Characterization of perspective active medium based on mixed crystals Ce3+:LiCaXSr1-XAIF6

Shavelev A.A., Nizamutdinov A.S., Shakirov A.A., Marisov M.A., Madirov E.I., Lukinova E.V., Rakhimov N.F., Popov P.A., Semashko V.V. *Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

Abstract

© 2020 IEEE. The aim of this work is characterization of perspective active media based on mixed crystals Ce3+:LiCaXSr1XAlF6. Also the optical studies ions in the UV spectral range and effect of the various types of the doping centers on the laser characteristics in the Ce3+:LiCaXSr1-XAlF6 mixed crystals were studied.

http://dx.doi.org/10.1109/ICLO48556.2020.9285897

Keywords

fluoride, mixed crystals, UV lasers

References

- [1] V. A. Fromzel, C. R. Prasad et al. Advances in Optical and Photonic Devices, 101-116 (2010)
- [2] K. Watanabe, T. Yanagida et al. Sensors and Materials, 27, 269-275 (2015).
- [3] D. Alderighi et al. Applied Physics B: Lasers and Optics, 83, 51-54 (2006)
- [4] M. H. Pham et al. Japanese Journal of Applied Physics, 53, 062701 (2014)
- [5] A. S. Nizamutdinov, V. V. Semashko et al. Physics of the Solid State, 50, 1648-1651 (2008)