Stephan Koch

List of Publications by Year in descending order

249 papers	11,585 citations	44069 48 h-index	39675 94 g-index
255 all docs	255 docs citations	255 times ranked	6628 citing authors

#	Article	IF	Citations
1	Influence of inter- and intra-valley carrier dynamics on the optical properties of monolayer TMDCs. , 2022, , .		0
2	On the importance of electronâ€“electron and electronâ€“phonon scatterings and energy renormalizations during carrier relaxation in monolayer transition-metal dichalcogenides. Journal of Physics Condensed Matter, 2022, 34, 285601.	1.8	2
3	Controlling condensed matter with lightwave fields and forces. , 2021, , .		0
4	Magnetic-field tuning of the intraexcitonic absorption and gain in transition metal dichalcogenides. Physical Review B, 2021, 104, .	3.2	0
5	Probing Intervalence Band Coupling via Highâ€Harmonic Generation in Binary Zincâ€Blende Semiconductors. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100397.	2.4	4
6	Electronâ€“Hole Plasmaâ€Induced Dephasing in Transition Metal Dichalcogenides. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100391.	2.4	0
7	Microscopic Coulomb interaction in transition-metal dichalcogenides. Journal of Physics Condensed Matter, 2021, 33, 035301.	1.8	3
8	Microscopic theory for the incoherent resonant and coherent off-resonant optical response of tellurium. Physical Review B, 2021, 104, .	3.2	8
9	Super-resolution lightwave tomography of electronic bands in quantum materials. Science, 2020, 370, 1204-1207.	12.6	38
10	Propagation Induced Dephasing in Semiconductor High-Harmonic Generation. Physical Review Letters, 2020, 125, 083901.	7.8	53
11	Ultrafast band-gap renormalization and build-up of optical gain in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoTe</mml:mi><mml:mn>2</mml:mn></mml:msub><m Physical Review B, 2020, 101, .	3.2	22
12	Half-occupation approach for the ab initio calculation of strained Ga(AsSb)/GaAs valence band offsets. AIP Advances, 2020, 10, 045207.	1.3	1
13	Extension of the LDA-1/2 method to the material class of bismuth containing IIIâ€“V semiconductors. AIP Advances, 2020, 10, 115003.	1.3	1
14	Mode-locking in vertical external-cavity surface-emitting lasers with type-II quantum-well configurations. Applied Physics Letters, 2019, 114, .	3.3	2
15	Spin-Layer and Spin-Valley Locking in CVD-Grown AAâ€²- and AB-Stacked Tungsten-Disulfide Bilayers. Journal of Physical Chemistry C, 2019, 123, 21813-21821.	3.1	27
16	Spin-Layer- and Spin-Valley-Locking Due to Symmetry in Differently-Stacked Tungsten Disulfide Bilayers. , 2019, , .		0
17	Microscopic calculation of the optical properties and intrinsic losses in the methylammonium lead iodide perovskite system. APL Materials, 2019, 7, 011107.	5.1	2
18	Ab-initio calculation of band alignments for opto-electronic simulations. AIP Advances, 2019, 9, 055328.	1.3	1

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19	Complex dielectric function of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>GaA</mml:mi><mml:msub><mml:mi mathvariant="normal">s</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math> as a function of Bi content. Physical Review Materials, 2019, 3, .	2.4	6
20	Non-equilibrium dynamics in the dual-wavelength operation of vertical external-cavity surface-emitting lasers. Optics Express, 2019, 27, 5368.	3.4	0
21	Carrier dynamics in TMDCs for optical applications. , 2019, , .		0
22	Influence of microscopic many-body scattering on multi-wavelength VECSEL lasing. , 2019, , .		0
23	Exciton ionization by THz pulses in germanium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 154001.	1.5	3
24	High-temperature operation of electrical injection type-II (GaIn)As/Ga(AsSb)/(GaIn)As â€œWâ€•quantum well lasers emitting at 1.3 Âµm. Scientific Reports, 2018, 8, 1422.	3.3	14
25	Influence of the effective layer thickness on the ground-state and excitonic properties of transition-metal dichalcogenide systems. Physical Review B, 2018, 97, .	3.2	48
26	Extended band anti-crossing model for dilute bismides. Applied Physics Letters, 2018, 112, .	3.3	8
27	Giant excitation induced bandgap renormalization in TMDC monolayers. Applied Physics Letters, 2018, 112, .	3.3	45
28	Lightwave valleytronics in a monolayer of tungsten diselenide. Nature, 2018, 557, 76-80.	27.8	201
29	Dynamics of charge-transfer excitons in type-II semiconductor heterostructures. Physical Review B, 2018, 97, .	3.2	19
30	Low-Threshold Operation of GaAs-Based (GaIn)As/Ga(AsSb)/(GaIn)As â€žW"-Quantum Well Lasers Emitting at 1.3 Î¼m. , 2018, , .		0
31	Modeling and experimental realization of modelocked VECSEL producing high power sub-100 fs pulses. Applied Physics Letters, 2018, 113, .	3.3	23
32	Auger losses in dilute InAsBi. Applied Physics Letters, 2018, 112, .	3.3	9
33	VECSEL design for high peak power ultrashort mode-locked operation. Applied Physics Letters, 2018, 112, 262105.	3.3	6
34	Observation of interlayer excitons in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoSe</mml:mi><mml:mn>2</mml:mn></mml:msub></m single crystals. Physical Review B, 2018, 97, .	3.2	54
35	Multi-Angle VECSEL Cavities for Dispersion Control and Peak-Power Scaling. IEEE Photonics Technology Letters, 2017, 29, 326-329.	2.5	13
36	Microscopic Theory for the Groundstate and Linear Optical Response of Novel Two-Dimensional Materials with Hexagonal Symmetry. , 2017, , 43-84.		3

