

Electronic Supplementary Material (ESI) for Journal of Materials

Chemistry C.

Doping dependent dual-response mechanoluminescence in ZnGa_2O_4

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Electronic Supplementary Information

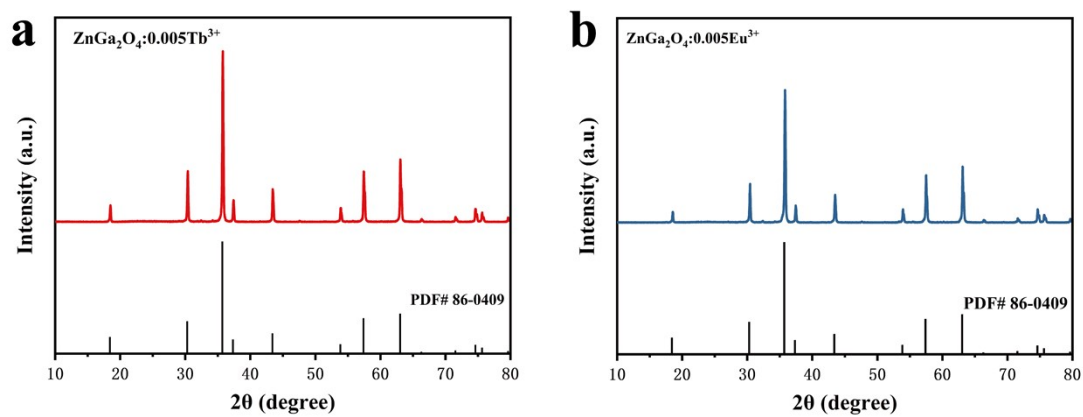


Figure S1. The XRD patterns of ZGO:Tb³⁺ (a) and ZGO:Eu³⁺ (b).

