Electronic Supplementary Material (ESI) for RSC Advances.

Use of Porous Cellulose Microcapsules for Water Treatment

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Supporting Information

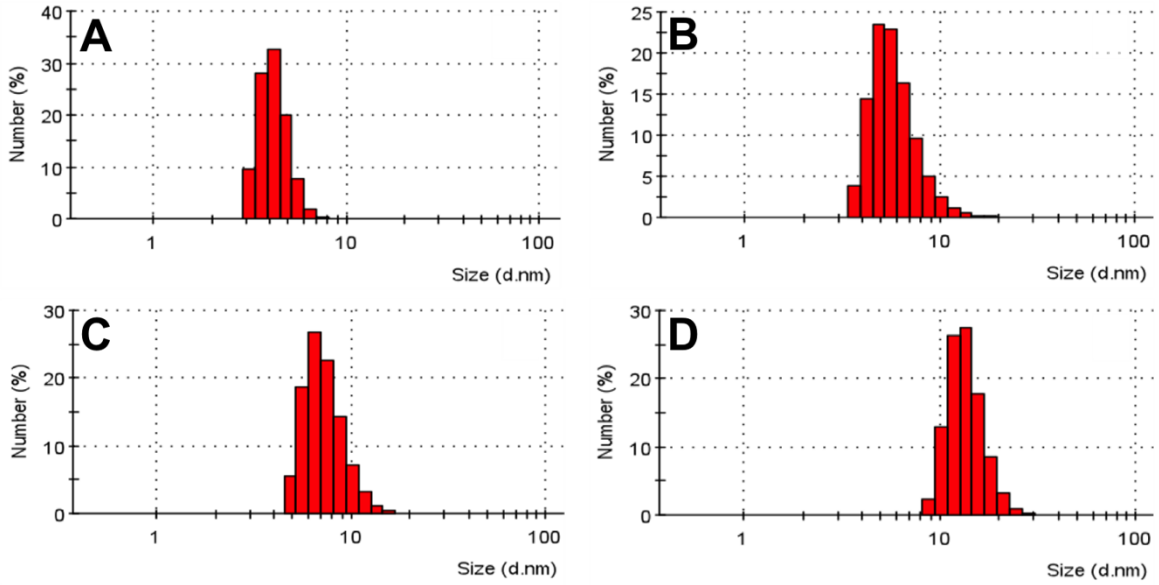

Fig. S1. Number size distribution of Ag-cit (A), Ag-PVP (B), Au-cit (C), Au-PVP NPs (D) as obtained from DLS measurements.

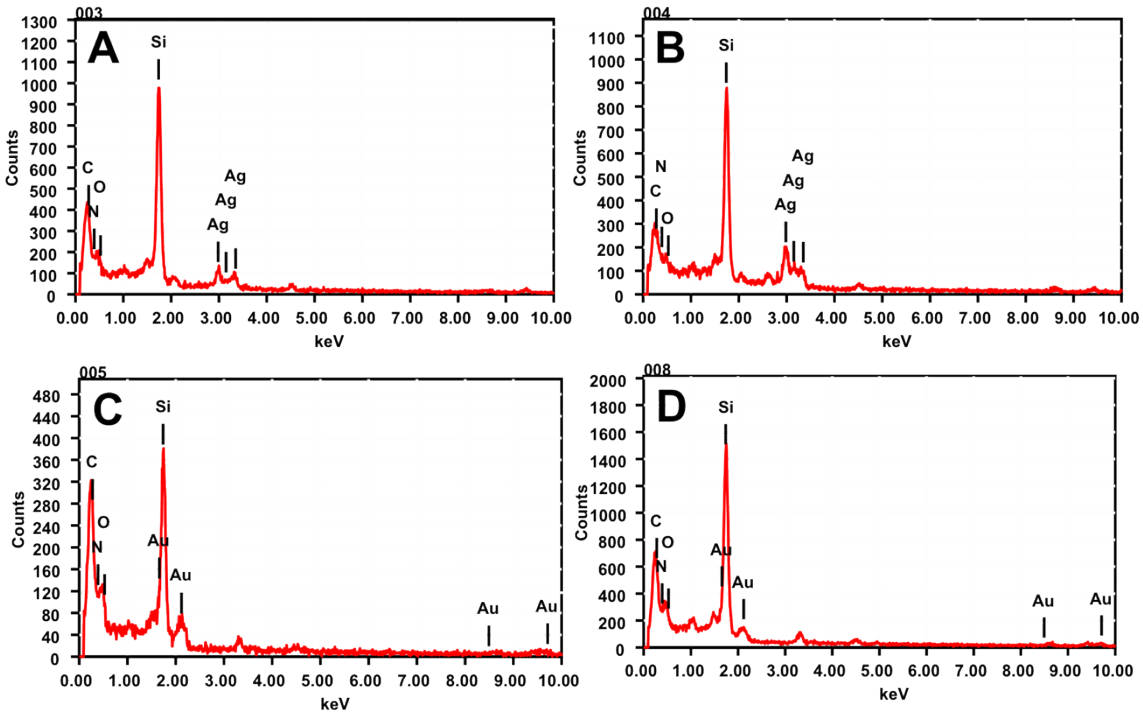

Fig. S2. EDS spectrum of Ag-cit (A), Ag-PVP (B), Au-cit (C), Au-PVP NPs (D) adsorbed on PEI-MC.

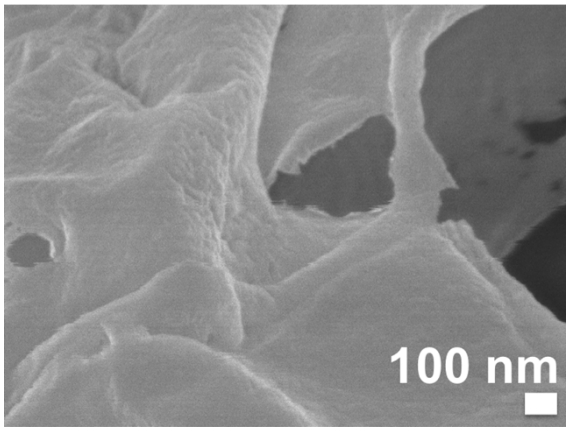

Figure S3. High magnification SEM image of PEI-MC.

Table S1. Various Ag and Au NPs adsorbents and their maximum Langmuir capacities (Q_m) or kinetics adsorption capacities (q_e).

Adsorbent	Langmuir/kinetics adsorption capacity (mg/g)			
	Ag-cit	Ag-PVP	Au-cit	Au-PVP
Amine-functionalized electrospun poly(vinyl alcohol) membrane[21]	56	-	79-84	-
Activated carbon[22]	65	-	-	-
Chitosan-functionalized cellulosic nanofibers[23]	13.1	13.1	17.9	17.4
Biomimetic NiO[24]	-	54.8	-	76.8
PVA/Gluten hybrid nanofibers[25]	31.8	-	36.5	-
Amine-functionalized block copolymer[26]	225	115.2	98	108.2
PEI-MC (this study)	270	208	116	50

The equations in Figure 9 were formed by plotting the relevant XY scatter chart and using the linear regression function in Microsoft Excel with order = 2.