

Electronic supplementary information (ESI)

An anomalous downsizing of glycothermally-synthesized YBO₃ crystals by Ce³⁺ doping

Ayano Tani, Hiroki Hara, Satoru Takeshita,* and Tetsuhiko Isobe*

Department of Applied Chemistry, Faculty of Science and Technology, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan

Additional figures

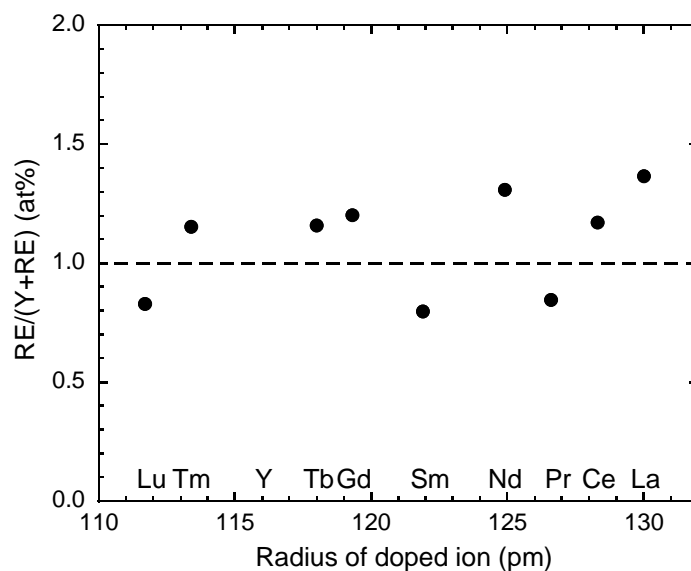


Fig. S1. Change in the actual RE concentration of RE³⁺-doped YBO₃ samples with ionic radius of doped RE³⁺ ion.

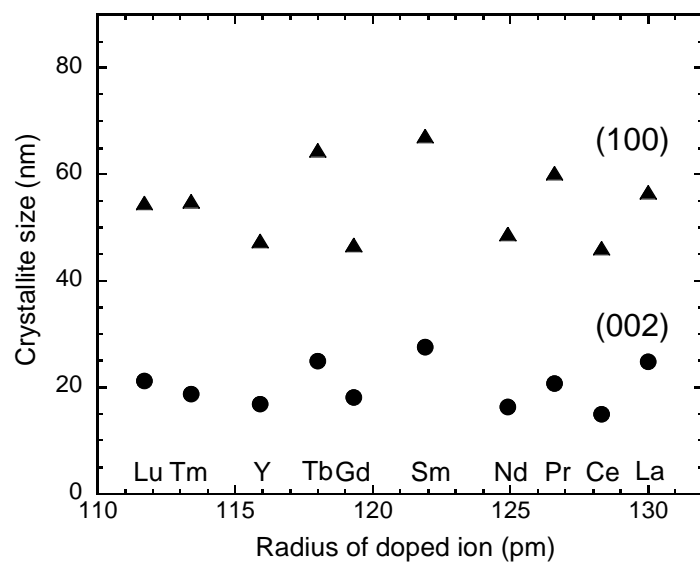


Fig. S2. Changes in crystallite sizes perpendicular to (100) and (002) of RE^{3+} -doped YBO_3 samples with ionic radius of doped RE^{3+} ion.

