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5 March 2021

Frequency comb seeding of a single-mode near-infrared semiconductor laser

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Proceedings Volume 11705, Novel In-Plane Semiconductor Lasers XX: [\(/conference-proceedings-of-spie/11705.toc\)](#) 1170504 (2021) <https://doi.org/10.1117/12.2578982> (<https://doi.org/10.1117/12.2578982>)

Event: SPIE OPTO [\(/conference-proceedings-of-spie/browse/SPIE-Photonics-West/SPIE-OPTO/2021\)](#), 2021, Online Only

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An amplitude-modulated optical frequency comb generated by a passively mode-locked InGaAs double quantum well semiconductor laser is optically injected into a laser emitting a single optical mode continuous wave output in solitary operation. Optical frequency comb generation in the injected laser is experimentally demonstrated and regimes of injection locking are analyzed.

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