

Electronic supplementary information

Aqueous Synthesis of Silver Nanoparticles Immobilized on Cationic Cellulose Matrix and Their Catalytic and Antibacterial Activities

Jun You^a, Mengxiong Xiang^b, Haoze Hu^a, Jun Cai^b, Jinping Zhou^{*a}, Yaping Zhang^c

^aDepartment of Chemistry, Wuhan University, Wuhan 430072, China

^bHubei Provincial Cooperative Innovation Center of Industrial Fermentation and Key Laboratory of Fermentation Engineering (Ministry of Education), Hubei University of Technology, Wuhan 430068, China

^cState Key Laboratory Cultivation Base for Nonmetal Composites and Functional Materials, Southwest University of Science and Technology, Mianyang, 621010, China

* Corresponding author, Tel: +86-27-87219274, Fax: +86-27-68754067

E-mail: zhoujp325@whu.edu.cn (J. Zhou)

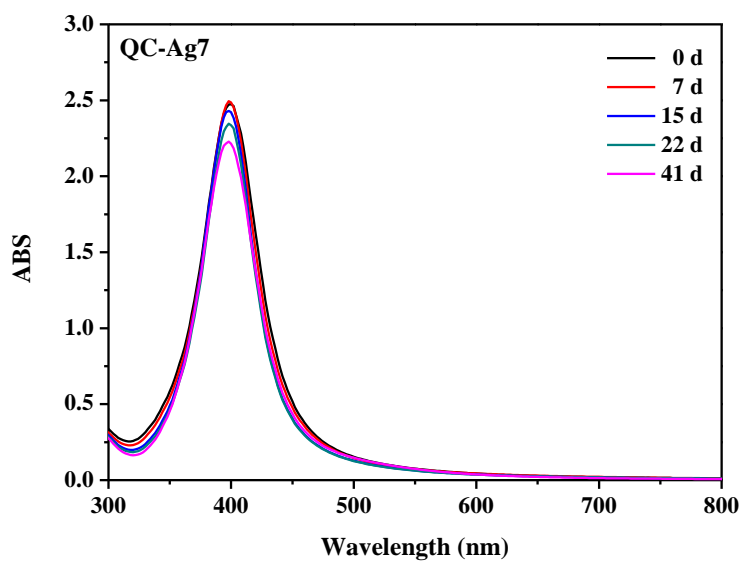


Fig. S1 Time dependence of the UV-Vis absorption spectra of the QC-Ag7 aqueous solutions.

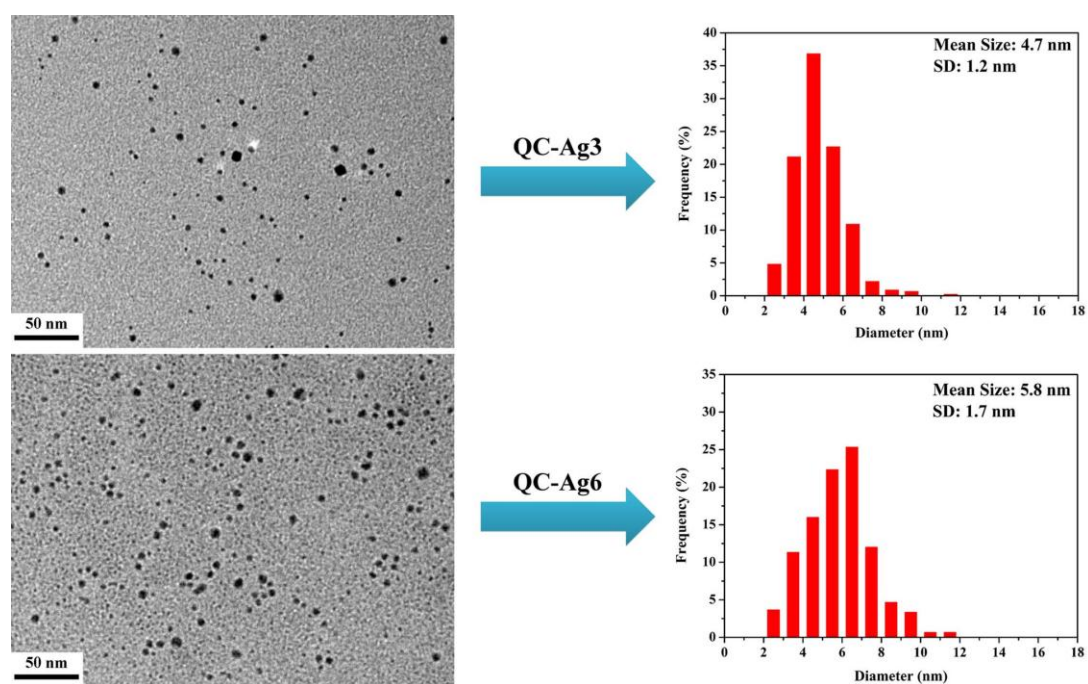


Fig. S2 TEM images (left, the scale bar is 100 nm) and size distribution histograms (right) of the redispersed QC-Ag NPs in distilled water.

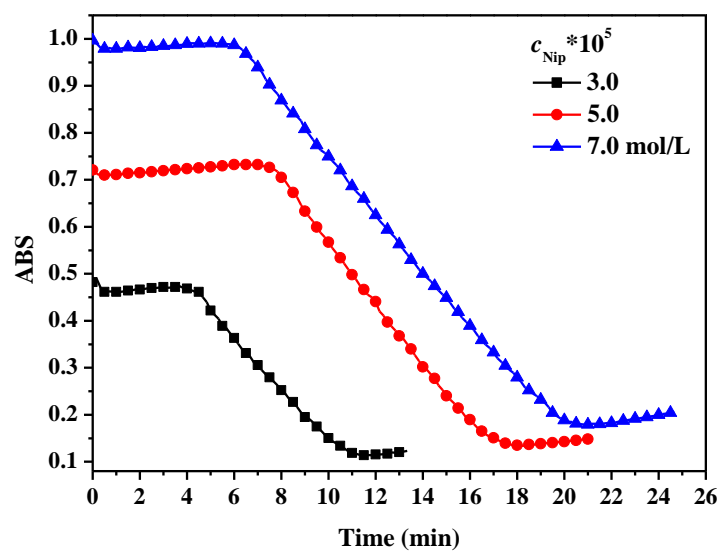


Fig. S3 Time dependence of the absorption of Nip at 400 nm at various initial Nip concentrations in the presence of QC-Ag7 NPs. ($c_{\text{Ag NPs}} = 3.7 \times 10^{-6}$ mol/L, $c_{\text{NaBH}_4} = 8 \times 10^{-3}$ mol/L)