Zbig R Wasilewski

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1013028/publications.pdf

Version: 2024-02-01

258 papers 9,541 citations

50 h-index 90 g-index

259 all docs

259 docs citations

259 times ranked 5512 citing authors

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Coupling and Entangling of Quantum States in Quantum Dot Molecules. Science, 2001, 291, 451-453. | 6.0 | 759 |
| 2 | Terahertz quantum cascade lasers operating up to â ¹ 1/4 200 K with optimized oscillator strength and improved injection tunneling. Optics Express, 2012, 20, 3866. | 1.7 | 493 |
| 3 | Addition spectrum of a lateral dot from Coulomb and spin-blockade spectroscopy. Physical Review B, 2000, 61, R16315-R16318. | 1.1 | 369 |
| 4 | Phase-Controlled Currents in Semiconductors. Physical Review Letters, 1995, 74, 3596-3599. | 2.9 | 338 |
| 5 | Quantum dot infrared photodetectors. Applied Physics Letters, 2001, 78, 79-81. | 1.5 | 293 |
| 6 | Negative capacitance effect in semiconductor devices. IEEE Transactions on Electron Devices, 1998, 45, 2196-2206. | 1.6 | 268 |
| 7 | High-power portable terahertz laser systems. Nature Photonics, 2021, 15, 16-20. | 15.6 | 228 |
| 8 | Coherent control of three-spin states in a triple quantum dot. Nature Physics, 2012, 8, 54-58. | 6.5 | 215 |
| 9 | InAs selfâ€assembled quantum dots on InP by molecular beam epitaxy. Applied Physics Letters, 1996, 68, 991-993. | 1.5 | 183 |
| 10 | Manipulating the energy levels of semiconductor quantum dots. Physical Review B, 1999, 59, 15368-15373. | 1.1 | 169 |
| 11 | Mode-locked pulses from mid-infrared Quantum Cascade Lasers. Optics Express, 2009, 17, 12929. | 1.7 | 168 |
| 12 | Fractal Conductance Fluctuations in a Soft-Wall Stadium and a Sinai Billiard. Physical Review Letters, 1998, 80, 1948-1951. | 2.9 | 153 |
| 13 | Terahertz quantum-cascade lasers based on a three-well active module. Applied Physics Letters, 2007, 90, 041112. | 1.5 | 151 |
| 14 | Background-limited terahertz quantum-well photodetector. Applied Physics Letters, 2005, 86, 231103. | 1.5 | 121 |
| 15 | Excitonic Energy Shell Structure of Self-Assembled InGaAs/GaAs Quantum Dots. Physical Review Letters, 2004, 92, 187402. | 2.9 | 111 |
| 16 | How good is the polarization selection rule for intersubband transitions?. Applied Physics Letters, 1998, 72, 1682-1684. | 1.5 | 110 |
| 17 | Segregation of Si δdoping in GaAsâ€AlGaAs quantum wells and the cause of the asymmetry in the currentâ€voltage characteristics of intersubband infrared detectors. Applied Physics Letters, 1993, 63, 761-763. | 1.5 | 100 |
| 18 | Exciton Dephasing in Quantum Dot Molecules. Physical Review Letters, 2003, 91, 267401. | 2.9 | 100 |

| # | Article | IF | Citations |
|----|---|------|-----------|
| 19 | Integrated quantum well intersub-band photodetector and light emitting diode. Electronics Letters, 1995, 31, 832-833. | 0.5 | 97 |
| 20 | Self-Similar Magnetoresistance of a Semiconductor Sinai Billiard. Physical Review Letters, 1997, 78, 1952-1955. | 2.9 | 97 |
| 21 | High-frequency quantum-well infrared photodetectors measured by microwave-rectification technique. IEEE Journal of Quantum Electronics, 1996, 32, 1024-1028. | 1.0 | 95 |
| 22 | Composition of AlGaAs. Journal of Applied Physics, 1997, 81, 1683-1694. | 1.1 | 95 |
| 23 | Microwave radiation induced magneto-oscillations in the longitudinal and transverse resistance of a two-dimensional electron gas. Solid State Communications, 2004, 129, 341-345. | 0.9 | 89 |
| 24 | Bipolar spin blockade and coherent state superpositions in a triple quantum dot. Nature Nanotechnology, 2013, 8, 261-265. | 15.6 | 83 |
| 25 | Coupled Electron-Phonon Modes in Optically Pumped Resonant Intersubband Lasers. Physical Review Letters, 2003, 90, 077402. | 2.9 | 81 |
