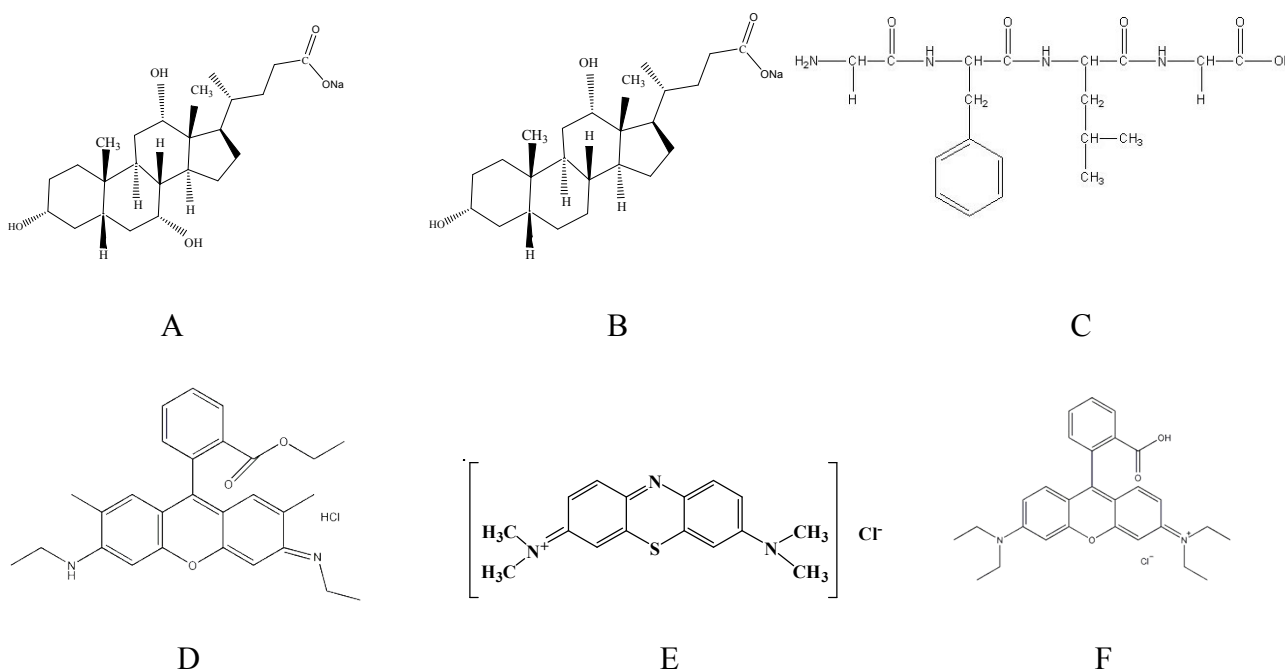


Fig. S1 The structures of (A) Sodium cholate, (B) Sodium deoxycholate, (C) GG4 (D) Rhodamine6G, (E) Methylene blue. (F) Rhodamine B.

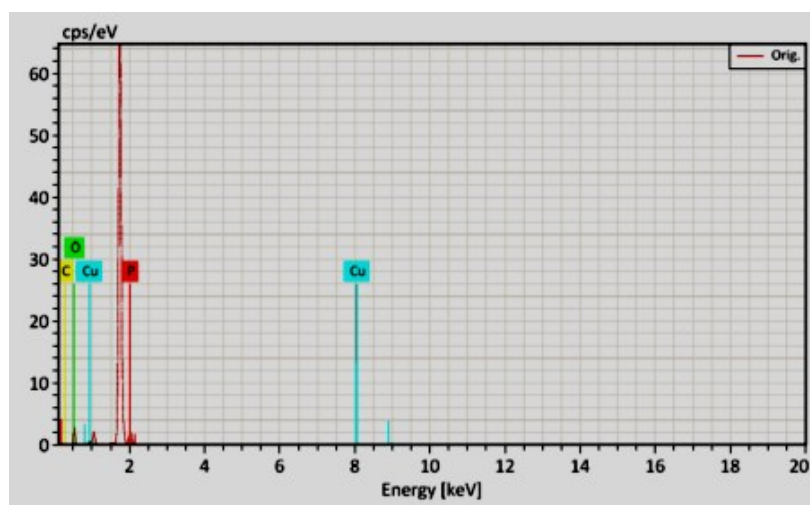


Fig. S2 EDX pattern of SC-Cu₃(PO₄)₂·3H₂O nanoflowers .

