

# D Indjin

## List of Publications by Year in descending order

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183  
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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Prospects of temperature performance enhancement through higher resonant phonon transition designs in GaAs-based terahertz quantum-cascade lasers. <i>New Journal of Physics</i> , 2022, 24, 033047.	1.2	7
2	Observation of optical feedback dynamics in single-mode terahertz quantum cascade lasers: Transient instabilities. <i>Physical Review A</i> , 2021, 103, .	1.0	19
3	Design optimization of tensile-strained SiGeSn/GeSn quantum wells at room temperature. <i>Journal of Applied Physics</i> , 2021, 129, 123102.	1.1	5
4	Terahertz imaging with self-pulsations in quantum cascade lasers under optical feedback. <i>APL Photonics</i> , 2021, 6, 091301.	3.0	6
5	Design considerations of intra-step SiGeSn/GeSn quantum well electroabsorption modulators. <i>Journal of Applied Physics</i> , 2021, 130, 153103.	1.1	2
6	External cavity terahertz quantum cascade laser with a metamaterial/graphene optoelectronic mirror. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	13
7	Laser feedback interferometry in multi-mode terahertz quantum cascade lasers. <i>Optics Express</i> , 2020, 28, 14246.	1.7	15
8	Dual resonance phononâ€“photonâ€“phonon terahertz quantum-cascade laser: physics of the electron transport and temperature performance optimization. <i>Optics Express</i> , 2020, 28, 38788.	1.7	13
9	Monitoring Water Dynamics in Plants using Laser Feedback Interferometry. , 2020, , .		3
10	Sensing and imaging using laser feedback interferometry with quantum cascade lasers. <i>Applied Physics Reviews</i> , 2019, 6, 021320.	5.5	52
11	Density matrix superoperator for periodic quantum systems and its application to quantum cascade laser structures. <i>AIP Advances</i> , 2019, 9, .	0.6	9
12	Coherent imaging using laser feedback interferometry with pulsed-mode terahertz quantum cascade lasers. <i>Optics Express</i> , 2019, 27, 10221.	1.7	31
13	Detection sensitivity of laser feedback interferometry using a terahertz quantum cascade laser. <i>Optics Letters</i> , 2019, 44, 3314.	1.7	15
14	Frequency Tuning Range Control in Pulsed Terahertz Quantum-Cascade Lasers: Applications in Interferometry. <i>IEEE Journal of Quantum Electronics</i> , 2018, 54, 1-8.	1.0	9
15	Determining Ethanol Content of Liquid Solutions Using Laser Feedback Interferometry with a Terahertz Quantum Cascade Laser. , 2018, 2, 1-4.		9
16	Ultrafast switch-on dynamics of frequency-tuneable semiconductor lasers. <i>Nature Communications</i> , 2018, 9, 3076.	5.8	16
17	Infinite-Period Density-Matrix Model for Terahertz-Frequency Quantum Cascade Lasers. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2017, 7, 368-377.	2.0	16
18	Measurement of the emission spectrum of a semiconductor laser using laser-feedback interferometry. <i>Scientific Reports</i> , 2017, 7, 7236.	1.6	20

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19	Multi-spectral terahertz sensing: proposal for a coupled-cavity quantum cascade laser based optical feedback interferometer. Optics Express, 2017, 25, 10153.	1.7	15
20	Excimer Laser Surgery: Biometrical Iris Eye Recognition with Cyclorotational Control Eye Tracker System. Sensors, 2017, 17, 1211.	2.1	2
21	Laser Feedback Interferometry as a Tool for Analysis of Granular Materials at Terahertz Frequencies: Towards Imaging and Identification of Plastic Explosives. Sensors, 2016, 16, 352.	2.1	27
22	Model for a pulsed terahertz quantum cascade laser under optical feedback. Optics Express, 2016, 24, 20554.	1.7	16
23	Origin of terminal voltage variations due to self-mixing in terahertz frequency quantum cascade lasers. Optics Express, 2016, 24, 21948.	1.7	10
24	Polarization-entangled mid-infrared photon generation in $\text{InP}$ -doped semiconductor quantum wells. Semiconductor Science and Technology, 2016, 31, 115011.	1.0	1