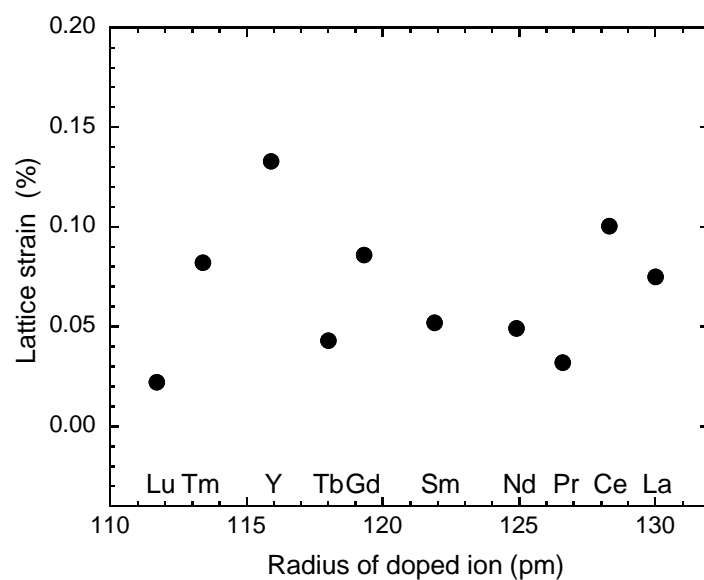


Fig. S3. Change in the lattice strain along a -direction of RE^{3+} -doped YBO_3 samples with ionic radius of doped RE^{3+} ion.

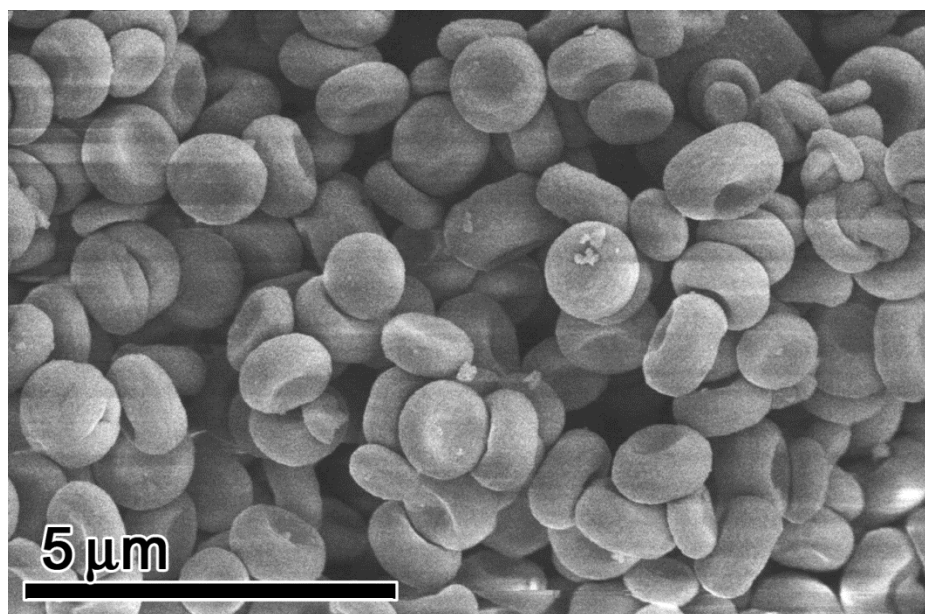


Fig. S4. SEM image of the undoped YBO₃ sample.

