

Electronic Supplementary Information (ESI)

Assembly of celastrol to zeolitic imidazolate framework-8 as a new novel drug delivery strategy for cancer therapy

Na Wang^{a,†} and Yifan Li^{a,†}, Fei He^a, Susu Liu^a, Yuan Liu^a, Jinting Peng^b, Jiahui Liu^c, Changyuan Yu^{*,a}, Shihui Wang^{*,a}

^a College of Life Science and Technology, Beijing University of Chemical Technology, Beijing 100029, China

^b Department of Gynecology, Shenzhen Traditional Chinese Medicine Hospital, Shenzhen, 518033, Guangdong, China.

^c Analytical Instrumentation Center, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China.

****Author for correspondence:***

Tel: +86-10-64421335

Fax: +86-10-64421335

wangshihui@mail.buct.edu.cn

yucy@mail.buct.edu.cn

† These authors contributed equally to this work

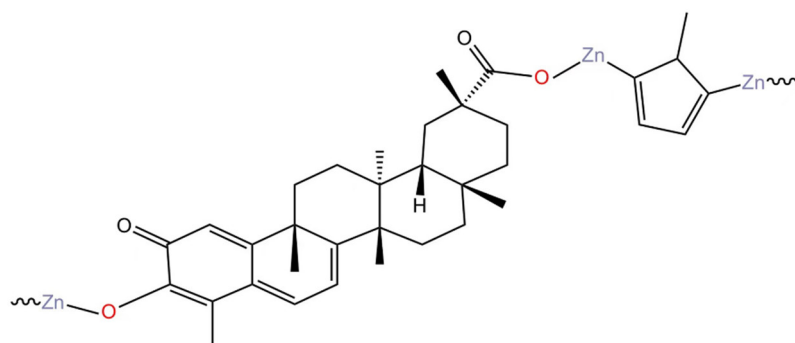


Fig. S1 The deduced chemical structure of Cel-ZIF-8.

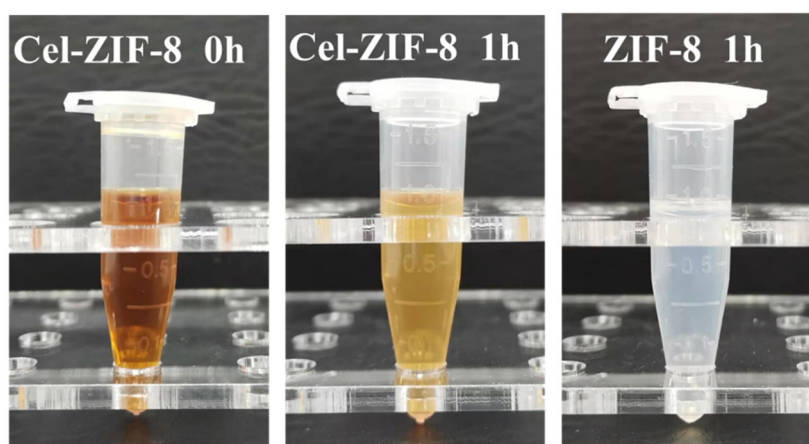


Fig. S2 The color changes of Cel-ZIF-8 during synthesis. ZIF-8 was used as the control.

