

Supporting information (SI) for

Morphology-dependent photocatalytic activity of octahedral anatase particles prepared by ultrasonication–hydrothermal reaction of titanates

Zhishun Wei,^a Ewa Kowalska,^{*a} Jonathan Verrett,^b Christophe Colbeau-Justin,^b Hynd Remita^{b,c} and Bunsho Ohtani^a

^a*Catalysis Research Center, Hokkaido University, Sapporo 001-0021, Japan.*

e-mail: kowalska@cat.hokudai.ac.jp; tel.: +81-11-706-9130; fax: +81-11-706-9133.

^b*Laboratory of Physical Chemistry, UMR 8000, Paris-Sud University, 91405 Orsay, France.*

^c*CNRS, Laboratory of Physical Chemistry, UMR 8000, 91405 Orsay, France*

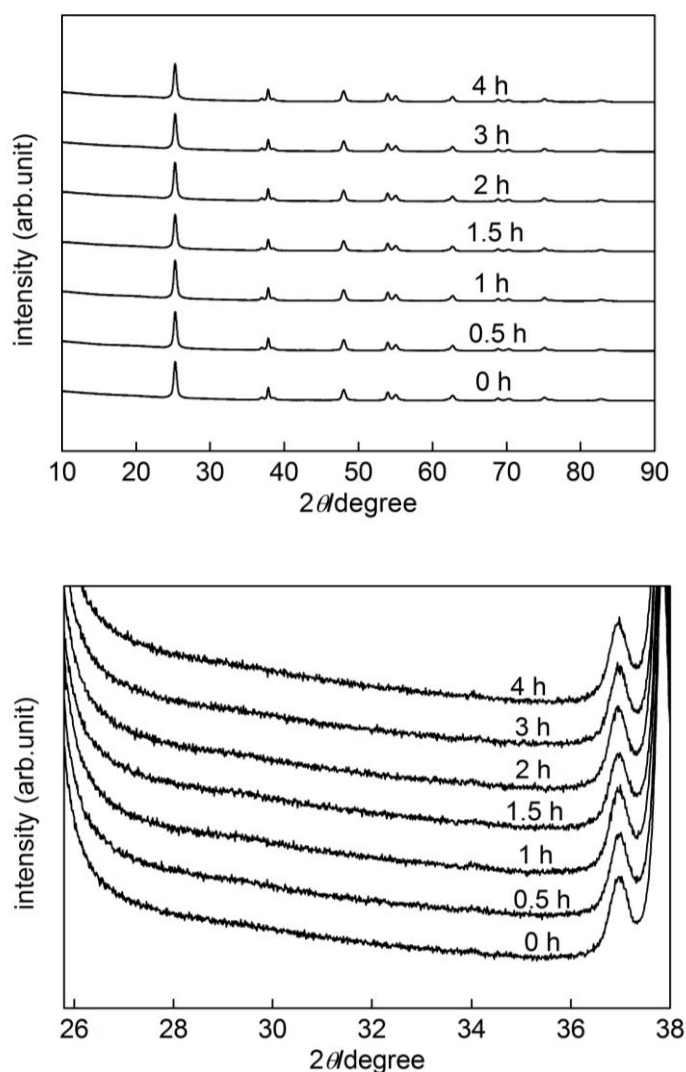


Fig. S1 XRD patterns of products obtained for various US durations. (top) Whole XRD range for all samples. (bottom) Enlargement of XRD patterns for {310} TNWs range.

