Controlled synthesis of monodisperse silver nanoparticles supported layered double hydroxides catalyst

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Supporting Information

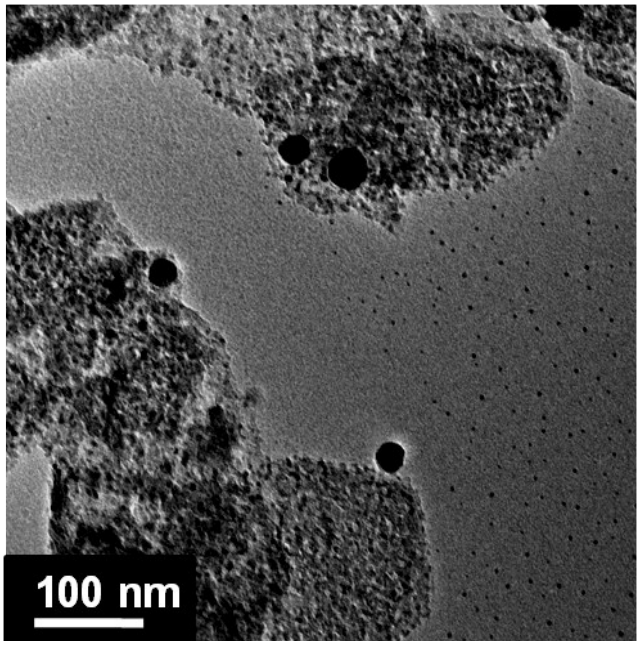


Figure S1

Figure S1: TEM image showing the monodisperse Ag nanoparticles deposited on LDH surface alongwith weakly bound Ag nanoparticles separated from the LDH surfaces after sonication.

