Supporting Information:

Comment on"Zero-thermal-quenching and photoluminescence tuning with assistance of carriers from defect cluster traps"

Yu Xiao,[ab] Zhendong Hao*[ab]

1. State Key Laboratory of Luminescence and Applications, Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, 3888 Eastern South Lake Road, Changchun 130033, China.

2. Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences, Beijing 100049, China.

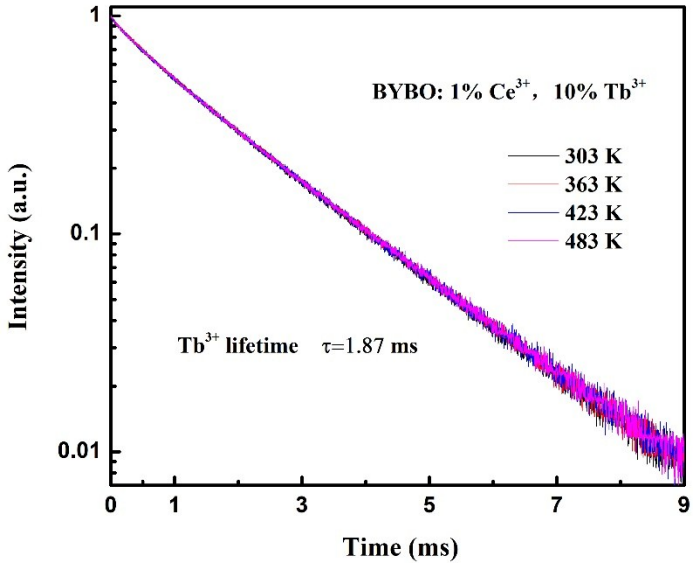

Fig. S1 Fluorescence decay curves of Tb^{3+} $^5D_4$ transition in BYBO: 1% Ce^{3+}, 10% Tb^{3+} upon Ce^{3+} excitation at 350nm for different temperatures from 303K to 483K

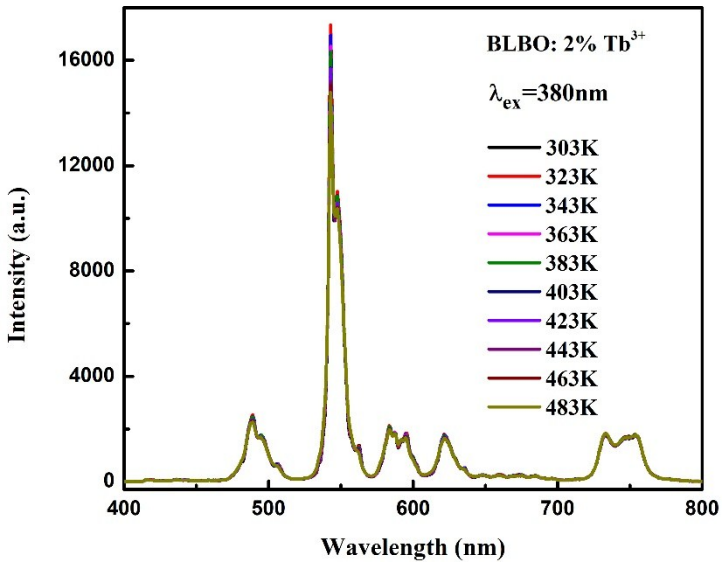

Fig.S2 Temperature dependent PL spectra of BLBO: 2% Tb^{3+} upon 380nm excitation.

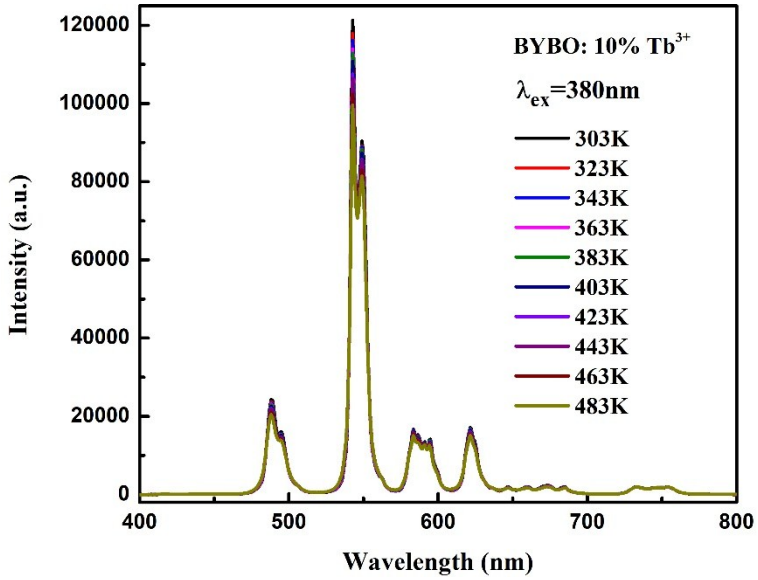

Fig.S3 Temperature dependent PL spectra of BYBO: 10% Tb^{3+} upon 380nm excitation.

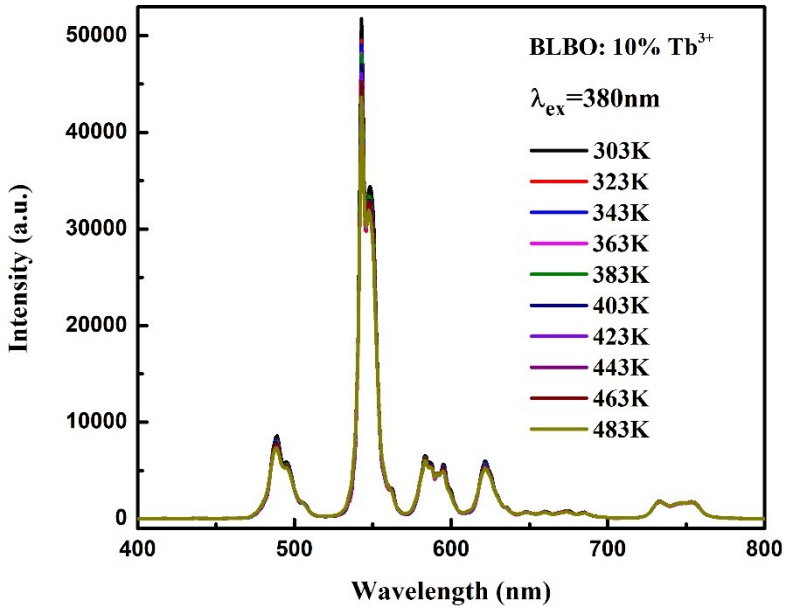

Fig.S4 Temperature dependent PL spectra of BLBO: 10% Tb^{3+} upon 380nm excitation.