

## **Crystal field of octahedral Yb<sup>3+</sup> centers in a CsCaF<sub>3</sub> crystal**

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### **Abstract**

The phenomenological crystal-field potentials of cubic and trigonal Yb<sup>3+</sup> centers in a CsCaF<sub>3</sub> crystal have been determined from the experimental energy-level schemes. These potentials are compared with the potentials of the analogous centers in the isomorphous hosts KMgF<sub>3</sub> and KZnF<sub>3</sub>. Information about the phonon spectrum of a CsCaF<sub>3</sub>:Yb crystal was obtained from the electronic-vibrational structure of the luminescence spectra. © 1997 American Institute of Physics.

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