Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Facilely Controlled Synthesis of Core-Shell Structured MOF Composite and Its Derived N-doped Hierarchical Porous Carbon for CO_2 Adsorption

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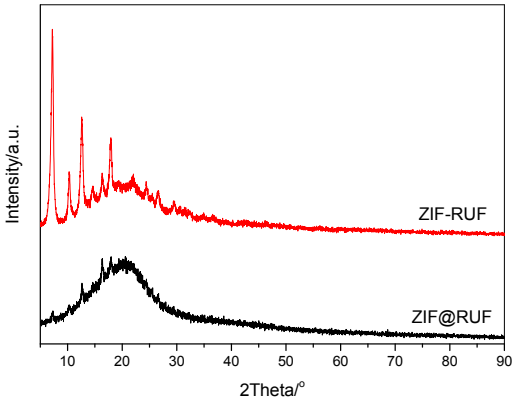

Fig.S1 XRD patterns of ZIF@RUF composite and ZIF-RUF physical mixture

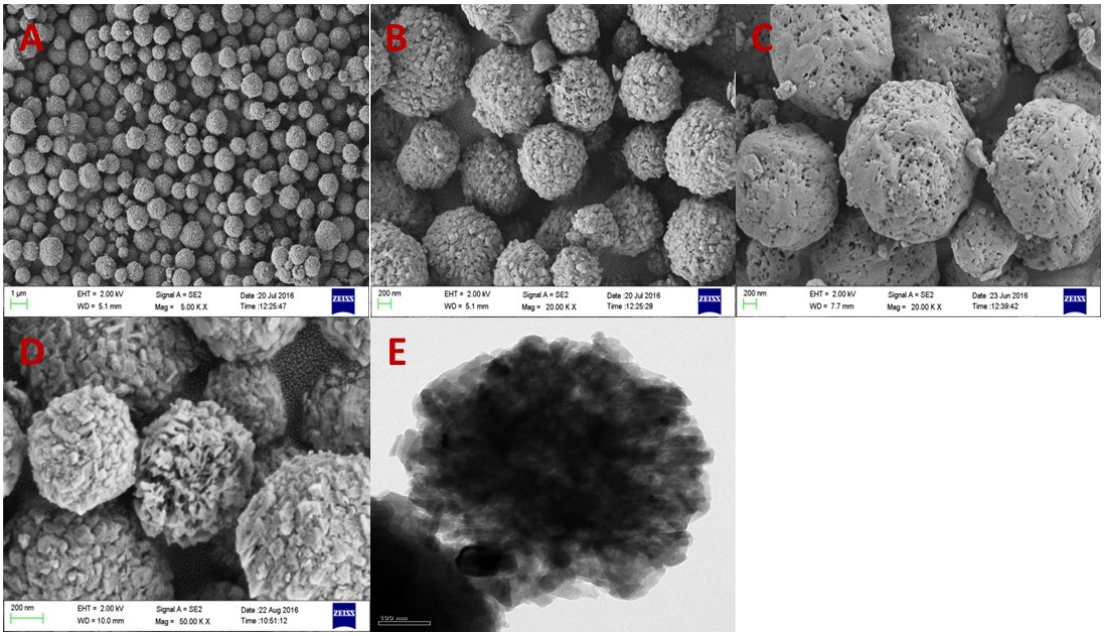

Fig.S2 SEM (A-D) and TEM (E) images of ZIF-8 particles

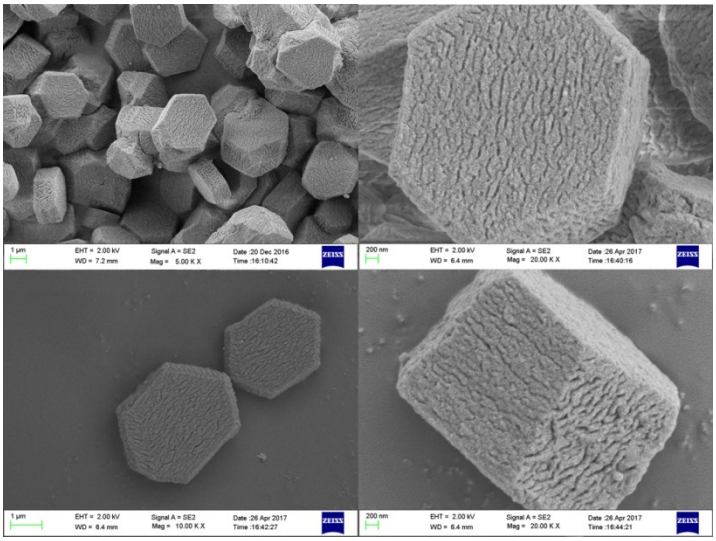

Fig.S3 SEM images of RUF sample

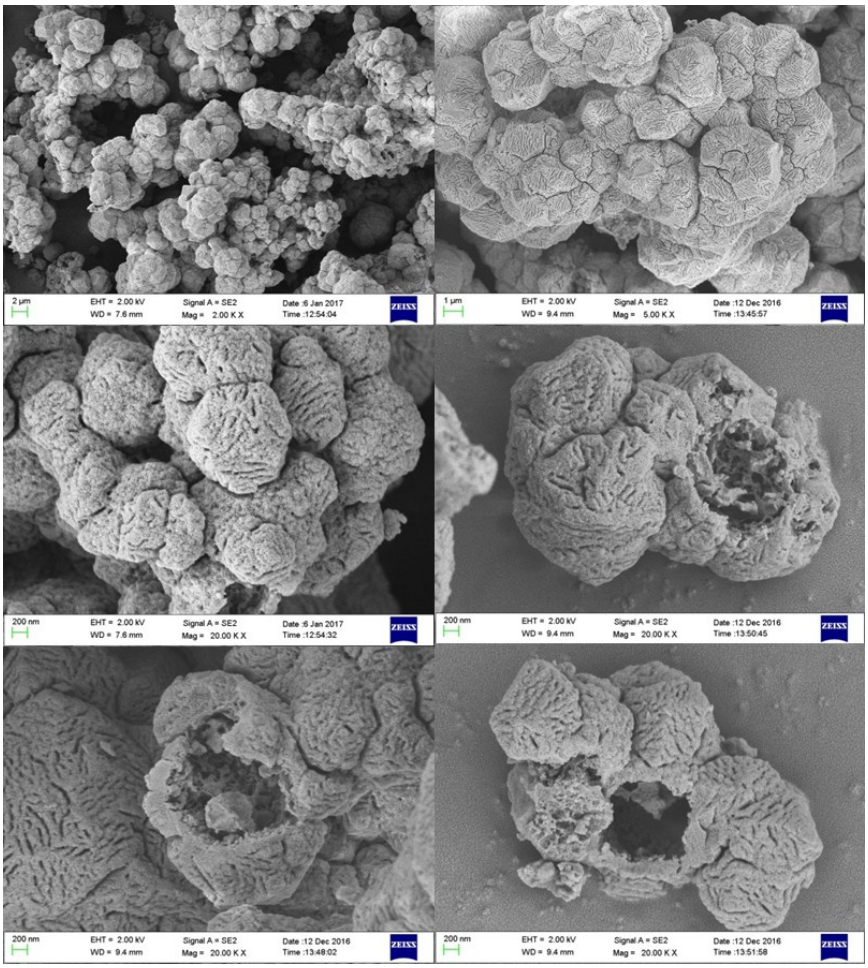

Fig.S4 SEM images of ZIF@RUF composite

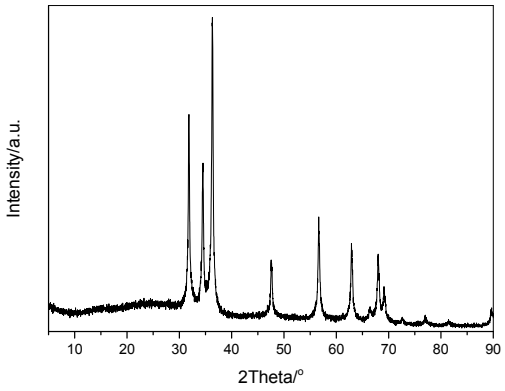

Fig.S5 XRD patterns of ZIFC-600 obtained by carbonization of ZIF-8 at 600 °C in N_2 atmosphere

