

## Supplementary Material

# Control of gold nanostructure morphology by variation of temperature and reagent ratios in the Turkevich reaction

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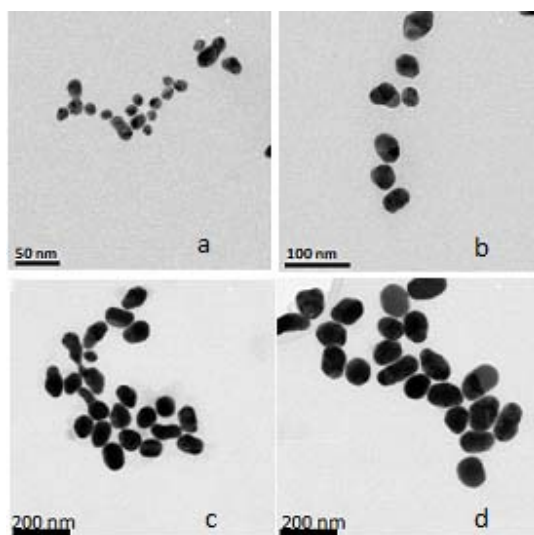
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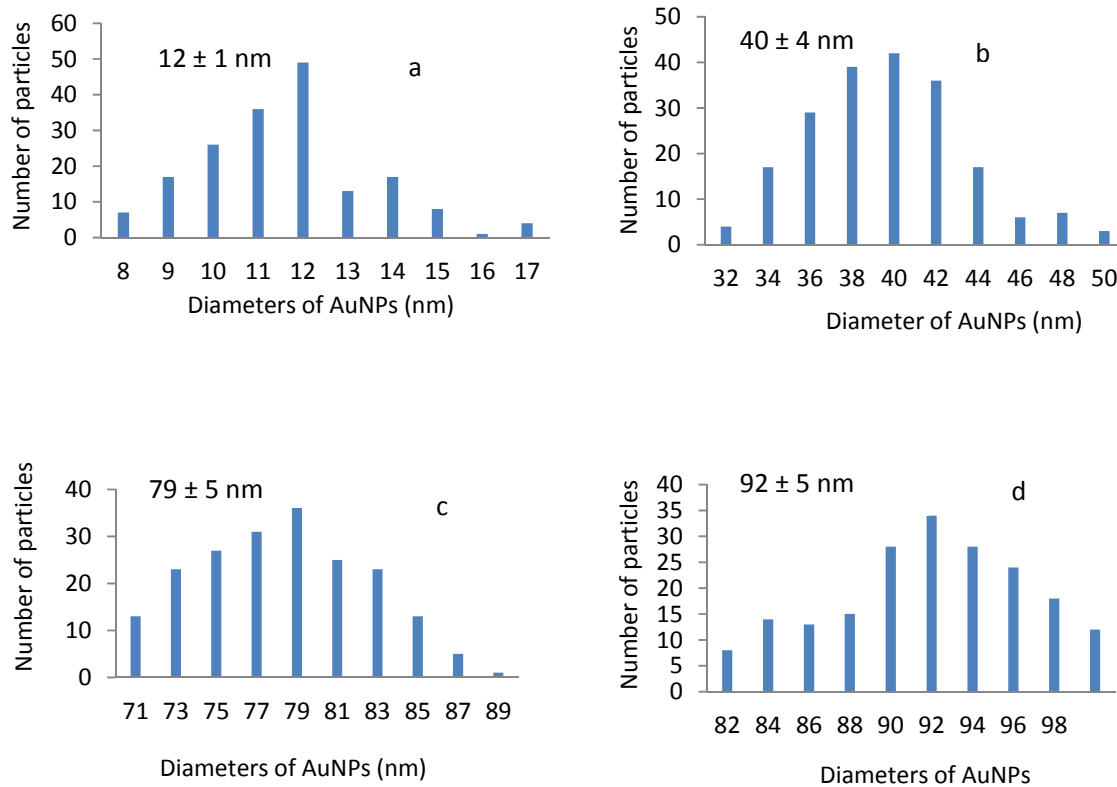
E-mail: [vladimir.golovko@canterbury.ac.nz](mailto:vladimir.golovko@canterbury.ac.nz), [antony.fairbanks@canterbury.ac.nz](mailto:antony.fairbanks@canterbury.ac.nz)

The electronic supplementary information provides representative transmission electron microscopy (TEM) images and particle size distributions of selected gold nanosystems.