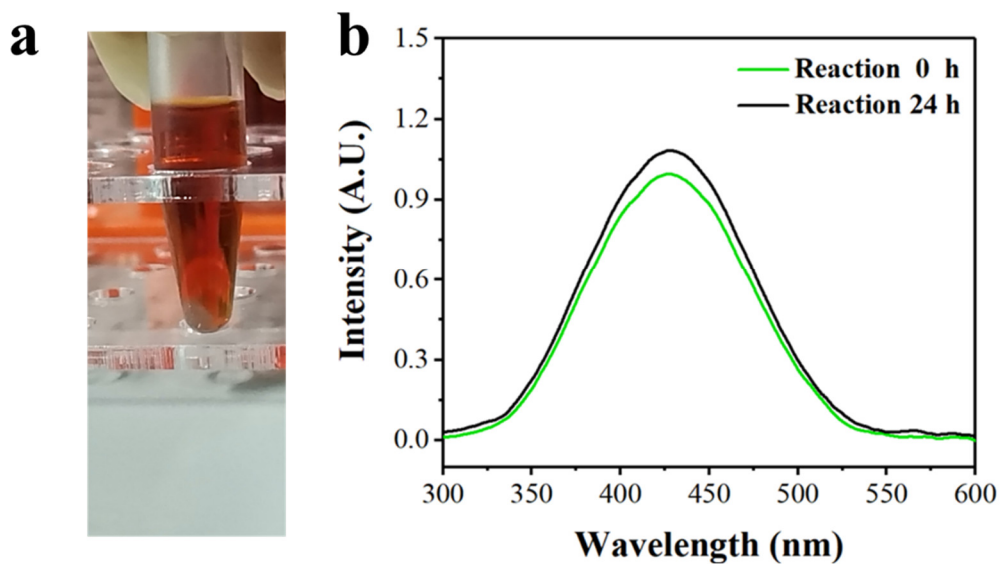


Fig. S3 Synthesis and Characterization of Cel/ZIF-8. Cel and ZIF-8 was mixed in methanol with stirring for 24 h and centrifuged at 10,000 rpm for 10 min (a). UV/Vis absorbance of the supernatant before and after stirring (diluted 20 times) (b).

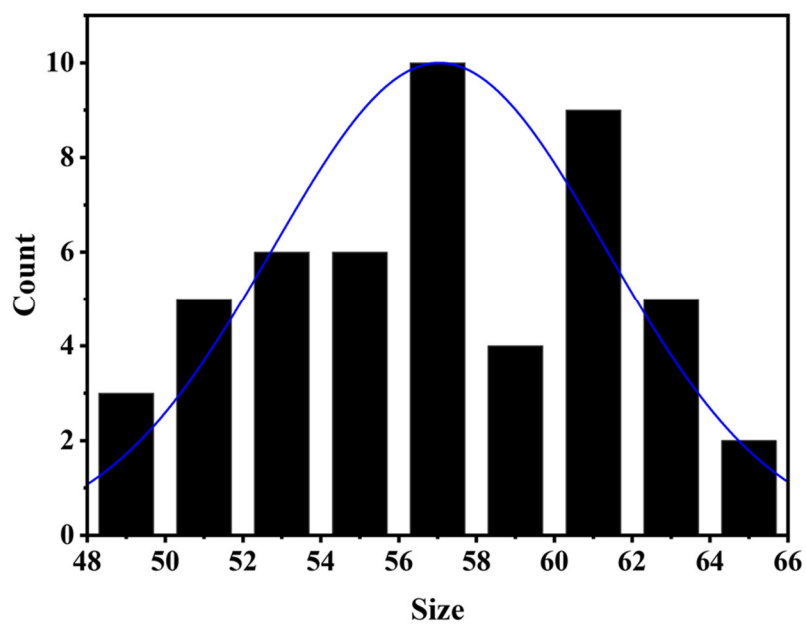


Fig. S4 Particle size distribution of Cel-ZIF-8 obtained from TEM image (57 ± 9 nm).

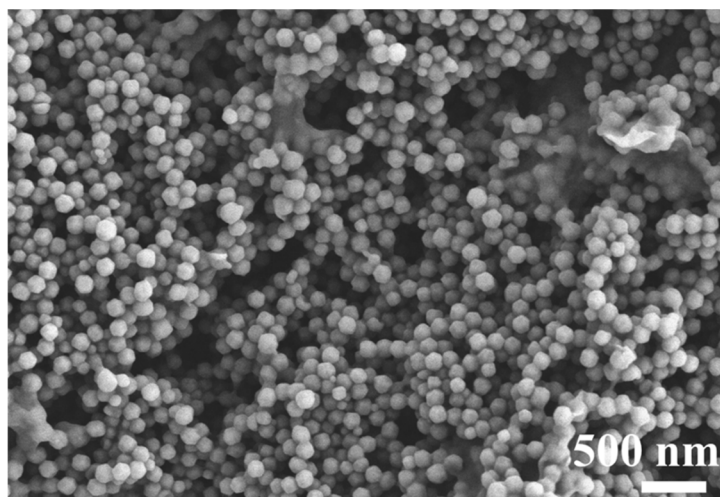


Fig. S5 The TEM image of ZIF-8 with an average size of 107 ± 8.86 nm.