25	Optical feedback effects on terahertz quantum cascade lasers: modelling and applications. , 2016, , .		1
26	Design considerations for GaN/AlN based unipolar (opto-)electronic devices, and interface quality aspects. , 2016, , .		0
27	Magnetic field effects on THz quantum cascade laser: A comparative analysis of three and four quantum well based active region design. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 81, 275-280.	1.3	5
28	Simple Electrical Modulation Scheme for Laser Feedback Imaging. IEEE Sensors Journal, 2016, 16, 1937-1942.	2.4	20
29	Mid-infrared entangled photon generation in optimised asymmetric semiconductor quantum wells. Superlattices and Microstructures, 2016, 90, 107-116.	1.4	1
30	Terahertz radar cross-section characterisation using laser feedback interferometry with quantum cascade laser. Electronics Letters, 2015, 51, 1774-1776.	0.5	12
31	Coherent vertical electron transport and interface roughness effects in AlGaIn/GaN intersubband devices. Journal of Applied Physics, 2015, 118, .	1.1	22
32	Efficient prediction of terahertz quantum cascade laser dynamics from steady-state simulations. Applied Physics Letters, 2015, 106, .	1.5	32
33	Terahertz quantum cascade laser bandwidth prediction. , 2015, , .		0
34	Possibilities of achieving negative refraction in QCL-based semiconductor metamaterials in the THz spectral range. Optical and Quantum Electronics, 2015, 47, 883-891.	1.5	3
35	Cubic GaN/AlGaIn based quantum wells optimized for applications to tunable mid-infrared photodetectors. Optical and Quantum Electronics, 2015, 47, 865-872.	1.5	8
36	Active phase-nulling of the self-mixing phase in a terahertz frequency quantum cascade laser. Optics Letters, 2015, 40, 950.	1.7	9

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37	Three-dimensional terahertz imaging using swept-frequency feedback interferometry with a quantum cascade laser. Optics Letters, 2015, 40, 994.	1.7	35
38	GaInAs/AlInAs quantum cascade laser design based on optimized second harmonic generation. Physica Scripta, 2014, T162, 014009.	1.2	0
39	A QCL model with integrated thermal and stark rollover mechanisms. , 2014, , .		0
40	THz QCL self-mixing interferometry for biomedical applications. , 2014, , .		1
41	High-contrast coherent terahertz imaging of porcine tissue via swept-frequency feedback interferometry. Biomedical Optics Express, 2014, 5, 3981.	1.5	41
42	Methodology for materials analysis using swept-frequency feedback interferometry with terahertz frequency quantum cascade lasers. Optics Express, 2014, 22, 18633.	1.7	20
43	Terahertz inverse synthetic aperture radar imaging using self-mixing interferometry with a quantum cascade laser. Optics Letters, 2014, 39, 2629.	1.7	36
44	Terahertz imaging using quantum cascade lasers—a review of systems and applications. Journal Physics D: Applied Physics, 2014, 47, 374008.	1.3	141
45	Genetic algorithm applied to the optimization of quantum cascade lasers with second harmonic generation. Journal of Applied Physics, 2014, 115, 053712.	1.1	4
46	Optimizing optical nonlinearities in GaInAs/AlInAs quantum cascade lasers. Nuclear Technology and Radiation Protection, 2014, 29, 10-16.	0.3	5
47	Coherent THz imaging using the self-mixing effect in quantum cascade lasers. , 2014, , .		0
48	Comparative study of intersubband absorption in AlGaIn/GaN and AlInN/GaN superlattices: Impact of material inhomogeneities. Physical Review B, 2013, 88, .	1.1	28
49	Self-Mixing Interferometry With Terahertz Quantum Cascade Lasers. IEEE Sensors Journal, 2013, 13, 37-43.	2.4	46
50	Swept-frequency feedback interferometry using terahertz frequency QCLs: a method for imaging and materials analysis. Optics Express, 2013, 21, 22194.	1.7	91
51	Coherent three-dimensional terahertz imaging through self-mixing in a quantum cascade laser. Applied Physics Letters, 2013, 103, .	1.5	45
