Electronic Supplementary Material (ESI) for Environmental Science: Nano. This journal is © The Royal Society of Chemistry 2022

Supplementary Information

Magnetic conjugated microporous polymer hollow spheres decorated with Fe_3O_4 nanoparticles for selective absorption and sterilization

Zhentao Hu,ª Yingjiao Ma,ª Nan Lu,ª Lijuan Yan,ª Hanxue Sun,ª Zhaoqi Zhu,ª Weidong Liang,ª An Li*a

College of Petrochemical Technology, Lanzhou University of Technology, Langongping Road 287, Lanzhou 730050, P. R. China

*Corresponding author: Prof. An Li, Tel.: +86-931-7823125. Fax: +86-931-7823125. E-mail address: <u>lian2010@lut.cn</u> (A. Li)



Figure 1 (A) EDS photographs of distribution of elements for C and Si on the surface of CMP-1. (B) EDS photographs of distribution of elements for C, Si and Fe on the surface of CMP-2.

Table 1 fitting result of Langmuir

Sample	antibiotic	equation of regression	R ²	q _{max} (mg g ⁻¹)	b _L (L mg⁻¹)
CMP-1@Fe ₃ O ₄	OFL	Y=0.00565X+0.41589	0.9979	176.99	0.01358
CMP-2@Fe ₃ O ₄	OFL	Y=0.00545X+0.35321	0.9996	183.48	0.01543
CMP-1@Fe ₃ O ₄	DIF	Y=0.00490X+0.12375	0.9993	204.08	0.03959
CMP-2@Fe ₃ O ₄	DIF	Y=0.00504X+0.14804	0.9978	198.41	0.03405

Table 2 fitting result of Freundich

Samp	le antibioti	c equation of regression	R ²	k _F	1/n
CMP-1@	Fe ₃ O ₄ OFL	Y=0.36682X+3.32929	0.9381	27.91	0.36682
CMP-2@	Fe ₃ O ₄ OFL	Y=0.41878X+3.01862	0.9666	20.46	0.41878
CMP-1@	Fe ₃ O ₄ DIF	Y=0.39839X+2.45186	0.9597	11.60	0.39839
CMP-2@I	Fe ₃ O ₄ DIF	Y=0.47331X+2.43296	0.9539	11.39	0.47331