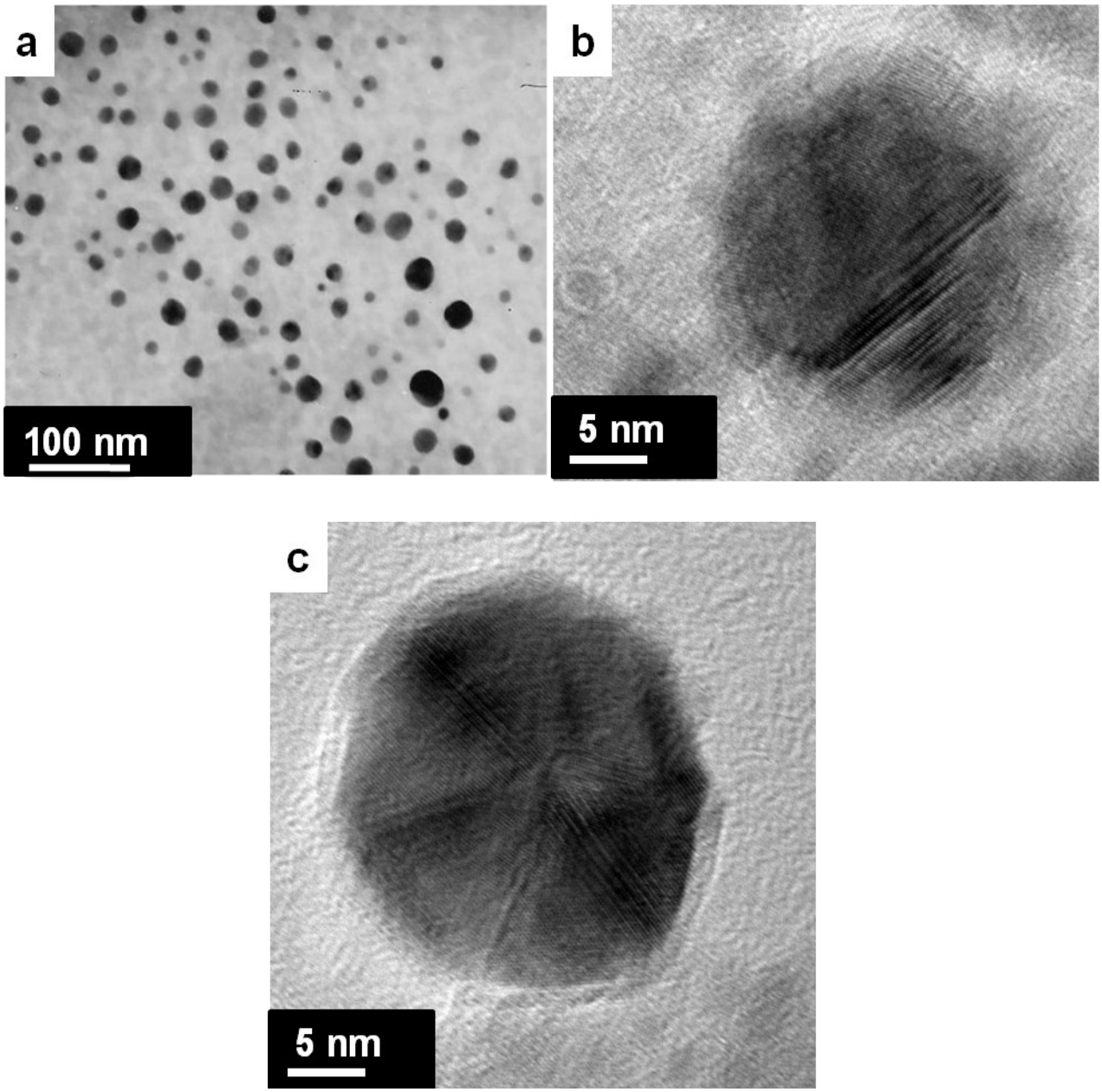


Figure S2

Figure S2. (a) TEM image of Ag nanoparticles formed in the aqueous phase during chemical reduction using ZnAl-(citrate) LDH. HRTEM images of the Ag nanoparticles separated from the LDH surface exhibit twinned growth (b) linear twin (c) multi-twin of Ag nanoparticles.

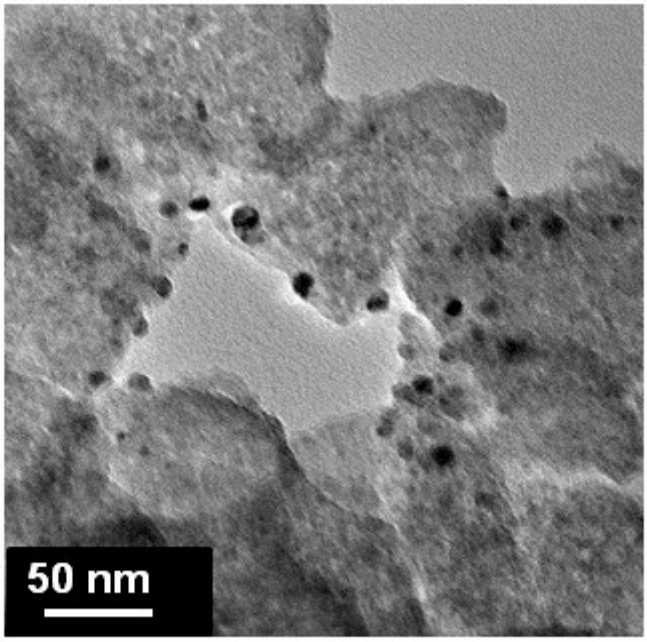
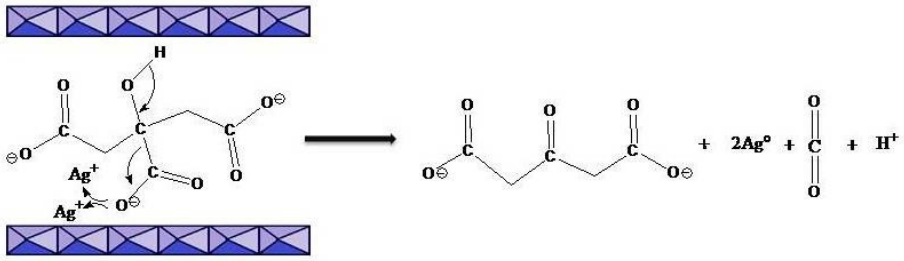


Figure S2

Figure S3: TEM image showing the relatively larger Ag nanoparticles at the edges of the LDH sheets. These nanoparticles are weakly adhered to the LDHs. During sonication these nanoparticles are separated from the LDH edges.



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36 **Figure S4**

37 Figure S4: Probable mechanism of Ag nanoparticle formation by the reductive

38 decomposition of citrate anions intercalated in the interlayer of LDHs.

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