## **Supporting Information**

## A Peculiar Layered 12-fold Cationic Coordination Compound LiInTi<sub>2</sub>O<sub>6</sub>: Phase Relations, Crystal Structure and Colortunable Photoluminescence

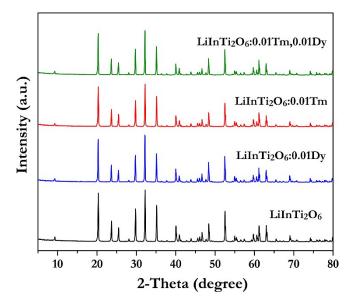
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**Figure S1.** XRD patterns of the representative phosphors of  $LiInTi_2O_6:0.01Dy^{3+}$ ,  $LiInTi_2O_6:0.01Tm^{3+}$ , and  $LiInTi_2O_6:0.01Tm^{3+}$ ,  $0.01Dy^{3+}$ . The XRD pattern of pure  $LiInTi_2O_6$  is also given as a reference.

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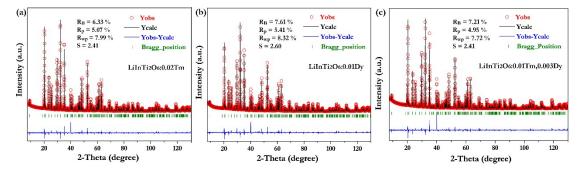


Figure S2. Rietveld refinement patterns for the representative phosphors of  $LiInTi_2O_6:0.02Tm^{3+}$ ,  $LiInTi_2O_6:0.01Dy^{3+}$ , and  $LiInTi_2O_6:0.01Tm^{3+}$ ,  $0.003 Dy^{3+}$ .