

Supporting Information

Silica nanoparticles assisted Ba₂SiO₄: Eu²⁺ - a bluish-green emitting remote phosphor for white light application

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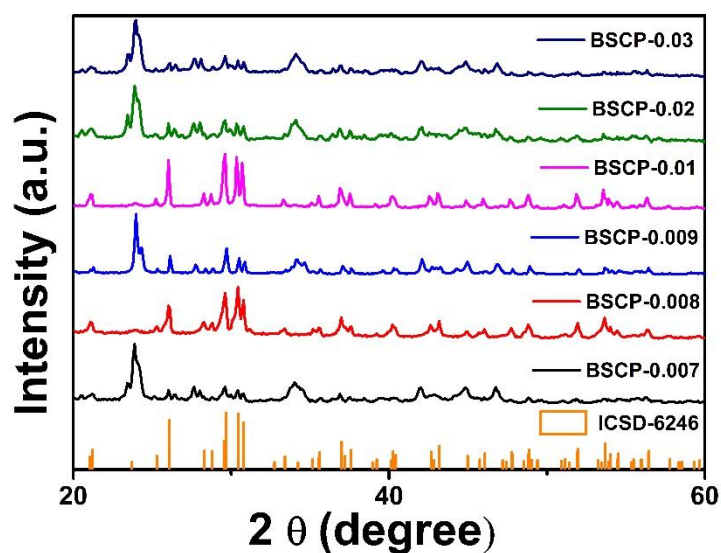


Figure S1: X-ray diffraction patterns of BSCP-0.007, 0.008, 0.009, 0.01, 0.02, and 0.03 phosphors.

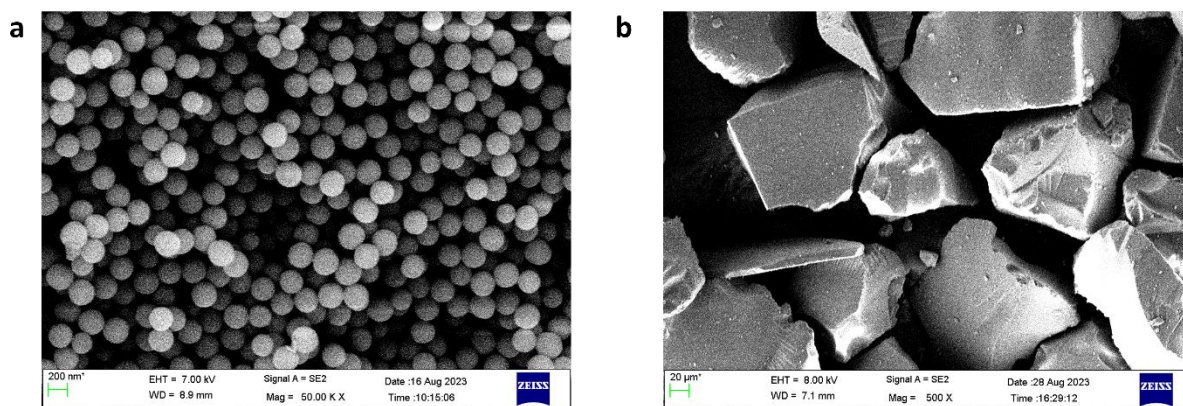


Figure S2: (a) and (b) represent FE-SEM images of silica nanoparticles and conventional silica.

