

## Polarization Instabilities in Vertical-Cavity Surface-Emitting Lasers

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**Abstract.** We report on experimental investigation of short-period InGaAs/InGaAlAs superlattice vertical cavity surface emitting lasers characteristics (VCSEL), including light-current-voltage characteristics, optical and radiofrequency spectra and polarization mode hopping between orthogonal modes. The observed polarization switching features is similar to what is observed in quantum well VCSEL. Future investigations will consider polarization-resolved optical and radiofrequency spectra, total intensity noise analysis of VCSEL biased near the polarization switching point.

**Acknowledgements.** This work was supported by the Ministry of Science and Higher Education of Russian Federation, research project no. 2019-1442.

**Citation:** Rev. Adv. Mater. Technol., 2022, vol. 4, no. 1, pp. 9–13

**View online:** <https://doi.org/10.17586/2687-0568-2022-4-1-9-13>

**View Table of Contents:** <https://reviewsamt.com/issues>

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