## **Supporting Information**

## Well-designed Sunlight-like Bi<sup>3+</sup>-activated White-light Phosphor

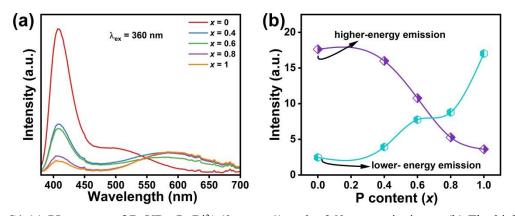
## for General Lighting

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**Fig. S1** (a) PL spectra of  $BaYB_{5-x}P_x:Bi^{3+}$  ( $0 \le x \le 1$ ) under 360 nm excitation. (b) The higher-/lower-energy emission intensity as function of P<sup>5+</sup> content.

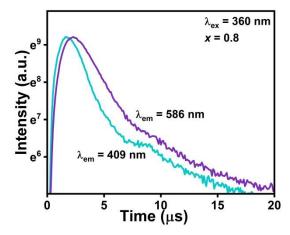


Fig. S2 The lifetime decay curves for  $Bi^{3+}$  in the  $BaYB_{4.2}P_{0.8}$ : $Bi^{3+}$  phosphor excited at 360 nm and monitored at 409 and 586 nm.