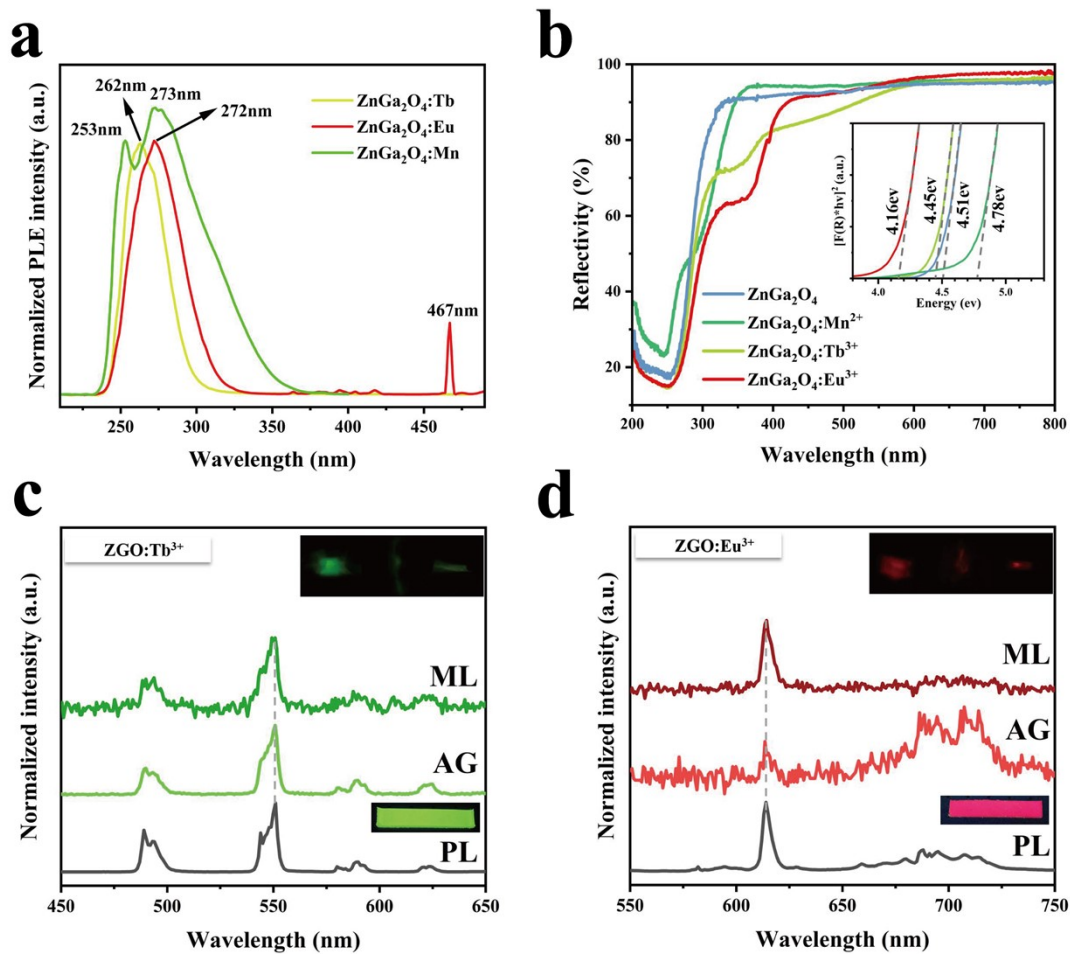


Figure S2. (a) PLE and (b) UV-Vis DRS of ZnGa₂O₄ host and ZGO:M (M=Mn, Tb and Eu), the comparison of their excitation spectra (λ_{em} = maximum emission wavelength). The ML, AG and PL spectra of (c) ZGO:Tb³⁺ and (d) ZGO:Eu³⁺.

