Supplementary material (ESI) for Journal of Materials Chemistry

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Ionic liquids-facilitated synthesis and catalytic activity of highly dispersed Ag nanoclusters supported by TiO_2

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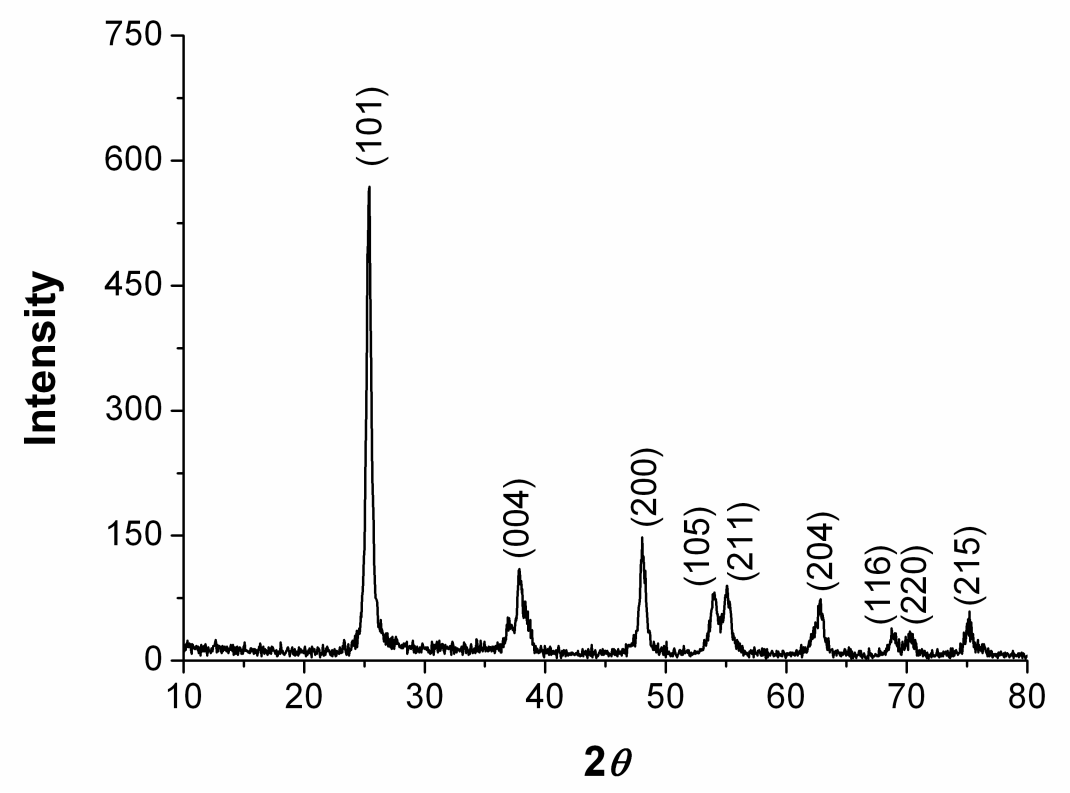
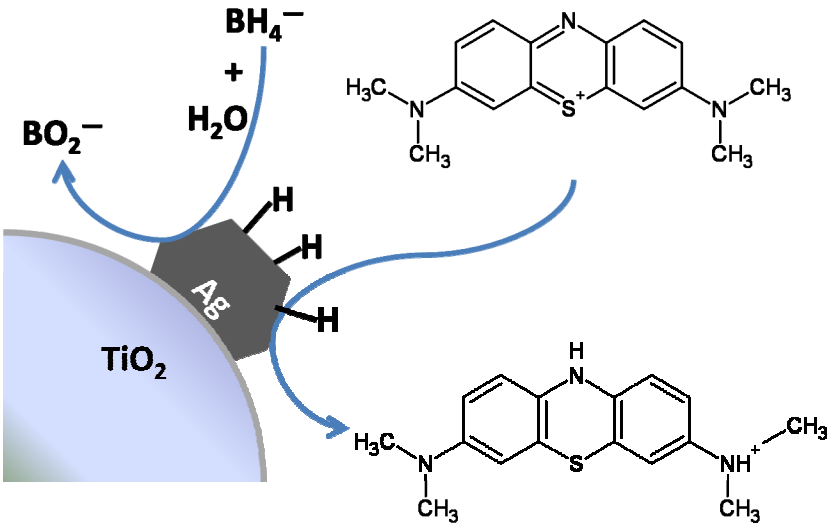
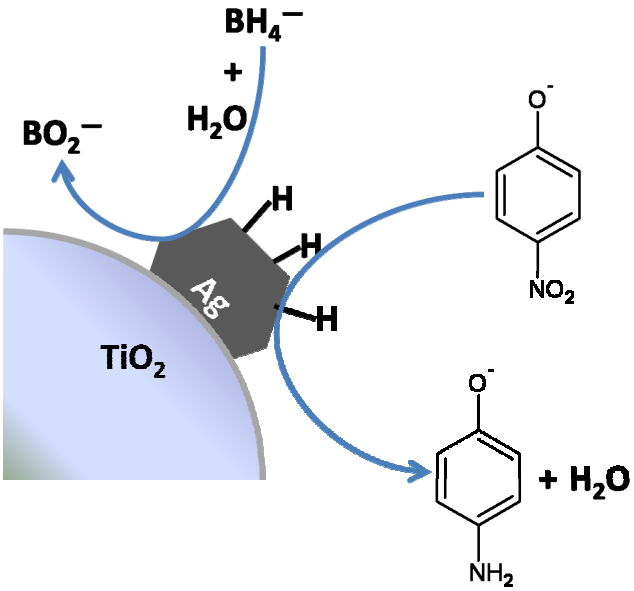


Fig. S1 Powder XRD results of the as-synthesized Ag/TiO_2 particles indicating that TiO_2 exists in the anatase form (ICDD-JCPDS #21-1272).



Scheme S1. Postulated reaction pathways of methylene blue (MB) reduction catalyzed by Ag nanoclusters supported on TiO_2. Hydrogen species liberated from BH_4^- react with MB on the surface of Ag clusters.



Scheme S2. Postulated reaction pathways of 4-nitrophenol (4-NP) reduction catalyzed by TiO_2-supported Ag nanoclusters. Surface hydrogen species generated from BH_4^- reduces 4-NP ions to form 4-aminophenolate ions.