

Electronic Supplementary Information

Role of Base in the Formation of Silver Nanoparticles Synthesized Using Sodium Acrylate as Dual Reducing and Encapsulating Agents

Shun Nishimura, Derrick Mott, Atsushi Takagaki, Shinya Maenosono,* and Kohki Ebitani*

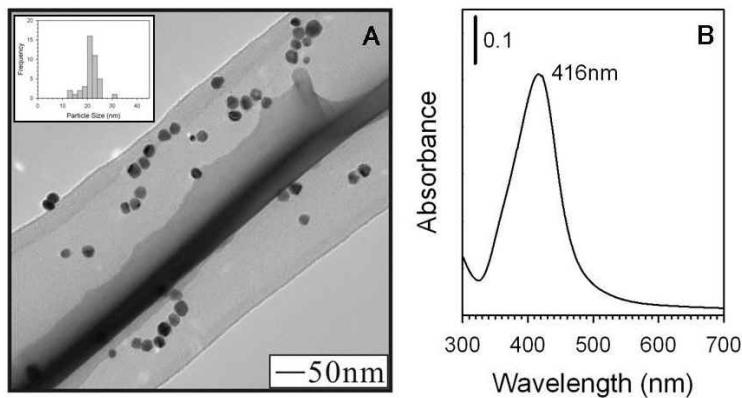


Fig. S1 (A) TEM image and (B) UV-vis spectrum of Ag NPs synthesized using sodium acrylate as dual reducing and encapsulating agent (see Ref. 16).

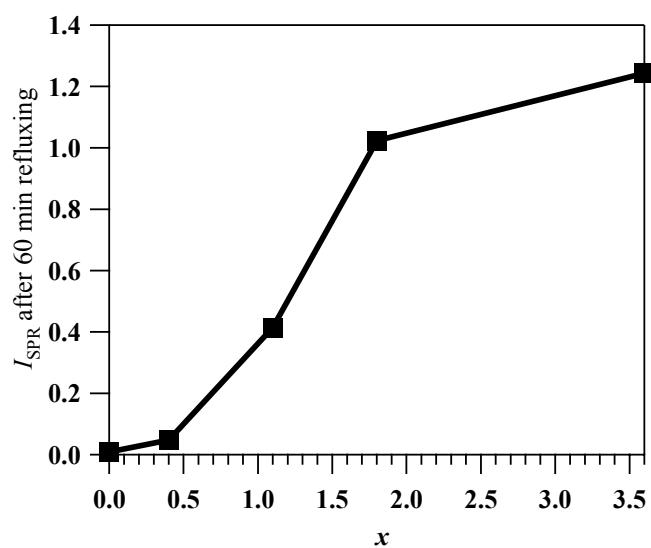


Fig. S2 The intensity of the SPR band at 405 nm after 60 min refluxing plotted versus the x .