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37	Ultrafast non-equilibrium carrier dynamics in semiconductor laser mode-locking. Semiconductor Science and Technology, 2017, 32, 013002.	2.0	21
38	Non-equilibrium effects in VECSELs. Proceedings of SPIE, 2017, , .	0.8	1
39	Symmetry-controlled temporal structure of high-harmonic carrier fields from a bulk crystal. Nature Photonics, 2017, 11, 227-231.	31.4	128
40	Atomic structure of â€˜Wâ€™â€type quantum well heterostructures investigated by aberrationâ€corrected STEM. Journal of Microscopy, 2017, 268, 259-268.	1.8	8
41	Ultrahigh Offâ€Resonant Field Effects in Semiconductors. Laser and Photonics Reviews, 2017, 11, 1700049.	8.7	51
42	Density-dependent exciton dynamics and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>L</mml:mi></mml:math> -valley anisotropy in germanium. Physical Review B, 2017, 95, .	3.2	8
43	Impact of detuning on the performance of semiconductor disk lasers. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	3
44	Valence band splitting in bulk dilute bismides. Applied Physics Letters, 2017, 111, 182103.	3.3	7
45	Self-Channeling of High-Power Long-Wave Infrared Pulses in Atomic Gases. Physical Review Letters, 2017, 118, 063901.	7.8	36
46	Pulse interactions in a colliding pulse mode-locked vertical external cavity surface emitting laser. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 329.	2.1	18
47	Non-equilibrium ultrashort pulse generation strategies in VECSELs. Optica, 2017, 4, 412.	9.3	21
48	Anab initiobased approach to optical properties of semiconductor heterostructures. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 065001.	2.0	7
49	Gain spectroscopy of a type-II VECSEL chip. Applied Physics Letters, 2016, 109, .	3.3	13
50	Microscopic analysis of saturable absorbers: Semiconductor saturable absorber mirrors versus graphene. Journal of Applied Physics, 2016, 119, .	2.5	21
51	Type-II vertical-external-cavity surface-emitting laser with Watt level output powers at 1.2â€‰Î¼m. Applied Physics Letters, 2016, 108, .	3.3	25
52	Band offset in (Ga, In)As/Ga(As, Sb) heterostructures. Journal of Applied Physics, 2016, 120, .	2.5	5
53	Hybrid cluster-expansion and density-functional-theory approach for optical absorption in TiO_2. Journal of the Optical Society of America B: Optical Physics, 2016, 33, C123.	2.1	4
54	1.2Î¼m emitting VECSEL based on type-II aligned QWs. , 2016, , .		0