52	Demonstration of the self-mixing effect in interband cascade lasers. Applied Physics Letters, 2013, 103, .	1.5	17
53	Relationship between electron-LO phonon and electron-light interaction in quantum dots. Physical Review B, 2012, 85, .	1.1	2
54	Modeling of electron relaxation processes and the optical gain in a magnetic-field assisted THz quantum cascade laser. Physica Scripta, 2012, T149, 014017.	1.2	3

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55	Self-mixing signals in terahertz lasers. , 2012, , .		0
56	Electronic states and intraband terahertz optical transitions in InGaAs quantum rods. Journal of Applied Physics, 2012, 111, 073110.	1.1	5
57	The role of temperature in quantum-cascade laser waveguides. Journal of Computational Electronics, 2012, 11, 137-143.	1.3	8
58	Coherent transport description of the dual-wavelength ambipolar terahertz quantum cascade laser. Journal of Applied Physics, 2011, 109, 013111.	1.1	13
59	Terahertz imaging through self-mixing in a quantum cascade laser. Optics Letters, 2011, 36, 2587.	1.7	149
60	Demonstration of a self-mixing displacement sensor based on terahertz quantum cascade lasers. Applied Physics Letters, 2011, 99, .	1.5	63
61	Charge Carrier Transport in Quantum Cascade Lasers in Strong Magnetic Field. Acta Physica Polonica A, 2011, 119, 99-102.	0.2	1
62	Inter-Landau Level Scattering Processes in Magnetic Field Assisted THz Quantum Cascade Laser. Acta Physica Polonica A, 2011, 120, 227-230.	0.2	0
63	Theoretical modelling of InGaAs quantum rods: Terahertz intraband absorption and its dependence on rod height. Journal of Physics: Conference Series, 2010, 242, 012012.	0.3	2
64	A quantum transport model for the double-barrier nonmagnetic spin filter. Journal of Physics: Conference Series, 2010, 242, 012008.	0.3	1
65	Dependence of Threshold Current Density on the Waveguide Ridge Width in Quantum-Cascade Lasers. IEEE Journal of Quantum Electronics, 2010, 46, 1320-1326.	1.0	1
66	Optimization and magnetic-field tunability of quantum cascade laser for applications in trace gas detection and monitoring. Journal Physics D: Applied Physics, 2010, 43, 045101.	1.3	27
67	Quantum Cascade Laser Design for Tunable Output at Characteristic Wavelengths in the Mid-Infrared Spectral Range. Acta Physica Polonica A, 2010, 117, 772-776.	0.2	1
68	Comparison of SiO <sub>2</sub> , Si <sub>3</sub> N <sub>4</sub> , As <sub>2</sub> S <sub>3</sub> , and Ge <sub>0.25</sub> Se <sub>0.75</sub> dielectric layers for InP- and GaAs-based material systems for midinfrared quantum cascade laser waveguides. Journal of Applied Physics, 2009, 106, 053104.	1.1	5
69	Nonparabolicity effects and the spin-split electron dwell time in symmetric III-V double-barrier structures. Microelectronics Journal, 2009, 40, 611-614.	1.1	3
70	Intervalley scattering in GaAs/AlGaAs quantum wells and quantum cascade lasers. Microelectronics Journal, 2009, 40, 577-580.	1.1	1
71	Quantum Dots as Sources and Detectors of Mid- and Far-Infrared Radiation: Theoretical Models. Acta Physica Polonica A, 2009, 116, 464-467.	0.2	9
72	Spin Precession of Quasi-Bound States in Heterostructures with Spin-Orbit Interaction. Acta Physica Polonica A, 2009, 116, 513-515.	0.2	0

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73	Electron Transport and Terahertz Gain in Quantum-Dot Cascades. IEEE Photonics Technology Letters, 2008, 20, 129-131.	1.3	18
74	Thermal Modeling of Terahertz Quantum-Cascade Lasers: Comparison of Optical Waveguides. IEEE Journal of Quantum Electronics, 2008, 44, 680-685.	1.0	38
75	Mid-infrared quantum cascade laser waveguide losses: An anisotropic complex permittivity model. , 2008, , .		0
76	On the coherence/incoherence of electron transport in semiconductor heterostructure optoelectronic devices. Proceedings of SPIE, 2008, , .	0.8	3
77	Time delay in thin slabs with self-focusing Kerr-type nonlinearity. Physical Review A, 2008, 77, .	1.0	16
