

Electronic supplementary information

Photocatalytic decomposition of Rhodamine B on uranium-doped mesoporous titanium dioxide

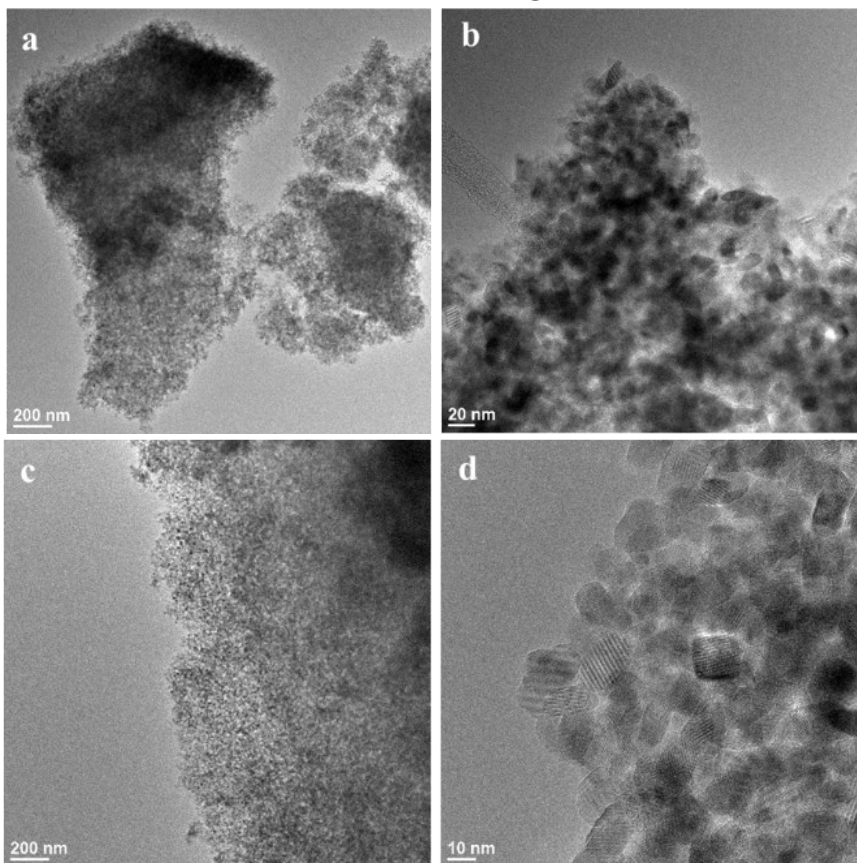
Yi Liu,^a Blake Becker,^b Brandon Burdine,^c Ginger E. Sigmon^b and Peter C. Burns*^{a b}

^a Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN 46556, USA.

^b Department of Civil & Environmental Engineering & Earth Sciences, University of Notre Dame, Notre Dame, IN 46556, USA.

^c Department of Chemical and Biomolecular Engineering, University of Notre Dame, Notre Dame, IN, 46556 USA.

*Corresponding author: Peter C. Burns, pcburns@nd.edu.



