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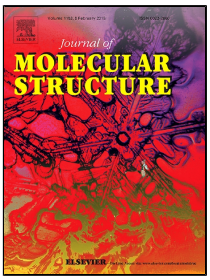

Structural studies of a green-emitting terbium doped calcium zinc phosphate phosphor

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Highlights

Structural studies of a green-emitting terbium doped calcium zinc phosphate phosphor

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1. A green emitting $CaZn_2(PO_4)_2:Tb^{3+}$ phosphors were synthesized.
2. Chemical bonds of P-O, Ca-O, Zn-O and Tb-O were investigated by XPS.
3. The phosphor has two different decay dynamics upon various emissions.
4. Chromaticity coordinates were located in green region of visible spectrum.