

## **Spectroscopy and stimulated emission of Nd<sup>3+</sup> in an acentric CsY<sub>2</sub>F<sub>7</sub> host**

Dubinskii M., Khaidukov N., Garipov L., Naumov A., Semashko V.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### **Abstract**

The results of preliminary spectroscopic studies of new fluoride single-crystal CsY<sub>2</sub>F<sub>7</sub> that is activated by Nd<sup>3+</sup> ions are given. Direct evidence for the possibility of application of this ordered material as a laser host is given for the first time to our knowledge. Stimulated emission of Nd<sup>3+</sup> ions on the main intermultiplet transition is obtained under both nonselective flash-lamp pumping conditions and continuous Ar ion laser pumping conditions. © 1992 Optical Society of America.

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