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55	Lightwave-driven quasiparticle collisions on a subcycle timescale. Nature, 2016, 533, 225-229.	27.8	216
56	Configuration dependence of band-gap narrowing and localization in dilute<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>GaAs</mml:mi><mml:mrow><mml:mn>1</m Physical Review B, 2016, 93, .	3.2	31
57	Interaction-induced nonlinear refractive-index reduction of gases in the midinfrared regime. Physical Review E, 2016, 93, 013208.	2.1	11
58	Investigation of the Beam Quality of a Terahertz Emitting Vertical-External-Cavity Surface-Emitting Laser. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 536-539.	2.2	3
59	Fully microscopic modeling of mode locking in microcavity lasers. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 75.	2.1	27
60	Coherent cyclotron motion beyond Kohnâ€™sÂtheorem. Nature Physics, 2016, 12, 119-123.	16.7	41
61	Excitonic transitions in highly efficient (GaIn)As/Ga(AsSb) type-II quantum-well structures. Applied Physics Letters, 2015, 107, 182104.	3.3	14
62	Compositional dependence of the band gap in Ga(NAsP) quantum well heterostructures. Journal of Applied Physics, 2015, 118, .	2.5	8
63	Novel type-II material system for laser applications in the near-infrared regime. AIP Advances, 2015, 5, 047105.	1.3	28
64	Influence of non-equilibrium carrier dynamics on pulse amplification in semiconductor gain media. Proceedings of SPIE, 2015, , .	0.8	1
65	Sub-cycle strong-field electron dynamics in a bulk semiconductor traced by high-order harmonic generation. , 2015, , .		0
66	Real-time observation of interfering crystal electrons in high-harmonic generation. Nature, 2015, 523, 572-575.	27.8	480
67	Coherent Terahertz Control of Vertical Transport in Semiconductor Heterostructures. Physical Review Letters, 2015, 114, 116802.	7.8	6
68	Optical excitation dependent emission properties of InGaN quantum wells. Journal of Computational Electronics, 2015, 14, 425-431.	2.5	1
69	Quantum-optical spectroscopy on dropletons. Proceedings of SPIE, 2015, , .	0.8	1
70	Analysis of optical scattering losses in vertical-external-cavity surface-emitting lasers. Applied Physics B: Lasers and Optics, 2015, 120, 41-46.	2.2	4
71	Ultrafast pulse amplification in mode-locked vertical external-cavity surface-emitting lasers. Applied Physics Letters, 2014, 105, .	3.3	10
72	Ultrafast nonequilibrium carrier dynamics in semiconductor laser mode locking. Optica, 2014, 1, 192.	9.3	50

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73	Nonequilibrium and thermal effects in mode-locked VECSELs. Optics Express, 2014, 22, 6422.	3.4	29
74	Magnetic control of Coulomb scattering and terahertz transitions among excitons. Physical Review B, 2014, 89, .	3.2	5
75	Characterizing biexciton coherences with quantum spectroscopy. Physical Review B, 2014, 89, .	3.2	15
76	Systematic investigation of terahertz-induced excitonic Rabi splitting. Physical Review B, 2014, 89, .	3.2	16
77	Microscopic analysis of non-equilibrium dynamics in the semiconductor-laser gain medium. Applied Physics Letters, 2014, 104, 151111.	3.3	16
78	Influence of many-body interactions during the ionization of gases by short intense optical pulses. Physical Review E, 2014, 89, 033103.	2.1	17
79	Quantum droplets of electrons and holes. Nature, 2014, 506, 471-475.	27.8	101
80	Sub-cycle control of terahertz high-harmonic generation by dynamical Bloch oscillations. Nature Photonics, 2014, 8, 119-123.	31.4	808
81	Quantum-Memory Effects in the Emission of Quantum-Dot Microcavities. Physical Review Letters, 2014, 113, 093902.	7.8	17
82	Evolution of multi-mode emission from vertical-external-cavity surface-emitting lasers. , 2014, , .		0
83	Quantum theory of terahertz emission due to ultrashort pulse ionization of gases. Physical Review E, 2013, 88, 063102.	2.1	5
84	Room-temperature terahertz generation using vertical-external-cavity surface-emitting lasers. , 2013, , .		0
85	Terahertz excitations of lambda systems in a semiconductor microcavity. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1222-1225.	0.8	2
86	On the measurement of the thermal impedance in vertical-external-cavity surface-emitting lasers. Journal of Applied Physics, 2013, 113, 153102.	2.5	21
87	Observation of Forbidden Exciton Transitions Mediated by Coulomb Interactions in Photoexcited Semiconductor Quantum Wells. Physical Review Letters, 2013, 110, 137404.	7.8	27
88	In situ spectroscopy of high-power vertical-external-cavity surface-emitting lasers. Physica Status Solidi (B): Basic Research, 2013, 250, 1781-1784.	1.5	1
89	THzâ€manipulation of excitonic polarization in (GaIn)As/GaAs quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1226-1229.	0.8	0
90	Terahertzâ€induced effects on excitons in magnetic field. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1218-1221.	0.8	2