| 26 | Frequency quenching of microwave-induced resistance oscillations in a high-mobility two-dimensional electron gas. Physical Review B, 2007, 76, . | 1.1 | 79 |
| 27 | Multicolor voltage-tunable quantum-well infrared photodetector. IEEE Electron Device Letters, 1993, 14, 566-568. | 2.2 | 77 |
| 28 | Unusual capacitance behavior of quantum well infrared photodetectors. Applied Physics Letters, 1997, 70, 1828-1830. | 1.5 | 77 |
| 29 | Coupled InAs/GaAs quantum dots with well-defined electronic shells. Applied Physics Letters, 2000, 76, 2268-2270. | 1.5 | 75 |
| 30 | Resistively Detected Nuclear Magnetic Resonance in the Quantum Hall Regime: Possible Evidence for a Skyrme Crystal. Physical Review Letters, 2002, 88, 256807. | 2.9 | 75 |
| 31 | Effect of doping concentration on the performance of terahertz quantum-cascade lasers. Applied Physics Letters, 2005, 87, 141102. | 1.5 | 75 |
| 32 | Three-dimensional transport diagram of a triple quantum dot. Physical Review B, 2010, 82, . | 1.1 | 74 |
| 33 | Dark current in quantum well infrared photodetectors. Journal of Applied Physics, 1993, 73, 2029-2031. | 1.1 | 73 |
| 34 | Photoconductivity nonlinearity at high excitation power in quantum well infrared photodetectors. Applied Physics Letters, 1997, 70, 414-416. | 1.5 | 67 |
| 35 | High absorption (>90%) quantum-well infrared photodetectors. Applied Physics Letters, 2001, 79, 4237-4239. | 1.5 | 66 |
| 36 | Blue-violet InGaN laser diodes grown on bulk GaN substrates by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2005, 86, 011114. | 1.5 | 66 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Magneto-optical studies of n-GaAs under high hydrostatic pressure. Semiconductor Science and Technology, 1986, 1, 264-274. | 1.0 | 63 |
| 38 | Enhanced degradation resistance of quantum dot lasers to radiation damage. Applied Physics Letters, 2000, 77, 624-626. | 1.5 | 61 |
| 39 | Band-gap energy oflnxGa1â^'xNyAs1â^'yas a function of N content. Physical Review B, 2002, 66, . | 1.1 | 59 |
| 40 | From laterally modulated two-dimensional electron gas towards artificial graphene. New Journal of Physics, 2012, 14, 053002. | 1.2 | 59 |
| 41 | Lasing in quantum-dot ensembles with sharp adjustable electronic shells. Applied Physics Letters, 1999, 75, 986-988. | 1.5 | 58 |
| 42 | A phonon scattering assisted injection and extraction based terahertz quantum cascade laser. Journal of Applied Physics, $2012,111,111$ | 1.1 | 58 |
| 43 | Pixelless infrared imaging device. Electronics Letters, 1997, 33, 379. | 0.5 | 57 |
| 44 | High mobility two-dimensional electron gas in AlGaNâ̂-GaN heterostructures grown on bulk GaN by plasma assisted molecular beam epitaxy. Applied Physics Letters, 2005, 86, 102106. | 1.5 | 56 |
| 45 | Nitride-based laser diodes grown by plasma-assisted molecular beam epitaxy. Journal Physics D: Applied Physics, 2014, 47, 073001. | 1.3 | 56 |
| 46 | Collapse of the Zeeman gap in quantum dots due to electronic correlations. Physical Review B, 1999, 59, 2801-2806. | 1.1 | 54 |
| 47 | GaAs/AlGaAs quantum-well photodetector for visible and middle infrared dual-band detection. Applied Physics Letters, 2000, 77, 2437-2439. | 1.5 | 54 |
| 48 | Importance of the upper state position in the performance of quantum well intersubband infrared detectors. Applied Physics Letters, 1991, 59, 3625-3627. | 1.5 | 53 |
| 49 | Attenuation and velocity of 56 GHz longitudinal phonons in gallium arsenide from 50 to 300 K. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1994, 70, 687-698. | 0.6 | 53 |
| 50 | Shot-noise suppression in resonant tunneling. Physical Review B, 1995, 51, 5116-5120. | 1.1 | 51 |
| 51 | Studies of oxide desorption from GaAs substrates via Ga[sub 2]O[sub 3] to Ga[sub 2]O conversion by exposure to Ga flux. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 1534. | 1.6 | 51 |
