

Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is (c) The Royal Society of Chemistry 2010

Supporting Information

Converting AgCl nanocubes to sunlight-driven plasmonic AgCl:Ag nanophotocatalyst with high activity and durability

Changhua An*, Ruiping Wang, Shutao Wang and Xiaoyun Zhang

State Key Laboratory of Heavy Oil Processing, College of Chemistry and Chemical Engineering, China University of Petroleum, Qingdao, Shandong 266555, P. R. China

Email: anchh@upc.edu.cn

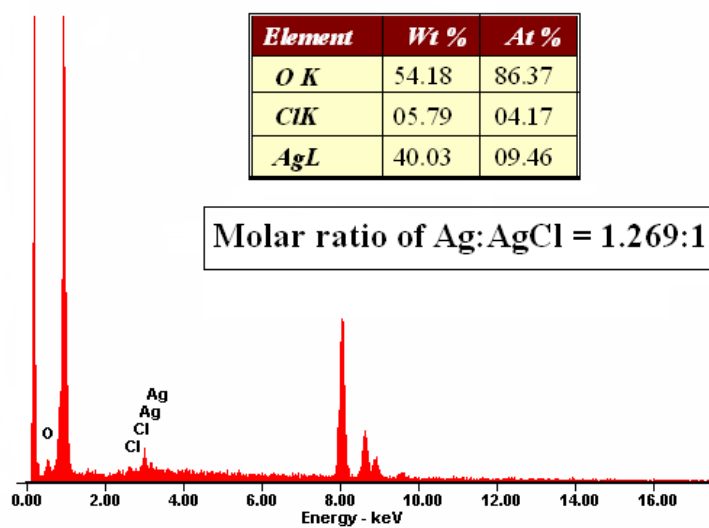


Fig. S1 EDS spectra of as-synthesized AgCl:Ag nanoparticles

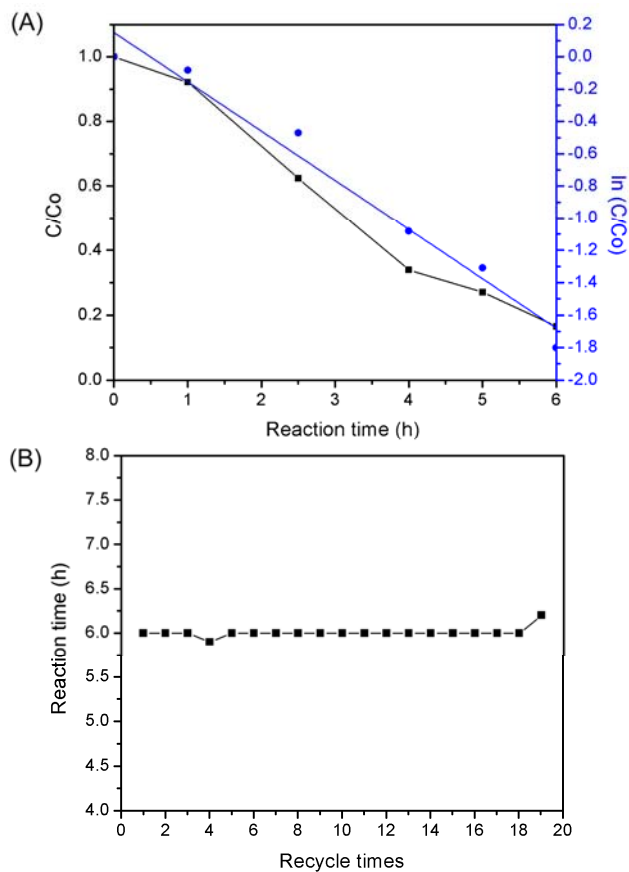


Fig. S2 (A) The normalized concentration of the MO molecules as a function of reaction time in both linear (black) and logarithmic (blue) scale, (B) The reaction time for 19 successive complete degradation of MO molecules catalyzed with the same batch of AgCl:Ag nanoparticles under homogeneous visible-light irradiation

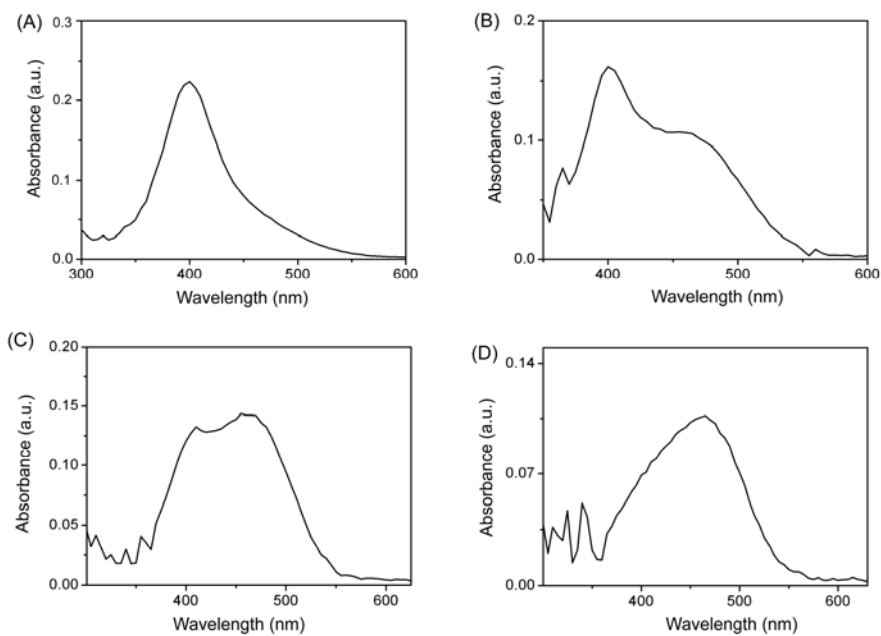


Fig. S3 The absorption spectra of MO molecules the cycling reactions before a mixture of the MO molecules with the AgCl:Ag nanoparticles was exposed to the sunlight. (A) 1st-3rd reaction, (B) 4th reaction, (C) 5th reaction, (D) 6th-19th reaction.

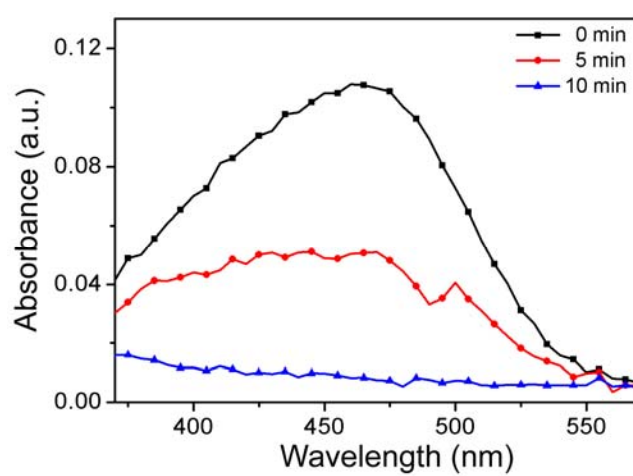


Fig. S4 Absorption spectra of MO molecules in 6-15th successive reactions.