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91	Analytical solutions for electronic states in three-dimensional semiconductor quantum rings. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1246-1249.	0.8	0
92	Terahertz-induced exciton signatures in semiconductors. Physica Status Solidi (B): Basic Research, 2013, 250, 1768-1772.	1.5	2
93	Sequential build-up of quantum-optical correlations. Journal of the Optical Society of America B: Optical Physics, 2012, 29, A17.	2.1	8
94	High Peak Power Operation of a 1- Î¼m GaAs-Based Optically Pumped Semiconductor Laser. IEEE Photonics Technology Letters, 2012, 24, 380-382.	2.5	3
95	Time-dynamics of the two-color emission from vertical-external-cavity surface-emitting lasers. Applied Physics Letters, 2012, 100, .	3.3	21
96	Study of the two-color emission dynamics from a vertical-external-cavity surface-emitting laser. , 2012, , .		1
97	High room-temperature optical gain in Ga(NAsP)/Si heterostructures. Applied Physics Letters, 2012, 100, .	3.3	16
98	Temperature and pump power dependent photoluminescence characterization of MBE grown GaAsBi on GaAs. Journal of Materials Science: Materials in Electronics, 2012, 23, 1799-1804.	2.2	24
99	Pushing the output powers of transversal multimode VECSELs beyond the 100 W barrier. , 2012, , .		0
100	Ionization of coherent excitons by strong terahertz fields. Physical Review B, 2012, 85, .	3.2	36
101	Heterodyne Detection of Intracavity Generated Terahertz Radiation. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 271-277.	3.1	7
102	Terahertz Excitation of a CoherentÎ›-Type Three-Level System of Exciton-Polariton Modes in a Quantum-Well Microcavity. Physical Review Letters, 2012, 108, 267402.	7.8	30
103	Interaction of THz radiation with semiconductor many-body systems. , 2011, , .		0
104	An industry perspective on the optimization of InGaN lasers and LEDs via modeling. , 2011, , .		0
105	Gain of blue and cyan InGaN laser diodes. Applied Physics Letters, 2011, 98, .	3.3	36
106	Indirect interband optical transitions in a semiconductor quantum ring with submicrometer dimensions. Physical Review B, 2011, 84, .	3.2	3
107	Excitonâ€“polariton lightâ€“semiconductor coupling effects. Nature Photonics, 2011, 5, 273-273.	31.4	144
108	Heat Management in High-Power Vertical-External-Cavity Surface-Emitting Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1772-1778.	2.9	24

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109	VECSEL Optimization Using Microscopic Many-Body Physics. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1753-1762.	2.9	22
110	Quantum spectroscopy with SchrÃ¶dinger-cat states. Nature Physics, 2011, 7, 799-804.	16.7	99
111	Microscopic theory of the extremely nonlinear terahertz response of semiconductors. Physica Status Solidi (B): Basic Research, 2011, 248, 863-866.	1.5	55
112	Nonâ€equilibrium analysis of the twoâ€color operation in semiconductor quantumâ€well lasers. Physica Status Solidi (B): Basic Research, 2011, 248, 843-846.	1.5	19
113	Interaction of terahertz radiation with semiconductors. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1198-1203.	0.8	0
114	Plasmaâ€related phononâ€sideband emission in semiconductors. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1129-1132.	0.8	0
115	Carrier dynamics in (ZnMg)O alloy materials. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1149-1152.	0.8	1
116	Microscopic simulation of semiconductor laser devices. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2558-2563.	0.8	4
117	Temperature-dependence of the internal efficiency droop in GaN-based diodes. Applied Physics Letters, 2011, 99, .	3.3	113
118	Monitoring the temperature distribution in high-power VECSELs. , 2011, , .		0
119	Optical response and ground state of graphene. Physical Review B, 2011, 84, .	3.2	57
120	Terahertz and optical frequency mixing in semiconductor quantum-wells. , 2010, , .		0
121	Predictive Microscopic Modeling of VECSELs. IEEE Journal of Quantum Electronics, 2010, 46, 810-817.	1.9	20
122	Quantum modeling of semiconductor gain materials and verticalâ€externalâ€cavity surfaceâ€emitting laser systems. Physica Status Solidi (B): Basic Research, 2010, 247, 789-808.	1.5	8
123	Influence of the spatial pump distribution on the performance of high power vertical-external-cavity surface-emitting lasers. Applied Physics Letters, 2010, 97, .	3.3	23
124	Density-activated defect recombination as a possible explanation for the efficiency droop in GaN-based diodes. Applied Physics Letters, 2010, 96, .	3.3	202
125	Modelling the interaction between terahertz radiation and semiconductors. , 2010, , .		0
126	Microscopic simulation of nonequilibrium features in quantum-well pumped semiconductor disk lasers. Applied Physics Letters, 2010, 96, .	3.3	4