| 52 | Intersubband Raman Laser. Applied Physics Letters, 2001, 78, 3580-3582. | 1.5 | 50 |
| 53 | Quantum interference and phonon-mediated back-action in lateral quantum-dot circuits. Nature Physics, 2012, 8, 522-527. | 6.5 | 50 |
| 54 | Determination of the size, shape, and composition of indium-flushed self-assembled quantum dots by transmission electron microscopy. Journal of Applied Physics, 2000, 88, 2272-2277. | 1.1 | 49 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Optimized GaAsâ^•AlGaAs light-emitting diodes and high efficiency wafer-fused optical up-conversion devices. Journal of Applied Physics, 2004, 96, 5243-5248. | 1.1 | 48 |
| 56 | Pixelless thermal imaging with integrated quantum-well infrared photodetector and light-emitting diode. IEEE Photonics Technology Letters, 2002, 14, 182-184. | 1.3 | 47 |
| 57 | Uncooled infrared detectors for 3–5μm and beyond. Applied Physics Letters, 2008, 93, . | 1.5 | 47 |
| 58 | Tunnel current in quantum dot infrared photodetectors. Journal of Applied Physics, 2003, 93, 1320-1322. | 1.1 | 46 |
| 59 | AlGaAs emitterâ^•GaAs barrier terahertz detector with a 2.3 THz threshold. Applied Physics Letters, 2005, 86, 071112. | 1.5 | 46 |
| 60 | Nonequivalent atomic step edgesâ€"Role of gallium and nitrogen atoms in the growth of InGaN layers. Journal of Crystal Growth, 2013, 367, 115-121. | 0.7 | 46 |
| 61 | Self-assembled quantum dots: five years later. Superlattices and Microstructures, 1999, 25, 87-96. | 1.4 | 45 |
| 62 | Nitride-based laser diodes by plasma-assisted MBEâ€"From violet to green emission. Journal of Crystal Growth, 2009, 311, 1632-1639. | 0.7 | 45 |
| 63 | Pixelless infrared imaging utilizing a p-type quantum well infrared photodetector integrated with a light emitting diode. Applied Physics Letters, 1997, 70, 2784-2786. | 1.5 | 43 |
| 64 | Light-hole and heavy-hole transitions for high-temperature long-wavelength infrared detection. Applied Physics Letters, 2010, 97, . | 1.5 | 43 |
| 65 | Quantum oscillations in the microwave magnetoabsorption of a two-dimensional electron gas. Physical Review B, 2010, 81, . | 1.1 | 43 |
| 66 | InAs/GaAs(100) self-assembled quantum dots: arsenic pressure and capping effects. Journal of Crystal Growth, 2002, 236, 145-154. | 0.7 | 42 |
| 67 | Studies and modeling of growth uniformity in molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 120. | 1.6 | 41 |
| 68 | Influence of the number of wells in the performance of multiple quantum well intersubband infrared detectors. Journal of Applied Physics, 1992, 72, 1062-1064. | 1.1 | 40 |
| 69 | Optical phonons inAlxGa1â^'xAs: Raman spectroscopy. Physical Review B, 2004, 70, . | 1.1 | 40 |
| 70 | Emission from a highly excited singleInAsâ^'GaAsquantum dot in magnetic fields: An excitonic Fock-Darwin diagram. Physical Review B, 2006, 74, . | 1.1 | 40 |
| 71 | Enhanced charge detection of spin qubit readout via an intermediate state. Applied Physics Letters, 2012, 101, . | 1.5 | 40 |
| 72 | Heterojunction wavelength-tailorable far-infrared photodetectors with response out to 70 μm. Applied Physics Letters, 2001, 78, 2241-2243. | 1.5 | 39 |

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 73 | Cutoff tailorability of heterojunction terahertz detectors. Applied Physics Letters, 2003, 82, 139-141. | 1.5 | 39 |
| 74 | Intersubband transitions in InGaNAs/GaAs quantum wells. Applied Physics Letters, 2002, 81, 1836-1838. | 1.5 | 38 |
| 75 | Effect of oscillator strength and intermediate resonance on the performance of resonant phonon-based terahertz quantum cascade lasers. Journal of Applied Physics, 2013, 113, 113109. | 1.1 | 38 |
