

Energy scaling of multi-pass cells for nonlinear optics

Thursday, 1 September 2022 12:00 (2 hours)

We introduce a novel nonlinear multi-pass cell configuration comprising a concave-convex geometry. In a proof-of-principle experiment, 260 fs, 15 μ J pulses are broadened and compressed to approximately 50 fs with 90 % efficiency with excellent spatio-spectral homogeneity. A compact design for 0.5 J and 1 ps laser is also presented.

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Session Classification: Lunch and Poster Session 2