

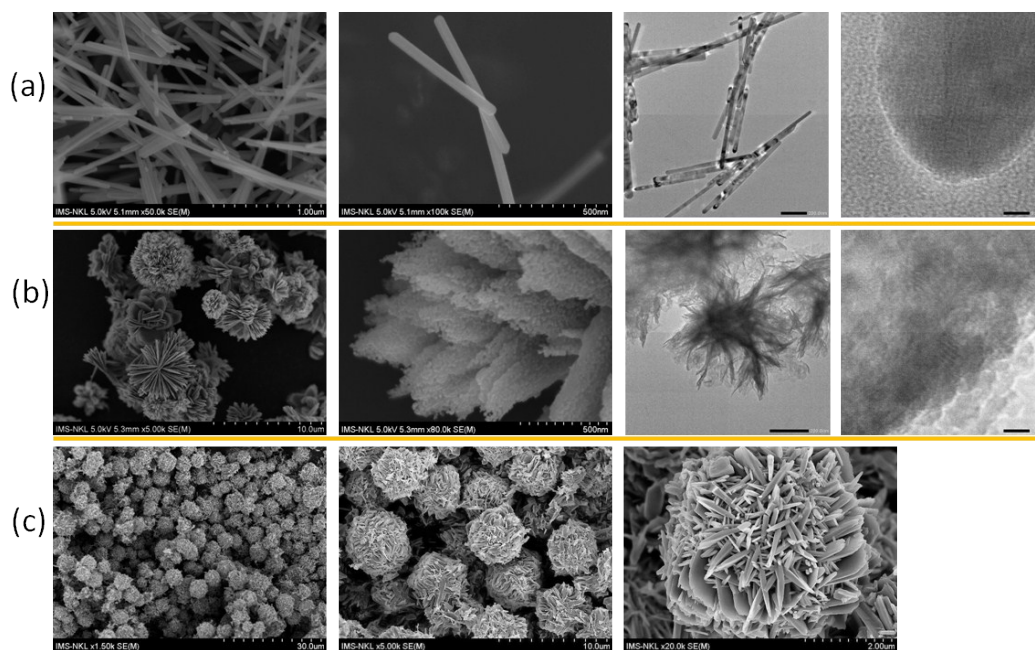
Supporting Information

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

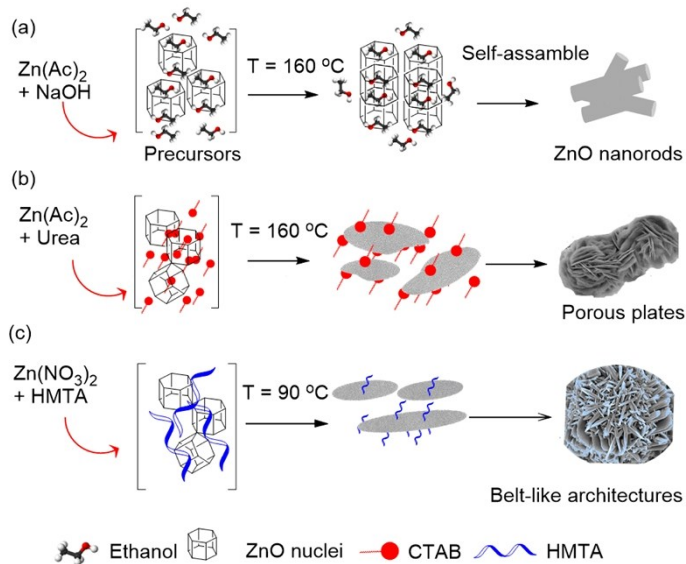
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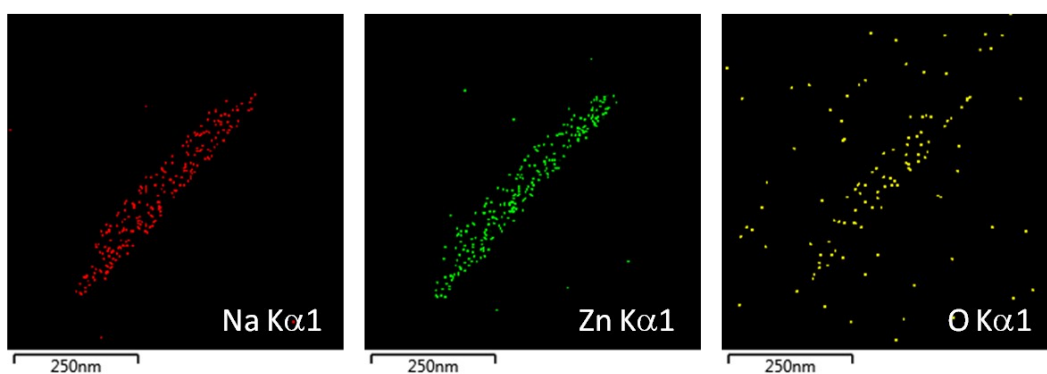
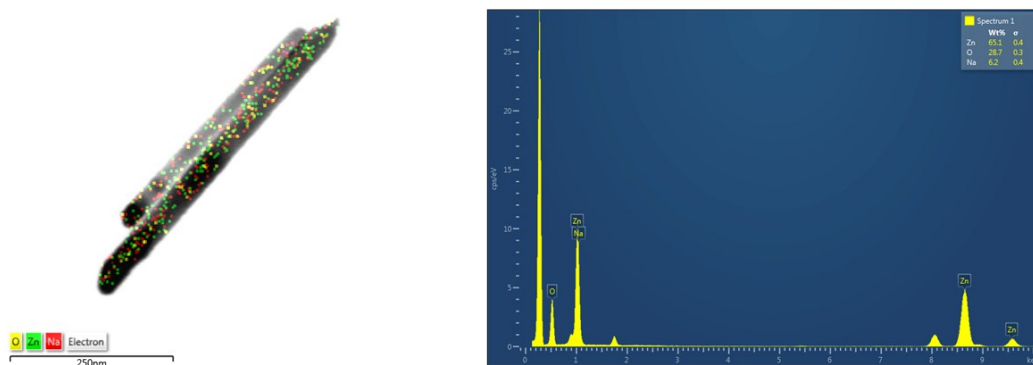
I. Structures and Morphologies



