

CORRECTION

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Correction: A roadmap for laser optimization of Yb:Ca₃(NbGa)₅O₁₂-CNGG-type single crystal garnets

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Correction for 'A roadmap for laser optimization of Yb:Ca₃(NbGa)₅O₁₂-CNGG-type single crystal garnets' by J. O. Álvarez-Pérez *et al.*, *J. Mater. Chem. C*, 2021, 9, 4628–4642, DOI: 10.1039/d0tc05718e.

The authors regret that in the published work the Yb³⁺ Z_l/Z_u value given was erroneous. The correct value according to the energy level selection given in Fig. S13 in the ESI is $Z_l/Z_u = 1.044$. Thus, Fig. 5 in the published article must be replaced with the corrected version shown below. Accordingly, the maximum emission cross sections are $\sigma_{\text{EMI}} = 1.35 \times 10^{-20} \text{ cm}^2$ for Yb:CLNGG, $\sigma_{\text{EMI}} = 1.12 \times 10^{-20} \text{ cm}^2$ for Yb:CNGG and $\sigma_{\text{EMI}} = 1.17 \times 10^{-20} \text{ cm}^2$ for Yb:CNNGG. The radiative lifetimes calculated by the Füchtbauer–Landeberg method using these new emission cross sections are $\tau_{\text{RAD}} = 611 \mu\text{s}$ for Yb:CNGG, $\tau_{\text{RAD}} = 644 \mu\text{s}$ for 12.23 at% Na: 7.13 at%

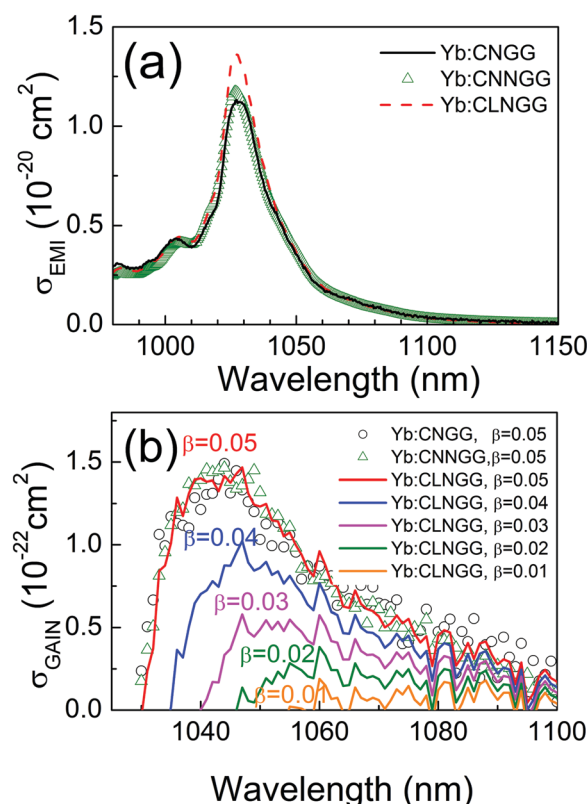


Fig. 5 (a) Emission cross section, σ_{EMI} , of Yb:CNGG-type crystals. (b) Gain cross sections of Yb:CNGG-type crystals. Circles are for Yb:CNGG, $\beta = 0.05$. Triangles are for Yb:CNNGG, $\beta = 0.05$. The lines correspond to Yb:CLNGG for different β values.

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Yb:CNNGG and $\tau_{\text{RAD}} = 582 \mu\text{s}$ for Yb:CLNGG, *i.e.* much closer to the experimentally determined value, $\tau_{\text{RAD}} \approx 800 \mu\text{s}$, than those reported in the published article ($\tau_{\text{RAD}} = 419\text{--}464 \mu\text{s}$).

These corrections have no effect on any other results published in the article, and do not affect the discussion or any of the published conclusions. The authors sincerely apologize for this error.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