| 76 | Few-Electron Open Dots: Single Level Transport. Physical Review Letters, 1999, 83, 1838-1841. | 2.9 | 37 |
| 77 | Quantum Hall ferromagnet at high filling factors: A magnetic-field-induced Stoner transition. Physical Review B, 2005, 72, . | 1.1 | 37 |
| 78 | Growth optimisation of the GaN layers and GaN/AlGaN heterojunctions on bulk GaN substrates using plasma-assisted molecular beam epitaxy. Physica Status Solidi A, 2004, 201, 320-323. | 1.7 | 36 |
| 79 | High power blue–violet InGaN laser diodes grown on bulk GaN substrates by plasma-assisted molecular beam epitaxy. Semiconductor Science and Technology, 2005, 20, 809-813. | 1.0 | 36 |
| 80 | Terahertz Emission in Asymmetric Quantum Wells by Frequency Mixing of Midinfrared Waves. IEEE Journal of Quantum Electronics, 2006, 42, 1157-1174. | 1.0 | 36 |
| 81 | Evolution of the energy levels in quantum dot ensembles with different densities. Applied Physics Letters, 1999, 75, 1866-1868. | 1.5 | 35 |
| 82 | Voltageâ€ŧuning in multi olor quantum well infrared photodetector stacks. Journal of Applied Physics, 1996, 79, 8091-8097. | 1.1 | 33 |
| 83 | Terahertz Quantum Well Photodetectors. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 374-377. | 1.9 | 33 |
| 84 | InGaN light emitting diodes for 415 nm–520 nm spectral range by plasma assisted MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S917. | 0.8 | 32 |
| 85 | Metal-Grating-Coupled Terahertz Quantum-Well Photodetectors. IEEE Electron Device Letters, 2011, 32, 659-661. | 2.2 | 31 |
| 86 | Long time relaxation phenomena of a two-dimensional electron system within integer quantum Hall plateau regimes after magnetic field sweeps. Physical Review B, 2004, 69, . | 1.1 | 30 |
| 87 | Two-band electron transport in a double quantum well. Physical Review B, 2005, 71, . | 1.1 | 30 |
| 88 | Excitonic complexes in natural InAs/GaAs quantum dots. Physical Review B, 2015, 91, . | 1.1 | 30 |
| 89 | Charge nonâ€neutrality in the quantum well region of a GaAsâ€AlGaAs intersubband 9 μm detector. Applied Physics Letters, 1991, 58, 1059-1061. | 1.5 | 28 |
| 90 | Phase Diagram for the Breakdown of the Quantum Hall Effect. Physical Review Letters, 1999, 82, 1249-1252. | 2.9 | 28 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 91 | An indirectly pumped terahertz quantum cascade laser with low injection coupling strength operating above 150 K. Journal of Applied Physics, 2013, 113, . | 1.1 | 28 |
| 92 | Pixel-less infrared imaging based on the integration of an n-type quantum-well infrared photodetector with a light-emitting diode. Applied Physics Letters, 1999, 75, 563-565. | 1.5 | 27 |
| 93 | Natural quantum dots in the InAsâ^•GaAs wetting layer. Applied Physics Letters, 2008, 92, 171104. | 1.5 | 27 |
| 94 | Midinfrared optical upconverter. Applied Physics Letters, 2005, 86, 201103. | 1.5 | 26 |
| 95 | Intersubband photocurrent from the quantum well of an asymmetrical doubleâ€barrier structure. Journal of Applied Physics, 1991, 70, 935-940. | 1.1 | 25 |
| 96 | Postgrowth tuning of quantumâ€well infrared detectors by rapid thermal annealing. Journal of Applied Physics, 1994, 75, 8234-8236. | 1.1 | 25 |
| 97 | Noise and photoconductive gain in AlGaAs/GaAs quantum well intersubband infrared photodetectors. Journal of Applied Physics, 1994, 76, 1889-1894. | 1.1 | 25 |
| 98 | Growth mechanism of InGaN by plasma assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 03C136. | 0.6 | 25 |
| 99 | The enhancement of quantum well intermixing through repeated ion implantation. Semiconductor Science and Technology, 1994, 9, 2134-2137. | 1.0 | 24 |
| 100 | Quantum Interference between Three Two-Spin States in a Double Quantum Dot. Physical Review Letters, 2012, 108, 226802. | 2.9 | 24 |
