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标题: Vertical Cavity Surface Emitting Terahertz Laser
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摘要: Vertical cavity surface emitting terahertz lasers can be realized in conventional semiconductor microcavities with embedded quantum wells in the strong coupling regime. The cavity is to be pumped optically at half the frequency of the 2p exciton state. Once a threshold population of 2p excitons is achieved, a stimulated terahertz transition populates the lower exciton-polariton branch, and the cavity starts emitting laser light both in the optical and terahertz ranges. The lasing threshold is sensitive to the statistics of photons of the pumping light.
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