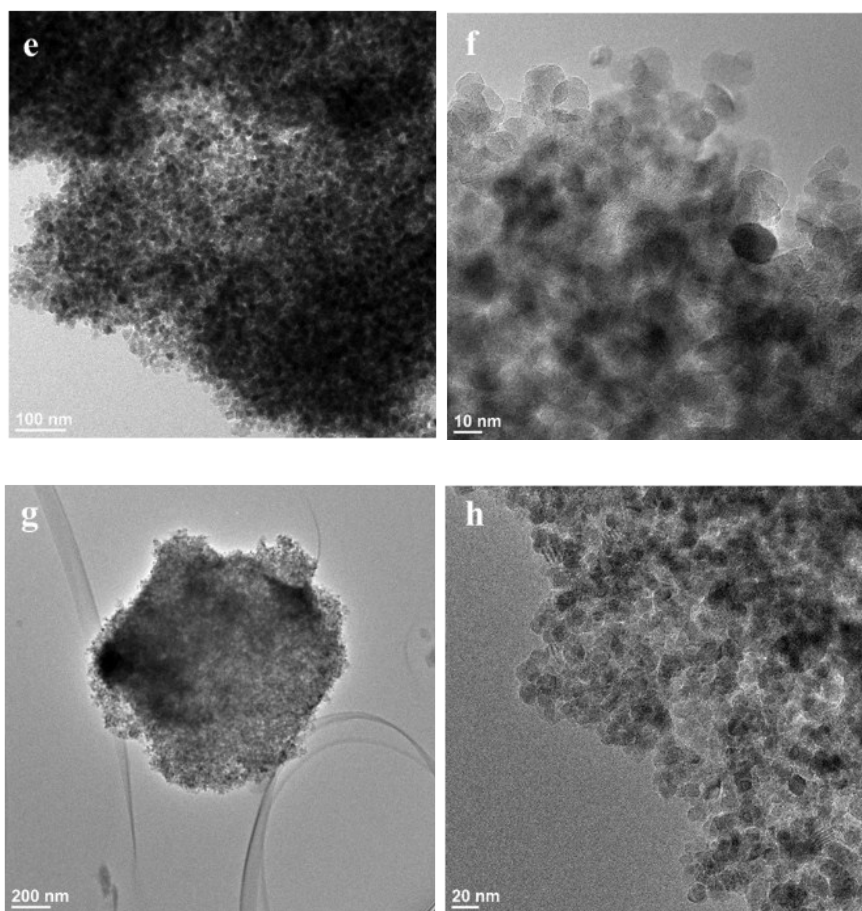
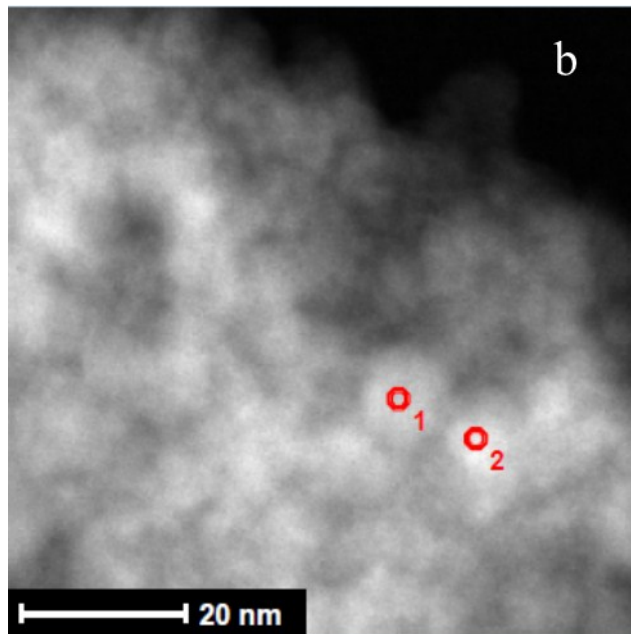
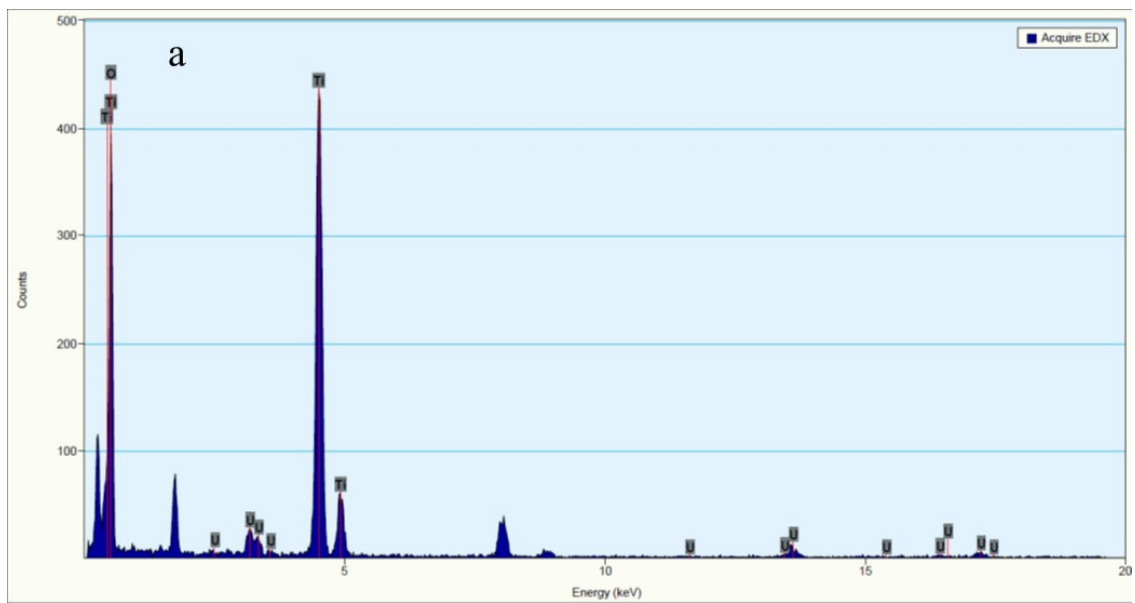


