Electronic Supplementary Information for

Twisted molecules based hyper-crosslinked porous polymers for

rapid and efficient removal of organic micropollutants from water

Ziyan Jia,^{‡a} Jiannan Pan,^{‡a} Chen Tian^b and Daqiang Yuan^{*a}

^aFujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, Fuzhou, Fujian 350002, China. E-mail: <u>ydq@fjirsm.ac.cn</u>

^bSchool of Environment and Energy, Key Laboratory of Pollution Control and Ecosystem Restoration in Industry Clusters (Ministry of Education), Guangdong Engineering and Technology Research Center for Environmental Nanomaterials, South China University of Technology, Guangzhou 510006, China.

^{*‡*}*These authors contribute to this work equally.*

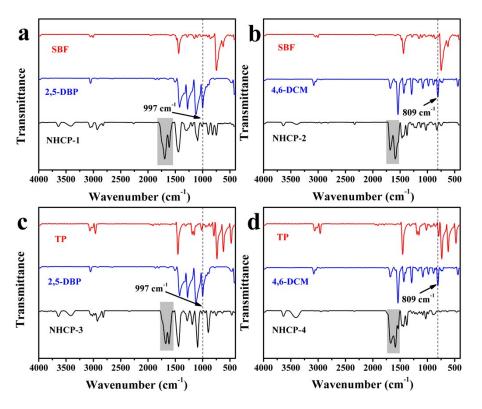


Fig. S1. FT-IR spectra of NHCPs and corresponding reactants.

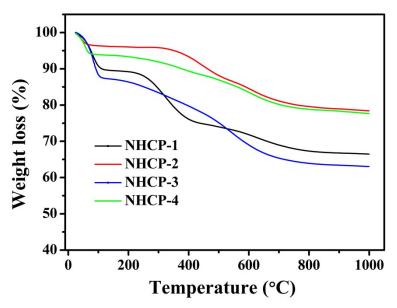


Fig. S2. Thermal gravimetric analysis of NHCPs under N₂ atmosphere.

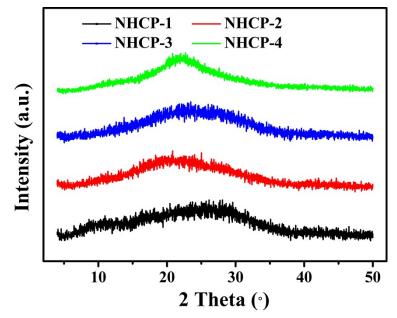


Fig. S3. The powder X-ray diffraction data of NHCPs.

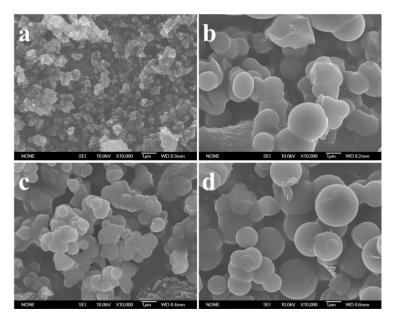


Fig. S4. The SEM images of NHCP-1 (a), NHCP-2 (b), NHCP-3 (c) and NHCP-4 (d).

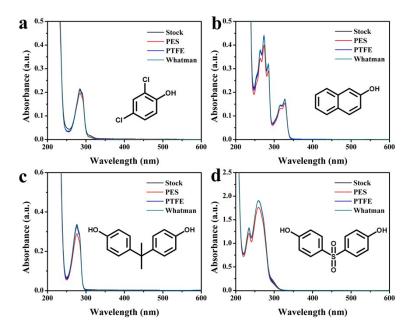


Fig. S5. The UV-Vis spectroscopy of different pollutants solution (0.1 mM) after filtration of PES (0.2 um), PTFE (0.2 um) and Whatman (0.2 um) membrane filters.

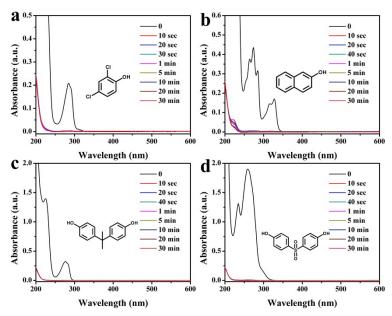


Fig. S6. The UV-Vis spectroscopy of different pollutants solution (0.1 mM) determined over time by 1 mg mL⁻¹ NHCP-1.

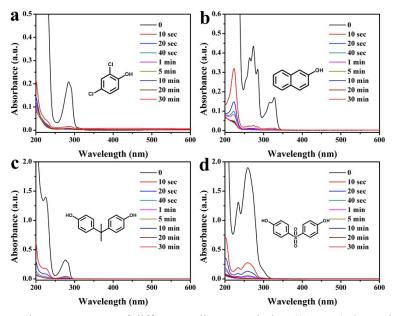


Fig. S7. The UV-Vis spectroscopy of different pollutants solution (0.1 mM) determined over time by 1 mg mL⁻¹ NHCP-2.

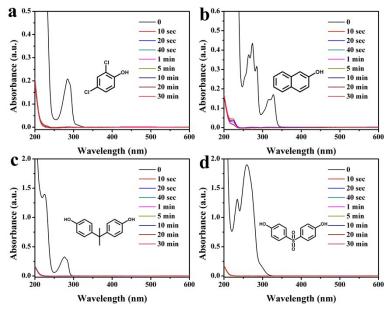


Fig. S8. The UV-Vis spectroscopy of different pollutants solution (0.1 mM) determined over time by 1 mg mL⁻¹ NHCP-3.

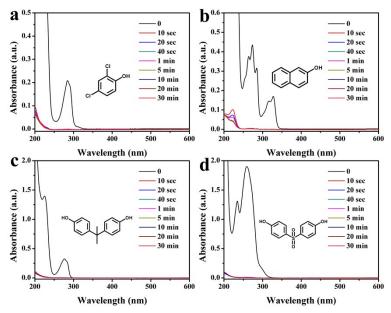


Fig. S9. The UV-Vis spectroscopy of different pollutants solution (0.1 mM) determined over time by 1 mg mL⁻¹ NHCP-4.

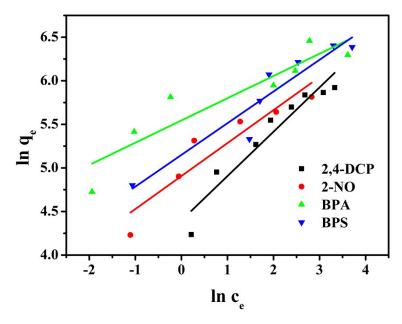


Fig. S10. The Freundlich isotherm model for 2,4-DCP, 2-NO, BPA and BPS.

Table S1. Adsorption isolicitin parameters of Fredhancin models.				
Pollutants	2,4-DCP	2-NO	BPA	BPS
K _F	81.27	135.21	255.91	172.33
n	1.97	2.64	3.92	2.75
R _F ²	0.910	0.850	0.819	0.879

 Table S1. Adsorption isotherm parameters of Freundlich models.