| 101 | Low dark current dual band infrared photodetector using thin AlAs barriers and Γâ€X mixed intersubband transition in GaAs quantum wells. Applied Physics Letters, 1994, 64, 475-477. | 1.5 | 23 |
| 102 | Enhanced compositional disordering of quantum wells in GaAs/AlGaAs and InGaAs/GaAs using focused Ga+ion beams. Applied Physics Letters, 1994, 65, 621-623. | 1.5 | 22 |
| 103 | Intersubband infrared detector with optimized valence band quantum wells for 3–5 Î⅓m wavelength region. Journal of Applied Physics, 1999, 85, 2972-2976. | 1.1 | 22 |
| 104 | Inhomogeneous broadening in quantum dots with ternary aluminum alloys. Applied Physics Letters, 2001, 79, 2701-2703. | 1.5 | 22 |
| 105 | Twoâ€photon intersubband transitions in quantum well infrared photoconductors. Applied Physics Letters, 1994, 65, 1560-1562. | 1.5 | 21 |
| 106 | Studies of Si segregation in GaAs using current–voltage characteristics of quantum well infrared photodetectors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1994, 12, 1273. | 1.6 | 20 |
| 107 | Quasi-phase matched second-harmonic generation in an AlxGa1â^'xAs asymmetric quantum-well waveguide using ion-implantation-enhanced intermixing. Applied Physics Letters, 2000, 77, 4247-4249. | 1.5 | 20 |
| 108 | Microwave measurement of shot noise in resonant tunneling diodes. Applied Physics Letters, 1997, 71, 530-532. | 1.5 | 19 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 109 | Time-Resolved Thermal Quenching of THz Quantum Cascade Lasers. IEEE Journal of Quantum Electronics, 2010, 46, 396-404. | 1.0 | 19 |
| 110 | A high carrier injection terahertz quantum cascade laser based on indirectly pumped scheme. Applied Physics Letters, 2014, 104, 041111. | 1.5 | 19 |
| 111 | MBE growth of continuously-graded parabolic quantum well arrays in AlGaAs. Journal of Crystal Growth, 2019, 514, 103-108. | 0.7 | 19 |
| 112 | Measurements of intersubband photocurrents from quantum wells in asymmetrical-double-barrier structures. Physical Review B, 1991, 44, 1411-1414. | 1.1 | 18 |
| 113 | 1.5 $\hat{l}\frac{1}{4}$ m to 0.87 $\hat{l}\frac{1}{4}$ m optical upconversion using wafer fusion technology. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 788. | 0.9 | 18 |
| 114 | Optical upconverter with integrated heterojunction phototransistor and light-emitting diode. Applied Physics Letters, 2006, 88, 073501. | 1.5 | 18 |
| 115 | Optimal Doping Density for Quantum-Well Infrared Photodetector Performance. IEEE Journal of Quantum Electronics, 2009, 45, 623-628. | 1.0 | 18 |
| 116 | Short wavelength (1–4 μm) infrared detectors using intersubband transitions in GaAs-based quantum wells. Journal of Applied Physics, 1998, 83, 6178-6181. | 1.1 | 17 |
| 117 | A study of GaAs/AlGaAs p-type quantum well infrared photodetectors with different barrier heights. Journal of Applied Physics, 1998, 83, 585-587. | 1.1 | 17 |
| 118 | Transient photocurrent overshoot in quantum-well infrared photodetectors. Applied Physics Letters, 2001, 79, 2094-2096. | 1.5 | 17 |
| 119 | Fock-Darwin spectrum of a single InAs/GaAs quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3748-3751. | 0.8 | 17 |
| 120 | Dresselhaus spin-orbit coupling in a symmetric (100) GaAs quantum well. Physical Review B, 2006, 74, . | 1.1 | 17 |
| 121 | InGaN laser diodes operating at 450–460 nm grown by rf-plasma MBE. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B102. | 0.6 | 17 |
| 122 | CdTeâ€Cd1â^'xMnxTe multiple quantum well structures grown by pulsed laser evaporation and epitaxy. Applied Physics Letters, 1991, 59, 1591-1593. | 1.5 | 16 |
| 123 | Low threshold optical bistable switching in an asymmetric î»/4â€shifted distributedâ€feedback heterostructure. Applied Physics Letters, 1995, 67, 1051-1053. | 1.5 | 16 |
