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(54) Title: DOPED AMORPHOUS AND CRYSTALLINE ALKALINE EARTH GALLATES AS ELECTROLUMINESCENT MATERIALS (57) Abstract New phosphors based on doped alkaline earth gallates for electroluminescent (EL) display materials. Bright red EL has been obtained in amorphous and crystalline alkaline earth gallates doped with europium. Powder targets of compositions $\text{Sr}_4\text{Ga}_2\text{O}_7$, $\text{Sr}_7\text{Ga}_4\text{O}_{13}$, $\text{Sr}_3\text{Ga}_2\text{O}_6$, $\text{Sr}_3\text{Ga}_4\text{O}_9$, SrGa_4O_7, $\text{SrGa}_{12}\text{O}_{19}$, $\text{Ba}_4\text{Ga}_2\text{O}_7$, $\text{Ba}_3\text{Ga}_2\text{O}_6$ and $\text{Ca}_3\text{Ga}_4\text{O}_9$ doped with 1-2 % Eu, where RF magnetron sputtered onto BaTiO_3 substrates. Both annealed and as-deposited films yielded bright EL emission in the red part of the visible spectrum with peaks characteristic of the Eu^{3+} ion.		