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PAPER



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ELECTRONIC SUPPLEMENTARY MATERIAL

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FIGURE LEGENDS

Figure S1. Coordination environment of the EuBDC coordination compound.

Figure S2. Nitrogen adsorption-desorption BET isotherms of EuBDC (black line) and CDots/BDC (red line).

Figure S3. Thermogravimetric analysis curves of EuBDC (black line) and CDots/EuBDC (red line).

Figure S4. Emission spectra of CDots (λ_{Em} = 310-410nm) mesured at room temperature.

Figure S5. Stability of CDots under UV irradiation for 1h.

Figure S6. Excitation (λ_{Ex} = 621 nm (black line)) and emission (λ_{Em} = 280 nm (red line)) spectra for EuBDC coordination compound.

Figure S7. Blue (400-560 nm)-red (560-710 nm) spectral composition for EuBDC and CDots/EuBDC

Figure S8. ⁵D₀ decay curves (λ_{Ex} = 280 nm and λ_{Em} = 621 nm) for EuBDC (black line) and CDots/EuBDC (red line).

Figure S9. (A) Emission spectra (λ_{Ex} = 280-400- nm) and (B) Red (550-720)–blue (390-550 nm) spectral composition for CDots/EuBDC.

Figure S10. CIE Chromaticity diagram for CDots/EuBDC in different emission (λ_{Ex} = 280-394- nm).

Figure S11. A) Emission spectra of EuBDC in the range 295–343 K with excitation at 370 nm and B) Temperature-dependent exponential decay curves of EuBDC recorded at A) λ_{Ex} = 370 nm and λ_{Em} = 615 nm.

Figure S12. XRD measurements of EuBDC Simulated (grey line), before (black line) and after heating-cooling processes (red line).













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Table S1. CIE color coordinates of CDots/EuBDC for different excitation wavelengths (λ_{Ex} =280-400 nm).

Wavelength	CIE color
(nm)	coordinates (x,y)
280	0.64; 0.34
300	0.64; 0.35
315	0.64; 0.35
321	0.64; 0.35
330	0.63; 0.34
340	0.50; 0.29
365	0.31; 0.23
370	0.29; 0.23
380	0.37; 0.26
394	0.56; 0.32

Table S2. Temperature-dependent CIE emission color coordinates of CDots/EuBDC (293-348 K).

Temperature	CIE color
К	coordinates x,y
293	0.36; 0.27
298	0.37; 0.28
303	0.38; 0.28
308	0.39; 0.28
313	0.39; 0.28
318	0.40; 0.29
323	0.40; 0.29
328	0.41; 0.29
333	0.42; 0.29
338	0.43; 0.30
343	0.43; 0.30
348	0.44; 0.30