

Response to Comment on “High-Active Anatase TiO₂ Nanosheets Exposed with 95% {100} Facets Toward Efficient H₂ Evolution and CO₂ Photoreduction”

Hua Xu,^{†,‡} Shuxin Ouyang,^{*,‡} Peng Li,^{†,‡,§} Tetsuya Kako,^{†,‡} and Jinhua Ye^{*,†,‡,⊥}

[†]Graduate School of Chemical Science and Engineering, Hokkaido University, Sapporo 060-0814, Japan

[‡]Environmental Remediation Materials Unit and [§]International Center for Materials Nanoarchitectonics (WPI-MANA), National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba 305-0044, Japan

[⊥]TU-NIMS Joint Research Center, School of Materials Science and Engineering, Tianjin University, 92 Weijin Road, Nankai District, Tianjin 300072, P.R. China

In the original manuscript, the major conclusion is that TiO₂ nanosheets exposed with high percentage of {100} facets were prepared, which exhibit excellent photocatalytic properties. The XRD pattern showed that our prepared TiO₂ nanosheets have the preferential crystallographic orientation along the (100) crystal plane. However, we carelessly uploaded the wrong SAED image of other crystal instead of the TiO₂ nanosheets in the original manuscript, thus resulting in the discrepancy between the XRD and SAED patterns.

Nevertheless, we have rechecked the HRTEM and the related fast Fourier transform (FFT) patterns of our prepared TiO₂ nanosheets carefully, and found that the diffraction spots of the FFT pattern indeed can be indexed to the [100] zone of anatase TiO₂; this result is consistent with the XRD pattern.

We are sincerely sorry for the error in the SAED pattern of the original manuscript, and give readers the correct understanding about this manuscript below.

Page 1350, Figure 2c should be replaced with the following figure:

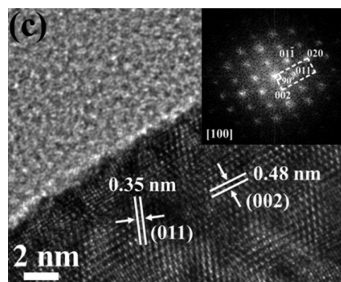


Figure 2c. HRTEM image, and the related fast Fourier transform (FFT) pattern (inset of c) of the TiO₂ nanosheet.

The description in the text about Figure 2c should be replaced as: “The high-resolution TEM (HRTEM) image of our prepared TiO₂ nanosheet (Figure 2c) shows that the distance of the visible lattice fringes were measured to be 0.35 and 0.48 nm, which corresponds to the lattice spacing of the (011) and (002) atomic plane of anatase TiO₂, respectively. In addition, the corresponding fast Fourier transform (FFT) pattern (inset of Figure 2c) reveals that the diffraction spots can be indexed to the [100] zone of anatase TiO₂ for our prepared TiO₂ nanosheet.”

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■ AUTHOR INFORMATION

Corresponding Author

*E-mail: jinhua.ye@nims.go.jp

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