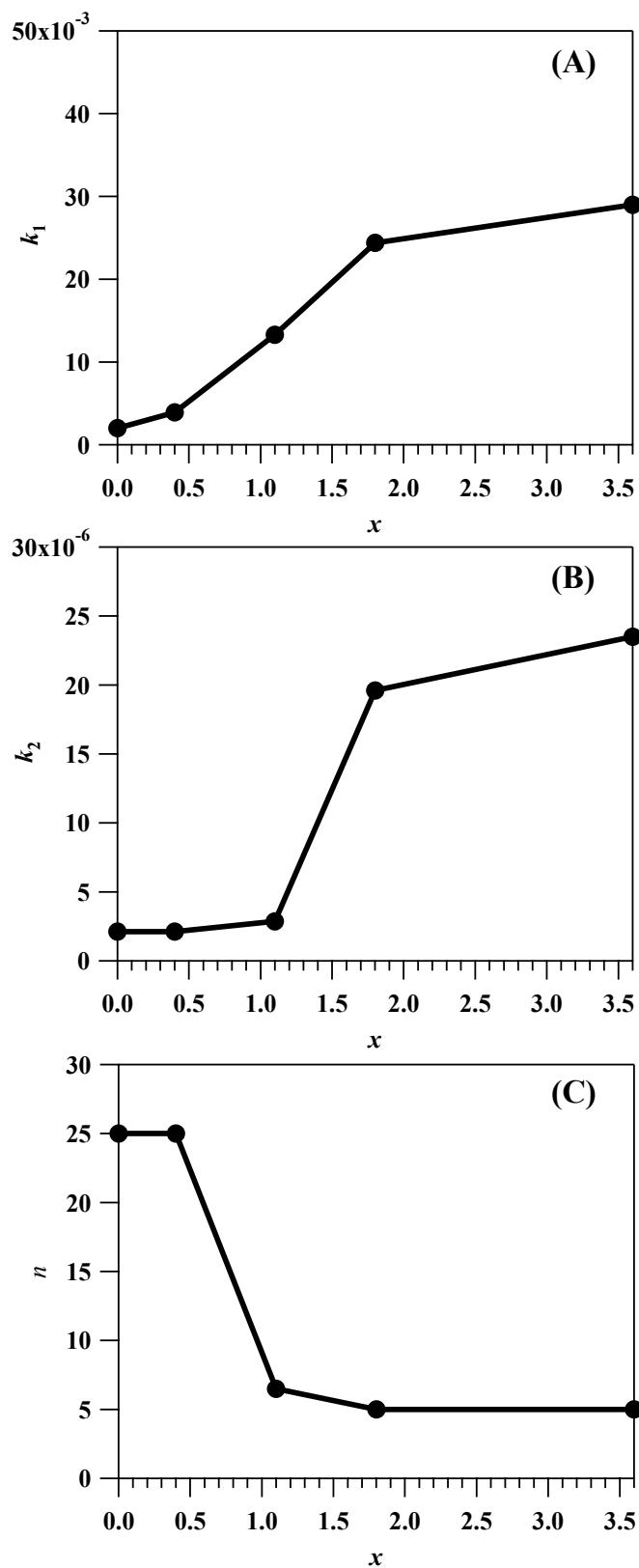


Fig. S3 The values of (A) k_1 , (B) k_2 and (C) n obtained by a fitting plotted versus the x .