78	Wide wavelength tuning of GaAs $\alpha$ -AlxGa1 $\alpha$ 'xAs bound-to-continuum quantum cascade lasers by aluminum content control. Applied Physics Letters, 2008, 92, .	1.5	5
79	Spin-dependent dwell times of electron tunneling through double- and triple-barrier structures. Journal of Applied Physics, 2008, 103, 083701.	1.1	7
80	Intervalley Scattering and the Role of Indirect Band Gap AlAs Barriers: Application to GaAs/AlGaAs Quantum Cascade Lasers. Acta Physica Polonica A, 2008, 113, 891-902.	0.2	3
81	Design Considerations for Nonmagnetic Semiconductor-Based Spin Filters. Materials Science Forum, 2007, 555, 41-46.	0.3	0
82	Stark shift of the spectral response in quantum dots-in-a-well infrared photodetectors. Journal Physics D: Applied Physics, 2007, 40, 5537-5540.	1.3	22
83	Application of the genetic algorithm to the optimized design of semimagnetic semiconductor-based spin-filters. Journal Physics D: Applied Physics, 2007, 40, 5066-5070.	1.3	15
84	Quantum transport in semiconductor quantum dot superlattices: Electron-phonon resonances and polaron effects. Physical Review B, 2007, 76, .	1.1	26
85	Room temperature operation of AlGaIn/GaN quantum well infrared photodetectors at a 3 $\alpha$ '4 $\mu$ m wavelength range. Semiconductor Science and Technology, 2007, 22, 1240-1244.	1.0	9
86	Electron transport in n-doped Si/SiGe quantum cascade structures. Journal of Applied Physics, 2007, 101, 093703.	1.1	8
87	Density matrix theory of transport and gain in quantum cascade lasers in a magnetic field. Physical Review B, 2007, 76, .	1.1	40
88	Influence of electron $\alpha$ 'electron scattering on electron relaxation rates in three and four-level quantum cascade lasers in magnetic fields. Optics Communications, 2007, 279, 330-335.	1.0	6
89	Influence of nonparabolicity on tunneling times in semiconductor structures. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 366, 130-133.	0.9	4
90	Time Delay in Thin Slabs with Kerr-Type Nonlinearity. Acta Physica Polonica A, 2007, 112, 987-992.	0.2	0

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91	A microscopic model of electron transport in quantum dot infrared photodetectors. Journal of Applied Physics, 2006, 100, 074502.	1.1	23
92	Design of a ZnMnSe/ZnMgSe spin-polarized terahertz quantum cascade laser tunable by magnetic field. Applied Physics Letters, 2006, 89, 011109.	1.5	8
93	Influence of the active region design on output characteristics of GaAs/AlGaAs quantum cascade lasers in a strong magnetic field. Semiconductor Science and Technology, 2006, 21, 215-220.	1.0	30
94	Symmetry-based calculation of single-particle states and intraband absorption in hexagonal GaN/AlN quantum dot superlattices. Journal of Physics Condensed Matter, 2006, 18, 6249-6262.	0.7	19
95	On the incoherence of quantum transport in semiconductor heterostructure optoelectronic devices. International Biennial Baltic Electronics Conference, 2006, , .	0.0	0
96	Intraband absorption in InAs/GaAs quantum dot infrared photodetectors—effective mass versus $k$ -modelling. Semiconductor Science and Technology, 2006, 21, 1098-1104.	1.0	38
97	Aspects of the internal physics of InGaAs/InAlAs quantum cascade lasers. Journal of Applied Physics, 2006, 99, 114505.	1.1	20
98	Electron transport in quantum cascade lasers in a magnetic field. Physical Review B, 2006, 73, .	1.1	23
99	Influence of doping density on electron dynamics in GaAs/AlGaAs quantum cascade lasers. Journal of Applied Physics, 2006, 99, 103106.	1.1	47
100	Investigation of Thermal Effects in Quantum-Cascade Lasers. IEEE Journal of Quantum Electronics, 2006, 42, 857-865.	1.0	52
101	Influence of injector doping density and electron confinement on the properties of GaAs/Al <sub>0.45</sub> Ga <sub>0.55</sub> As quantum cascade lasers. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 411-414.	0.8	4
102	Theoretical modelling of electron transport in InAs/GaAs quantum dot superlattices. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3770-3773.	0.8	0