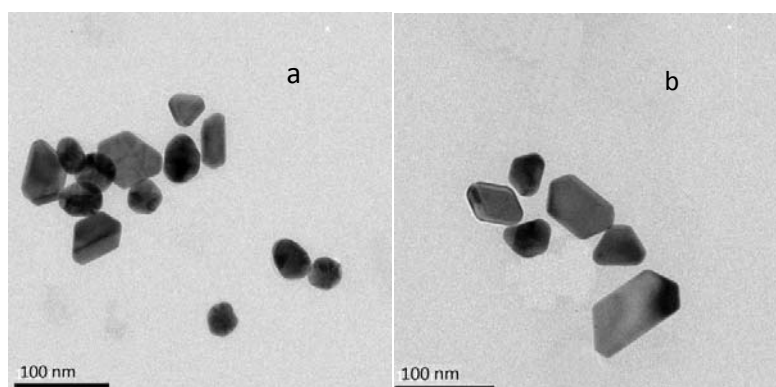
At least 200 nanoparticles were measured for the statistics of particle size distributions in all cases.



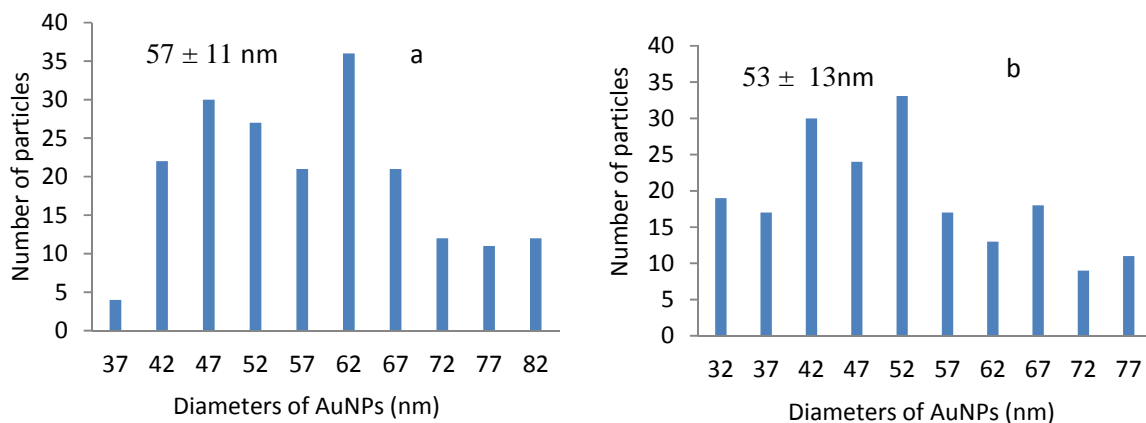
**Fig. S1** TEM images of spherical and quasi spherical Au NPs obtained in experiments **(1a)** and **(1b)**: (a) R value of 8.7 (reflux or 70 °C), (b) R value of 1.7 (reflux or 70 °C), (c) R value of 0.8 (reflux), and (d) R value of 0.7 (reflux).



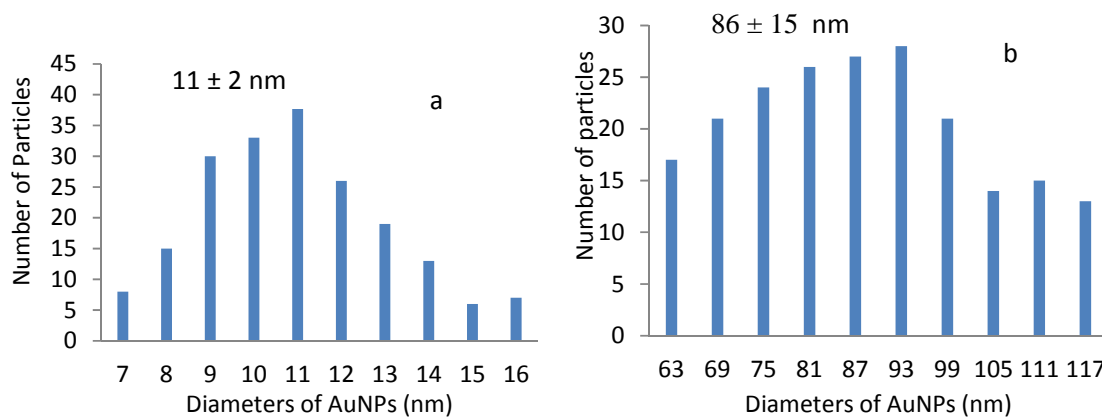
**Fig. S2** Size distribution histograms of spherical and quasi spherical Au NPs obtained in experiments **(1a)** and **(1b)**: a) R value of 8.7 (reflux or 70 °C), b) R value of 1.7 (reflux or 70 °C), c) R value of 0.8 (reflux), and d) R value of 0.7 (reflux).



**Fig. S3** TEM images of spherical NPs obtained (a) in **(2a)** and (b) in **(3a)**.



**Fig. S4** Size distribution histograms of Au NPs obtained in (2a) and (3a).



**Fig. S5** Size distribution histograms: (a) the diameter of the nanowires obtained in experiment (4a) and (b) individual particles discernable in the chains obtained in experiment (4b).