Supporting Information:

Reply to comment on "Zero-thermal-quenching and photoluminescence tuning with the assistance of carriers from defect

cluster traps"

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Fig. S1 The XRD patterns of  $SZ_{1-x}SPO:12\%Tb^{3+}$  ( $0 \le x \le 0.6\%$ ).

The XRD patterns of  $SZ_{1-x}SPO:12\%Tb^{3+}$  ( $0 \le x \le 0.6\%$ ) were presented in Fig. S1 in comparison with the Powder Diffraction File (PDF) card No. 54-1186. All the phosphors were certified as pure phase.