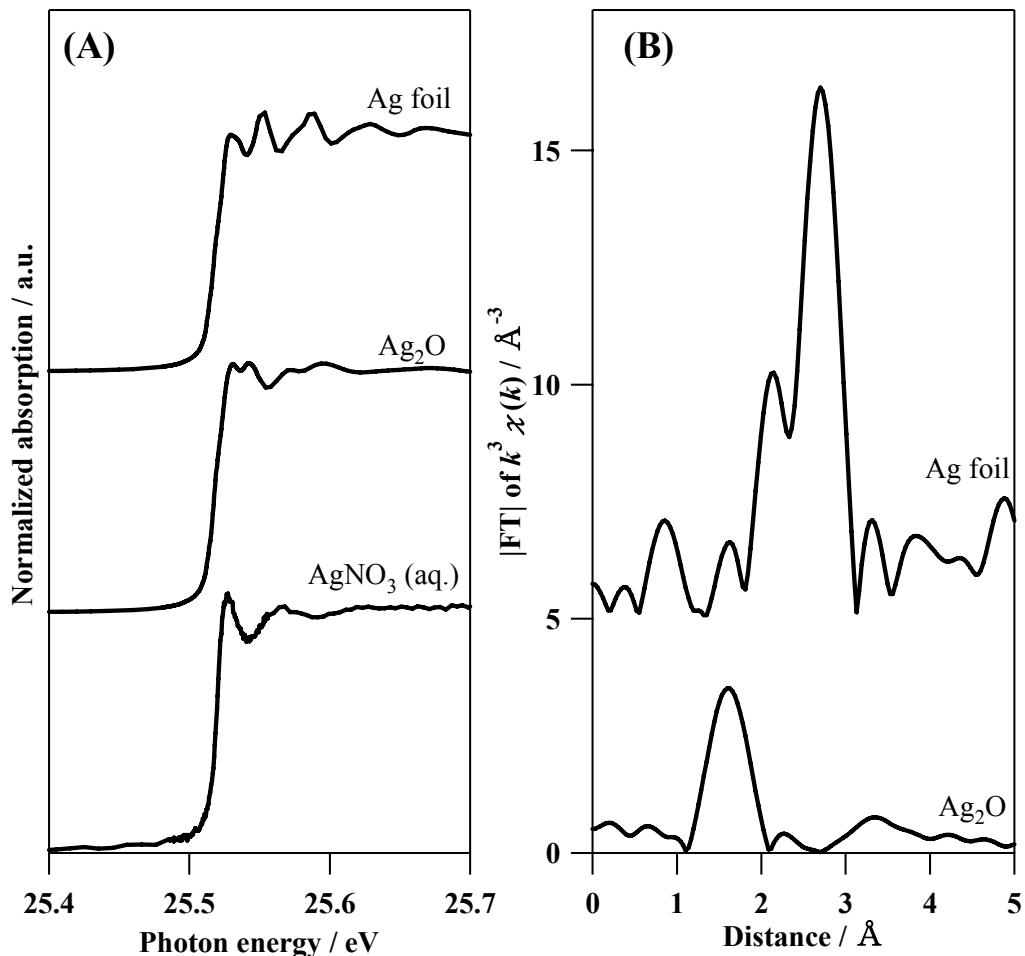


Fig. S4 (A) The XANES spectra of reference materials such as Ag foil, Ag₂O powder, and AgNO₃ (aq.). (B) The |FT| of EXAFS for Ag foil and Ag₂O powder.

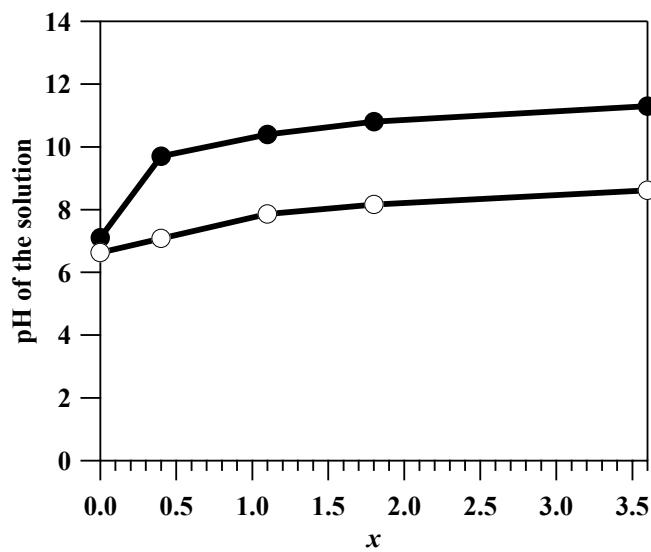


Fig. S5 The values of pH of the reaction mixture plotted versus the x . Filled and open circles correspond to the pH values of samples before and after refluxing for 60 min, respectively.

