

Electronic Supplementary Information

Discovery of Yb^{2+} - Yb^{3+} couple as red-to-NIR persistent luminescence emitters in Yb-activated $(\text{Ba}_{1-x}\text{Sr}_x)\text{AlSi}_5\text{O}_2\text{N}_7$ phosphors

Ying Lv,^a Le Wang,^{*,b} Yixi Zhuang,^{*,a} Tian-Liang Zhou,^a and Rong-Jun Xie^{*,a,c}

^aCollege of Materials, Xiamen University, Simingnan-Road 422, Xiamen 361005, P. R. China

^bCollege of Optics and Electronic Science and Technology, China Jiliang University, Hangzhou, Zhejiang 310018, China.

^cSialon Group, National Institute for Materials Science, 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan

*rjxie@xmu.edu.cn; Xie.Rong-Jun@nims.go.jp; zhuangyixi@xmu.edu.cn; calla@cjl.u.edu.cn

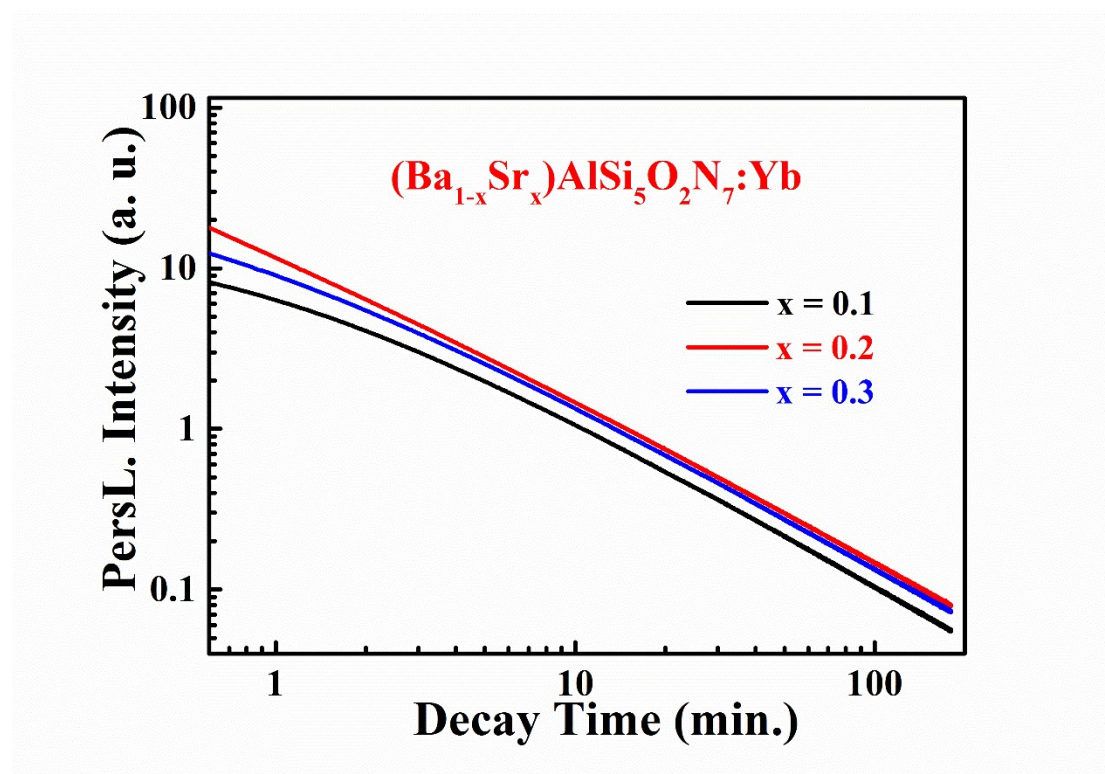


Figure S1. PersL decay curves of $(\text{Ba}_{1-x}\text{Sr}_x)\text{AlSi}_5\text{O}_2\text{N}_7:\text{Yb}$ ($x = 0.1, 0.2, 0.3$).