

Noble Metal-Modified Faceted Anatase Titania Photocatalysts: Octahedron versus Decahedron

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Figures and Tables

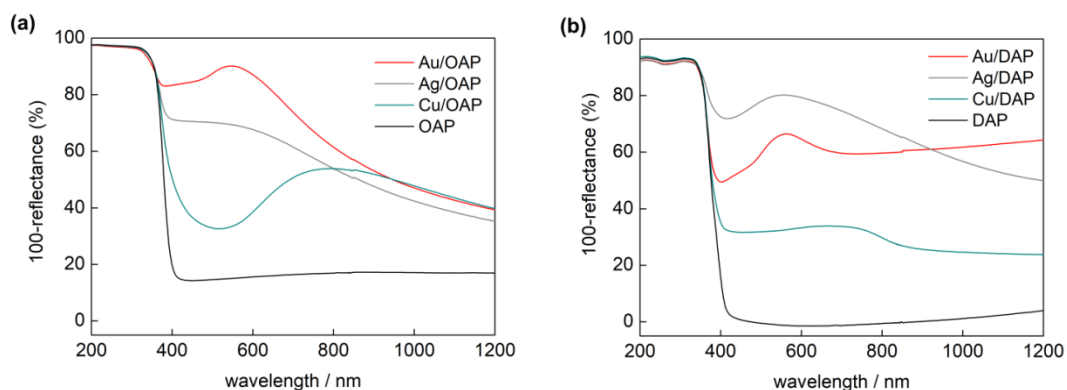


Figure S1. DRS spectra of bare and modified OAP (a) and DAP (b) samples taken with BaSO₄ as reference.

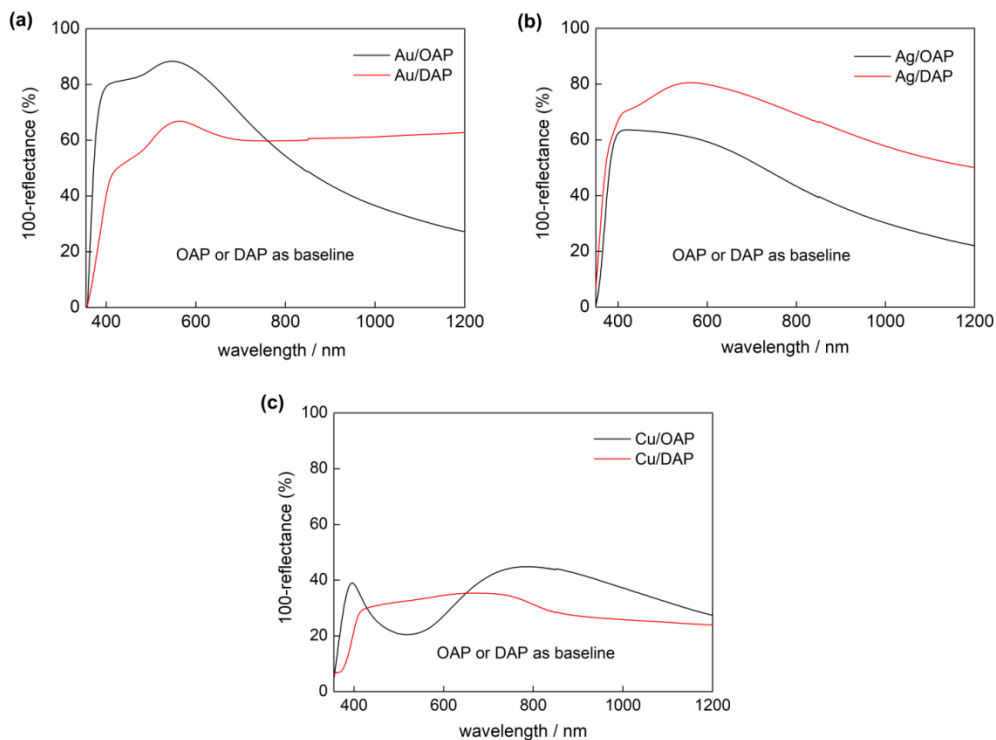


Figure S2. DRS spectra of faceted titania (OAP and DAP) modified with (a) gold, (b) silver and (c) copper taken with bare faceted titania as reference.