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127	Extraction of Many-Body Configurations from Nonlinear Absorption in Semiconductor Quantum Wells. Physical Review Letters, 2010, 104, 247401.	7.8	54
128	Configuration extraction of Coulomb-induced nonlinearities in semiconductor quantum wells. , 2010, , .		0
129	Nonlinear Terahertz Spectroscopy of Semiconductors. , 2009, , .		0
130	Optical gain and transient nonlinearities in Ge quantum wells. , 2009, , .		0
131	Numerical study of the influence of an antireflection coating on the operating properties of vertical-external-cavity surface-emitting lasers. Journal of Applied Physics, 2009, 106, .	2.5	16
132	Ultrafast nonlinear optical response of photoexcited Ge/SiGe quantum wells: Evidence for a femtosecond transient population inversion. Physical Review B, 2009, 79, .	3.2	73
133	Record pulsed power demonstration of a 2â€¦Î¼m GaSb-based optically pumped semiconductor laser grown lattice-mismatched on an AlAs/GaAs Bragg mirror and substrate. Applied Physics Letters, 2009, 95, 081112.	3.3	11
134	Microscopic analysis of mid-infrared type-II â€œWâ€•diode lasers. Applied Physics Letters, 2009, 94, .	3.3	12
135	Analysis of in-well pumping of semiconductor lasers by microscopic gain calculations. , 2009, , .		0
136	Ultrafast nonlinear optical effects in semiconductor quantum wells resonantly driven by few-cycle Terahertz pulses. , 2009, , .		0
137	Microscopic theory of the linear and nonlinear Terahertz response of semiconductors. , 2009, , .		0
138	Microscopic modeling of the optical properties of dilute nitride semiconductor gain materials. , 2009, , .		0
139	Microscopic Modeling of Quantum Well Gain Media for VECSEL Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 984-992.	2.9	6
140	Analytical analysis of single-photon correlations emitted by disordered semiconductor heterostructures. Journal of Materials Science: Materials in Electronics, 2009, 20, 23-29.	2.2	1
141	Phonon sidebands in semiconductor luminescence. Physica Status Solidi (B): Basic Research, 2009, 246, 332-336.	1.5	15
142	Terahertzâ€induced extreme nonlinear transients in semiconductor quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 457-460.	0.8	0
143	Microscopic analysis of highâ€harmonic generation in semiconductor nanostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 420-423.	0.8	13
144	Quantumâ€optical spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 385-388.	0.8	1

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145	Ga(AsSb)/GaAs/(AlGa)As heterostructures: additional holeâ€confinement due to quantum islands. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 411-414.	0.8	0
146	Performance changes of a verticalâ€externalâ€cavity surfaceemitting laser by an intraâ€cavity antiâ€reflexâ€coating. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 572-575.	0.8	0
147	Auger losses in GaNâ€based quantum wells: Microscopic theory. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S864.	0.8	17
148	On the origin of IQEâ€â€˜droopâ€™ in InGaN LEDs. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S913.	0.8	109
149	Transient optical response of quantum well excitons to intense narrowband terahertz pulses. Applied Physics Letters, 2009, 95, 201107.	3.3	21
150	Classical theory for second-harmonic generation from metallic nanoparticles. Physical Review B, 2009, 79, .	3.2	155
151	Charging Dynamics in Electrically Pumped Quantum Wells. IEEE Journal of Quantum Electronics, 2009, 45, 1024-1032.	1.9	6
152	5-W Yellow Laser by Intracavity Frequency Doubling of High-Power Vertical-External-Cavity Surface-Emitting Laser. IEEE Photonics Technology Letters, 2008, 20, 1700-1702.	2.5	77
153	On the importance of radiative and Auger losses in GaN-based quantum wells. Applied Physics Letters, 2008, 92, .	3.3	220
154	Optical Forces on a Quantum Dot in Metallic Bowtie Structures. IEEE Photonics Technology Letters, 2008, 20, 431-433.	2.5	2
155	Optical nonlinearities and Rabi flopping of an exciton population in a semiconductor interacting with strong terahertz fields. Physical Review B, 2008, 77, .	3.2	28
156	Influence of dielectric environment on quantum-well luminescence spectra. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 187.	2.1	9
157	Terahertz Coherent Control of Optically Dark Paraexcitons in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Cu</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="bold">O</mml:mi></mml:math>. Physical Review Letters, 2008, 101, 246401.	7.8	103
158	Temperature Dependence of Radiative and Auger Losses in Quantum Wells. IEEE Journal of Quantum Electronics, 2008, 44, 185-191.	1.9	20
159	High harmonics generated in semiconductor nanostructures by the coupled dynamics of optical inter- and intraband excitations. Physical Review B, 2008, 77, .	3.2	285
160	Hole confinement in quantum islands in Ga(AsSb)âˆ•GaAsâˆ•(AlGa)As heterostructures. Applied Physics Letters, 2008, 92, 161101.	3.3	3
161	High power tunable yellow laser using InGaAs/GaAs vertical external-cavity surface-emitting lasers. , 2008, , .		0
162	Quantum Design of Active Semiconductor Materials for Targeted Wavelengths. Materials Research Society Symposia Proceedings, 2008, 1076, 1.	0.1	0