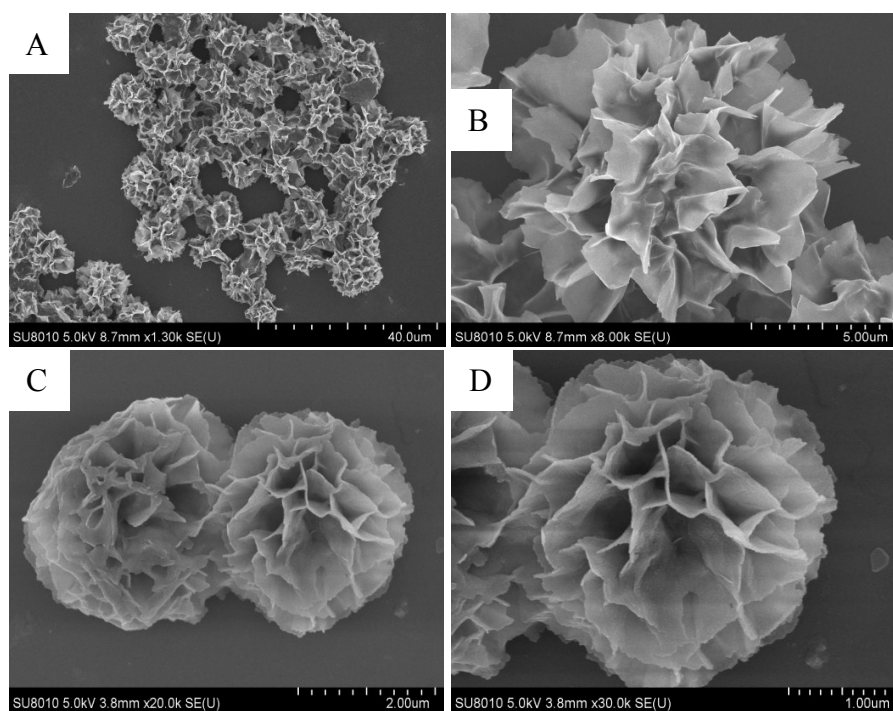


Fig.S3 SEM images of (A, B) SDC- $\text{Cu}_3(\text{PO}_4)_2 \cdot 3\text{H}_2\text{O}$ nanoflowers, (C, D) GG-4- $\text{Cu}_3(\text{PO}_4)_2 \cdot 3\text{H}_2\text{O}$ nanoflowers.

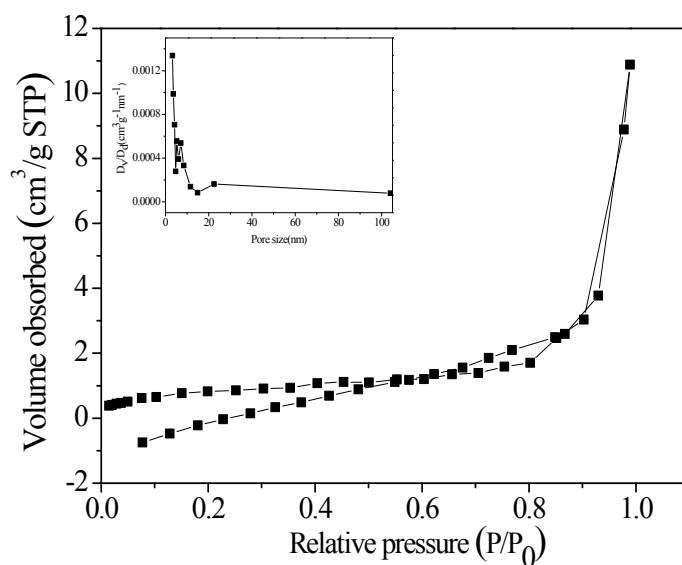


Fig.S4 Nitrogen adsorption–desorption isotherm and the pore size distribution curve (inset) for the SC- $\text{Cu}_3(\text{PO}_4)_2 \cdot 3\text{H}_2\text{O}$ nanoflowers.

