Electronic Supplementary Information

Fabrication of 3D hierarchical flower-like δ-MnO_2@COF nanocomposites for the efficient and ultra-fast removal of UO_2^{2+} ion from aqueous solution

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1. Chemicals

1, 3, 5-triformylphloroglucinol (≥95%, Tp) was obtained from Chinese Academy of Science Jilin Yanshen Technology Company. Other chemicals were analytical reagents or better and supplied by Macklin Chemical Reagent Company. All reagents were used directly without further purification.

The crystallographic data of δ-MnO_2 acquired from American Mineralogist Crystal Structure Database.

2. Figures

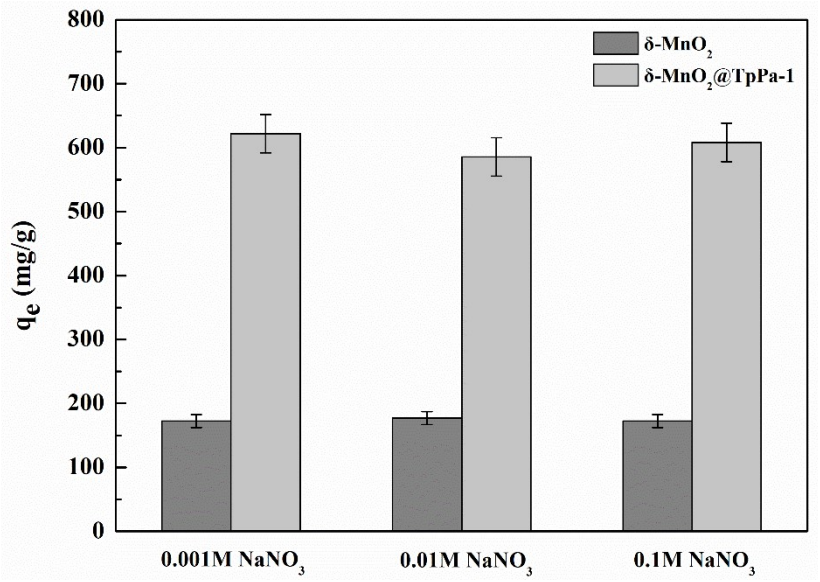

Fig. S1 The influence of ionic strength on the removal efficiency UO_2^{2+} ion adsorption onto δ-MnO_2 andδ-MnO_2@TpPa-1.

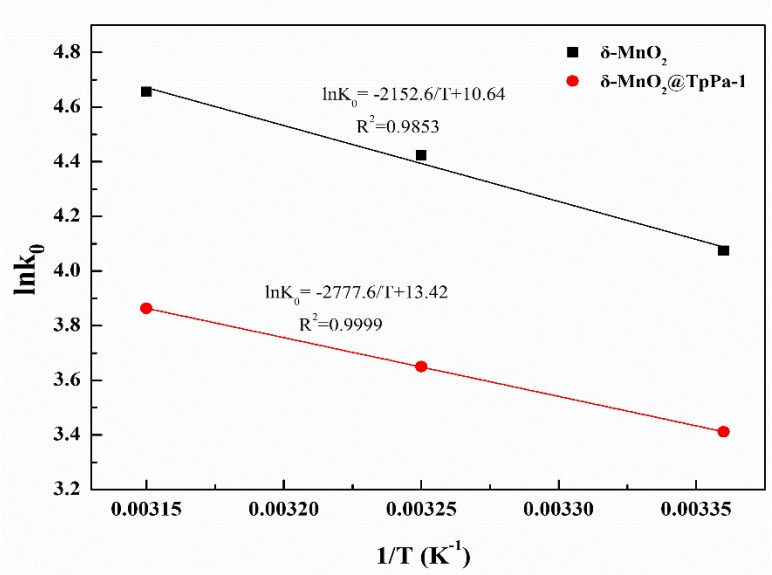

Fig. S2 The linear plots of lnK_0 of UO_2^{2+} ion versus 1/T at three different temperatures (T=298-318 K).

