

Supplementary Material (ESI) for Nanoscale

Preparation and catalytic ability to hydrogen peroxide of Ag nanoparticles highly dispersed via hyperbranched copolymer

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Table S1. Structure parameters of the HPCs.

Sample	St (mol %) ^a	CMS(mol %) ^b	M_n (KDa) ^c	M_w (KDa) ^c	M_w/M_n ^c	2°-BCl/1°-BCl ^d
HPC-1	30	70	7.4	35.1	4.74	0.28
HPC-2	70	30	6.9	21.8	3.13	0.13

^a content of styrene in total monomers; ^b content of p-chloromethyl styrene in total monomers;
^c determined by GPC; ^d determined by ¹H NMR.

Fig S1. the structure of HPCs

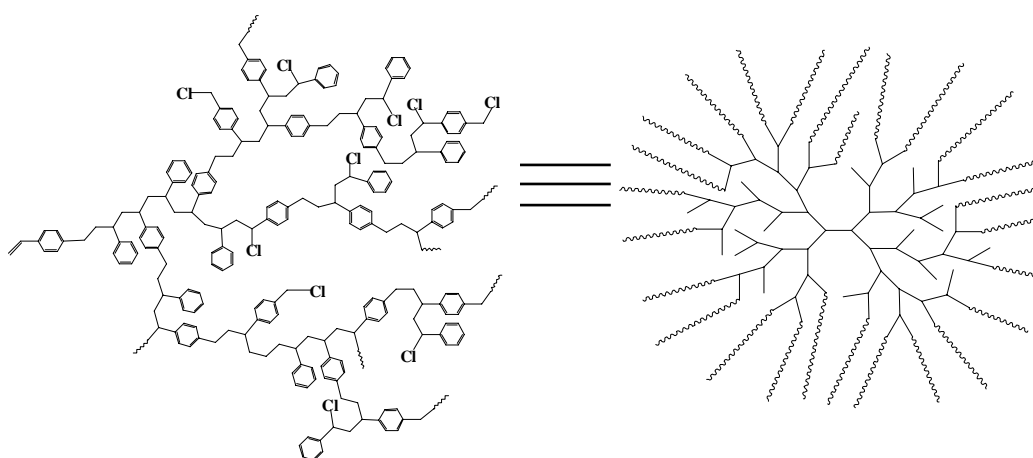


Fig. S2. UV-vis spectra of (a) Ag NPs, (b) HPC-1/Ag NPs, (c) HPC-2/Ag NPs dispersed in toluene after half a year.

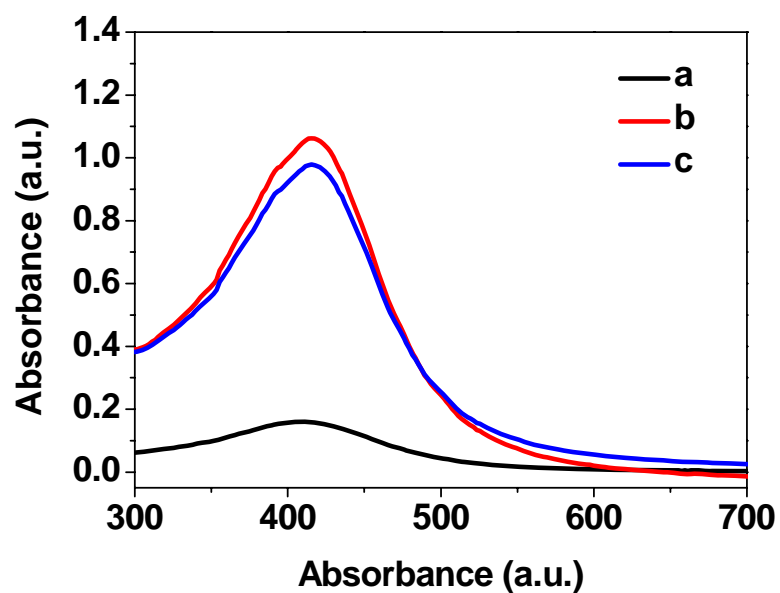


Fig S3. XPS spectrum for (a) Ag NPs, (b) HPC-1/Ag NPs, (c) HPC-2/Ag NPs. The insets in the expanded spectra are detailed scan spectra of Ag_{3d}.

