

Highly efficient cavity-dumped Q-switched Alexandrite laser

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We present a cavity-dumped Q-switched Alexandrite laser for LIDAR applications under CW double-pass diode pumping. A record pulse energy of $>500 \mu\text{J}$ was achieved at 755 nm, 2.8 ns and 5 kHz. Furthermore, efficient laser operation at 10 – 20 kHz repetition rates is demonstrated for the first time.

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