103	Lasing in spin-polarized terahertz quantum cascade structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4401-4404.	0.8	0
104	n-Si/SiGe quantum cascade structures for THz emission. Journal of Luminescence, 2006, 121, 311-314.	1.5	4
105	Thermal effects in InGaAs/AlAsSb quantum-cascade lasers. IEE Proceedings: Optoelectronics, 2006, 153, 287-292.	0.8	9
106	Modelling and simulation of electronic and optical responses of quantum well infrared photodetectors (QWIPs). Journal Physics D: Applied Physics, 2006, 39, 1773-1780.	1.3	3
107	Optimization of Semimagnetic Semiconductor-Based Nanostructures for Spintronic Applications. Materials Science Forum, 2006, 518, 35-40.	0.3	0
108	Comparative Analysis of 9 $\mu$ m GaAs/AlGaAs Quantum Cascade Lasers with Different Injector Doping. Materials Science Forum, 2006, 518, 29-34.	0.3	0

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109	Origin of detection wavelength tuning in quantum dots-in-a-well infrared photodetectors. Applied Physics Letters, 2006, 88, 251107.	1.5	20
110	Optimization of spin-filtering properties in diluted magnetic semiconductor heterostructures. Journal of Applied Physics, 2006, 99, 073905.	1.1	18
111	Simulation of a tunable optically pumped terahertz intersubband laser with diluted magnetic semiconductors. Journal of Applied Physics, 2006, 100, 073709.	1.1	13
112	Dependence of saturation effects on electron confinement and injector doping in GaAs $\hat{\cdot}$ Al <sub>0.45</sub> Ga <sub>0.55</sub> As quantum-cascade lasers. Applied Physics Letters, 2006, 88, 251109.	1.5	16
113	Effect of Injector Doping on Non-Equilibrium Electron Dynamics in Mid-Infrared GaAs/AlGaAs Quantum Cascade Lasers. , 2006, , 85-88.		0
114	A microscopic model of quantum well infrared photodetectors (QWIP). Infrared Physics and Technology, 2005, 47, 3-8.	1.3	7
115	Optically pumped intersublevel MidInfrared lasers based on InAs-GaAs quantum dots. IEEE Journal of Quantum Electronics, 2005, 41, 1361-1368.	1.0	19
116	SUSY transformation of guided modes in semiconductor waveguides. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3552-3555.	0.8	4
117	A physical model of quantum cascade lasers: Application to GaAs, GaN and SiGe devices. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 980-986.	0.8	14
118	Quantum cascade lasers in magnetic field: An active region model. Physica Status Solidi (B): Basic Research, 2005, 242, 1812-1816.	0.7	2
119	GaAs/Al <sub>0.45</sub> Ga <sub>0.55</sub> As Double Phonon Resonance Quantum Cascade Laser. AIP Conference Proceedings, 2005, , .	0.3	3
120	GaAs/AlGaAs Quantum Cascade Lasers Based on Double Resonant Electron $\hat{\cdot}$ LO Phonon Transitions. Materials Science Forum, 2005, 494, 25-30.	0.3	2
121	Optically pumped terahertz laser based on intersubband transitions in a GaN $\hat{\cdot}$ AlGaIn double quantum well. Journal of Applied Physics, 2005, 97, 103106.	1.1	51
122	Towards automated design of quantum cascade lasers. Journal of Applied Physics, 2005, 97, 084506.	1.1	36
123	Design and simulation of InGaAs $\hat{\cdot}$ AlAsSb quantum-cascade lasers for short wavelength emission. Applied Physics Letters, 2005, 87, 141109.	1.5	6
124	Magnetic-field tunable terahertz quantum well infrared photodetector. Journal of Applied Physics, 2005, 98, 084509.	1.1	15
125	Mechanisms of dynamic range limitations in GaAs $\hat{\cdot}$ AlGaAs quantum-cascade lasers: Influence of injector doping. Applied Physics Letters, 2005, 86, 211117.	1.5	69
126	Symmetry of $\hat{k}^{\text{TM}}$ Hamiltonian in pyramidallnAs $\hat{\cdot}$ GaAs quantum dots: Application to the calculation of electronic structure. Physical Review B, 2005, 72, .	1.1	43



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127	Relationship between carrier dynamics and temperature in terahertz quantum cascade structures: simulation of GaAs/AlGaAs, SiGe/Si and GaN/AlGaN devices. Semiconductor Science and Technology, 2005, 20, S237-S245.	1.0	32
