

# Self-Starting Kerr-Lens-Modelocked 1-GHz Ti:sapphire Oscillator Pumped by a Single Laser Diode

*Tuesday, 30 August 2022 19:15 (10 minutes)*

We present a 108-fs Kerr-lens-modelocked, diode-pumped 1-GHz Ti:sapphire laser. Self-starting operation producing 103 mW was obtained for 1-Watt pumping with a single 520-nm laser diode. From 1 Hz to 1 MHz the relative intensity noise was 0.01 and the repetition rate was externally referenced with a phase error of 1.7 mrad.

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**Session Classification:** Postdeadline Session