

## Supplementary Information

### Supported Gold Nanoparticles as a Reusable Catalyst for Synthesis of Lactones from Diols Using Molecular Oxygen as an Oxidant under Mild Conditions

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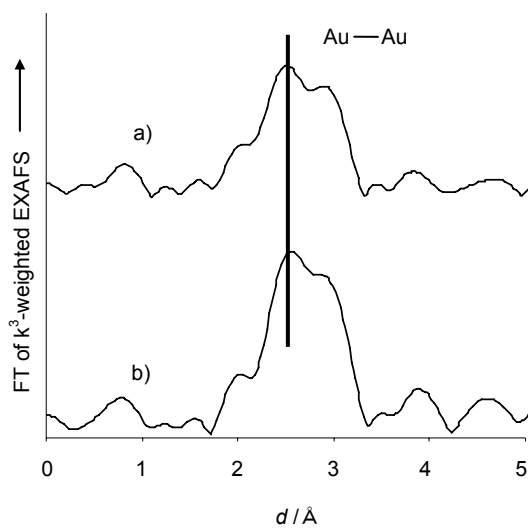
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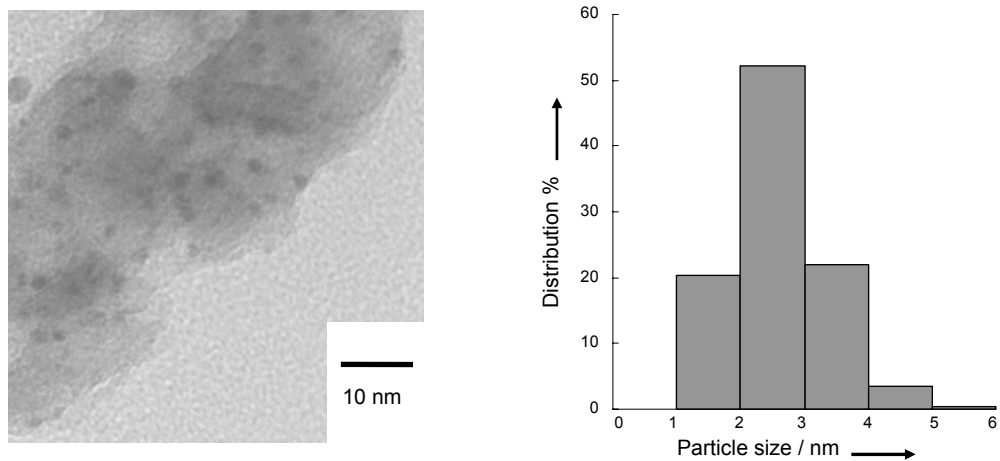
<b>EXAFS spectra of Au/HT</b>	<b>2S</b>
<b>TEM image of Au/HT</b>	<b>3S</b>

EXAFS



**Figure 1S.** Fourier transformation of  $k^3$ -weighted Au L-edge EXAFS experimental data for a) Au foil and b) Au/HT.

TEM



**Figure 2S.** a) TEM image of Au/HT, and b) size distribution diagram of the Au nanoparticles