162.Title: A C-Band InAs/InP Quantum Dot Semiconductor Mode-Locked Laser Emitting 403-GHz Repetition Rate Pulses

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Abstract: A passive InAs/InP quantumdot (QD) semiconductor mode-locked laser (MLL) emitting 403-GHz repetition rate pulses with 268- and 563-fs pulse durations is demonstrated experimentally around 1.54 mu m. The QD MLL consists of a QD Fabry-Perot laser and external cavities that include eight fiber Bragg gratings (FBGs). The mode-locking is realized by four-wave mixing in the QD waveguide between the longitudinal modes selected by the FBGs.