| 124 | Mid-wavelength infrared detection with InxGa1-xAs/Al0.45Ga0.55As multiple quantum well structures. Semiconductor Science and Technology, 1995, 10, 45-48. | 1.0 | 15 |
| 125 | Terahertz quantum well infrared detectors. Infrared Physics and Technology, 2009, 52, 289-293. | 1.3 | 15 |
| 126 | Realization of Harmonic Oscillator Arrays with Graded Semiconductor Quantum Wells. Physical Review Letters, 2020, 125, 097403. | 2.9 | 15 |

| # | Article | IF | CITATIONS |
|-----|---|--|-----------|
| 127 | Transport measurements of resonant-tunneling widths. Physical Review B, 1991, 43, 7086-7090. | 1.1 | 14 |
| 128 | Regular periodic intersubband photocurrent peaks in a multiple double-well structure. Physical Review B, 1993, 48, 1951-1954. | 1.1 | 14 |
| 129 | Effect of the shape of the first barrier on quantum well infrared photodetector performance. Journal of Applied Physics, 1997, 82, 889-892. | 1.1 | 14 |
| 130 | Quasiphase matched surface emitting second harmonic generation in periodically reversed asymmetric GaAs/AlGaAs quantum well waveguide. Applied Physics Letters, 1997, 70, 2655-2657. | 1.5 | 14 |
| 131 | Terahertz quantum cascade lasers: Fabrication, characterization, and doping effect. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 778-782. | 0.9 | 14 |
| 132 | Coherent exchange and double beam splitter oscillations in a triple quantum dot. Physical Review B, 2012, 86, . | 1.1 | 14 |
| 133 | Experimental investigation of terahertz quantum cascade laser with variable barrier heights. Journal of Applied Physics, 2014, 115, 163103. | 1.1 | 14 |
| 134 | Experimental study of intersubband infrared transitions in coupled quantum wells under an electric field. Journal of Applied Physics, 1990, 68, 3780-3782. | 1.1 | 13 |
| 135 | Widely tunable self-assembled quantum dot lasers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 578-581. | 0.9 | 13 |
| 136 | Infrared reflectivity of (GaAs)m/(AlAs)n superlattices. Applied Physics Letters, 2003, 83, 3683-3685. | 1.5 | 13 |
| 137 | Thermopower of a double quantum well based on GaAs. Physical Review B, 2003, 67, . | 1.1 | 13 |
| 138 | Role of Sb in the growth and optical properties of 1.55î½m GalnN(Sb)As∕GaNAs quantum-well structures by molecular-beam epitaxy. Applied Physics Letters, 2005, 87, 181908. | 1.5 | 13 |
| 139 | High current density tunnel diodes for multi-junction photovoltaic devices on InP substrates. Applied Physics Letters, 2021, 118, . | 1.5 | 13 |
| 140 | Infrared transmission and photocurrent study of intersubband transitions in a coupled asymmetrical quantum well structure. Journal of Applied Physics, 1991, 70, 7560-7563. | 1.1 | 12 |
| 141 | Fano resonance mediated by intersubband-phonon coupling. Applied Physics Letters, 2007, 91, 131121. | 1.5 | 12 |
| 142 | Electrically switching transverse modes in high power THz quantum cascade lasers. Optics Express, 2010, 18, 10036. | 1.7 | 12 |
| 143 | Dispersive line shape in the vicinity of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ν</mml:mi><mml:mo>=<td>$mo_{\overset{1}{1}\overset{1}{.}\overset{1}{1}}mml$:</td><td>mn>1</td></mml:mo></mml:mrow></mml:math> | $mo_{\overset{1}{1}\overset{1}{.}\overset{1}{1}}mml$: | mn>1 |
| 144 | Role of metastable charge states in a quantum-dot spin-qubit readout. Physical Review B, 2015, 92, . | 1.1 | 12 |

| # | Article | IF | CITATIONS |
|-----|--|----------------------|--------------------|
| 145 | Measurement of indium segregation in strained In _{<i>Nosub><i>x</i></i>} Ga _{1â€"<i>x</i>} As/GaAs quantum wells by transmission electron microscopy. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1997, 75, 803-821. | 0.8 | 11 |
| 146 | Grazing-angle intersubband absorption inn-doped GaAs multiple quantum wells. Physical Review B, 2000, 61, 13050-13054. | 1.1 | 11 |