Fig. S1. TEM images of TiO₂ (a) and (b), TiU1 (c) and (d), TiU2 (e) and (f), TiU3 (g) and (h).



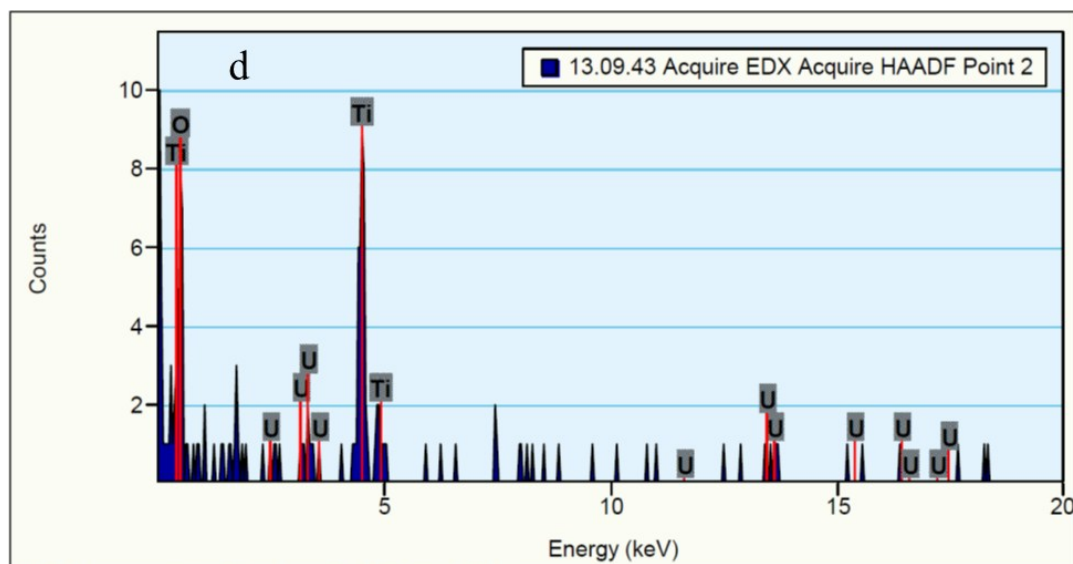
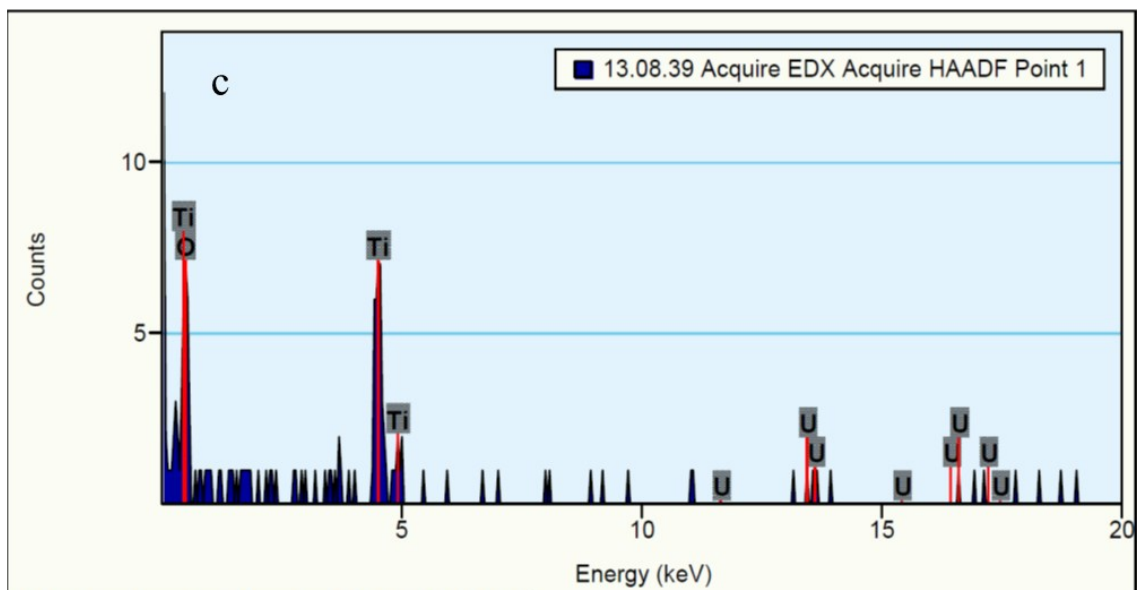


