Electronic Supplementary Material (ESI) for Photochemical & Photobiological Sciences. This journal is © The Royal Society of Chemistry and Owner Societies 2016

Supplementary Information

Different hollow and spherical TiO₂ morphologies have distinct activities for the photocatalytic inactivation of chemical and biological agents

Yuichi Yamaguchi,^{a,b} Takahito Shimodo,^{a,c} Sho Usuki,^{a,c}, Kanjiro Torigoe,^d Chiaki Terashima,^a Ken-ichi Katsumata,^a Masahiko Ikekita,^{a,c} Akira Fujishima,^a Hideki Sakai,^{a,b} and Kazuya Nakata^{*a,c}

^aResearch Institute for Science and Technology, Photocatalysis International Research

Center, Tokyo University of Science, 2641 Yamazaki, Noda, Chiba 278-8510, Japan

^bDepartment of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo

University of Science, 2641 Yamazaki, Noda, Chiba 278-8510, Japan

^cDepartment of Applied Biological Science, Faculty of Science and Technology, Tokyo

University of Science, 2641 Yamazaki, Noda, Chiba 278-8510, Japan

^dResearch Institute for Science and Technology, Tokyo University of Science, 2641

Yamazaki, Noda, Chiba 278-0022, Japan

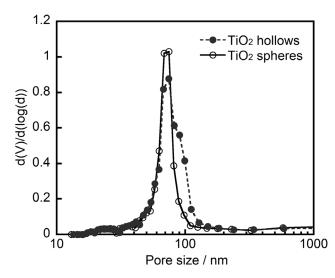


Figure S1. Pore size distributions of TiO₂ hollows and spheres.

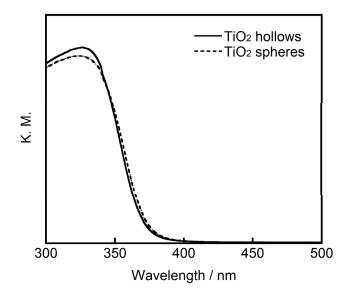


Figure S2. Diffuse reflectance spectra of TiO₂ hollows and spheres.

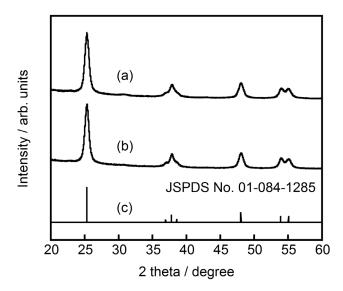


Figure S3. X-ray diffraction patterns of a) TiO₂ spheres and b) hollows after calcination at 773 K.