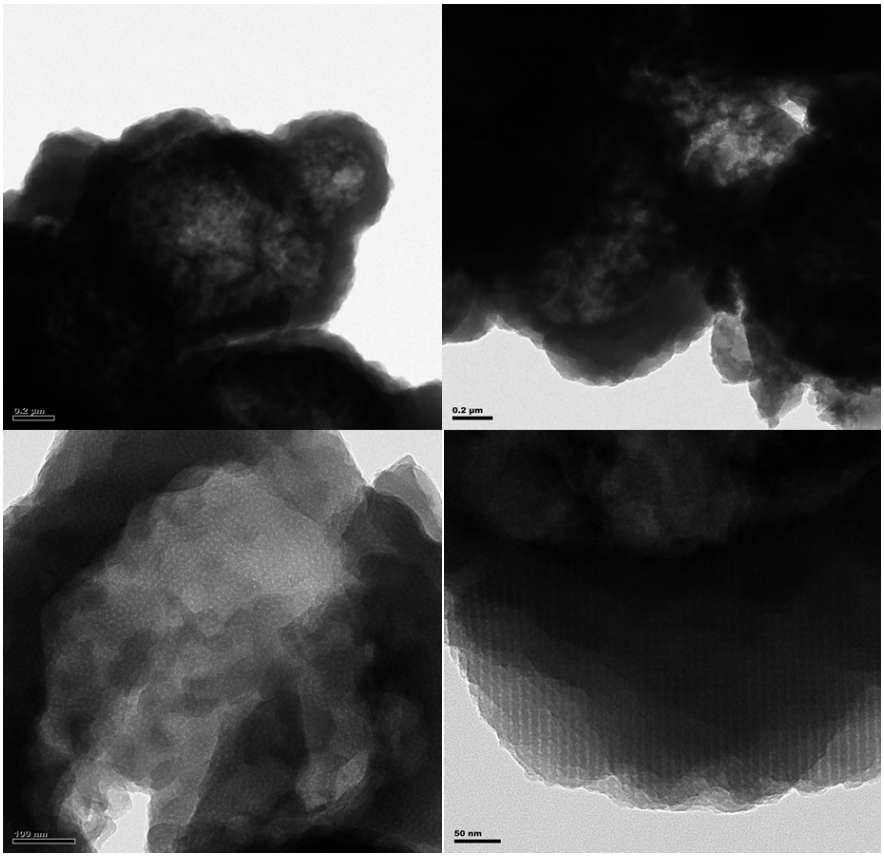

Fig.S6 TEM images of ZIFC@RUFC

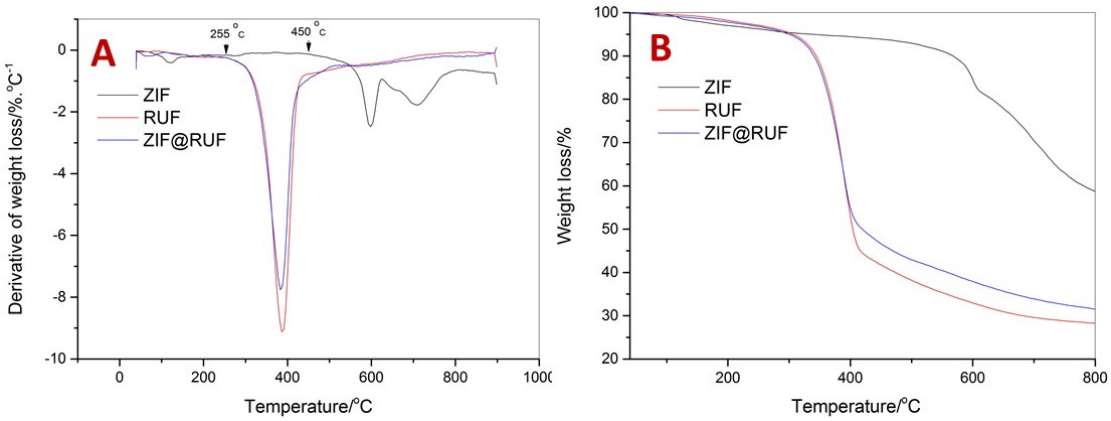

Fig.S7 Derivative thermogravimetric (A) and thermogravimetric analysis (B) of ZIF-8, RUF and ZIF@RUF under N_2 atmosphere

