10 mJ-level Picosecond OPCPA Pump Laser Based on Room Temperature Hybrid Yb:YAG Amplifier System

Wednesday, 31 August 2022 10:30 (15 minutes)

On the way to developing 100W and 10 mJ class laser we demonstrate a hybrid laser system based on fiber laser seed source and chirped pulse amplification in free-space Yb:YAG cascade. The system is capable of delivering 13 mJ energy 1 ps duration pulses at 20 Hz repetition rate.

Primary authors: KAZAKEVIČIUS, Aivaras (National Center for Physical Sciences and Technology, Vilnius, Lithuania); BUROKAS, Raimundas (National Center for Physical Sciences and Technology, Vilnius, Lithuania); DANILEVIČIUS, Rokas (Ekspla ltd., Vilnius, Lithuania); MICHAILOVAS, Andrejus (National Center for Physical Sciences and Technology, Vilnius, Lithuania)

Presenter: KAZAKEVIČIUS, Aivaras (National Center for Physical Sciences and Technology, Vilnius, Lithuania)

Session Classification: SSL 4 Short pulse generation & amplification