128	Electron-phonon relaxation rates and optical gain in a quantum cascade laser in a magnetic field. Journal of Applied Physics, 2005, 97, 103109.	1.1	32
129	Normal Incidence Mid-Infrared Photocurrent in AlGaN/GaN Quantum Well Infrared Photodetectors. Acta Physica Polonica A, 2005, 107, 174-178.	0.2	2
130	Carrier Dynamics in Quantum Cascade Lasers. Acta Physica Polonica A, 2005, 107, 75-81.	0.2	0
131	Mechanisms of carrier transport and temperature performance evaluation in terahertz quantum cascade lasers. Semiconductor Science and Technology, 2004, 19, S104-S106.	1.0	5
132	Physical model of quantum-well infrared photodetectors. Journal of Applied Physics, 2004, 96, 269-272.	1.1	31
133	Quantum well shape optimization of continuously graded Al <sub>x</sub> Ga <sub>1-x</sub> N structures by combined supersymmetric and coordinate transform methods. Physical Review B, 2004, 69, .	1.1	13
134	Optimization of Intersubband Optical Nonlinearities in Continually Graded AlGa <sub>N</sub> Quantum Well Structures. Materials Science Forum, 2004, 453-454, 21-26.	0.3	0
135	Simulation and design of GaN/AlGa <sub>N</sub> far-infrared (λ = 1434 μm) quantum-cascade laser. Applied Physics Letters, 2004, 84, 2995-2997.	1.5	83
136	Dilute magnetic semiconductor quantum-well structures for magnetic field tunable far-infrared/terahertz absorption. IEEE Journal of Quantum Electronics, 2004, 40, 1614-1621.	1.0	9
137	Global Optimization of Semiconductor Quantum Well Profile: Maximizing the Nonlinear Electro-Optical Coefficients. Materials Science Forum, 2003, 413, 21-26.	0.3	0
138	Digitally graded GaAs/Al <sub>0.44</sub> Ga <sub>0.56</sub> As quantum-cascade laser. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 620-622.	1.3	1
139	Electronic Raman scattering from intersubband transitions in GaN/AlGa <sub>N</sub> quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2662-2665.	0.8	1
140	Mechanisms of temperature performance degradation in terahertz quantum-cascade lasers. Applied Physics Letters, 2003, 82, 1347-1349.	1.5	68
141	Self-consistent scattering model of carrier dynamics in GaAs-AlGaAs terahertz quantum-cascade lasers. IEEE Photonics Technology Letters, 2003, 15, 15-17.	1.3	27
142	Optimal design of gan-algan bragg-confined structures for intersubband absorption in the near-infrared spectral range. IEEE Journal of Quantum Electronics, 2003, 39, 1297-1304.	1.0	13
143	Designing strain-balanced GaN/AlGa <sub>N</sub> quantum well structures: Application to intersubband devices at 1.3 and 1.55 μm wavelengths. Journal of Applied Physics, 2003, 93, 3194-3197.	1.1	41
144	Surface plasmon waveguides with gradually doped or NiAl intermetallic compound buried contact for terahertz quantum cascade lasers. Journal of Applied Physics, 2003, 94, 3249-3252.	1.1	8

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145	Digitally graded active region for optically pumped intersubband lasers and nonlinear wavelength convertors. Journal of Applied Physics, 2002, 91, 9423-9425.	1.1	2
146	Gain-maximized GaAs/AlGaAs quantum-cascade laser with digitally graded active region. Applied Physics Letters, 2002, 81, 2163-2165.	1.5	18
147	Intersubband absorption at $\lambda = 1.3 \mu\text{m}$ in optimized GaN/AlGaIn Bragg-confined structures. Journal of Applied Physics, 2002, 92, 7672-7674.	1.1	7
148	Quantum-well profile optimization for maximal Stark effect and application to tunable infrared photodetectors. Journal of Applied Physics, 2002, 91, 525.	1.1	11
149	Single-band envelope-function model in the full Brillouin zone for electronic structure calculation in semiconductor nanostructures. Journal of Applied Physics, 2002, 92, 515-522.	1.1	2
150	Self-consistent scattering theory of transport and output characteristics of quantum cascade lasers. Journal of Applied Physics, 2002, 91, 9019-9026.	1.1	129