| 147 | Influence of the single-particle Zeeman energy on the quantum Hall ferromagnet at high filling factors. Physical Review B, 2007, 75, . | 1.1 | 11 |
| 148 | Photovoltaic infrared detection with p-type graded barrier heterostructures. Journal of Applied Physics, 2012, 111, . | 1.1 | 11 |
| 149 | Visibility study of mml:ms:mml="http://www.w3.org/1998/Math/MathML">S/mml:mi>â^'/mmoscillations without applied initialization. Physical Review B, 2015, 91, . | nl:m ite xt>< | m ml: msub> |
| 150 | Thermally activated current–voltage asymmetry in quantum-well inter-subband photodetectors. Canadian Journal of Physics, 1996, 74, 9-15. | 0.4 | 10 |
| 151 | An asymmetric quantum well infrared photodetector with voltageâ€tunable narrow and broadâ€band response. Journal of Applied Physics, 1996, 79, 3307-3311. | 1.1 | 10 |
| 152 | QWIPs DESIGNED FOR HIGH ABSORPTION AND HIGH OPERATING TEMPERATURE. International Journal of High Speed Electronics and Systems, 2002, 12, 803-819. | 0.3 | 10 |
| 153 | Normal incidence detection of ultraviolet, visible, and mid-infrared radiation in a single GaAs/AlGaAs device. Optics Letters, 2009, 34, 2036. | 1.7 | 10 |
| 154 | Polarization Sensitivity of Quantum Well Infrared Photodetector Coupled to a Metallic Diffraction Grid. IEEE Journal of Quantum Electronics, 2010, 46, 877-883. | 1.0 | 10 |
| 155 | Effects of interface roughness scattering on device performance of indirectly pumped terahertz quantum cascade lasers. Journal of Physics: Conference Series, 2015, 619, 012003. | 0.3 | 10 |
| 156 | Single quantum well intersubband infrared detector using GaAs-AlGaAs asymmetrical double-barrier structures. Semiconductor Science and Technology, 1991, 6, C124-C127. | 1.0 | 9 |
| 157 | Nonuniform vertical charge transport and relaxation in quantum well infrared detectors. Journal of Applied Physics, 1998, 83, 991-997. | 1.1 | 9 |
| 158 | Optimization of p-doping in GaAs photon-recycling light-emitting diodes operated at low temperature. Semiconductor Science and Technology, 2001, 16, L21-L23. | 1.0 | 9 |
| 159 | Observation of resonant tunneling through a self-assembled InAs quantum dot layer. Applied Physics Letters, 2006, 88, 043103. | 1.5 | 9 |
| 160 | Improved thickness uniformity in molecular beam epitaxial growth of GaAs using a tilted conical insert crucible. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 3175-3177. | 0.9 | 8 |
| 161 | Temperature dependence of photoresponse inp-typeGaAs/AlxGa1â^'xAsmultiple quantum wells: Theory and experiment. Physical Review B, 2000, 61, 13798-13804. | 1.1 | 8 |
| 162 | Decay of long-lived quantum Hall induced currents in 2D electron systems. New Journal of Physics, 2007, 9, 71-71. | 1.2 | 8 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Analysis of Dark Current Mechanisms for Split-Off Band Infrared Detectors at High Temperatures. IEEE Transactions on Electron Devices, 2010, 57, 1230-1236. | 1.6 | 8 |
| 164 | Nonlinear magnetotransport phenomena in high-mobility two-dimensional electrons in InGaAs/InP and GaAs/AlGaAs. Physical Review B, 2012, 86, . | 1.1 | 8 |
| 165 | Optimization of metamorphic buffers for MBE growth of high quality AllnSb/InSb quantum structures: Suppression of hillock formation. Journal of Crystal Growth, 2017, 477, 7-11. | 0.7 | 8 |
| 166 | A Tunable Unidirectional Source for GUSTO's Local Oscillator at 4.74 THz. IEEE Transactions on Terahertz Science and Technology, 2022, 12, 144-150. | 2.0 | 8 |
| 167 | Magnetoâ€resonant tunneling from a lightly doped contact region interacting with quasiâ€twoâ€dimensional states in an accumulation layer. Journal of Applied Physics, 1990, 68, 4313-4315. | 1.1 | 7 |
| 168 | Patterning the second-order optical nonlinearity of asymmetric quantum wells by ion implantation enhanced intermixing. Applied Physics Letters, 1998, 72, 3097-3099. | 1.5 | 7 |