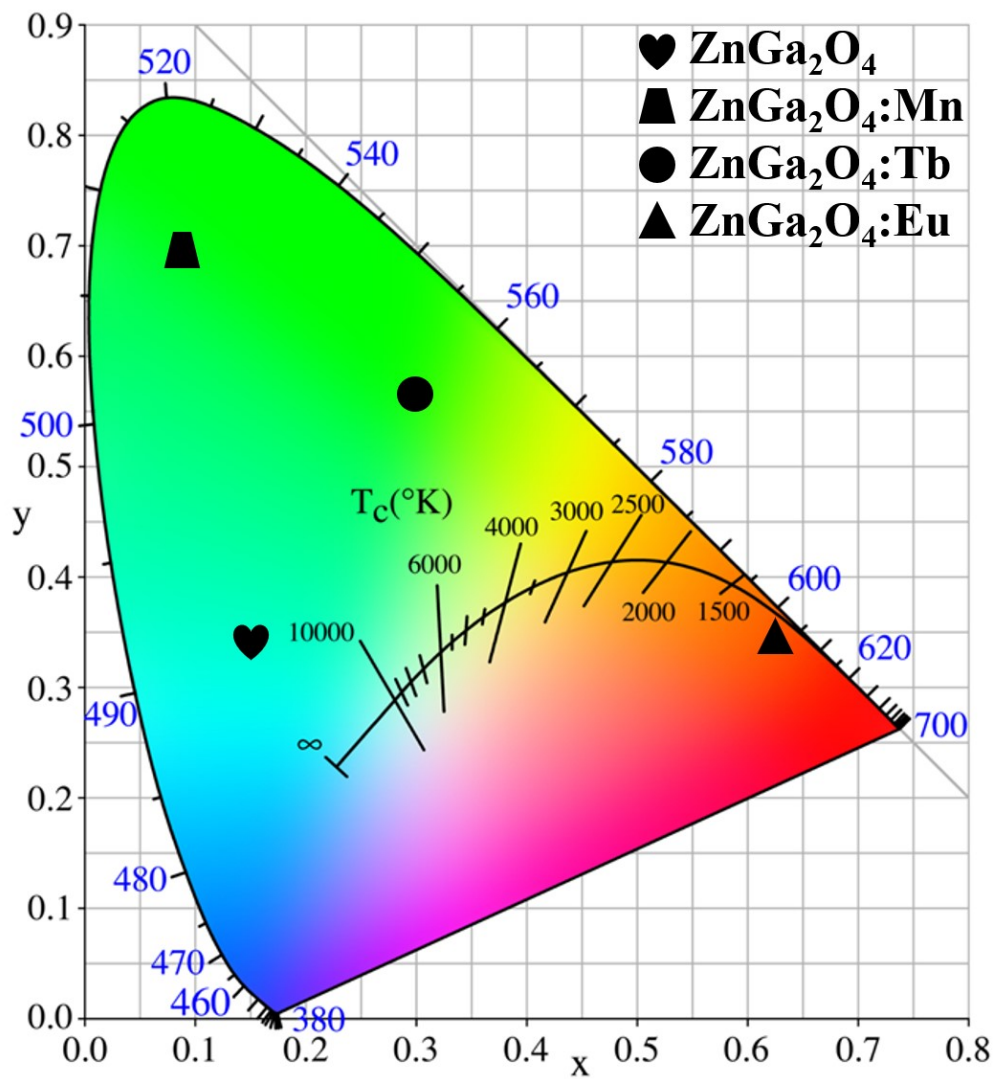


Figure S3. CIE coordinates of the ML composites

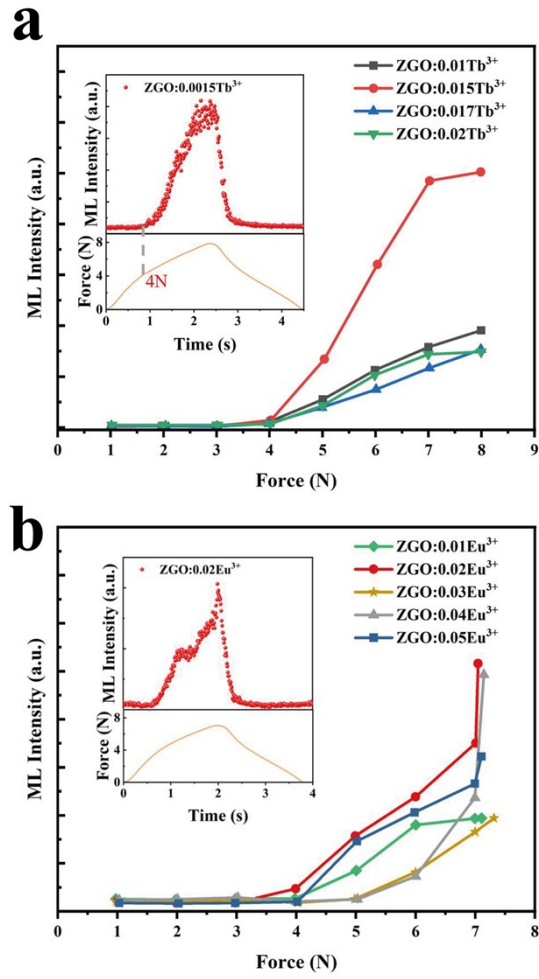


Figure S4. The integral ML intensity versus the tension force for the composite film of (a) ZGO:Tb/PDMS and (b) ZGO:Eu/PDMS.

