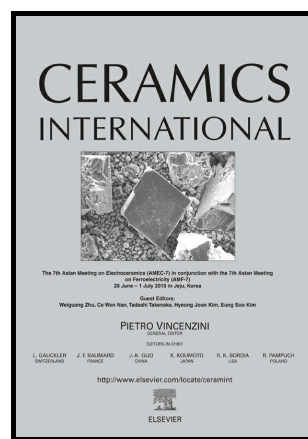


Yb<sup>3+</sup> concentration on emission color, thermal sensing and optical heater behavior of Er<sup>3+</sup> doped Y<sub>6</sub>O<sub>5</sub>F<sub>8</sub> phosphor

Haoyue Hao, Zhengming Lu, Hongyu Lu, Guanghong Ao, Yinglin Song, Yuxiao Wang, Xueru Zhang



www.elsevier.com/locate/ceri

PII: S0272-8842(17)30945-8  
DOI: <http://dx.doi.org/10.1016/j.ceramint.2017.05.133>  
Reference: CERI15293

To appear in: *Ceramics International*

Received date: 8 May 2017  
Revised date: 17 May 2017  
Accepted date: 18 May 2017

Cite this article as: Haoyue Hao, Zhengming Lu, Hongyu Lu, Guanghong Ao, Yinglin Song, Yuxiao Wang and Xueru Zhang, Yb<sup>3+</sup> concentration on emission color, thermal sensing and optical heater behavior of Er<sup>3+</sup> doped Y<sub>6</sub>O<sub>5</sub>F<sub>8</sub> phosphor, *Ceramics International*, <http://dx.doi.org/10.1016/j.ceramint.2017.05.133>

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.

**Yb<sup>3+</sup> concentration on emission color, thermal sensing and optical heater  
behavior of Er<sup>3+</sup> doped Y<sub>6</sub>O<sub>5</sub>F<sub>8</sub> phosphor**

Haoyue Hao<sup>a</sup>, Zhengming Lu<sup>a</sup>, Hongyu Lu<sup>a</sup>, Guanghong Ao<sup>b</sup>, Yinglin Song<sup>a</sup>, Yuxiao  
Wang<sup>a\*1</sup>, Xueru Zhang<sup>a\*2</sup>

<sup>a</sup>*Department of Physics, Harbin Institute of Technology, Harbin 150001, PR China*

<sup>b</sup>*Department of Applied Science, Harbin University of Science and Technology,  
Harbin 150001, PR China*

<sup>1</sup> wangyx@hit.edu.cn

<sup>2</sup> zhangxr@hit.edu.cn

*\*Corresponding author*

**Abstract**

Up-conversion phosphor is a potential candidate as non-contact temperature sensor because of its unjammable and unique detection abilities. In this work, we investigate the influence of Yb<sup>3+</sup> concentration on the emission color, thermal sensing and optical heater behavior of Er<sup>3+</sup> doped Y<sub>6</sub>O<sub>5</sub>F<sub>8</sub> phosphor. Our results show that the emission

Download English Version:

<https://daneshyari.com/en/article/5438040>

Download Persian Version:

<https://daneshyari.com/article/5438040>

[Daneshyari.com](https://daneshyari.com)