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Passively Q-switched Erbium-Doped Fiber Laser based on Graphene Oxide as Saturable Absorber (Article)

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Abstract

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In this paper, passively Q-switched fiber laser is demonstrated and the laser output energy is stabilized by using 2.4m Erbium-doped fiber laser (EDFL) with a graphene oxide used as saturable absorber (GO-SA). According to the experimental results in the Q-switched configuration, the laser cavity emits a wavelength centered at 1,558.75nm, and by inserting the GO-SA into EDFL cavity, hence, the laser output energy around 1.68nJ with an FWHM pulse width of 2.3µs at 123.5kHz was achieved. © 2018 Walter de Gruyter GmbH, Berlin/Boston 2018.

Author keywords

erbium-doped fiber laser fiber laser grapheme oxide Q-switched

Indexed keywords

Engineering controlled terms: Erbium Fiber lasers Fibers Graphene Q switching

Engineering uncontrolled terms: Erbium doped fiber laser FWHM pulse Laser output energy Passively Q-switched Q-switched

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