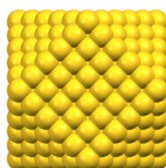


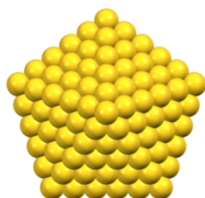
Metastability of the atomic structures of size-selected gold nanoparticles

Dawn M. Wells[†], Giulia Rossi[‡], Riccardo Ferrando[‡] and Richard E. Palmer^{†*}

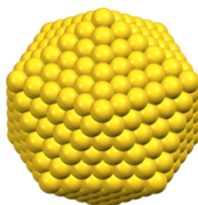
Au₅₆₁ Cuboctahedron (0,0)



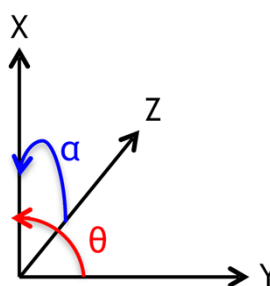
Au₅₆₁ Ino-decahedron (0,0)



Au₅₆₁ Icosahedron (0,0)



Cluster rotated
through (θ, α)



Supplementary figure S1. Orientation of cluster structures used for electron scattering simulations

Geometrical models of the Au₅₆₁ cuboctahedron, Ino-decahedron and icosahedron are shown alongside a key to the angle of orientation of the cluster (θ, α) used in the electron scattering simulations.

SI Video legend

Supplementary video S2. Au₅₆₁ structural transformation video

A series of STEM images (video) of an Au₅₆₁ cluster, taken during continuous irradiation with the STEM electron beam. The cluster transforms from decahedral to fcc. A total of 51 frames were taken at a dose of 2.1×10^4 e-/Angstrom²/frame, field of view 15.74nm×15.74nm and acquisition time per frame of 2.9s (images were cropped for the video to 5.5nm×5.5nm, frame time increased, and one frame was removed due to movement whilst imaging).