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ARTICLE TYPE

Creation and Luminescence of Size-selected Gold Nanorods

Y. Chen,^{*a} Y. Zhang,^a D. J. S. Birch^a and A. S. Barnard^b

5 Electronic Supplementary Information

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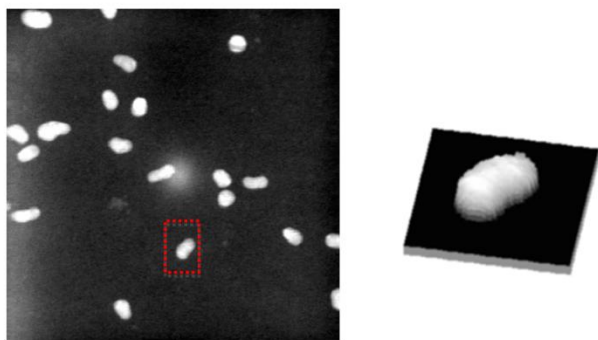


Fig. S1 Electron micrograph taken from Au₈₈₆₀ nanoparticles on an amorphous carbon TEM support using scanning transmission electron microscopy with a high angle annular dark field detector and an intensity 3D plot of one particle as labelled.

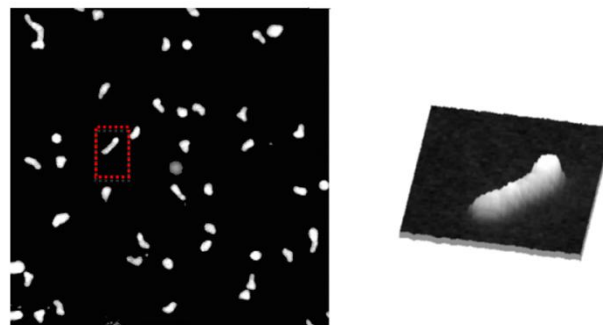


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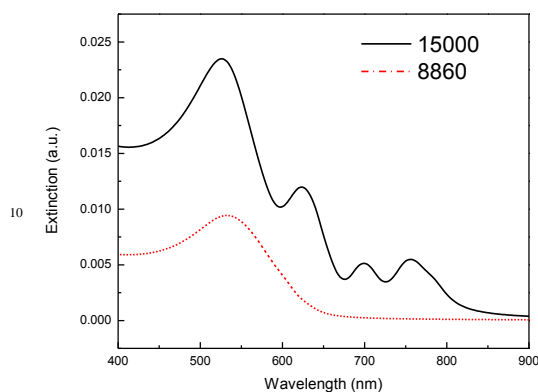


Fig. S2a Calculated extinction spectra of Au₁₅₀₀₀ and Au₈₈₆₀ nanocluster ensembles with aspect ratio distributions as shown in fig. 1b and fig. 2c.

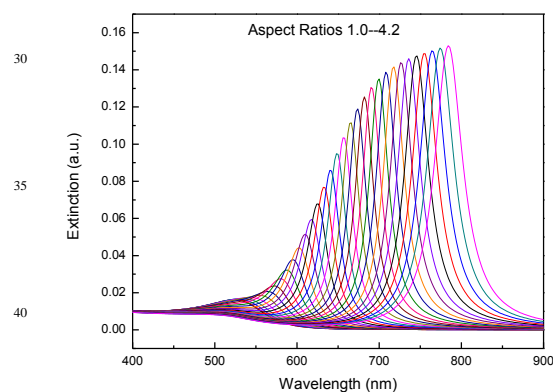


Fig. S2b Calculated extinction spectra of elongated ellipsoid with varying aspect ratios and sphere using Mie theory in the dipole approximation [SR1] with dielectric function of gold from SR2.

15 Notes and references

SR1. S. Link, M. B. Mohamed, and M. A. El-Sayed, *J. Phys. Chem. B* 1999, **103**, 3073.

SR2. F. Hao, and P. Nordlander, *Chem. Phys. Lett.* 2007, **446**, 115.

⁵⁰ ^a *Photophysics Group, Centre for Molecular Nanometrology, Department of Physics, SUPA, University of Strathclyde, John Anderson Building, 107 Rottenrow, Glasgow, G4 0NG, UK. Fax: +44 141 5522891; Tel: +44 141 5483087; E-mail: y.chen@strath.ac.uk*

⁵⁵ ^b *Virtual Nanoscience Laboratory, CSIRO Materials Science & Engineering, Clayton, 3168, Australia. Fax: +61-3-9545-2059; Tel: +61-4-9545-7840; E-mail: amanda.barnrd@csiro.au*

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