$CaF_2(Eu^{2+})$:LiF-structural and spectroscopic properties of a new system for neutron detection.

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Streszczenie

A series of composites of $CaF_2(Eu^{2+})$ and LiF with different Ca/Li ratios were fabricated via liquid phase consolidation. Luminescent properties of these samples were investigated. Radioluminescence shows the typical Eu^{2+} blue emission in all the compositions. The energy spectra measured under γ and neutron irradiation indicates that the most promising composition for neutron detection is the eutectic.

Słowa kluczowe

fluorides, liquid phase consolidation, neutron detection, scintillation, Eu2+

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