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Title:Continuous tuning of a diode laser over 8.4 THz near 1550 nm with a chirped grating
Authors:Fortin, Gilles (1); McCarthy, Nathalie (2)
Author affiliation:(1) AEREX Avionics Inc., Breakeyville, QC G0S 1E1, Canada; (2) Centre d'Optique, Photonique et Laser, (COPL), Département de Physique, de Génie Physique et d'Optique, Universite Laval, Quebec City, QC G1V 0A6, Canada
Corresponding author:Fortin, G.(gfortin@aerex.ca)
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Abstract:We achieve mode-hop-free tuning of an extended-cavity diode laser with an original technique. The external coupler is a chirped (varied line-space) diffraction grating. A simple linear translation of the grating is then sufficient to obtain continuous tuning. The measured continuous tuning range has reached 66 nm (8.4 THz) near a wavelength of 1550 nm with a relatively constant output power of 3 mW.
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