Supplementary Information (SI) for Nanoscale.


# Structural and optical properties of in situ Eu-doped ZnCdO/ZnMgO superlattices grown by plasma-assisted molecular beam epitaxy

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## Supplementary Materials

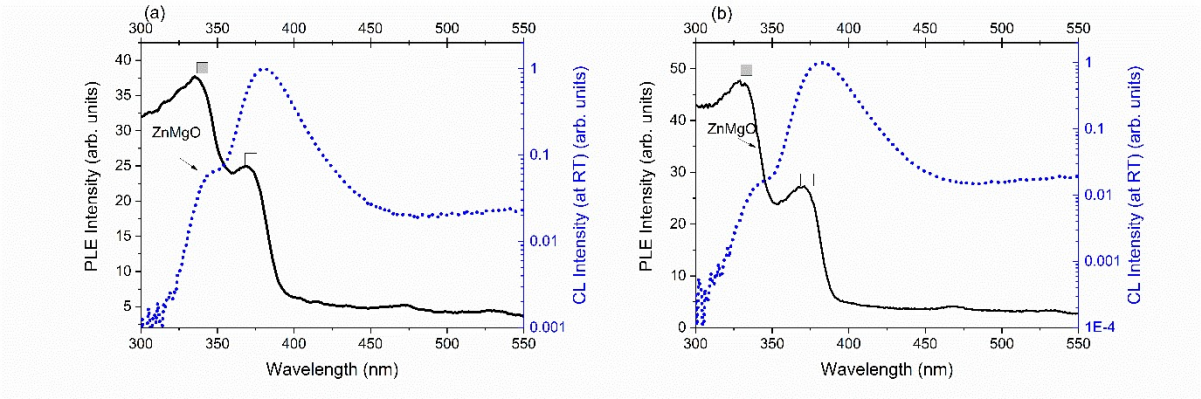


Fig S.1 PLE spectra (emission measured at 613 nm) and CL spectra measured at RT for two of the superlattices (a) sample A (b) sample B.

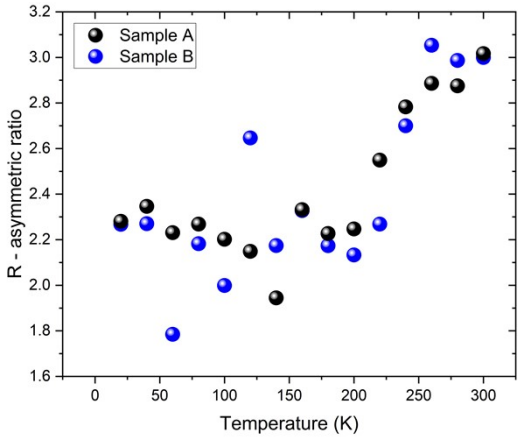


Fig S. 2 Dependence of luminescence integrated intensity ratio R on temperature of the I( $^5D_0 \rightarrow {}^7F2$) to I( $^5D_0 \rightarrow {}^7F_1$) transition line.

Table S1. CIE coordinates of Eu-doped $\{ZnCdO/ZnMgO\}_{22}$ SLs before and after annealing in an $O_2$ for 1 minute at room temperature.

| Room temperature | | | |
|---|---|---|---|
| Sample | | $x$ | $y$ |
| Sample A | As-grown | 0.3 | 0.275 |
| | RTP 700°C | 0.321 | 0.307 |
| | RTP 800°C | 0.242 | 0.195 |
| | RTP 900°C | 0.246 | 0.223 |
| Sample B | As-grown | 0.293 | 0.257 |
| | RTP 700°C | 0.34 | 0.313 |
| | RTP 800°C | 0.308 | 0.271 |
| | RTP 900°C | 0.267 | 0.246 |