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Towards ultra fast pulse generation by gain-switching of diode pumped surface emitting semiconductor lasers

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We present first results of our research towards ultra-short pulse generation in the sub-100 ps range based on cascaded gain-switched diode-pumped vertical-cavity surface-emitting semiconductor lasers. In particular, we focus on the surface emitters themselves and on the dependence of the output parameters on the pump wavelength and the pump fluence.

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