

Supporting information

ACS APPLIED MATERIALS & INTERFACES

Color-Tunable and Highly Luminous N^{3-} -doped $\text{Ba}_{2-x}\text{Ca}_x\text{SiO}_{4-6}\text{N}_{2/36}:\text{Eu}^{2+}$ ($0.0 \leq x \leq 1.0$) Phosphors for White NUV-LED

Donghyeon Kim,[†] Jong-Seong Bae,[§] Tae Eun Hong,[§] Kwun Nam Hui,[⊥] Sungyun Kim,^{||}

Chang Hae Kim,[¶] Jung-Chul Park^{†,*,*}

[†] Graduate School of Advanced Engineering, Silla University, Busan 46958, Republic of Korea

[‡] Center for Green Fusion Technology and Department of Engineering in Energy & Applied Chemistry, Silla University, Busan 46958, Republic of Korea

[§] Busan Center, Korea Basic Science Institute, Busan 46742, Republic of Korea

[⊥] Institute of Applied Physics and Materials Engineering, University of Macau, Avenida da Universidade, Taipa, Macau, China

^{||} Institute of NT.IT Fusion Technology, Ajou University, Suwon 16499, Republic of Korea

[¶] Advanced Materials Division, Korea Research Institute of Chemical Technology (KRICT), 141, Gajeong-ro, Yuseong-gu, Daejeon 34114, Korea

Corresponding: Jung-Chul Park

Center for Green Fusion Technology and Department of Engineering in Energy & Applied Chemistry, Silla University, Busan 617-736, Republic of Korea

Telephone: +82-51-999-5469

Fax number: +82-51-999-5652

E-mail: parkjc@silla.ac.kr

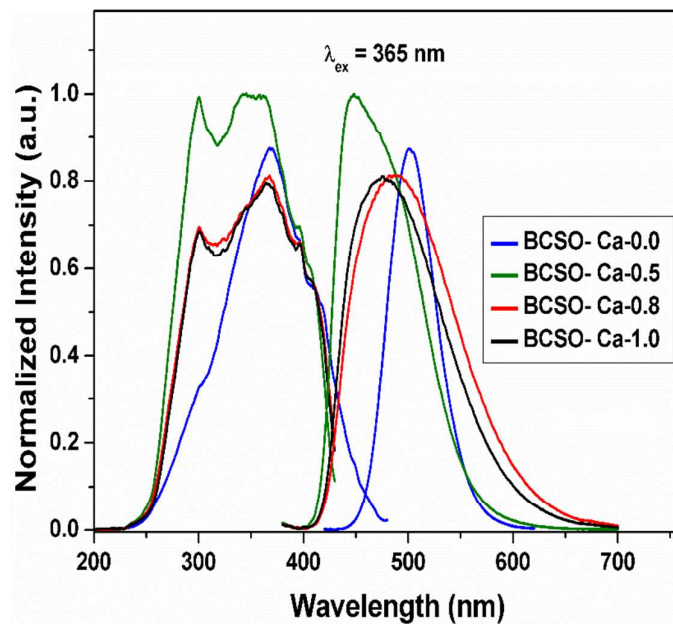


Figure S1. Normalized PL spectra of BCSO:Eu²⁺ (Ca = 0.0, 0.5, 0.8, 1.0).

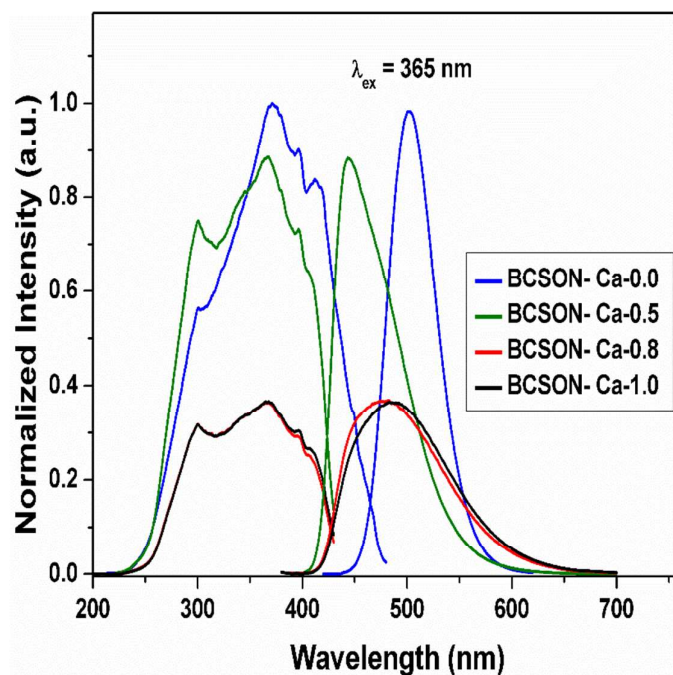


Figure S2. Normalized PL spectra of BCSON:Eu²⁺ (Ca = 0.0, 0.5, 0.8, 1.0).