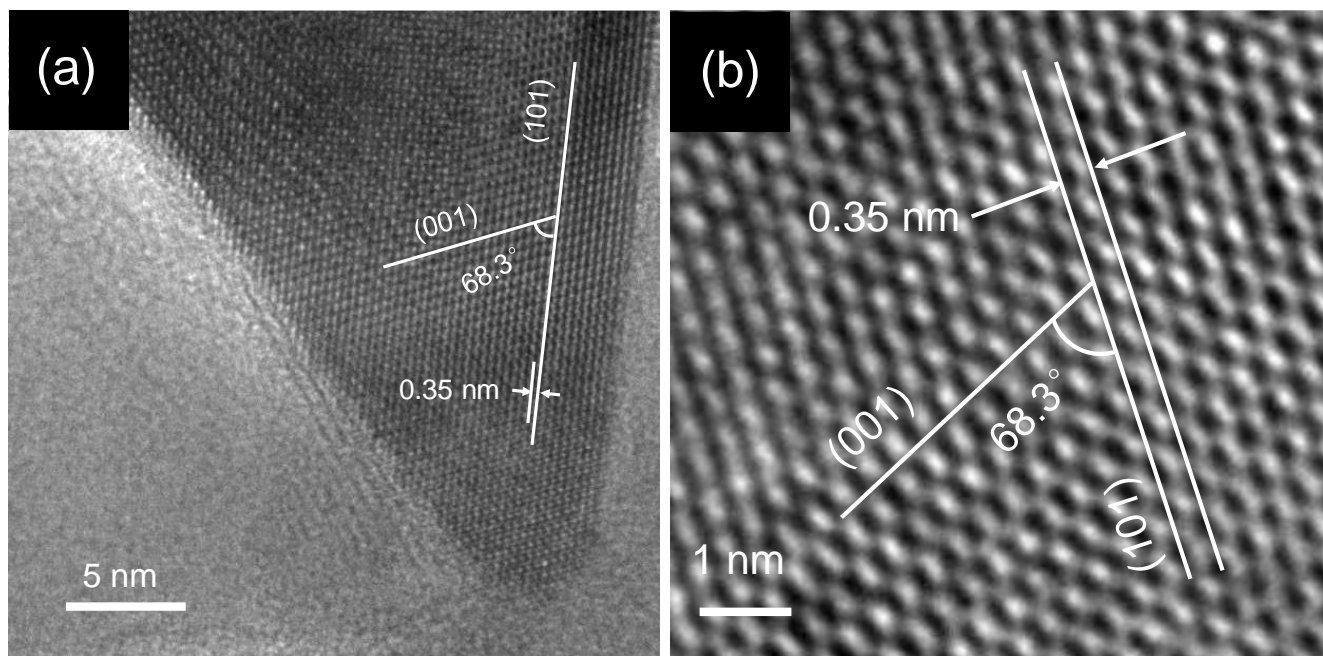


Figure S3. HR-TEM images of OAP for lower (a) and higher (b) resolution modes (0.35-nm lattice distance between fringes and 68.3° angle between {001} and {101} facets correspond to single anatase crystals).

