Electronic Supplementary Information

Porous MOF-808@ PVDF Beads for Removal of Iodine from Gas Streams

Lingyu Wang,[a] *Peng Chen,*[b] *Xiuting Dong,*[b] *Wen Zhang,*[b*] *Song Zhao,*[b] *Songtao Xiao,*[a] *Yinggen Ouyang*[a*]

[a]Department of Radiochemistry, China Institute of Atomic Energy, Beijing 102413, China

[b]State Key Laboratory of Chemical Engineering, Tianjin Key Laboratory of Membrane Science & Desalination Technology, and School of Chemical Engineering and Technology, Tianjin University, Tianjin 300350, China

[*]To whom correspondence should be addressed. E-mail: zhang_wen@tju.edu.cn. oyyg@ciae.ac.cn.

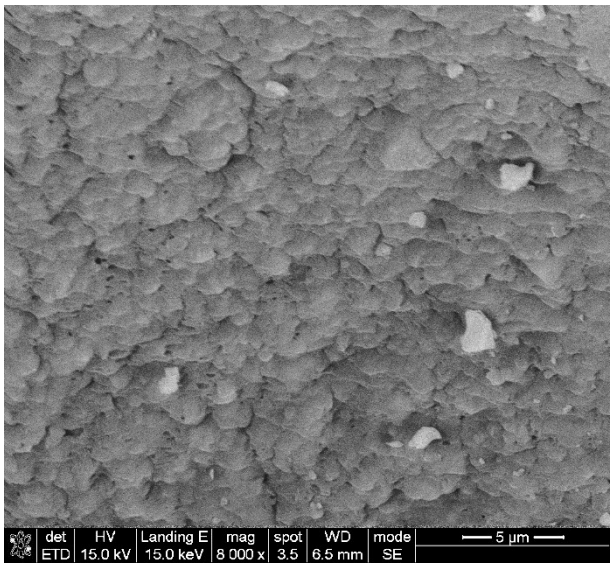

Figure S1 SEM image for the outside surface of 808-PVDF0.7.

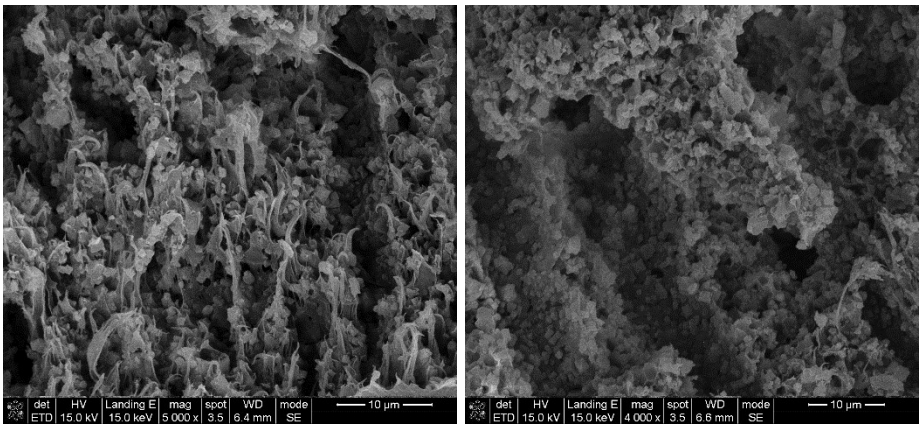

Figure S2 SEM image for the inner texture of 808-PVDF0.7.

Table S1 The contents of MOF-808 in 808-PVDF*x* beads

	F atomic %	Zr atomic %	MOF-808 wt.%
808-PVDF0.3	85.88	8.55	36%
808-PVDF0.5	72.27	15.82	55%
808-PVDF0.7	44.53	19.44	71%

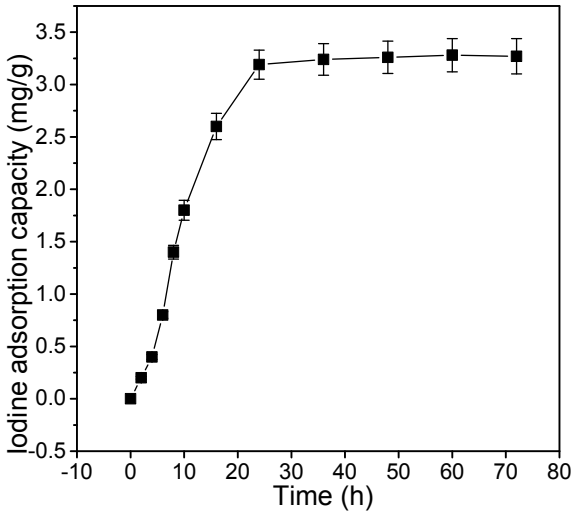

Figure S3 Adsorption curves for PVDF beads at 80 ℃.

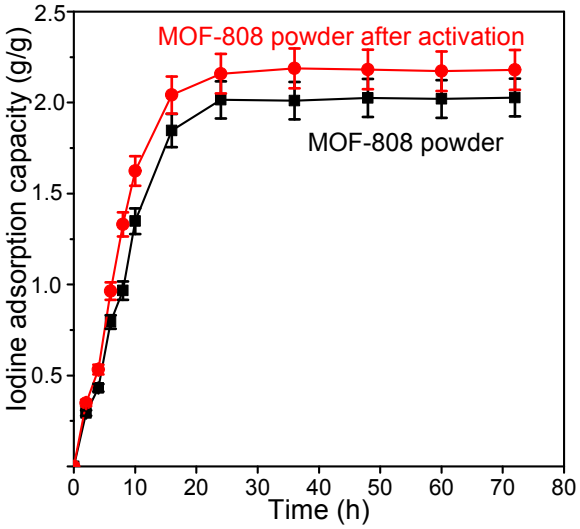

Figure S4 Adsorption curves for MOF-808 powder before and after activation. (activated using 250 mL DMF/25 mL ethylene glycol at 130 ℃ for 24 h)