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## Synthesis and Luminescence of $\text{Ba}_2\text{ScCl}_7$

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New results on luminescence in  $\text{Ba}_2\text{ScCl}_7$  are reported. Lanthanides  $\text{Eu}^{2+}$  and  $\text{Ce}^{3+}$  were chosen as activators. The phosphors could be prepared by a simple wet chemical method. Reduction of europium to the divalent form could be achieved at  $400^\circ\text{C}$ . Both activators exhibit strong photoluminescence (PL) originating in transitions from the lowest energy state of  $4f^{n-1}5d^1$  configuration to the ground state of  $4f^7/4f^8$  configuration. Simple preparation coupled with intense PL prompted us to suggest that these hitherto unexplored phosphors could be exploited for applications such as scintillator.

**Keywords:** halide, photoluminescence, phosphor.