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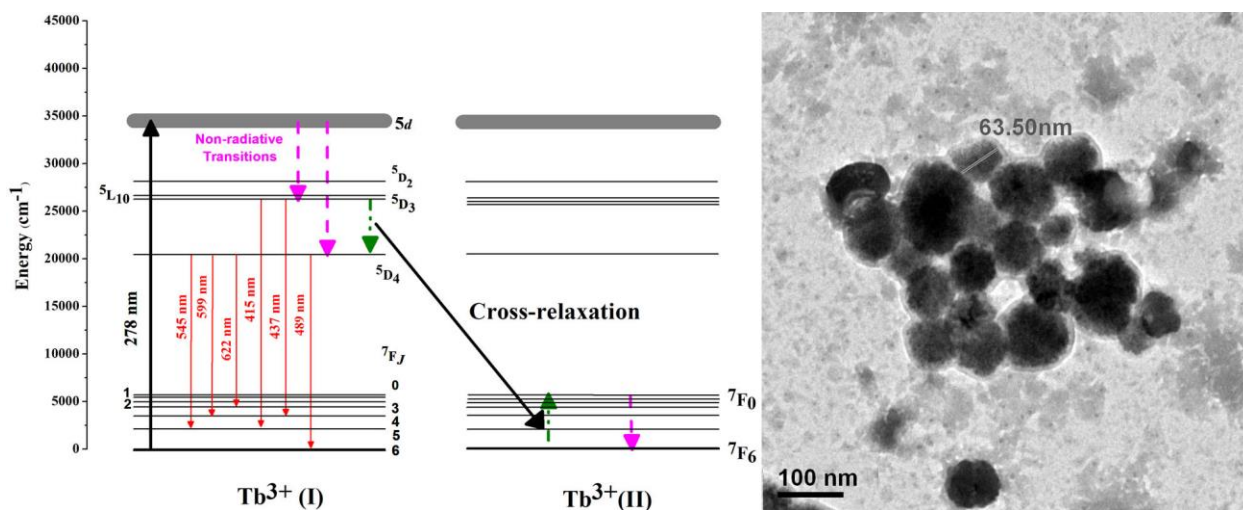
# Synthesis and luminescent properties of Tb<sup>3+</sup> doped BaLa<sub>2</sub>ZnO<sub>5</sub> nanoparticles

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## Graphical abstract



## Highlights:

- First combustion-synthesis report of BaLa<sub>2-x</sub>ZnO<sub>5</sub>:xTb<sup>3+</sup> nanophosphors.
- Lattice parameters and atomic positions have been refined.
- Critical distance for non-radiative energy transfer has been calculated.
- These nanophosphors are suitable candidate for solid state lighting.
- Some blue to green color tunability has been found.

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