408.
Accession number:20113214211424
Title:Nonlinear terahertz emission in semiconductor microcavities
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Source title:Physical Review Letters
Abbreviated source title:Phys Rev Lett
Volume:107
Issue:2
Issue date:July 6, 2011
Publication year:2011
Article number:027401
Language:English
ISSN:00319007
E-ISSN:10797114
CODEN:PRLTAO
Document type:Journal article (JA)
Publisher:American Physical Society, One Physics Ellipse, College Park, MD 20740-3844, United States
Abstract:We consider the nonlinear terahertz emission by the system of cavity polaritons in the regime of polariton lasing. To account for the quantum nature of terahertz-polariton coupling, we use the Lindblad master equation approach and demonstrate that quantum microcavities reveal a rich variety of nonlinear phenomena in the terahertz range, including bistability, short terahertz pulse generation, and terahertz switching.
Number of references:24