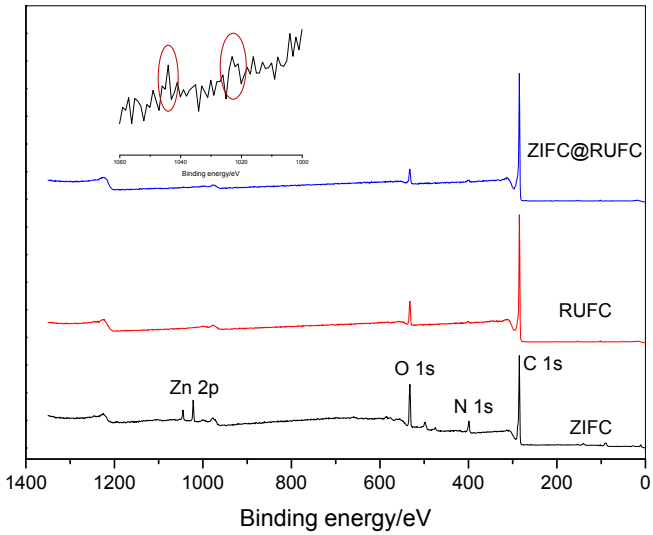

Fig.S8 XPS survey spectra of ZIFC, RUFC and ZIFC@RUFC. The inset is the magnified ZIFC@RUFC spectrum in the binding energy range of 1000-1060 eV.

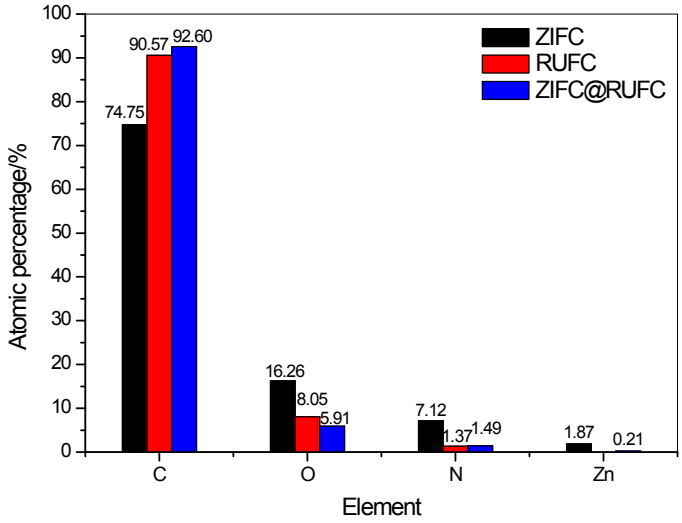

Fig.S9 C, N, O and Zn contents in ZIC, RUFC and ZIFC@RUFC samples from XPS

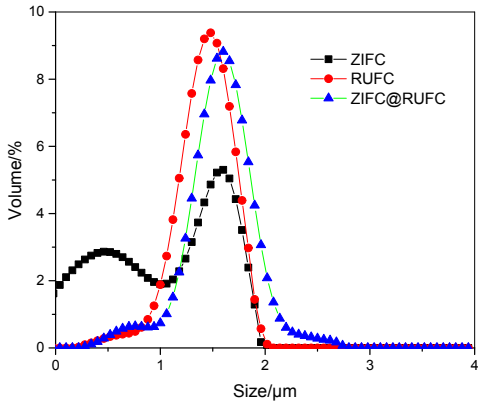

Fig.S10 Particle size distributions of ZIFC, RUFC, and ZIFC@RUFC sample