Contribution ID: **210** Type: **Oral Presentation**

Absorption and site-selective laser spectroscopy of BaF₂:Nd³⁺ single crystals

Thursday, 12 July 2012 12:00 (20 minutes)

Abstract content
   (Max 300 words)

Spectroscopic studies of Nd³⁺ ions in BaF₂ single crystals have been carried out in order to determine the optical properties of the material. A single Nd³⁺ - F⁻ center is dominant for dopant concentrations of up to 0.1%; this homogeneity makes the material attractive as a potential laser medium. Crystal-field energy levels for several Nd³⁺ multiplets deduced from optical absorption, direct fluorescence and upconversion fluorescence spectra obtained at 10 K will be presented and energy exchange mechanisms proposed.

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Would you like to <br> submit a short paper <br> for the Conference
 Proceedings (Yes / No)?

no

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