

Supporting Information

Photoluminescence Profile Mapping of Eu(III) and Tb(III → IV)- Embedded in Quantum Size SnO₂ Nanoparticles

Young In Choi and Youngku Sohn*

*Department of Chemistry, Yeungnam University, Gyeongsan, Gyeongbuk 712-
749, South Korea*

* Corresponding author e-mail: youngkusohn@ynu.ac.kr

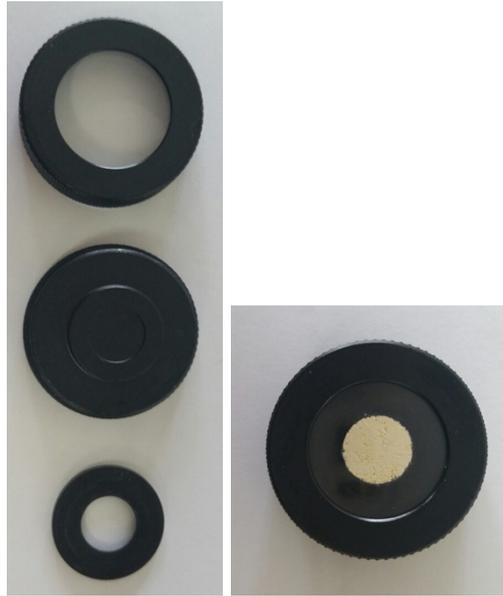


Fig. S1. Powder sample holder before (left) and after (right) sample mounting. Incident light only strikes the central area of the powder sample.

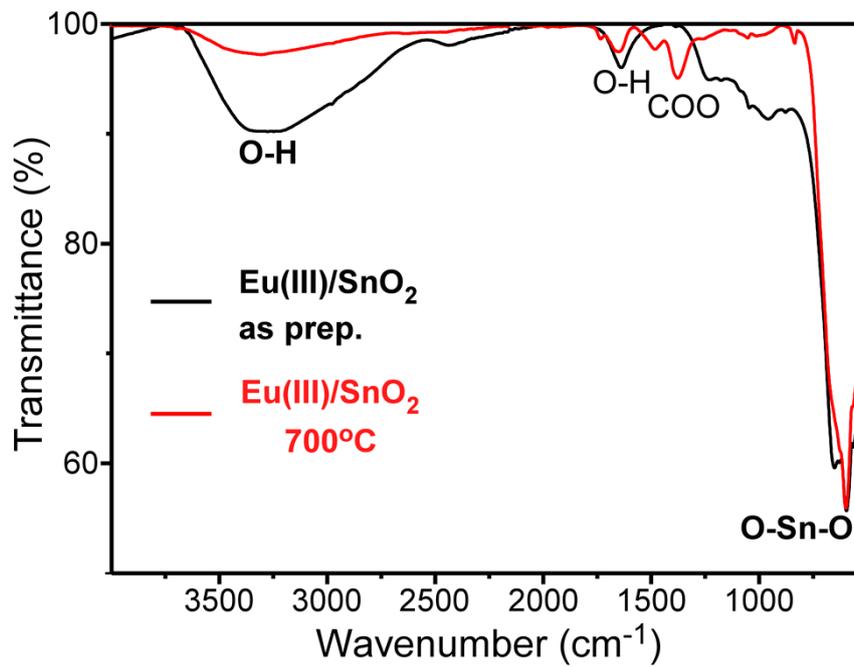


Fig. S2. Typical FT-IR spectra of 10 mol% Eu(III)-doped SnO₂ before and after thermal annealing.

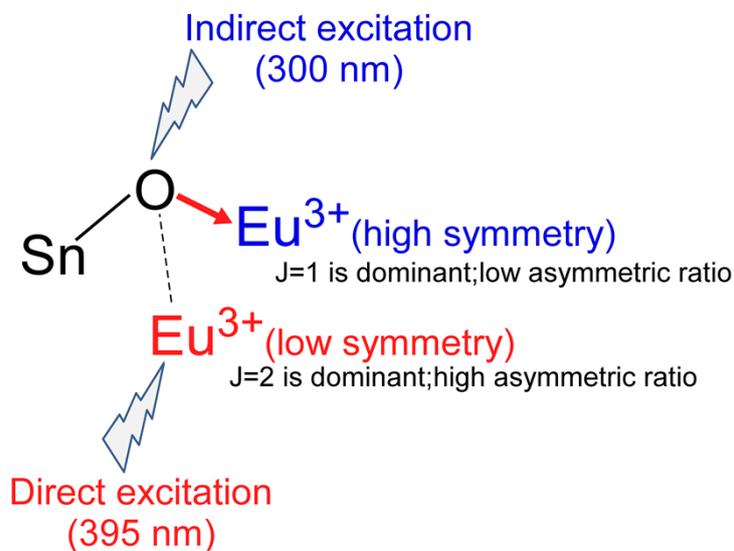


Fig. S3. Direct (395 nm) and indirect (300 nm) excitation photoluminescence mechanism and their consequent asymmetric ratios ($I_{J=2}/I_{J=1}$).

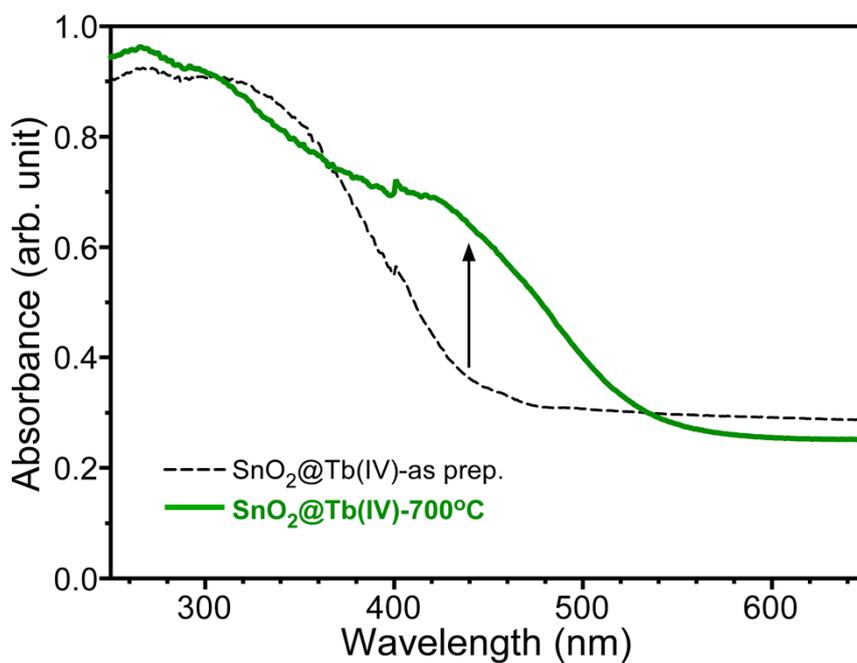


Fig. S4. UV-Vis absorption spectra of as-prepared and 700°C-annealed 10 mol% Tb(IV)/SnO₂ nanoparticles.