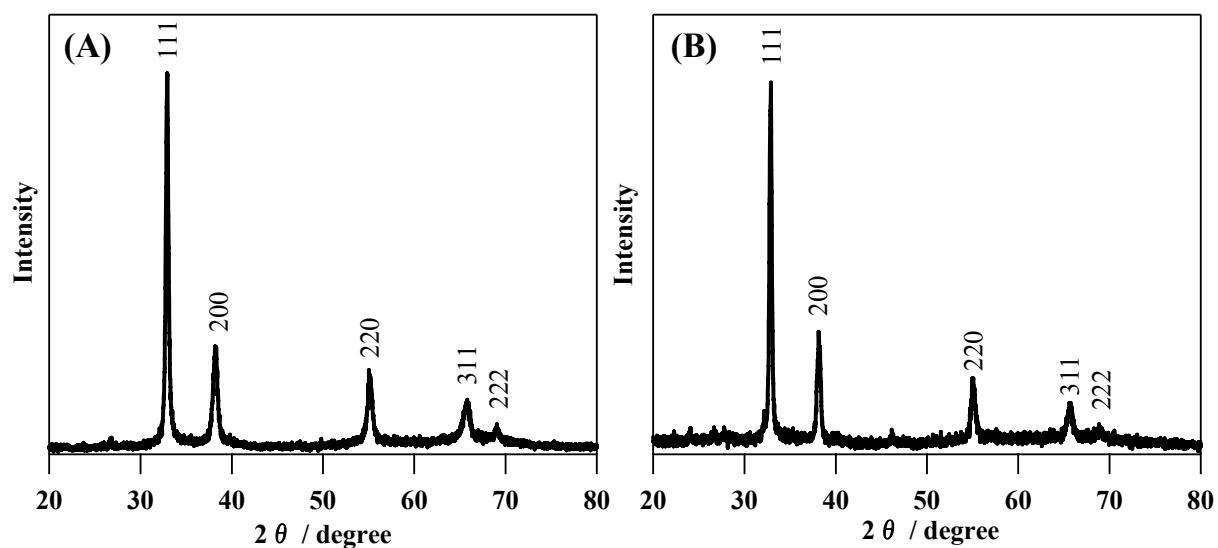


Fig. S6 XRD patterns of precipitate before heating in the cases of $x =$ (A) 1.1 and (B) 3.6.

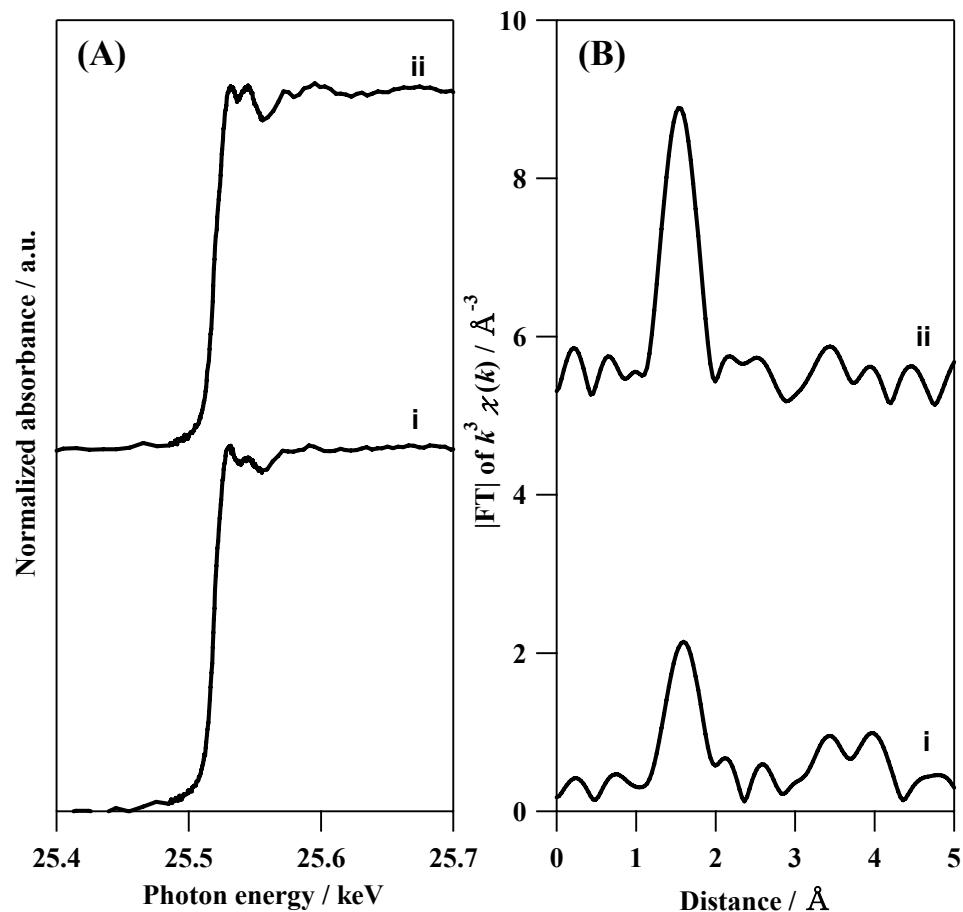


Fig. S7 (A) The XANES spectra and (B) the $|\text{FT}|$ of EXAFS of the reaction mixtures before heating in the cases of $x =$ (i) 1.1 and (ii) 3.6.

