

Spectroscopic properties of high-temperature sintered SrS:0.05%Ce³⁺ under high hydrostatic pressure.

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Streszczenie

Luminescent properties of SrS:Ce pellets sintered at 1700 °C were investigated under high pressure. Two different Ce³⁺-related emissions were confirmed to appear in blue-green and red part of spectrum and were shown to shift significantly and linearly to longer wavelengths with increasing pressure. Changes in decay times of both emissions were also thoroughly analyzed. The results confirmed that Ce³⁺ ions pairing/clustering occurring due to their enhanced mobility at high temperatures is responsible for the appearance of the recently reported red Ce³⁺ emission in sintered SrS:Ce pellets.

Adres publiczny

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Strona internetowa wydawcy

<https://www.rsc.org/>