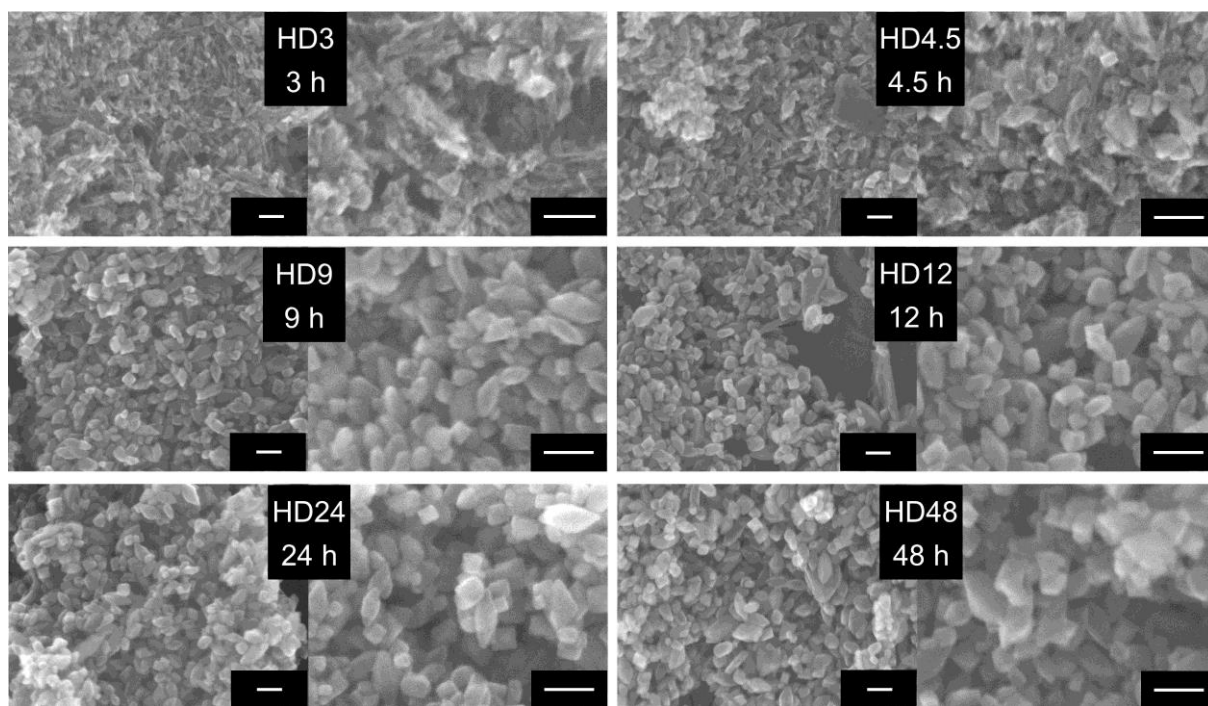


Fig. S2 SEM images of products obtained at different HT durations (3–48 h). Scale bars correspond to 50 nm.

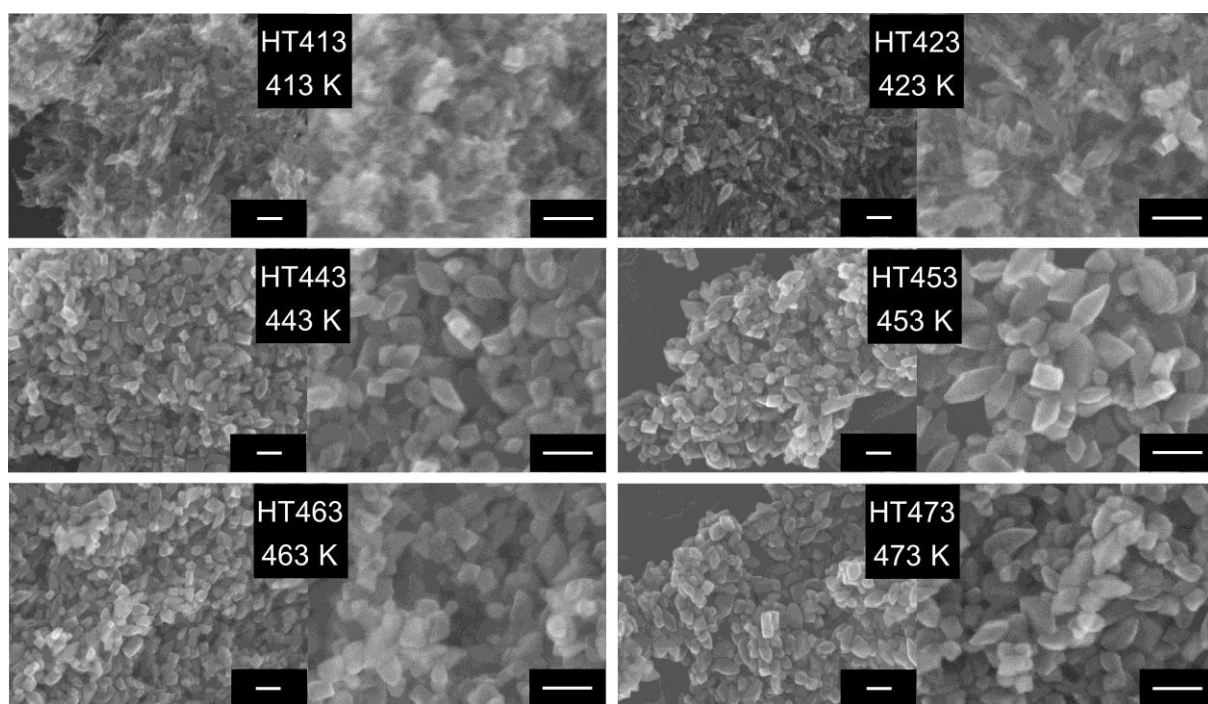


Fig. S3 SEM images of products obtained at different HT temperatures (413–473 K). Scale bars correspond to 50 nm.

