

Supporting Information

Metal-Ions-Imprinted Thermo-responsive Materials from Bacterial Cellulose: Synthesis, Characterization, and Adsorption Evaluation

Zhiming Li,^{a†} Hua Tian,^{a†} Yanyan Yuan,^a Xueqiong Yin,^{*a} Xin Wei,^b Liwen Tang,^a Suying Wei,^{*b}

a. Hainan Provincial Fine Chemical Engineering Research Center, Hainan University, Haikou, Hainan, 570228, P.R. China

b. Department of Chemistry and Biochemistry, Lamar University, P.O. Box 10022, Beaumont, TX 77710, USA

This file includes:

Fig.S1

Table S1

[†] Authors contributed equally to the work.

* Corresponding Author: yxq88@hotmail.com (Xueqiong Yin); swei@lamar.edu (Suying Wei)

DOI: 10.1039/x0xx00000x

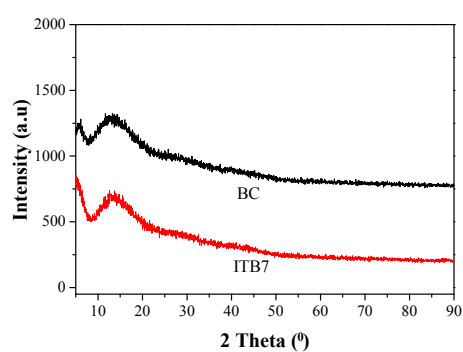


Fig.S1. XRD curves of BC and ITB7.

Table S1 Comparison of adsorption capacity, desorption percentage, elution method of various BC derivatives for the removal of Cu^{2+} ions from the aqueous solution.

Materials	Q_m , maximum adsorption capacity (mg/g)	Desorption percentage (D%)	Elution method	References
ITB7	140.85	98.81%	Water (20°C)	In this work
PEI-BC	148	82.6%	Na_2EDTA	Jin et al. (2018) ^[56]
BC-polyethylenimine	90.1	90%	EDTA	Wang et al. (2015) ^[55]
BCMAH-Cu(II)	36.23	96%	1 M NaCl	Bakhshpour et al. (2017) ^[54]
Amidoximated-BC	84	—	0.1M EDTA	Chen et al. (2009) ^[26]
Diethylenetriamine-BC	63.09	98.9%	EDTA	Shen et al. (2009) ^[27]
Amino-BC	35.83	—	—	Lu et al. (2014) ^[53]
Succinylated-BC	49.75	—	—	Yin et al. (2010) ^[52]

“—”representing no related data