Supporting Information

Correlation between Photoluminescence spectra with Gas Sensing and Photocatalytic Activities in Hierarchical ZnO nanostructures

T. Anh Thu Do, Ho Truong Giang, Do Van Huong, Pham Quang Ngan, Giang Hong Thai, Do Thi Thu and Tran Dai Lam

E-mail: thudta@ims.vast.vn;
Tel.: +84-43-7569318; Fax: +84-43-8360705.
b. Graduate University of Science and Technology, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet, Caugiay, Hanoi, Vietnam.

I. Structures and Morphologies

Supplementary S.1. FE-SEM and TEM images of hierarchical ZnO structures-based hydrothermal approach (a-c)
Supplementary S.2. Illustration of the growth mechanism of nanorods (a), porous plates (b), and flower-like architectures (c).

Supplementary S.3. STEM-Mapping images of ZnO nanorods
Supplementary S.4. UV-Vis diffuse reflectance spectra, and Kubelka-Munk transformed reflectance spectra of the all samples.

Supplementary S.5. Dynamic transient of resistances in response to NO2 for ZnO architectures at 270 °C and specified operating temperature.

Supplementary S.6. UV-vis absorption spectra of all samples are kept in the dark for 12 hours.