

Electronic Supplementary Information (ESI)

# Shape-Controlled Synthesis of Silver Crystals Mediated by Imidazolium-based Ionic Liquids

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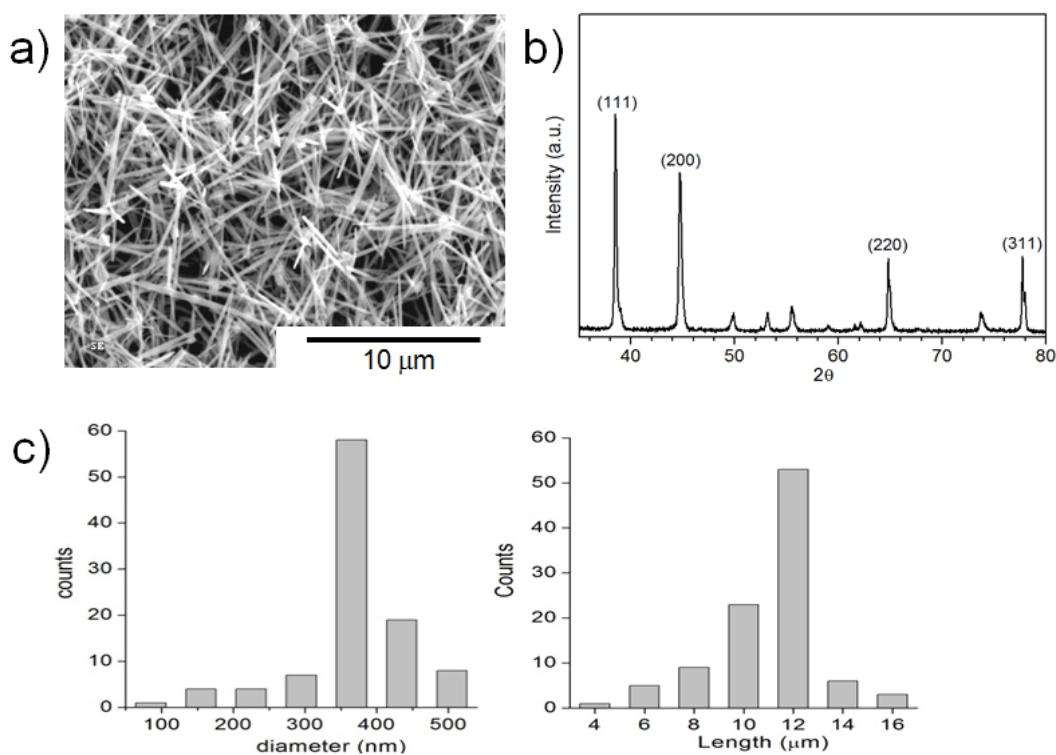


Figure S1. (a) FE-SEM images, (b) XRD-patterns and (c) size histogram of Ag nanowires synthesized at a reaction temperature of 160°C and bmim-MeSO<sub>4</sub>/ethylene glycol molar ratio of 0.5.

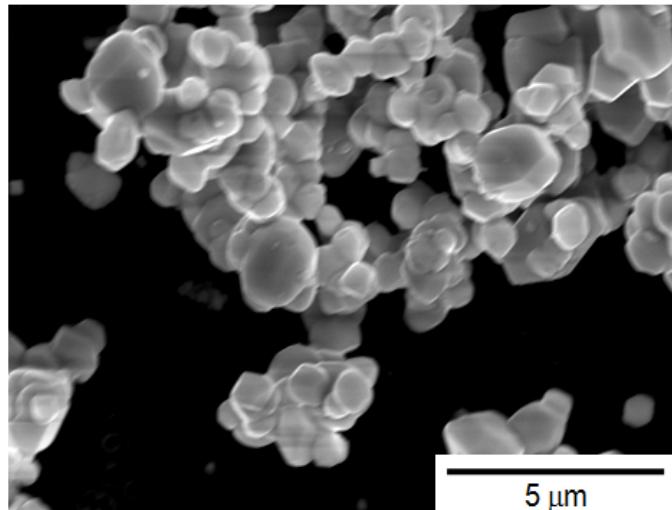


Figure S2. FE-SEM image of Ag crystals synthesized in pure IL (without EG). In this experiment, 0.625 mmol of  $\text{AgNO}_3$  was dissolved in 10 ml of bmim- $\text{MeSO}_4$  and stirred at room temperature for 15 min. Under stirring, the mixture was heated to 160°C and kept for 2 h. After cooling to room temperature, the product are filtered and washed with an excess of ethanol, followed by drying at 80 °C.

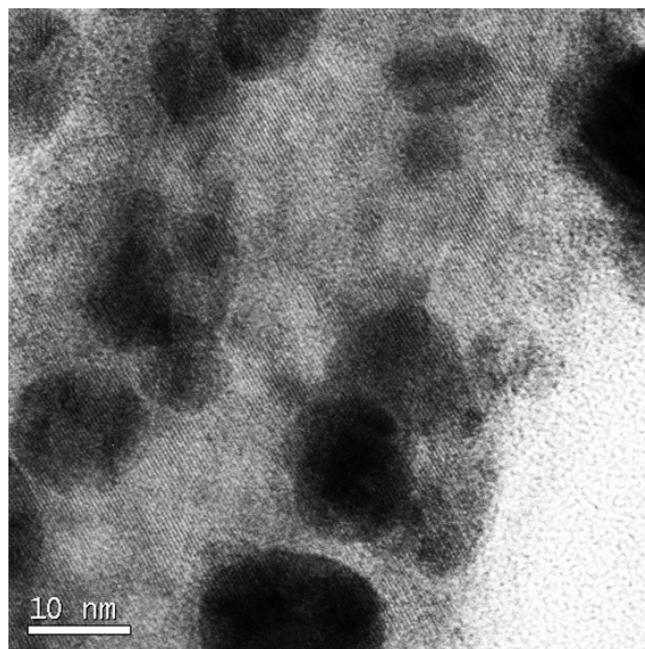


Figure S3. HR-TEM image of Ag crystals obtained after 40 min at a reaction temperature of 160°C and IL/EG molar ratio of 0.5. It is seen that the lattice fringes are uninterrupted across neighboring Ag particles.