

100W, 1 mJ, few-cycle pulses at 2 μm wavelength

Tuesday, 30 August 2022 16:30 (15 minutes)

We present a post compression of a thulium-doped fiber laser output in a hollow-core fiber, delivering 100W average power, 1mJ pulse energy and 17.6fs pulse duration at 100kHz repetition rate. It is, to the best of our knowledge, the highest average-power mJ-class few-cycle source in the SWIR reported.

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Session Classification: FWD 2 Thulium lasers and amplifiers