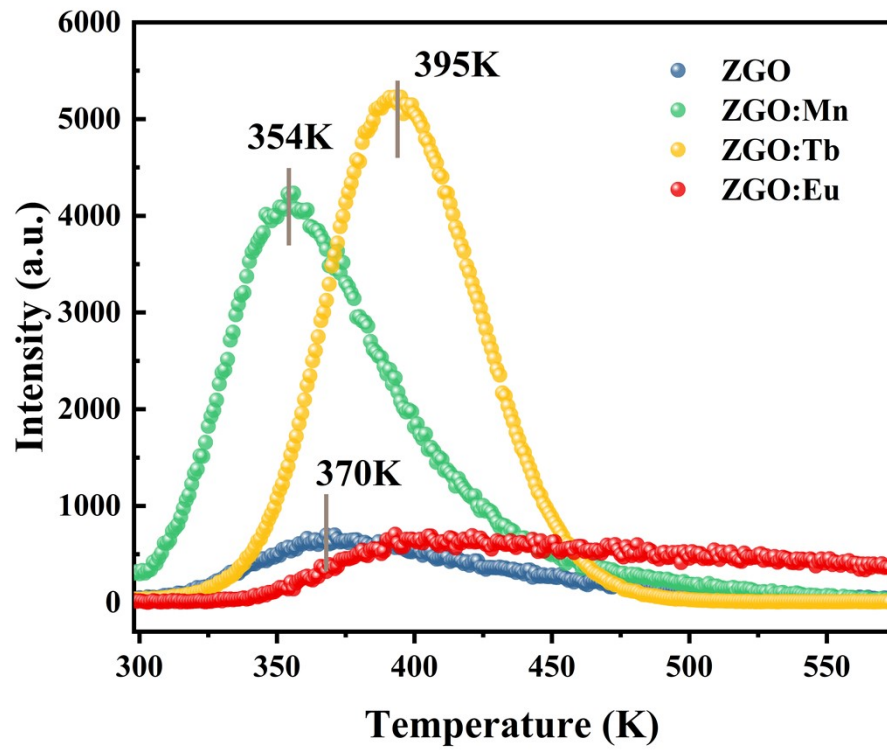


Figure S5. TL spectra of ZGO, ZGO:Mn, ZGO:Tb and ZGO:Eu before stretching

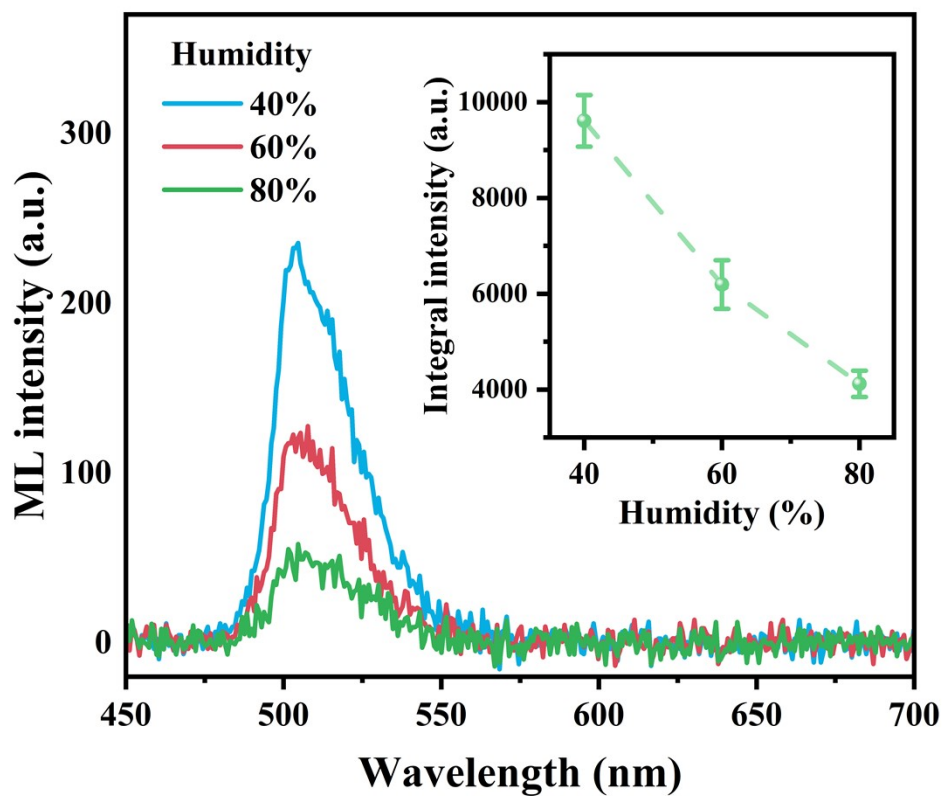


Figure S6. ML spectra of ZGO:Mn/PDMS under different humidity.