

**Electronic Supplementary Material (ESI) for New Journal of Chemistry.**

*Supporting information for:*

**Amino functionalized zirconium metal organic framework as  
catalyst for oxidative desulfurization**

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## 1. Table

**Table S1 EDS analysis of different elements content of UiO-66-NH<sub>2</sub>**

Element	Weight%	Atomic%
C	3.45	15.55
N	0.05	0.18
O	0.88	2.99
Cl	0.04	0.06
Zr	1.04	0.62
Cu <sup>a</sup>	94.54	80.60
Total	100.00	100.00

<sup>a</sup> The EDS analysis select copper mesh for sample preparation.

**Table S2 Textural properties of different samples.**

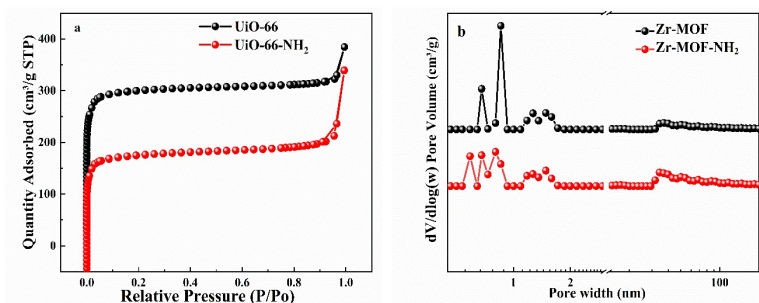
Samples	$S_{\text{BET}}^{\text{a}}$ ( $\text{m}^2\text{g}^{-1}$ )	$V_{\text{Pore}}^{\text{b}}$ ( $\text{cm}^3\text{g}^{-1}$ )	$D_{\text{pore}}^{\text{c}}$ (nm)
UiO-66	832.13	0.16	2.16
UiO-66-NH <sub>2</sub>	716.78	0.29	2.26
UiO-66-NH <sub>2</sub> recycled 7	363.61	0.14	2.87

<sup>a</sup> BET surface area.

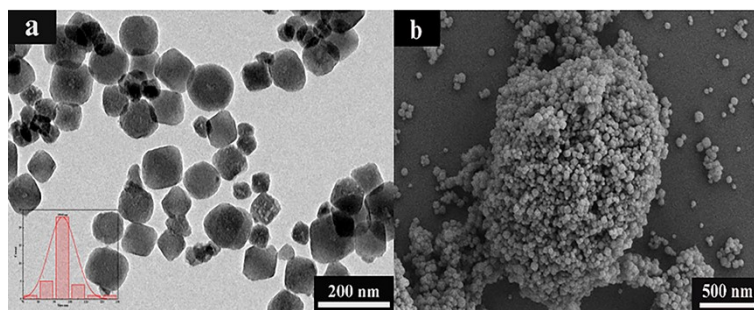
<sup>b</sup> BJH Adsorption cumulative volume of pores.

<sup>c</sup> Adsorption average pore diameter.

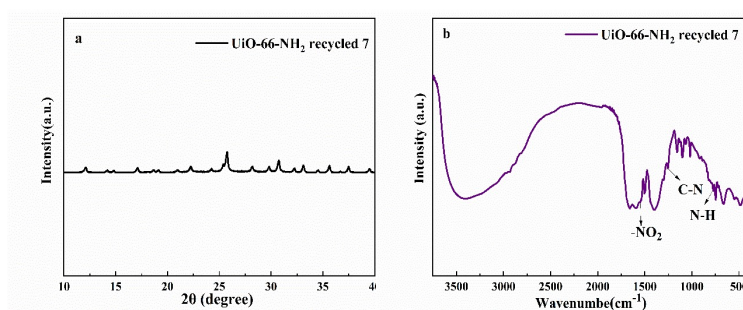
## 2. Figures



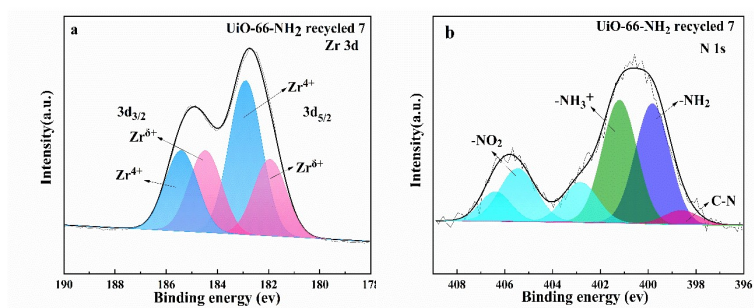
**Fig. S1** N<sub>2</sub> sorption isotherms (a) and Pore size distribution (b) of UiO-66 and UiO-66-NH<sub>2</sub>.



**Fig. S2.** TEM (a) and SEM (b) images of UiO-66-NH<sub>2</sub> recycled 7.



**Fig. S3** XRD pattern (a) and FTIR spectra (b) of UiO-66-NH<sub>2</sub> recycled.



**Fig. S4 XPS spectra of UiO-66-NH<sub>2</sub> recycled 7.**