

Oral Presentation

[PH1]Phosphors and Devices

Chair: Rong-Jun Xie (Xiamen University)

Co-Chair: Koutoku Ohmi (Tottori University)

Fri. Nov 29, 2019 10:40 AM - 11:55 AM Room 204 (2F)

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[PH1-1(Invited)]Discovery of novel nitride phosphors by high throughput calculation

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Keywords:phosphor, white LEDs, high throughput calculation

Discovery of new phosphors with interesting properties is driven by rapid advances in lighting and displays. In this paper, we screened and searched for a super-broadband phosphor $\text{Sr}_2\text{AlSi}_2\text{N}_6:\text{Eu}^{2+}$ by using high throughput calculations. The emission of the phosphor covered the whole range of the visible light, enabling to create super-high color rendition white light when pumped by a UV-LED chip.