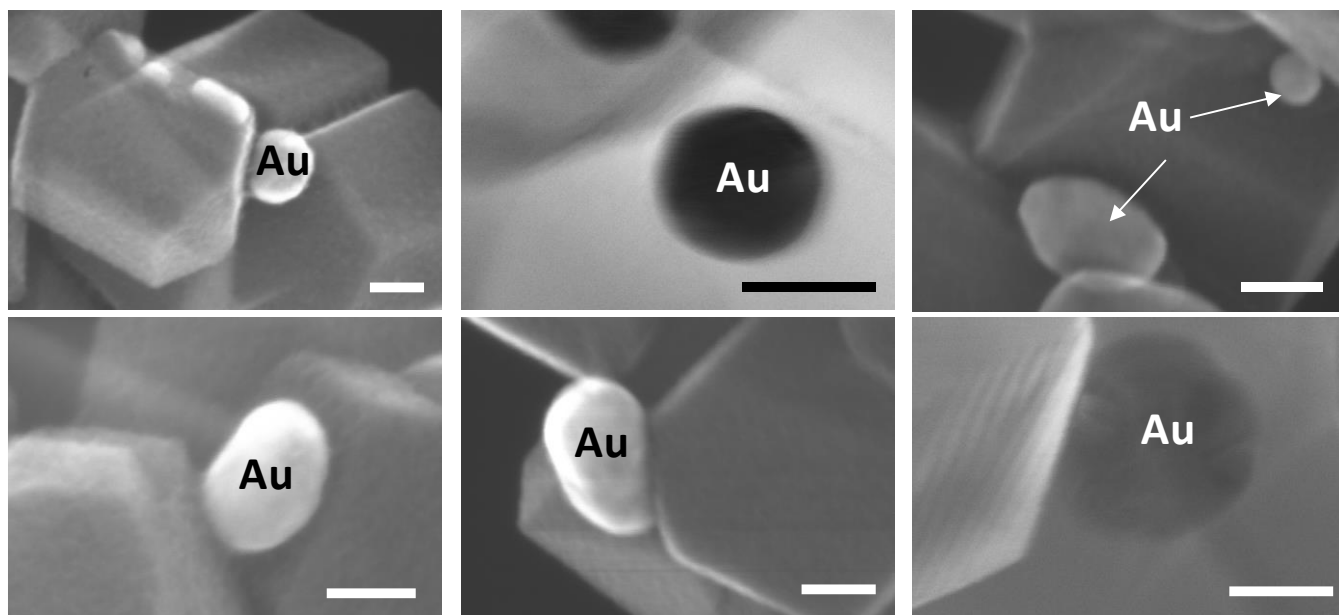


Figure S4. STEM images of Au/DAP (All scale bars correspond to 20 nm).

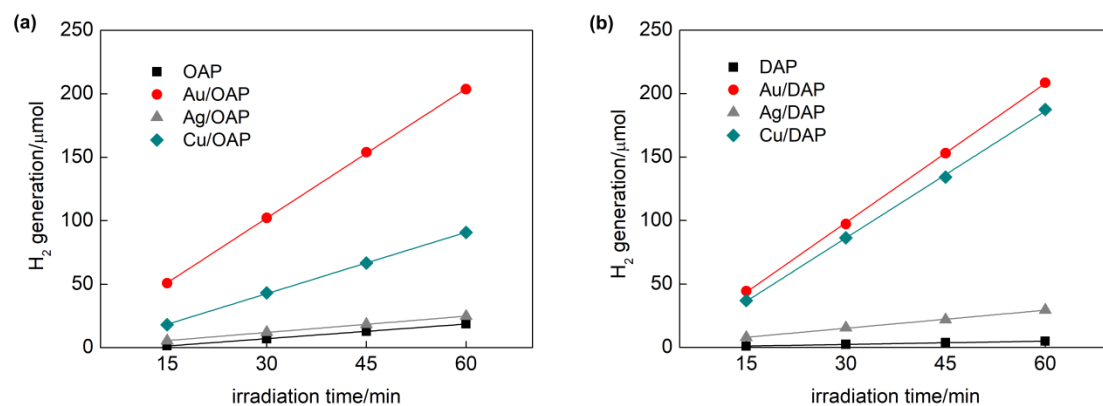


Figure S5. Photocatalytic activity for methanol dehydrogenation on bare and metal-modified OAP (a) and DAP (b).

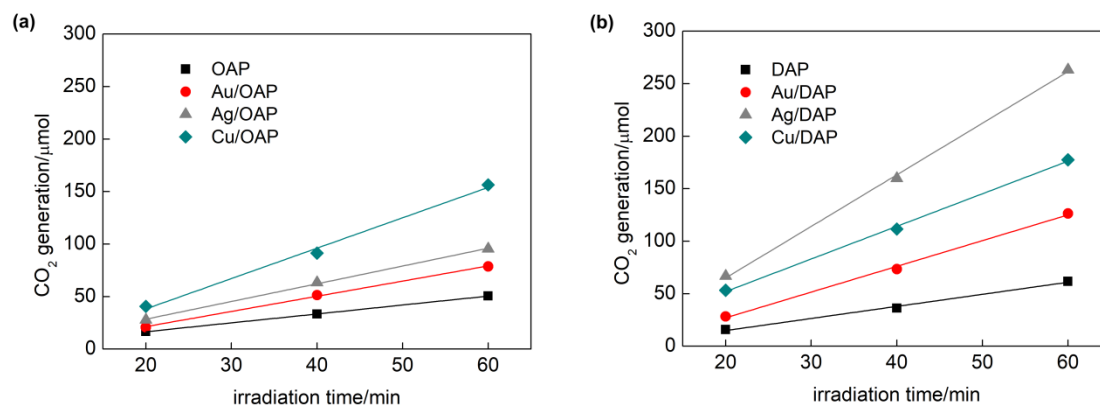


Figure S6. Photocatalytic activity for decomposition of acetic acid on bare and metal-modified OAP (a) and DAP (b).

