

Cite this: *Nanoscale*, 2017, 9, 18107

Correction: Controlled synthesis of lanthanide-doped Gd₂O₂S nanocrystals with novel excitation-dependent multicolor emissions

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DOI: 10.1039/c7nr90246h

rsc.li/nanoscale

Correction for 'Controlled synthesis of lanthanide-doped Gd₂O₂S nanocrystals with novel excitation-dependent multicolor emissions' by Lei Lei, *et al.*, *Nanoscale*, 2017, 9, 5718–5724.

The authors wish to amend the sections of the manuscript detailed below. These corrections are due to the misleading origin of the excitation bands for Eu/Sm/Dy in lanthanide oxysulfide hosts.

The corrections are as follows:

- (1) On page 5718 in the sentence beginning “Considering that Tb³⁺ and...” the phrase “4f → 5d” should instead read as “4f → 5d or 4f → 4f”.
- (2) On page 5721 in the sentence beginning “Taking the F-NYG NCs...” the phrase “4fⁿ → 4fⁿ⁻¹5d¹” should instead read as “4f → 5d or charge transfer band”
- (3) On page 5721 in the sentence beginning “On replacing all Gd³⁺ ions...” the phrase “the intensity of the 4f → 5d transitions for Tb³⁺ and Dy³⁺ in the PLE spectra” should instead read as “the intensity of the 4f → 5d transitions for Tb³⁺ and O²⁻ → Dy³⁺ charge transfer for Dy³⁺ in the PLE spectra”.
- (4) On page 5721 in the sentence beginning “However, the color variation...” the phrase “4f → 5d transitions of Tb³⁺ and Eu³⁺” should instead read as “4f → 5d transitions of Tb³⁺ and 4f → 4f transitions of Eu³⁺”
- (5) The labels in Fig. 4(a) and Fig. S10(b) should be corrected, as shown in the below corrected figures.¹

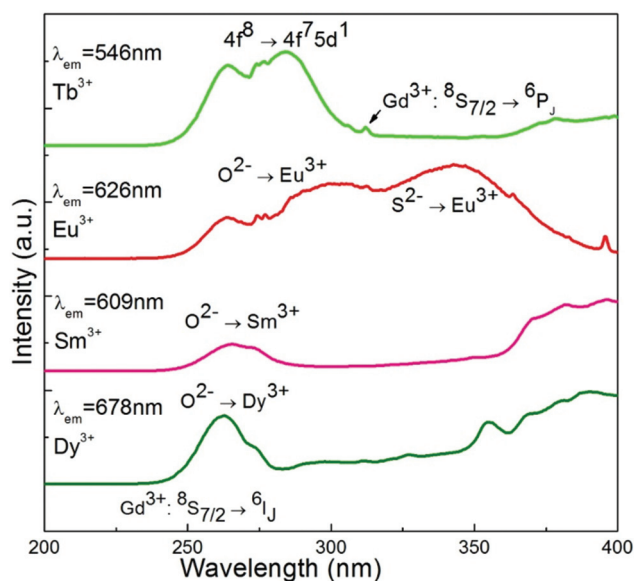


Fig. 4a PLE spectra of F-NYG:Tb³⁺ (or Eu³⁺, Sm³⁺, and Dy³⁺).

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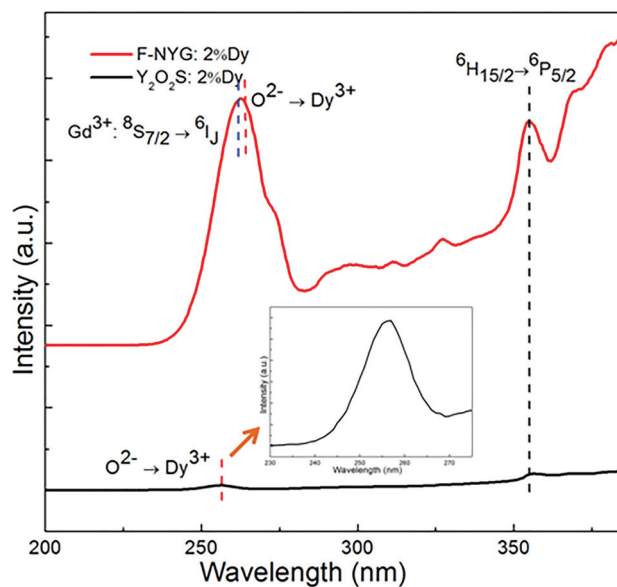


Fig. S10b PLE spectrum of F-NYG: 2%Dy (Y₂O₂S: 2%Dy).

(6) References 9 and 39 given in the sentence beginning “Multicolor emission could not...” should instead refer to the references listed below (ref. 2 and 3)

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

References

- 1 X. J. Wang, J. G. Li, M. S. Molokeev, Q. Zhu, X. D. Li and X. D. Sun, *Chem. Eng. J.*, 2016, **302**, 577–586.
- 2 J. R. DiMaio, B. Kokuoz, T. L. James and J. Ballato, *Adv. Mater.*, 2007, **19**, 3266–3270.
- 3 A. Podhorodecki, M. Banski, J. Misiewicz, M. Afzaal, P. O. Brien, D. Cha and X. B. Wang, *J. Mater. Chem.*, 2012, **22**, 5356–5361.

