

Sub-40 fs Kerr-lens mode-locked Tm,Ho:CALGO laser

Friday, 2 September 2022 10:45 (15 minutes)

In the present work, we explored further reduction of the pulse duration in ML Tm,Ho:CALGO laser via soft-aperture Kerr-lens mode-locking (KLM). Pulses as short as 37 fs were generated from KLM Tm,Ho:CALGO laser at 2061.3 nm with an average output power of 55 mW and a repetition rate of 76 MHz.

Primary authors: CHEN, Weidong (Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Berlin, Germany); WANG, Li (Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Berlin, Germany); GRIEBNER, Uwe (Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Berlin, Germany); ZHANG, Ge (Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, Fuzhou, China); LOIKO, Pavel (Centre de Recherche sur les Ions, les Matériaux et la Photonique (CIMAP), UMR 6252 CEA-CNRS- ENSICAEN, Université de Caen, Caen, France); MATEOS, Xavier (Universitat Rovira i Virgili, Tarragona, Spain); BAE, Ji Eun (Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea); ROTHERMUND, Fabian (Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea); XU, Xiaodong (Jiangsu Normal University, Xuzhou, China – 7University of Manitoba, Winnipeg, Canada); MAJOR, Arkady (University of Manitoba, Winnipeg, Canada); PETROV, Valentin (Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Berlin, Germany)

Presenter: CHEN, Weidong (Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Berlin, Germany)

Session Classification: SSL 7 Tm, Ho Lasers