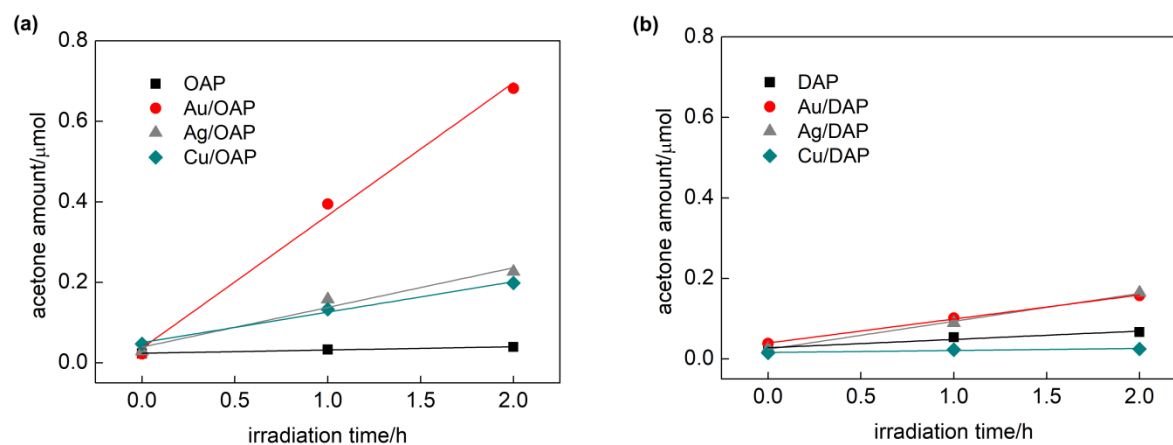


Figure S7. Photocatalytic activity for oxidation of 2-propanol on bare and metal-modified OAP (a) and DAP (b).

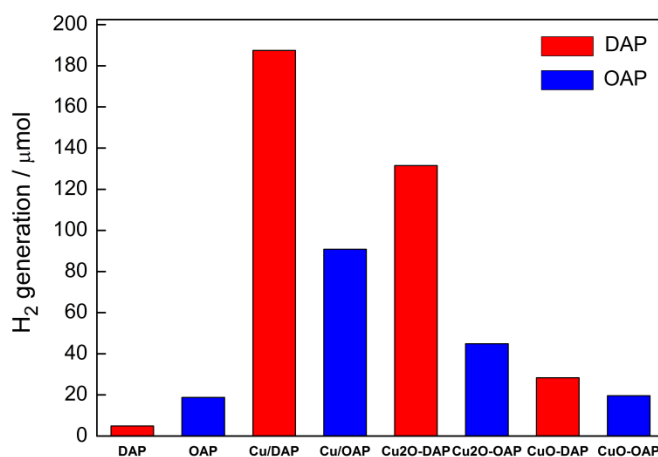


Figure S8. Comparison of photocatalytic activity for methanol dehydrogenation on bare, Cu/OAP, Cu/DAP and physical mixtures of copper oxides (Cu_2O and CuO) and titania (Cu_2O -OAP, CuO -OAP, Cu_2O -DAP and CuO -DAP) under UV/vis irradiation.

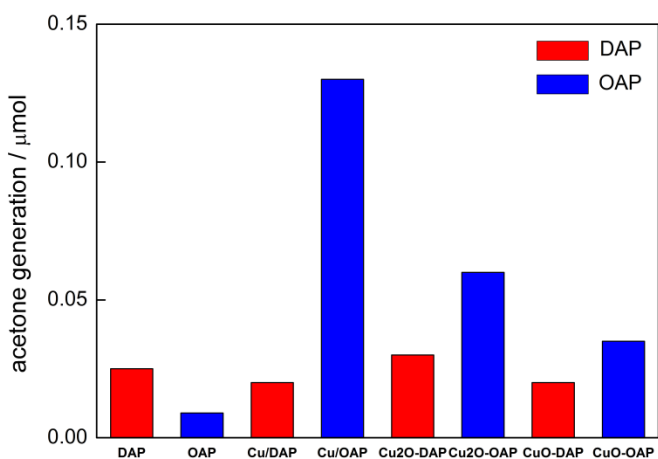


Figure S9. Comparison of photocatalytic activity for oxidation of 2-propanol on bare, Cu/OAP, Cu/DAP and physical mixtures of copper oxides (Cu_2O and CuO) and titania (Cu_2O -OAP, CuO -OAP, Cu_2O -DAP and CuO -DAP) under vis irradiation.