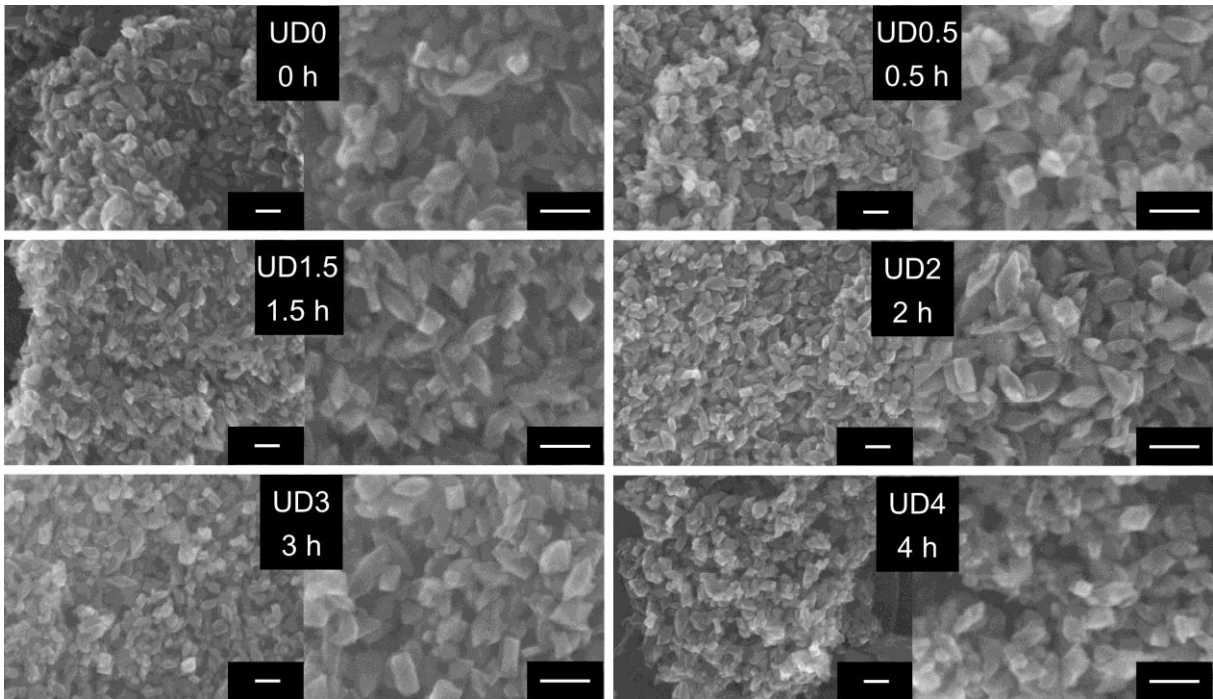


Fig. S4 SEM images of products obtained for different US durations (0–4 h). Scale bars correspond to 50 nm.

