

## Supporting information

### Glycerol as green hydrogen source for catalytic reduction over anisotropic silver nanoparticles

by

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**The characterization and catalytic activity figures and data for AgNPs sample (C0) prepared without any etchant.**

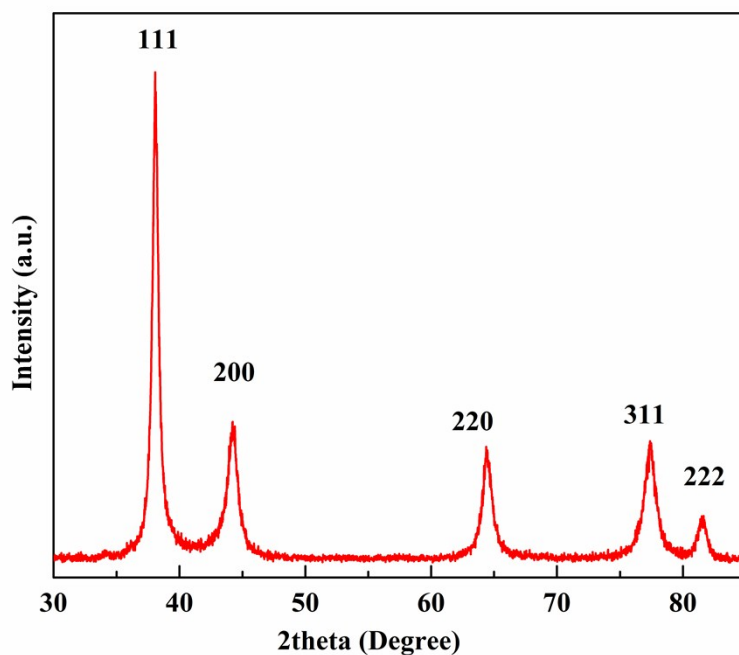


Fig.S1. X-ray powder diffraction pattern of C0 AgNPs confirms the presence of pure FCC silver.

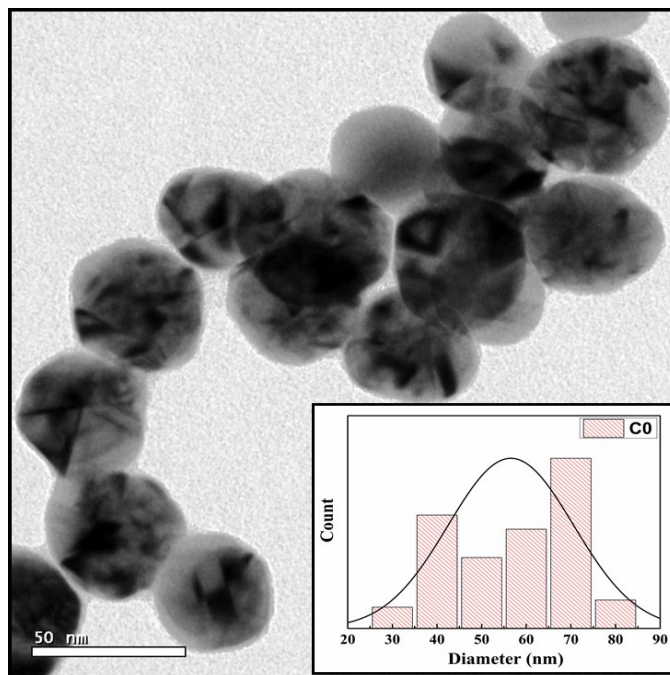


Fig.S2. TEM image of C0 AgNPs showing faceted spherical particles. Particle size distribution is shown in the inset of TEM micrograph.

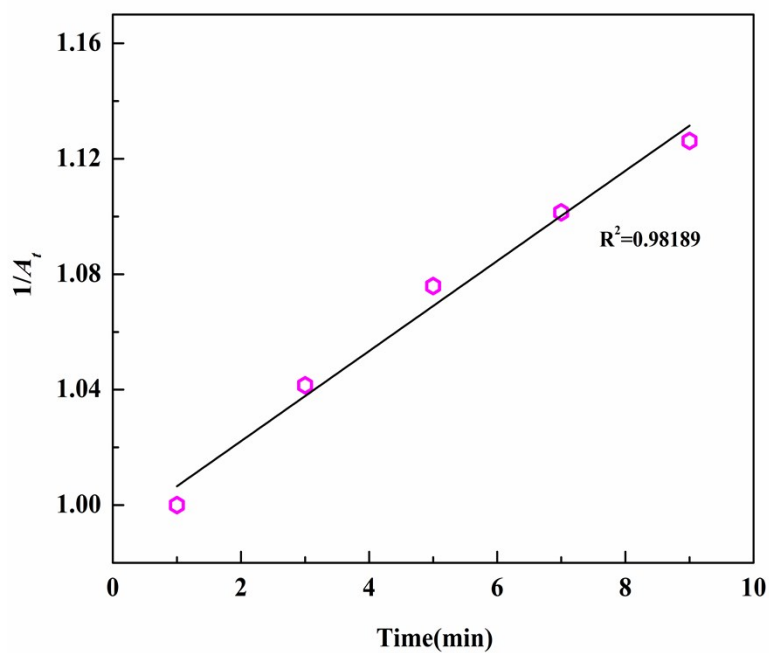


Fig.S3. Second order kinetics plot showing variation of  $1/A_t$  [absorbance ( $A$ ) measured at  $\lambda=406$  nm] versus time ( $t$ ) for C0 AgNPs.

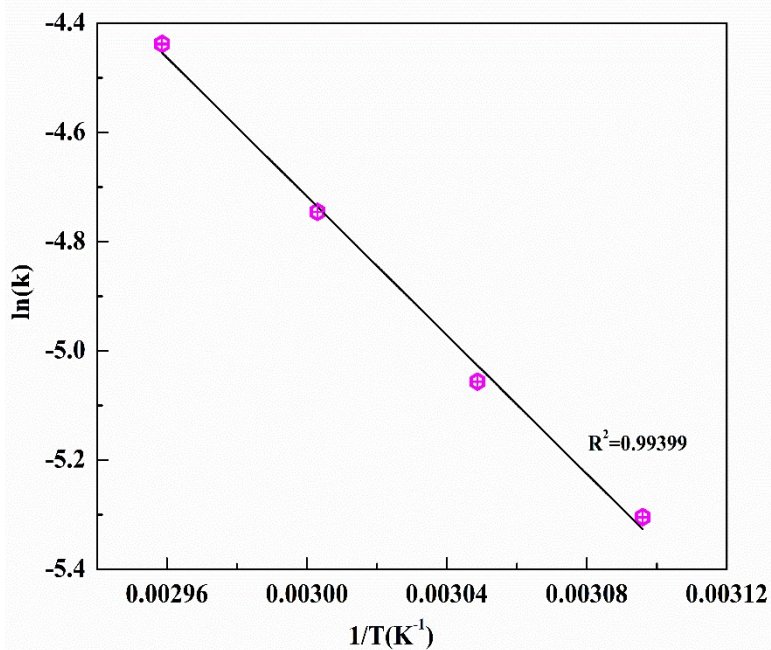


Fig.S4. Arrhenius plot of Nip reduction reaction catalyzed by C0 AgNPs. The activation energy was found to be 52.77 kJ/mole. Please note that the error bars are smaller in size than the symbol used for data points.