151	Global optimization of semiconductor quantum well profile for maximal optical rectification by variational calculus. Semiconductor Science and Technology, 2002, 17, 716-720.	1.0	7
152	Influence of leakage current on temperature performance of GaAs/AlGaAs quantum cascade lasers. Applied Physics Letters, 2002, 81, 400-402.	1.5	47
153	Electron temperature and mechanisms of hot carrier generation in quantum cascade lasers. Journal of Applied Physics, 2002, 92, 6921-6923.	1.1	65
154	Design of GaN/AlGaIn quantum wells for maximal intersubband absorption in $1.3 < \lambda < 2 \mu\text{m}$ wavelength range. Solid State Communications, 2002, 121, 619-624.	0.9	30
155	Multiparameter optimization of optical nonlinearities in semiconductor quantum wells by supersymmetric quantum mechanics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 279, 268-274.	0.9	5
156	Global optimization of intersubband resonant third harmonic generation in semiconductor quantum-well structures. Solid State Communications, 2001, 118, 145-149.	0.9	3
157	Quantum well shape optimization by variational calculus: maximizing the Stark effect and quantum interference derived electro-optic susceptibility. Optics Communications, 2001, 194, 181-190.	1.0	6
158	Two methods of quantum well profile optimization for maximal nonlinear optical susceptibilities. Physical Review B, 2001, 63, .	1.1	8
159	Supersymmetric quantum-well shape optimization for intersubband bound-continuum second harmonic generation. Superlattices and Microstructures, 2000, 28, 143-150.	1.4	0
160	Intersubband absorption in Teller-like semiconductor quantum wells. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 269, 179-185.	0.9	30
161	Intersubband Nonlinear Optical Susceptibility and Electro-Optical Coefficients in Asymmetric Bragg-Confined Coupled Quantum Wells. Physica Scripta, 2000, 61, 381-384.	1.2	0
162	Optimization of Intersubband Nonlinear Optical Susceptibilities in Asymmetric Bragg-Confined Structures. Materials Science Forum, 2000, 352, 225-230.	0.3	0

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163	Quantum-well shape optimization for intersubband-related electro-optic modulation properties. <i>Physical Review B</i> , 1999, 59, 5637-5642.	1.1	14
164	Resonant intersubband harmonic generation in asymmetric Bragg-confined quantum wells. <i>Solid State Communications</i> , 1999, 110, 339-343.	0.9	10
165	The absorption cross section for bound-free transitions in semiconductor quantum dots. <i>Solid State Communications</i> , 1999, 110, 103-107.	0.9	13
166	Resonantly enhanced bound-continuum intersubband second harmonic generation in optimized asymmetric semiconductor quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1999, 4, 119-127.	1.3	7
167	The electronic structure of the perturbed superlattice: the case of Bragg-confined double quantum well resonant structures. <i>Superlattices and Microstructures</i> , 1998, 23, 225-237.	1.4	6
168	Optimization of resonant second- and third-order nonlinearities in step and continuously graded semiconductor quantum wells. <i>IEEE Journal of Quantum Electronics</i> , 1998, 34, 795-802.	1.0	30
169	Intersubband Resonant Third Harmonic Generation in Asymmetric Semiconductor Quantum Wells. <i>Solid State Phenomena</i> , 1998, 61-62, 223-226.	0.3	0
170	Optimization of Optical Nonlinearities in Semiconductor Quantum Wells. <i>Solid State Phenomena</i> , 1998, 61-62, 91-96.	0.3	0
171	Bound-Continuum Intersubband Transition Based Optical Nonlinearities in Semiconductor Quantum Wells. <i>Solid State Phenomena</i> , 1998, 61-62, 231-234.	0.3	0
172	Influence of the Self-Consistent Potential on Absorption Cross Section in Semiconductor Quantum Dot. <i>Solid State Phenomena</i> , 1998, 61-62, 235-238.	0.3	0
173	Continuum Electron Wavefunction Shifts in Semiconductor Quantum Dot. <i>Solid State Phenomena</i> , 1998, 61-62, 227-230.	0.3	0
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