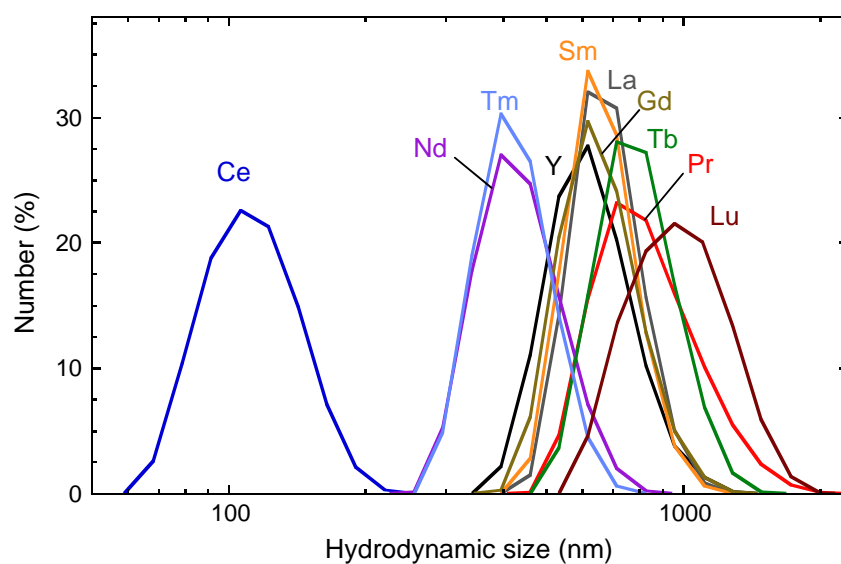


Fig. S5. Hydrodynamic size distributions of RE³⁺-doped YBO₃ samples.

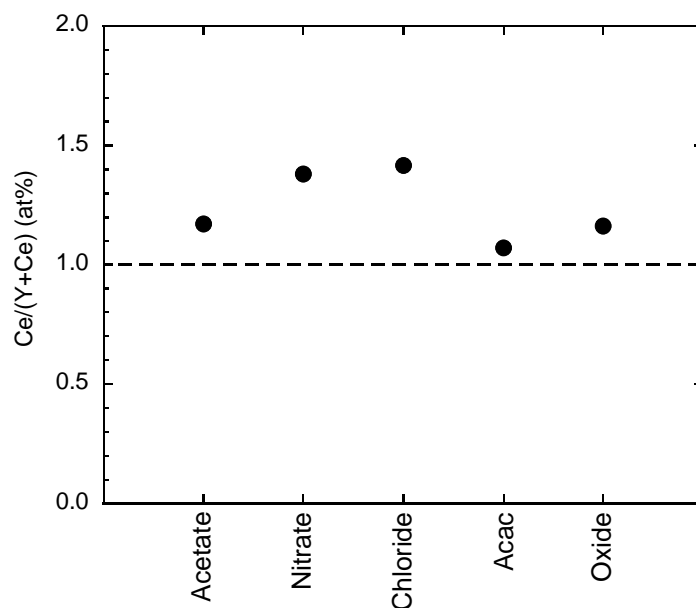


Fig. S6. Actual cerium concentrations of Ce-doped YBO₃ samples prepared from different cerium sources.

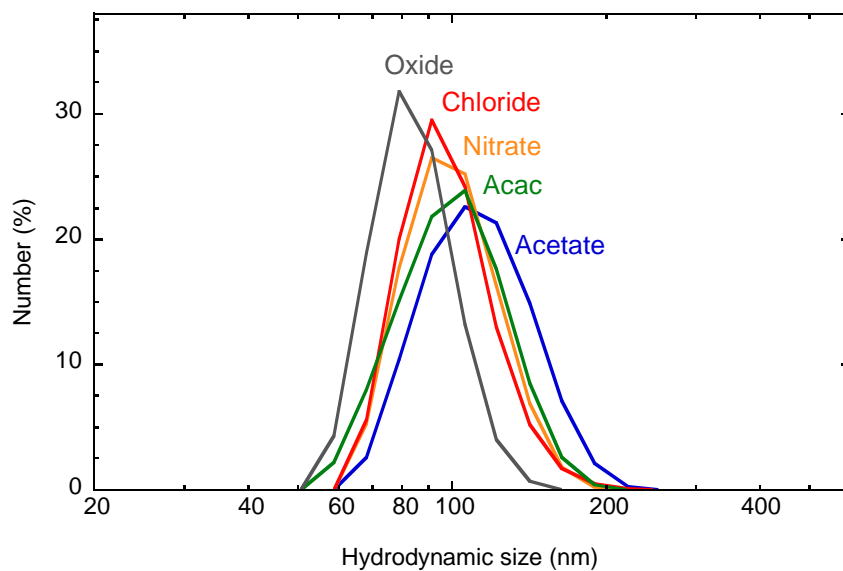


Fig. S7. Hydrodynamic size distributions of Ce-doped YBO₃ samples prepared from different cerium sources.