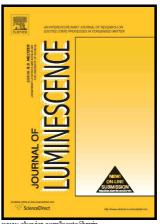
### Author's Accepted Manuscript

Abnormal photo-stimulated luminescence in Ba<sub>2</sub>Ga<sub>2</sub>GeO<sub>7</sub>: Tb<sup>3+</sup>, Bi<sup>3+</sup>

Shuyu Tian, Lei Zhao, Wenbo Chen, Zhichao Liu, Xiaotong Fan, Qiuhong Min, Huan Yu, Xue Yu, Jianbei Qiu, Xuhui Xu



www.elsevier.com/locate/jlumin

PII: S0022-2313(18)30882-2

DOI: https://doi.org/10.1016/j.jlumin.2018.06.007

Reference: LUMIN15669

To appear in: Journal of Luminescence

Received date: 18 May 2018 Revised date: 2 June 2018 Accepted date: 3 June 2018

Cite this article as: Shuyu Tian, Lei Zhao, Wenbo Chen, Zhichao Liu, Xiaotong Fan, Qiuhong Min, Huan Yu, Xue Yu, Jianbei Qiu and Xuhui Xu, Abnormal photo-stimulated luminescence in Ba<sub>2</sub>Ga<sub>2</sub>GeO<sub>7</sub>: Tb<sup>3+</sup>, Bi<sup>3+</sup>, *Journal of Luminescence*, https://doi.org/10.1016/j.jlumin.2018.06.007

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

#### **ACCEPTED MANUSCRIPT**

# Abnormal photo-stimulated luminescence in Ba<sub>2</sub>Ga<sub>2</sub>GeO<sub>7</sub>: Tb<sup>3+</sup>, Bi<sup>3+</sup>

Shuyu Tian<sup>a</sup>, Lei Zhao<sup>c</sup>, Wenbo Chen<sup>b</sup>\*, Zhichao Liu<sup>a</sup>, Xiaotong Fan<sup>a</sup>, Qiuhong Min<sup>a</sup>, Huan Yu<sup>a</sup>, Xue Yu<sup>a</sup>, Jianbei Qiu<sup>a</sup>, Xuhui Xu<sup>a\*</sup>

<sup>a</sup>College of Materials Science and Engineering, Kunming University of Science and Technology, Kunming 650093, P. R. China

<sup>b</sup>Engineering Research Center of New Energy Storage Devices and Applications, Chongqing University of Arts and Sciences, Chongqing, 402160, P. R. China

<sup>c</sup>School of Physics and Opto-Electronic Technology, Baoji University of Arts and Sciences, Baoji 721016, Shaanxi, People's Republic of China

qschenbo@sina.com

xuxuh07@126.com

\*Corresponding authors.

#### **Abstract**

A novel green-emitting phosphor Ba<sub>2</sub>Ga<sub>2</sub>GeO<sub>7</sub>: Tb<sup>3+</sup>, Bi<sup>3+</sup> was successfully synthesized by solid-state reaction. The photoluminescence (PL), photo-stimulated luminescence (PSL) and long persistent luminescence (LPL) were investigated in detail. After pre-irradiation upon UV light, the PSL spectrum of Ba<sub>2</sub>Ga<sub>2</sub>GeO<sub>7</sub>: Tb<sup>3+</sup>, Bi<sup>3+</sup> exhibits peaks centered at 493, 547, 589, and 627 nm

#### Download English Version:

## https://daneshyari.com/en/article/7839861

Download Persian Version:

https://daneshyari.com/article/7839861

<u>Daneshyari.com</u>