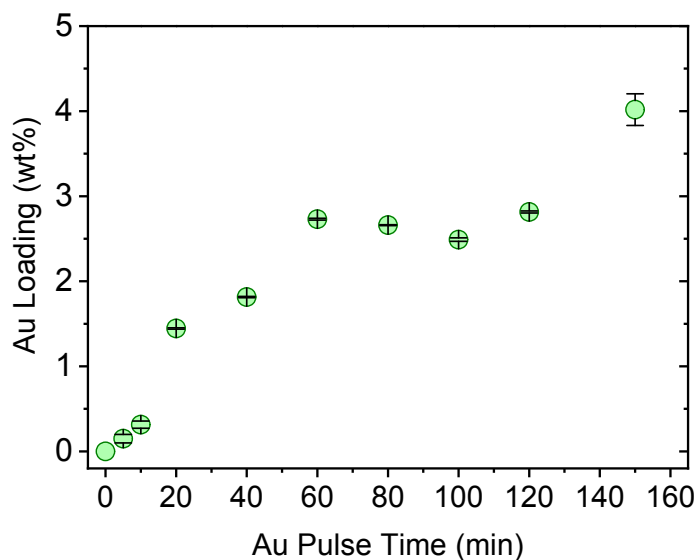


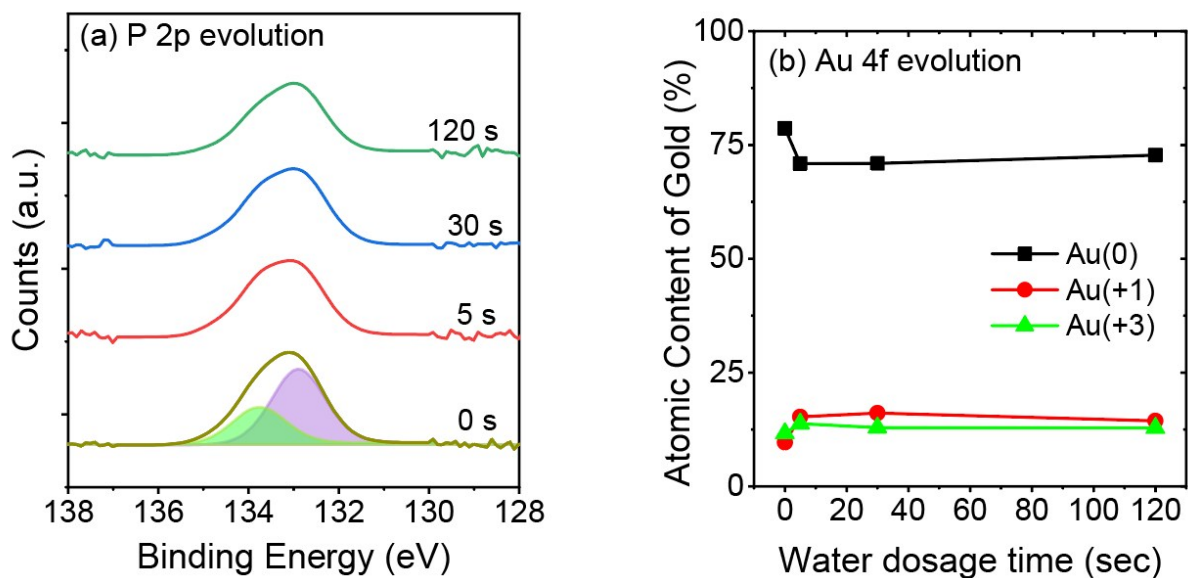
Supporting Information

Thermal Atomic Layer Deposition of Gold Nanoparticles: Controlled Growth and Size Selection for Photocatalysis

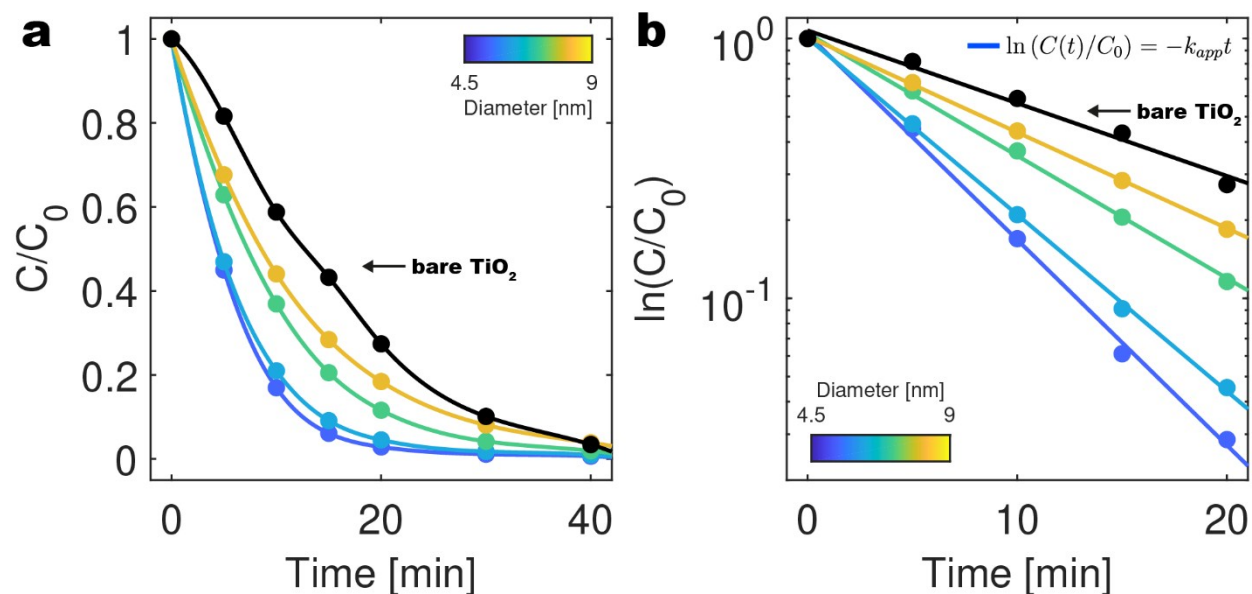
Fatemeh S. M. Hashemi ^{*[a]}, Fabio Grillo ^[a], Vikram R. Ravikumar ^[a], Dominik Benz ^[a], Ankit Shekhar ^[a], Matthew B. E. Griffiths ^[b], Seán T. Barry ^[b] and J. Ruud van Ommen ^[b]



Supporting Info Figure 1: ICP measurements, Au loading on TiO₂ nanoparticles as a function of Au precursor exposure time for 1 ALD cycle



Supporting Info Figure 2: effects of increasing water dosage time on the P and Au composition of the nanoparticles. (a) XPS evolution of P2p peak (purple: high binding energy peak, green: low binding energy peak) (b) XPS evolution of Au 4f oxidation states



Supporting Info Figure 3: Changes in the concentration of RhB solution containing the TiO_2 and Au/ TiO_2 nanoparticles as the Au nanoparticle size increases (a) C/C_0 versus illumination time (b) $\ln(C/C_0)$ versus illumination time. The reported k_{app} value for each sample is calculated from the slope of each curve in this graph.