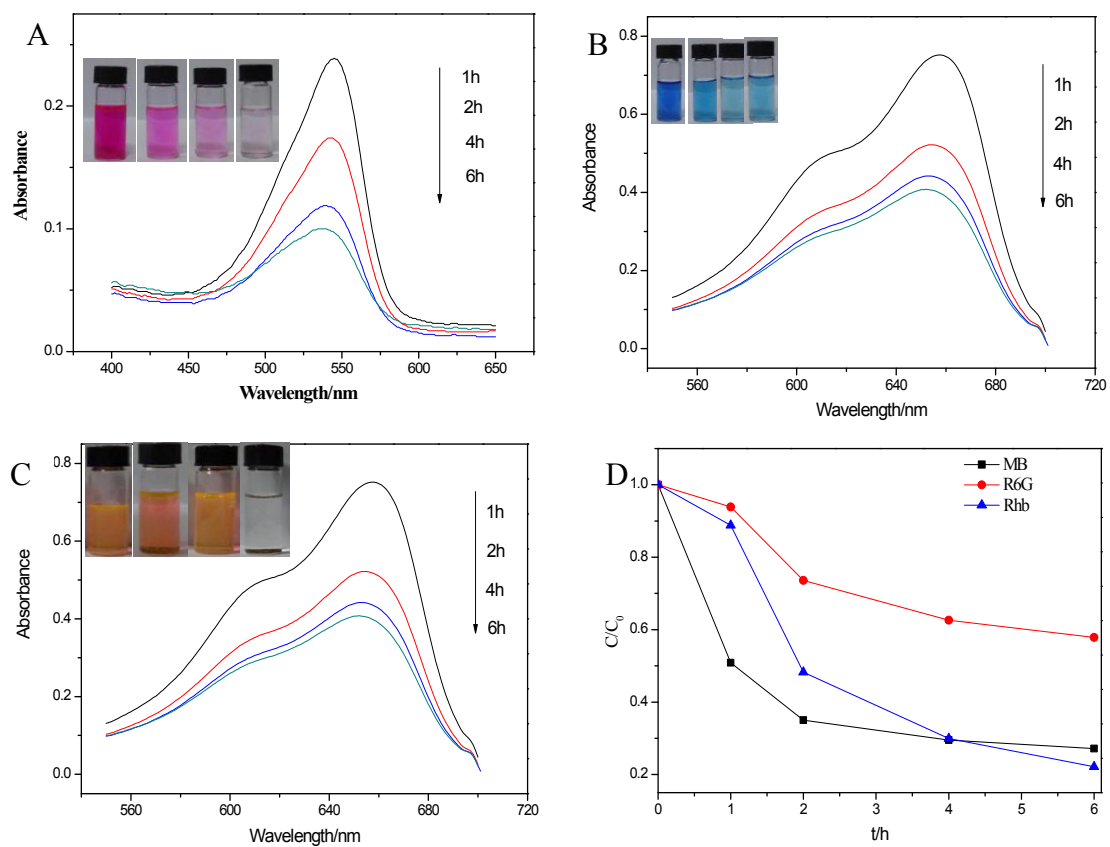


Fig.S5 Color change of cationic dyes solution over time and the UV-Vis spectrum. RhB; (B) MB;(C)R6G,and (D) comparison of degradation rates for different dye

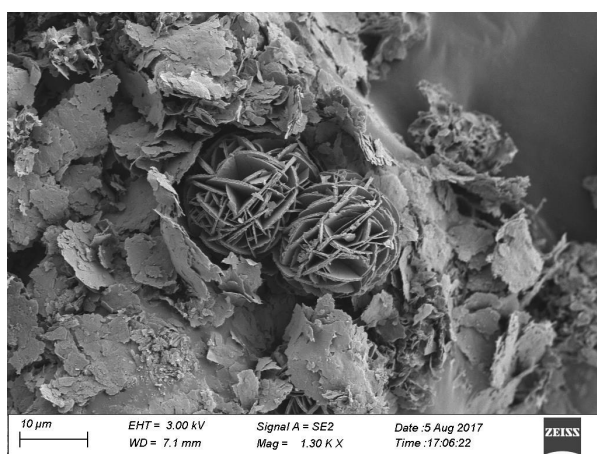


Fig.S6 SEM images of our catalyst after degradation of dyes.

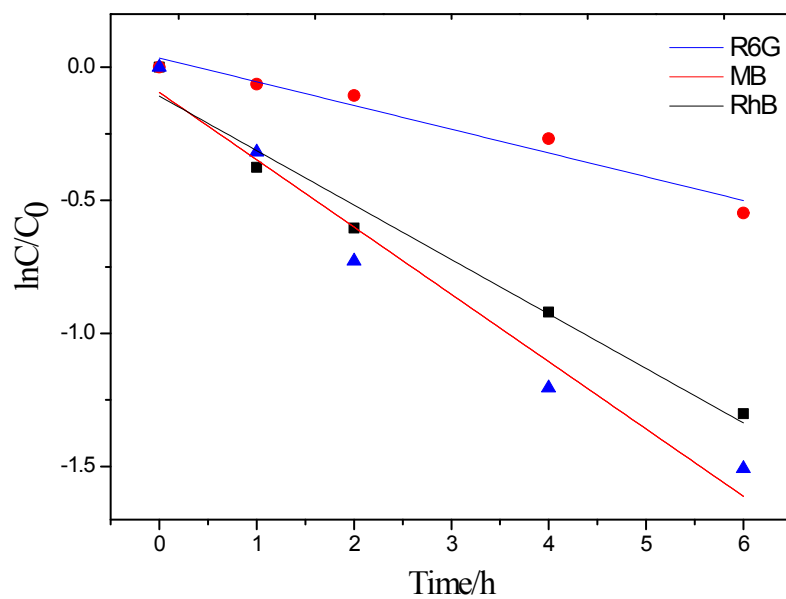


Fig.S7 Degradation rate of the three dyes calculated by $\ln(C_t/C_0)$ as functions of reaction time.