



# Passively mode-locked erbium-doped double-clad fiber laser operating at the 322nd harmonic

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Auteur	Amrani, Foued [1], Haboucha, Adil [2], Salhi, Mohamed [3], Leblond, Hervé [4], Komarov, Andrey [5], Grellu, Philippe [6], Sanchez, François [7]
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Résumé en anglais	We report passive mode locking of a soliton erbium-doped double-clad fiber laser operating at the 322nd harmonic of the fundamental cavity frequency. Repetition rates up to 3 GHz have been obtained with pulses of 1 ps duration and 18 pJ of energy. The supermode suppression at the 322nd harmonic is better than 25 dB. In addition, the transition dynamics from a bunched state of pulses to stable harmonic mode locking is presented, revealing a very long time scale.
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