Supplementary Information

On the role of gold nanoparticles in the selective photooxidation of 2-propanol over Au/TiO$_2$

Alexander Lüken, Martin Muhler and Jennifer Strunk$^\dagger$,*

$^\dagger$ Present address: Max-Planck-Institute for Chemical Energy Conversion, Stiftstr. 34-36, 45470 Mülheim an der Ruhr, Germany. Fax: +49 208 3063956; Tel: +49 203 3798235; E-mail: jennifer.strunk@cec.mpg.de
Figure S1 Flow scheme of the ATR-cell including the Ge reflection element, gas in- and outlet and the catalyst coating.

Figure S2 ATR-IR spectra of of the gas-phase photocatalytic dehydrogenation of 2-propanol over (A) uncovered Au/TiO$_2$, (B) 2-propanol-saturated Au/TiO$_2$, (C) uncovered Au/TiO$_2$ under Ar atmosphere, (D) uncovered TiO$_2$ (P25), (E) 2-propanol-saturated TiO$_2$ (P25), (F) uncovered TiO$_2$ (P25) under Ar atmosphere.
Figure S3 Experimental results for irradiation of TiO$_2$ (P25) with 2-propanol adsorption after 15 min.