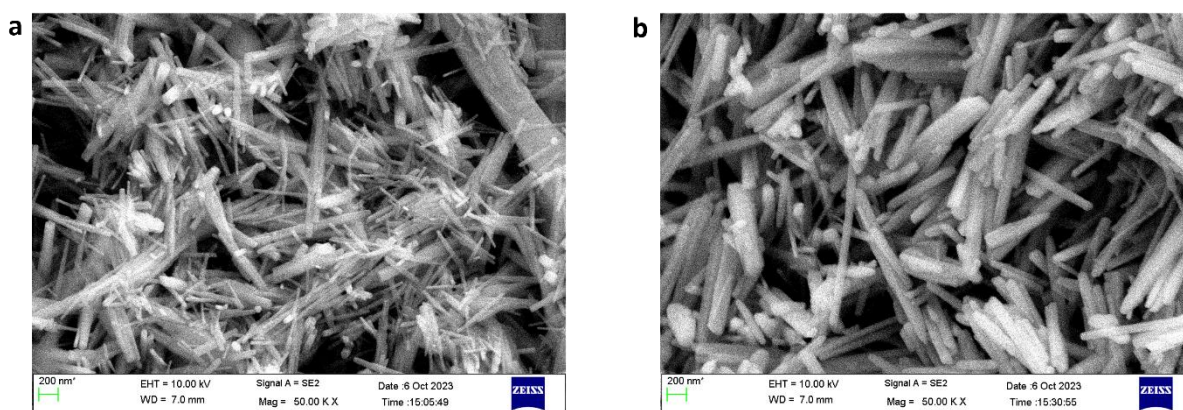


Figure S3: (a) and (b) represent FE-SEM images of BSSP-0.01 and BSCP-0.009 phosphor.

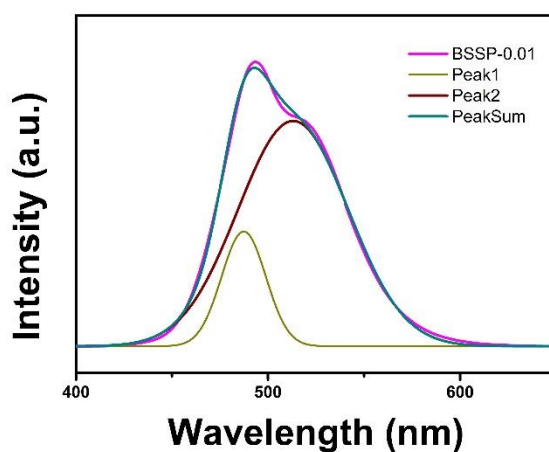


Figure S4: Gaussian fitting spectrum of BSSP-0.01 phosphor.

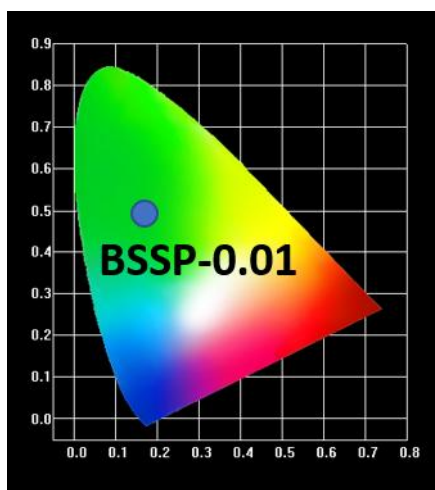


Figure S5: CIE chromaticity of optimized BSSP-0.01 phosphor.

Weight of the phosphor (mg) in 60 mg of binder	CIE (x, y)
30	0.15, 0.47
40	0.15, 0.47
50	0.15, 0.47
60	0.15, 0.47
70	0.15, 0.47

Table S1: Weight of the phosphor vs CIE coordinates of the BSSP remote phosphor

Voltage (V)	CIE coordinates (x, y)
2.9	0.25, 0.35
3.0	0.25, 0.35
3.1	0.24, 0.36
3.2	0.24, 0.38

3.3	0.23, 0.38
3.4	0.23, 0.39
3.5	0.23, 0.38
3.6	0.23, 0.38

Table S2: Applied Voltage Vs CIE coordinates of BSSP film-50 mg.

Change in time (h)	CIE coordinates (x, y)
1	0.23, 0.38
2	0.23, 0.38
3	0.23, 0.38
4	0.23, 0.38
5	0.23, 0.38
6	0.23, 0.38
7	0.23, 0.38
8	0.23, 0.38

Table S3: Change in time Vs CIE coordinates of optimized BSSP film – 50 mg.