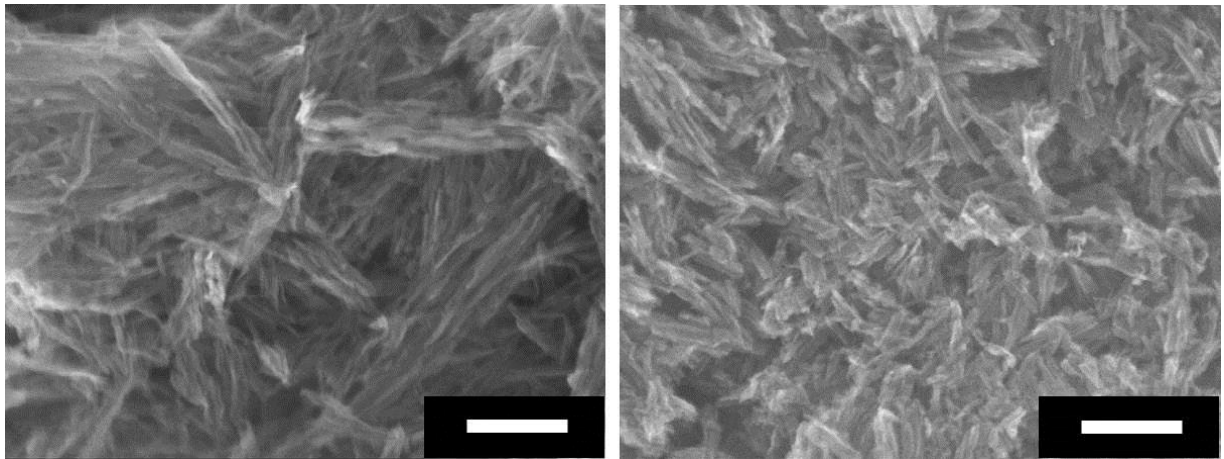


Fig. S5 SEM images of: (left) TNWs, (right) TNWs after 1-h US process. Scale bars correspond to 100 nm.

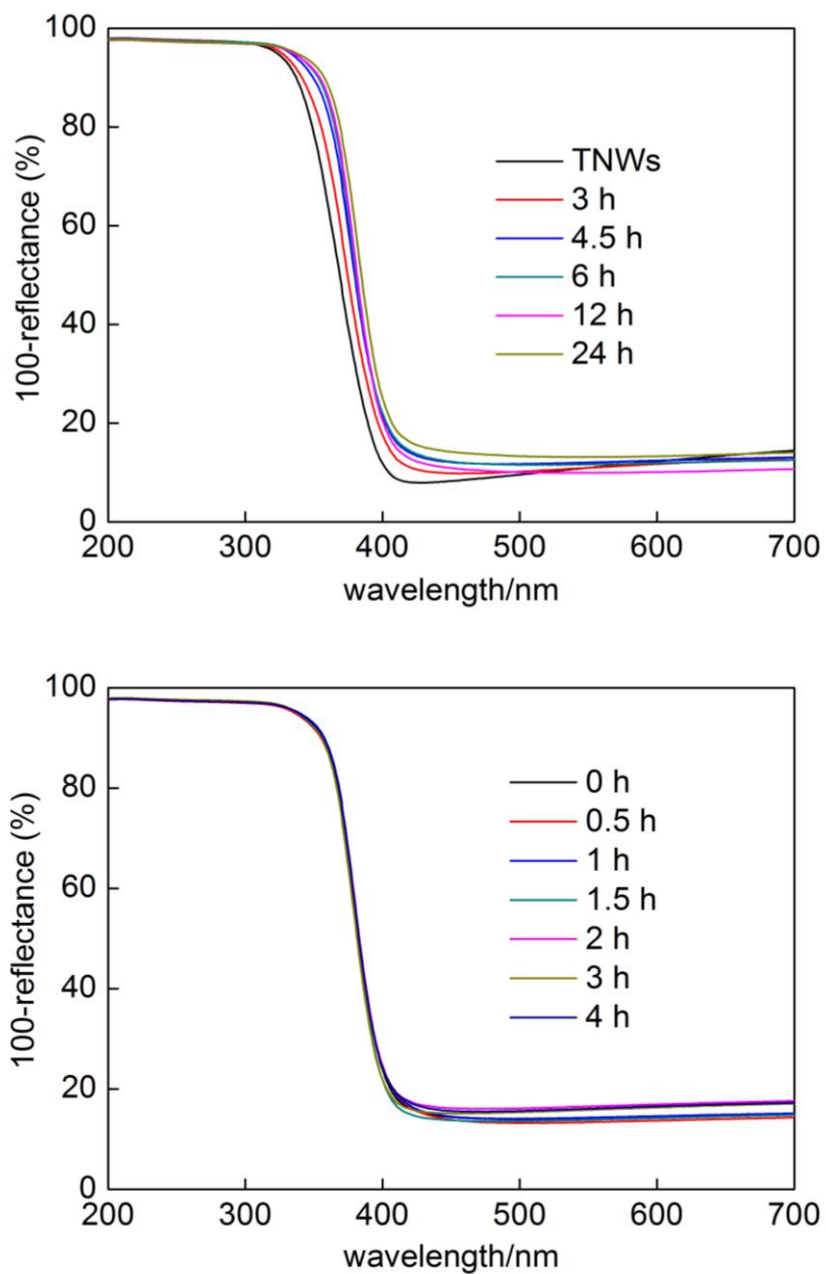


Fig. S6 DRS of: (top) TNWs and products obtained at different HT durations (3–24 h), (bottom) products obtained for different US durations (0–4 h).