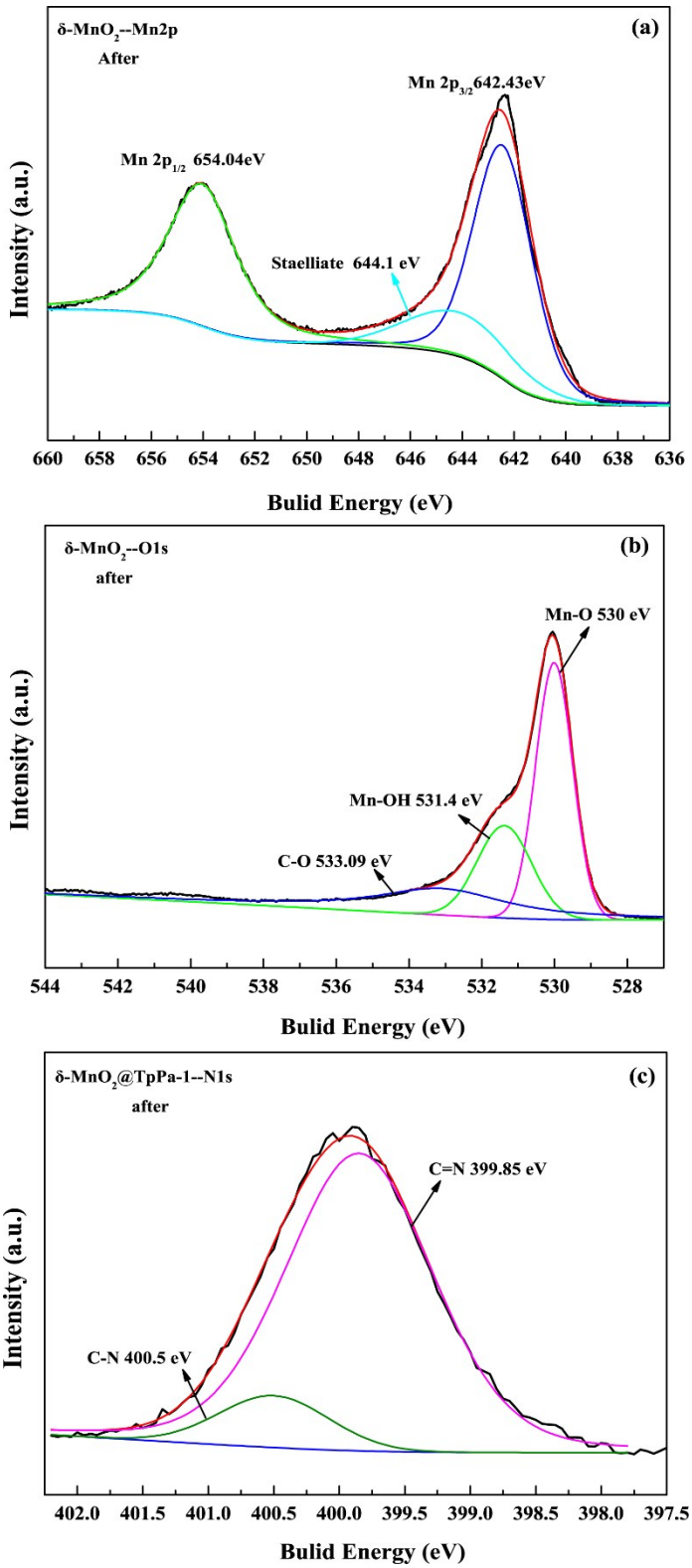

Fig. S3 XPS spectra of δ-MnO_2 and δ-MnO_2@TpPa-1: (a) δ-MnO_2-Mn2p; (b) δ-MnO_2-O1s; (c) δ-MnO_2@TpPa-1 N 1s after UO_2^{2+} ion adsorption.