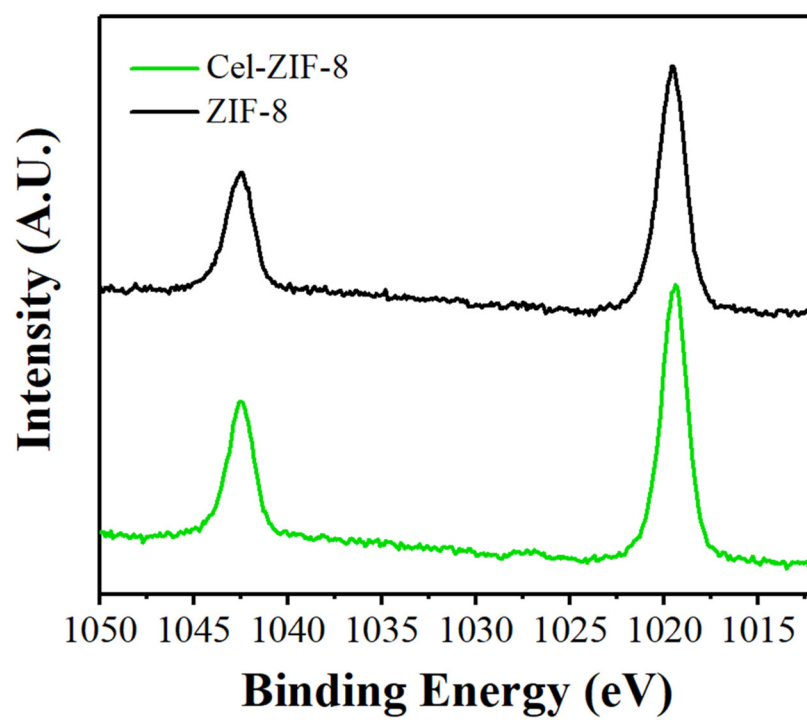


Fig. S6 Zn 2p of XPS of Cel-ZIF-8 and ZIF-8.

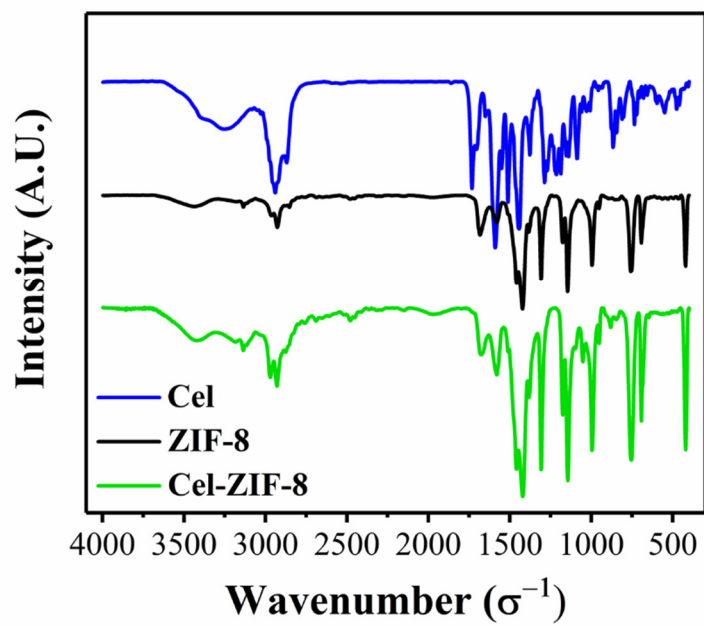


Fig. S7 FTIR spectra of Cel-ZIF-8, ZIF-8, and Cel.