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163	Microscopic calculation and measurement of the laser gain in a (GaIn)Sb quantum well structure. Applied Physics Letters, 2008, 92, .	3.3	12
164	Cluster-expansion representation in quantum optics. Physical Review A, 2008, 78, .	2.5	66
165	Interaction of THz Radiation with Semiconductors: Microscopic Theory and Experiments. , 2008, , 223-235.		2
166	Classical and Quantum Optics of Semiconductor Nanostructures. Nanostructure Science and Technology, 2008, , 255-351.	0.1	0
167	Nanosecond to microsecond dynamics of 1040nm semiconductor disk lasers. , 2007, , .		0
168	Microscopic Nonequilibrium Simulations in Semiconductor Laser Structures. , 2007, , .		0
169	Optical pumping using chirped pulses of a vertical-cavity surface-emitting laser (VCSEL). , 2007, , .		0
170	Closed-Loop Design and Demonstration of an 1178nm Multi-Watt VECSEL for a Sodium Guidestar Source. , 2007, , .		0
171	Quantum theory of the optical excitation of a semiconductor quantum dot. , 2007, , .		0
172	Dynamic behavior of 1040nm semiconductor disk lasers on a nanosecond time scale. Applied Physics Letters, 2007, 90, 241102.	3.3	12
173	Highly strained InGaAsâˆ•GaAs multiwatt vertical-external-cavity surface-emitting laser emitting around 1170nm. Applied Physics Letters, 2007, 91, .	3.3	47
174	Detection of THz radiation with semiconductor diode lasers. Applied Physics Letters, 2007, 91, .	3.3	9
175	Closed-loop design and demonstration of an 1178nm multi-watt VECSEL for a sodium guidestar source. , 2007, , .		0
176	Coulomb effects on quantum-well luminescence spectra and radiative recombination times. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1344.	2.1	7
177	Transient gain spectroscopy of (GaIn)As quantum wells: Experiment and microscopic analysis. Applied Physics Letters, 2007, 90, 251102.	3.3	11
178	Coherent Nonlinear Optical Effects in Semiconductor QWs Induced by Intense Single-Cycle THz Pulses. , 2007, , .		0
179	Interaction of Strong Single-Cycle Terahertz Pulses with Semiconductor Quantum Wells. Physical Review Letters, 2007, 99, 237401.	7.8	113
180	Microscopic analysis of the optical and electronic properties of semiconductor photonicâ€crystal structures. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 3600-3617.	1.8	1

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181	Microscopic simulation of semiconductor lasers in the GaInNAs material system. , 2006, , .		0
182	Temporal decay of coherently optically injected charge and spin currents due to carrierâ€“LO-phonon and carrier-carrier scattering. Physical Review B, 2006, 74, .	3.2	24
183	Semiconductor Optics in Photonic Crystal Structures. , 2006, , 43-62.		0
184	Semiconductor excitons in new light. Nature Materials, 2006, 5, 523-531.	27.5	272
185	Tunable high-power high-brightness linearly polarized vertical-external-cavity surface-emitting lasers. Applied Physics Letters, 2006, 88, 021105.	3.3	63
186	Quantum theory of luminescence in multiple-quantum-well Bragg structures. Physical Review B, 2006, 74, .	3.2	8
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