

Ultra-short pulses UV lasing in multifunctional Ce:LiY_{0.3}Lu_{0.7}F₄ active medium

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Abstract

© 2016 Optical Society of America. The single pulse laser oscillation with 400 ± 10 ps pulse duration at 311 nm from LiY_{0.3}Lu_{0.7}F₄:Ce³⁺ crystal was obtained from intracavity loss modulation via pump-induced color centers bleaching. Modulation of average losses is regulated via color centers concentration that determines the multifunctionality of solarizable LiY_{0.3}Lu_{0.7}F₄:Ce³⁺ active medium.

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