

# Supporting information

## **Comparison of platinum photodeposition processes on two types of titanium dioxide photocatalysts**

Muneaki Yamamoto,<sup>\*a</sup> Yasuhiro Minoura,<sup>b</sup> Masato Akatsuka,<sup>c</sup> Satoshi Ogawa,<sup>b</sup> Shinya Yagi,<sup>d</sup> Akira Yamamoto,<sup>e,f</sup> Hisao Yoshida<sup>e,f</sup> and Tomoko Yoshida<sup>\*a</sup>

<sup>a</sup>*Advanced Research Institute for Natural Science and Technology, Osaka City University, Sugimoto, Sumiyoshi-ku, Osaka, 558-8585, Japan*

<sup>b</sup>*Graduate School of Engineering, Nagoya University, Furo-cho, Chikusa-ku, Nagoya, 464-8603, Japan*

<sup>c</sup>*Applied Chemistry and Bioengineering, Graduate School of Engineering, Osaka City University, Sugimoto, Sumiyoshi-ku, Osaka, 558-8585, Japan*

<sup>d</sup>*Institute for Materials and systems for sustainability, Nagoya University, Furo-cho, Chikusa-ku, Nagoya, 464-8603, Japan*

<sup>e</sup>*Graduate School of Human and Environmental Studies, Kyoto University, Yoshida Nihonmatsu-cho, Sakyo-ku, Kyoto, 606-8501, Japan*

<sup>f</sup>*Elements Strategy Initiative for Catalysts and Batteries (ESICB), Kyoto University, Kyotodaigaku-Katsura, Kyoto, 615-8528, Japan*

*E-mail: tyoshida@ocarina.osaka-cu.ac.jp*

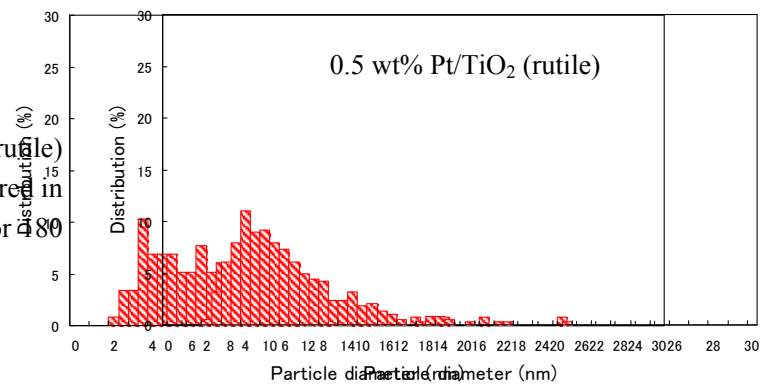
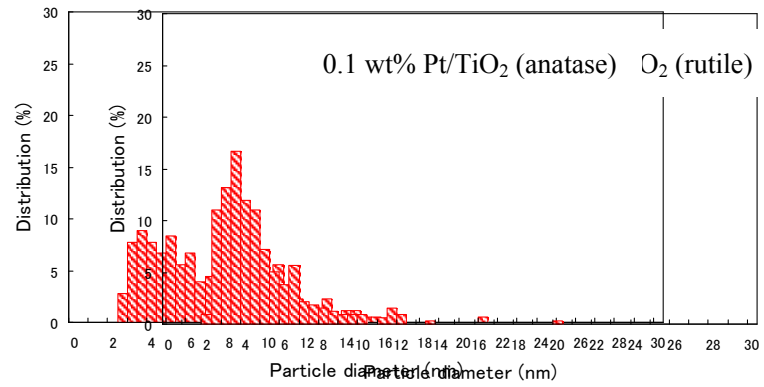
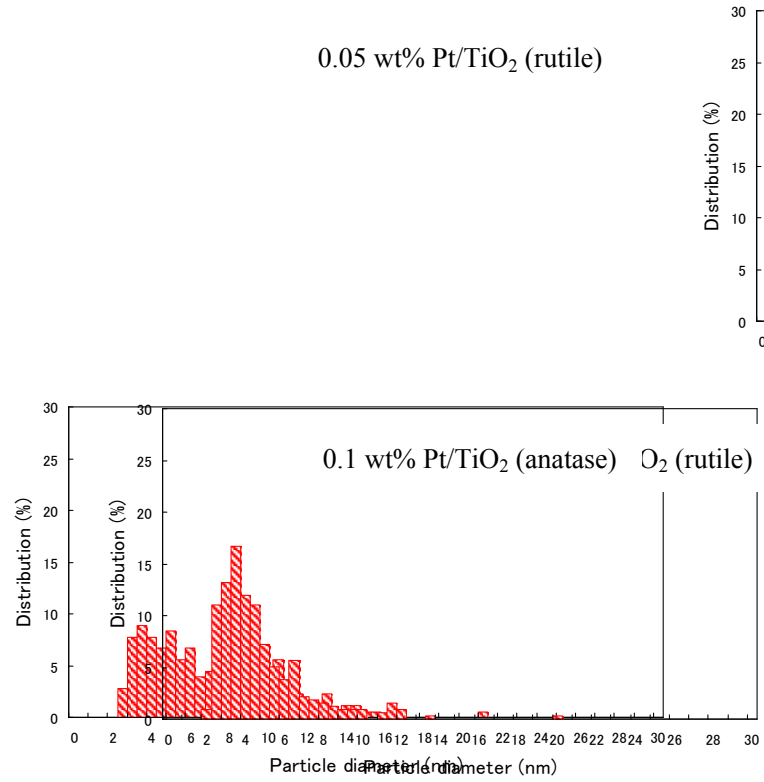
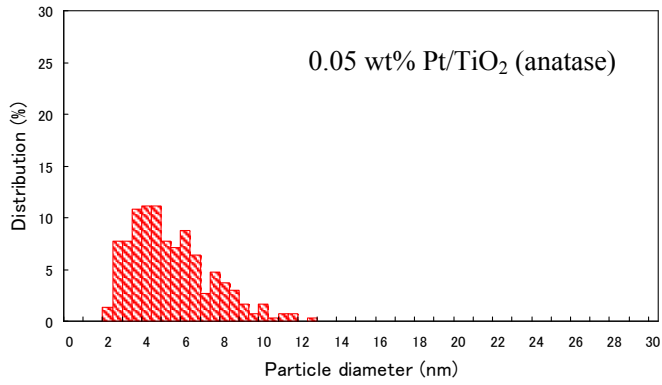


Fig. S1 Size distribution histograms of the Pt nanoparticles on various Pt/TiO<sub>2</sub> (anatase) and Pt/TiO<sub>2</sub> (rutile) samples with different Pt loadings amounts, which were prepared in the photodeposition method with the prolonged irradiation for 80 min.