Fig. S2. (a) EDS spectrum of circled area in image (Fig. 4b) of TiU4 (b) STEM image, (c) EDS spectrum of selected point O1 in the STEM image, and (d) EDS spectrum of selected point O2 in the STEM image of TiU4.

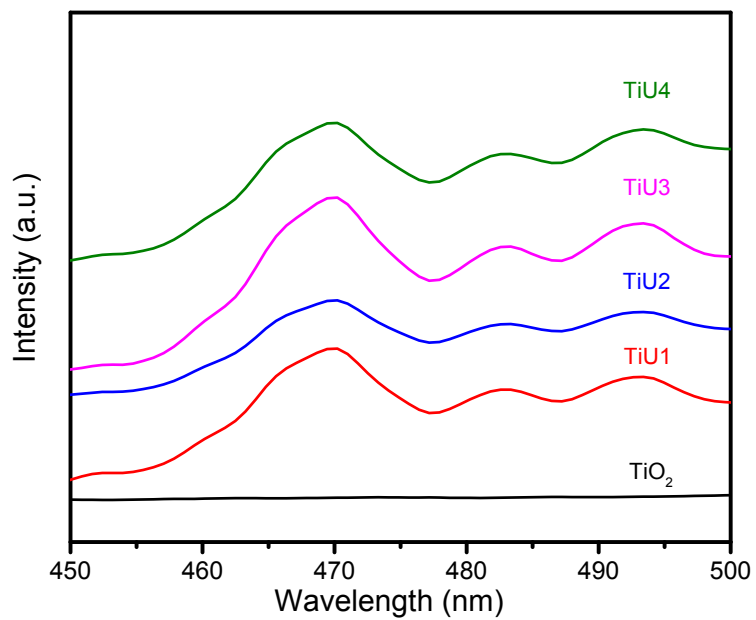


Fig. S3. UV-Vis reflectance of TiO₂ and TiU_x. U⁴⁺ detected in the 450-500 nm range.