Synthesis of hierarchical porous carbon in molten salt and its application for dye adsorption

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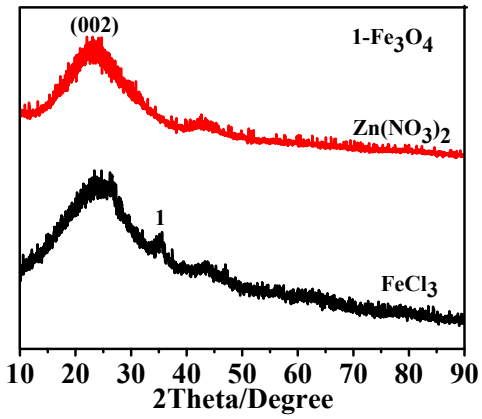
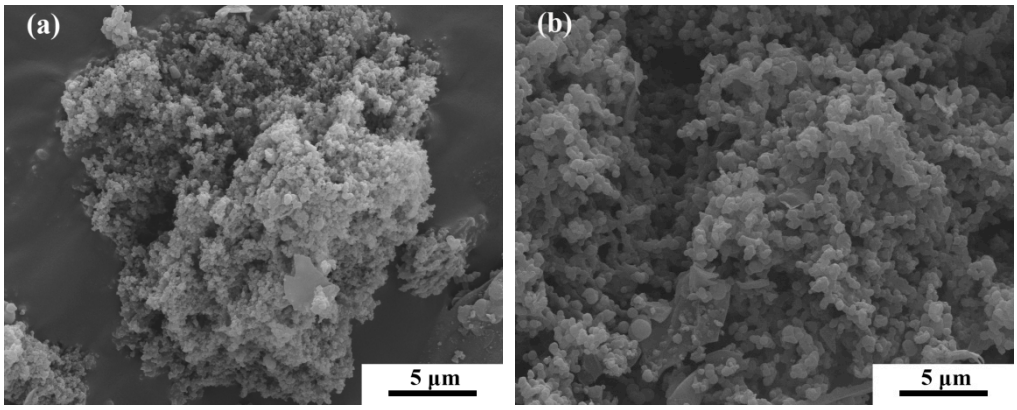


Fig. S1 Powder X-ray diffraction (XRD) pattern of porous carbon prepared at 800°C for 2 h using respectively $FeCl_3 \cdot 6H_2O$ and $Zn(NO_3)_2$ as oxidizing agents.



(a) FeCl3 (b) $Zn(NO_3)_2$

Fig. S2 Scanning electron microscope (SEM) images of porous carbon prepared at 800°C for 2 h using respectively 1.0 wt% $FeCl_3 \cdot 6H_2O$ and $Zn(NO_3)_2$ as oxidizing agents.

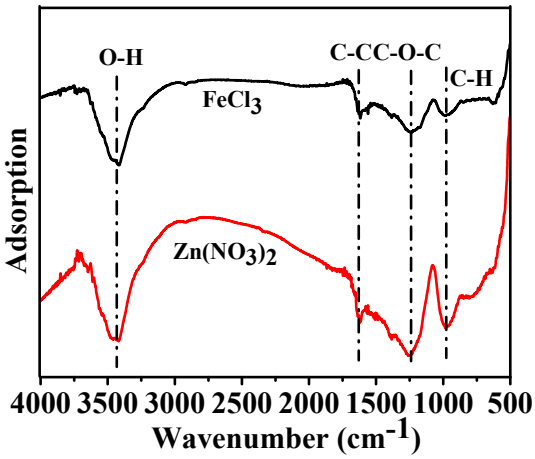


Fig. S3 Fourier transform infrared spectroscopy (FTIR) of porous carbon prepared at 800°C for 2 h using respectively 1.0 wt% $FeCl_3 \cdot 6H_2O$ and $Zn(NO_3)_2$ as oxidizing agents.

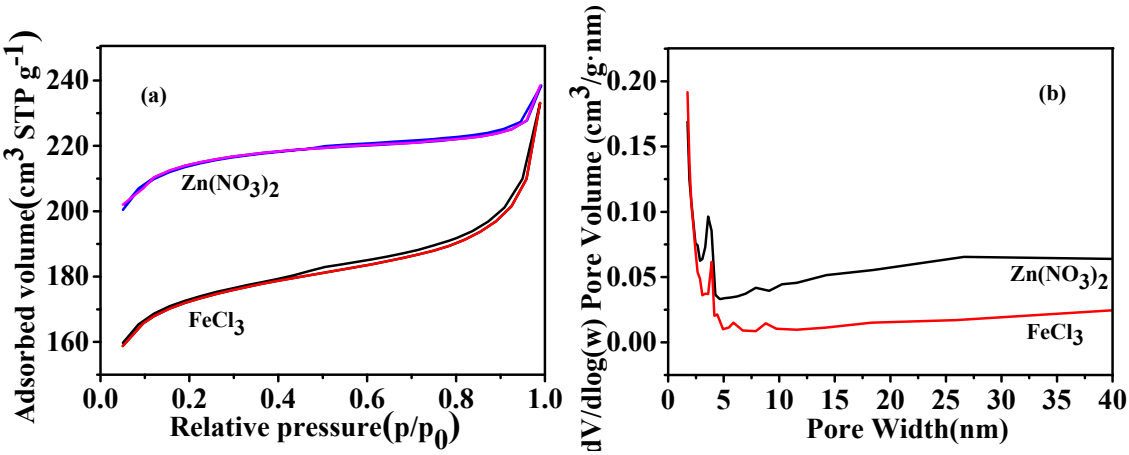


Fig. S4 N_2 adsorption-desorption isotherms (a) and pore size distribution curves (b) of porous carbon prepared at 800°C for 2 h with various amounts of Fe.

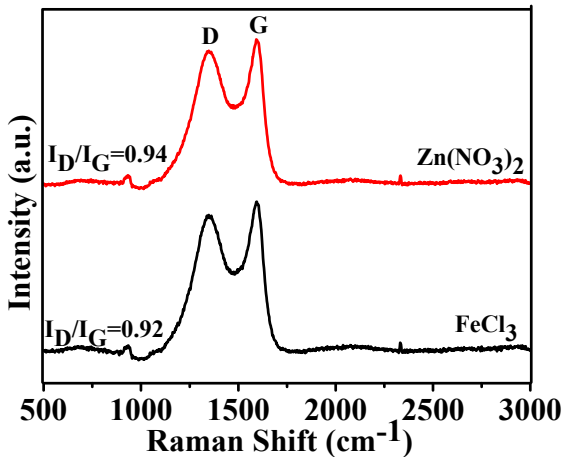


Fig. S5 Raman spectra of porous carbon prepared at 800°C for 2 h using respectively 1.0 wt% $FeCl_3 \cdot 6H_2O$ and $Zn(NO_3)_2$ as oxidizing agents.