

The Carboxyl Functionalized UiO-66-(COOH)₂ for Selective Adsorption of Sr²⁺

Yuan Gao ¹, Yin Hai Pan ^{1,2}, Zihan Zhou ¹, Quanzhi Tian ² and Rongli Jiang ^{1,*}

¹ School of Chemical Engineering and Technology, China University of Mining & Technology, Xuzhou 221116, China

² National Engineering Research Center of Coal Preparation and Purification, China University of Mining and Technology, Xuzhou, 221116, China

* Correspondence: ronglij@cumt.edu.cn

Table S1. The adsorption capacity (q_e) and the monitored pH values after adsorption under various pH condition.

pH	q _e (mg g ⁻¹)	pH after Adsorption
2	4.53	2.36
5	5.91	5.08
7	4.94	3.62

Table S2. Zeta potential values measured of the adsorbent before and after adsorption.

	Zeta Potential (mV)
UiO-66-(COOH) ₂	-31.7
After Sr ²⁺ adsorption	-33

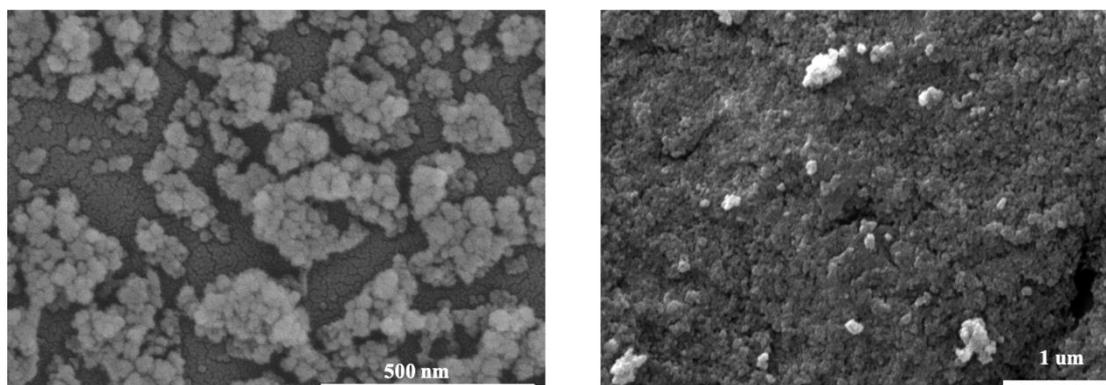


Figure S1. SEM of UiO-66-(COOH)₂ before (Left) and after (Right) Sr²⁺ adsorption.

Table S3. The weight percentage (%) of elements detected by EDS of UiO-66-(COOH)₂ after Sr²⁺ adsorption.

Element	Weight Percentage (%)
C	32.16
O	21.92
Sr	5.92
Zr	39.99
Total (%)	100