Electronic Supporting Information

Effect of kaolinite edge surfaces on formation of Tb³⁺-doped phosphor by solid-state reaction

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Figures



Figure S1. Photograph of the Tb³⁺ solution-immersed ground raw materials before and after the acid treatment (left to right).



Figure S2. Visible-light spectra of (a) m-CAS, (b) m-CAS-Tb-Edge, (c) m-CAS-Tb-0.075, (d) Tb₂O₃, and (e) m-CAS-Tb-0.3.



Figure S3. XPS spectrum of Tb_2O_3 (solid line). Dotted lines and dashed line are deconvolutional components and simulation spectrum, respectively.



Figure S4. FE-SEM images of (a) Ex-Kaol, (b) CaCO₃, (c) Tb₂O₃, (d) m-CAS, (e) m-CAS-Tb-0.3, and (f) m-CAS-Tb-Edge.



Figure S5. XRD patterns for CaCO₃, Ex-Kaol, and their ground raw materials (from bottom to top). The filled circles indicate calcite reflections.