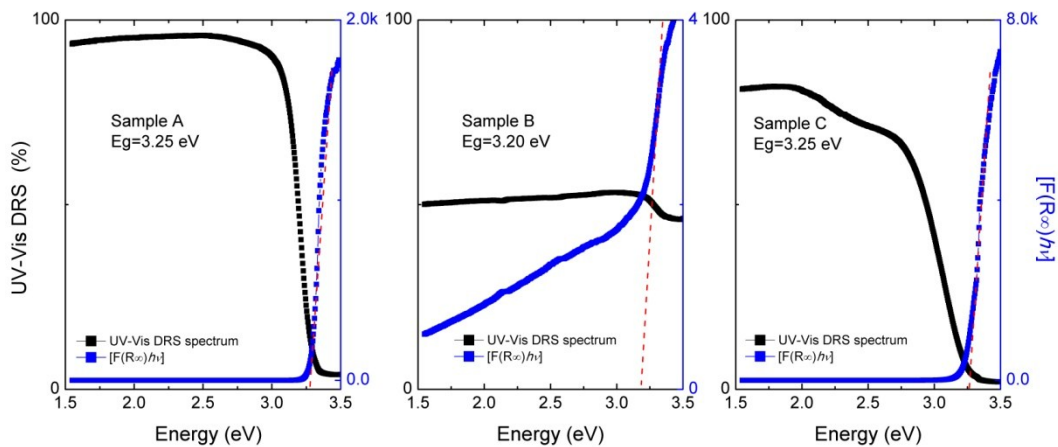
Supplementary S.1. FE-SEM and TEM images of hierarchical ZnO structures-based hydrothermal approach (a-c)



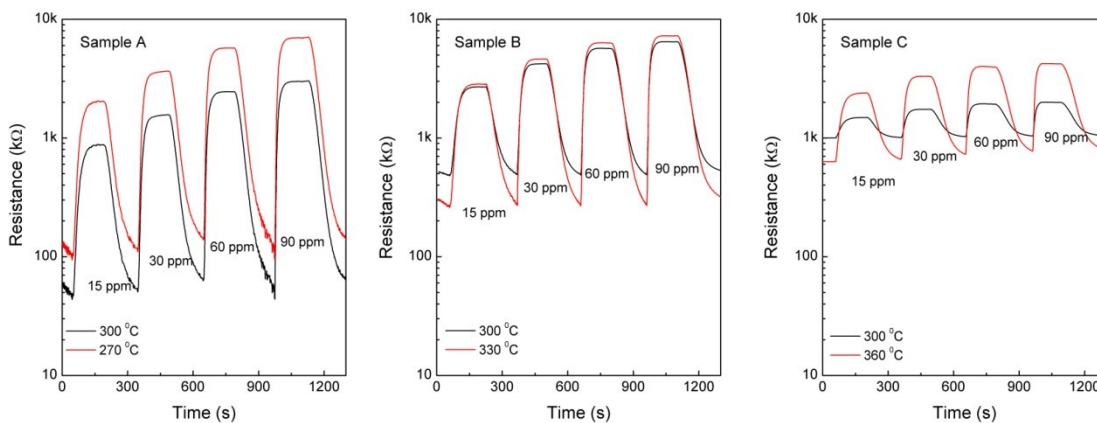
Supplementary S.2. Illustration of the growth mechanism of nanorods (a), porous plates (b), and flower-like architectures (c).



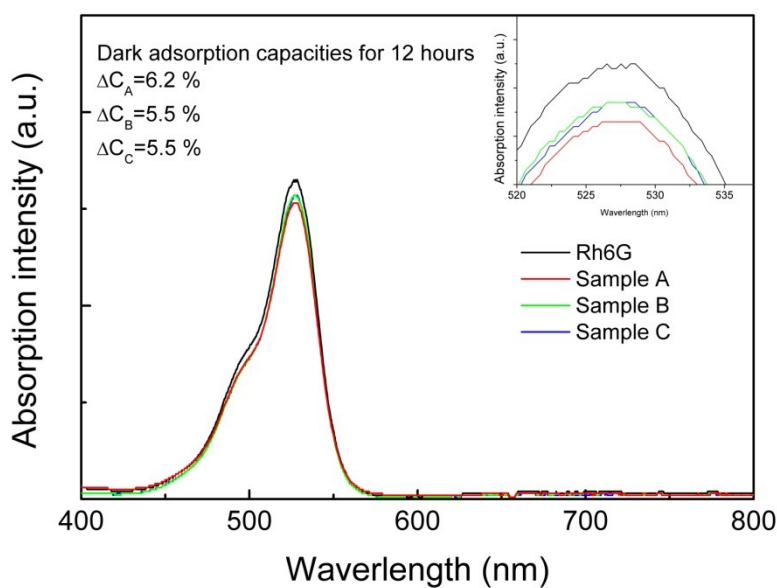
Supplementary S.3. STEM-Mapping images of ZnO nanorods



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