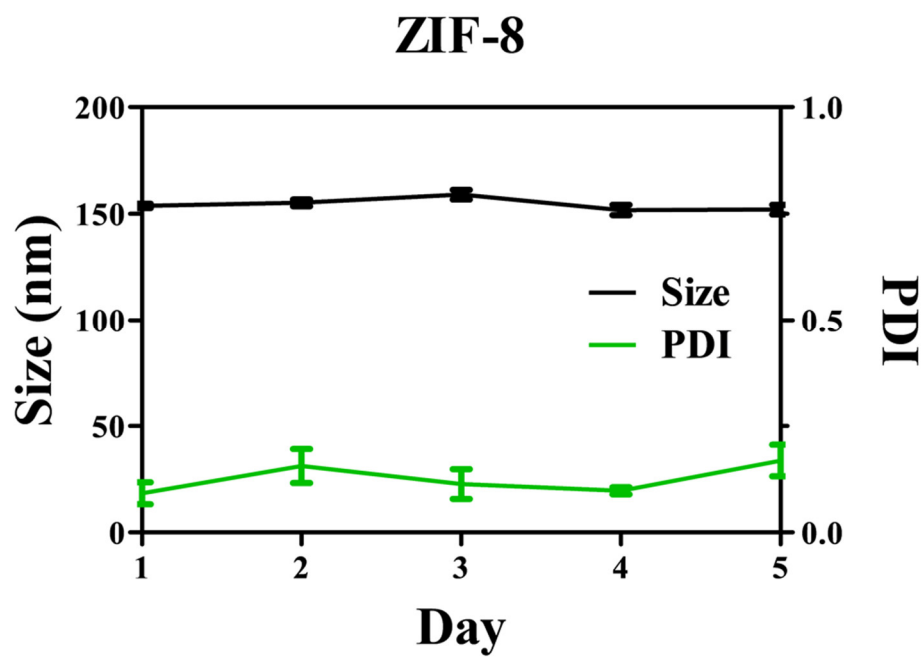


Fig. S8 Stability of ZIF-8 at physiological condition (pH 7.4).

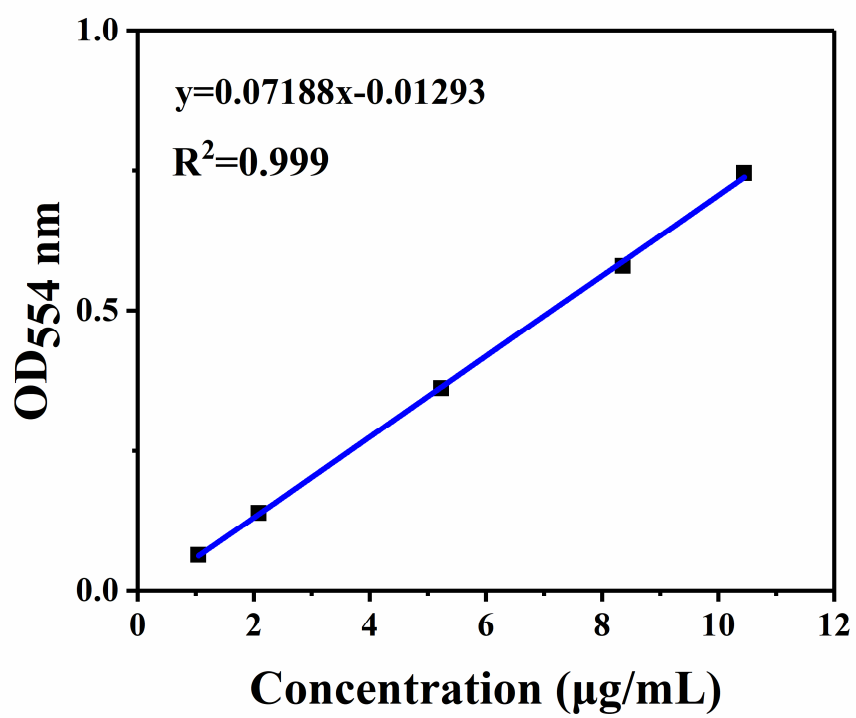


Fig. S9 Standard curve for Rhodamine B.