| 169 | High absorption GaAs/AlGaAs quantum well infrared photodetectors. Semiconductor Science and Technology, 2002, 17, L41-L43. | 1.0 | 7 |
| 170 | Single-photon emission from the natural quantum dots in the InAs/GaAs wetting layer. Physical Review B, 2011, 84, . | 1.1 | 7 |
| 171 | Three-spin coherent oscillations and interference. Physical Review B, 2015, 91, . | 1.1 | 7 |
| 172 | Growth and characterization of epitaxial aluminum layers on gallium-arsenide substrates for superconducting quantum bits. Superconductor Science and Technology, 2016, 29, 064004. | 1.8 | 7 |
| 173 | Thin film metrology and microwave loss characterization of indium and aluminum/indium superconducting planar resonators. Journal of Applied Physics, 2018, 123, . | 1.1 | 7 |
| 174 | Low-frequency impedance of quantized Hall conductors. Physical Review B, 2000, 62, 12990-12996. | 1.1 | 6 |
| 175 | Asymmetry in the dark current low frequency noise characteristics of B–B and B–C quantum well infrared photodetectors from 10 to 80 K. Journal of Applied Physics, 2000, 87, 2400-2407. | 1.1 | 6 |
| 176 | Thermal Oxidation of III-V Materials and Heterostructures. Journal of the Electrochemical Society, 2002, 149, G581. | 1.3 | 6 |
| 177 | Thermopower of a double quantum well in a parallel magnetic field. Physical Review B, 2004, 70, . | 1.1 | 6 |
| 178 | Pressure tuning of GalnNAs laser diodes in external cavity. , 2005, , . | | 6 |
| 179 | Temperature dependence of current–voltage characteristics of terahertz quantum-well photodetectors. Semiconductor Science and Technology, 2009, 24, 115014. | 1.0 | 6 |
| 180 | The effect of In-flush on the optical anisotropy of InAs/GaAs quantum dots. Journal of Applied Physics, 2012, 111, 033510. | 1.1 | 6 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Classical percolation fingerprints in the high temperature regime of the quantum Hall effect. New Journal of Physics, 2013, 15, 083027. | 1.2 | 6 |
| 182 | Regular and periodic peaks in device current, capacitance, and intersubband photocurrent from a multipleâ€doubleâ€well. Journal of Applied Physics, 1994, 75, 1748-1753. | 1.1 | 5 |
| 183 | Temperature independent current blocking due to hot electrons in InAlAs/InGaAs double heterojunction bipolar transistors with composite collectors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 846-849. | 0.9 | 5 |
| 184 | Reflection high-energy electron diffraction observation of the dynamics of semiconductor quantum dot formation and decay. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 2210. | 1.6 | 5 |
| 185 | Five-band bias-selectable integrated quantum well detector in an n-p-n architecture. Applied Physics Letters, 2010, 97, . | 1.5 | 5 |
| 186 | W line shape in the resistively detected nuclear magnetic resonance. Journal of Physics Condensed Matter, 2015, 27, 275801. | 0.7 | 5 |
| 187 | Temperature monitoring of narrow bandgap semiconductors. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, . | 0.6 | 5 |
| 188 | Hillock-free and atomically smooth InSb QWs grown on GaAs substrates by MBE. Journal of Crystal Growth, 2019, 513, 15-19. | 0.7 | 5 |
| 189 | Non-adiabatic single-electron pumps in a dopant-free GaAs/AlGaAs 2DEG. Applied Physics Letters, 2021, 119, . | 1.5 | 5 |
| 190 | Comparison of quantum well infrared photodetectors grown on different molecular beam epitaxial systems. Semiconductor Science and Technology, 1993, 8, 2010-2014. | 1.0 | 4 |
| 191 | Thermopower and weak localization. Semiconductor Science and Technology, 2004, 19, 1291-1299. | 1.0 | 4 |
| 192 | The effect of phonon extraction level separation on the performance of three-well resonant-phonon terahertz quantum-cascade lasers. Semiconductor Science and Technology, 2009, 24, 065012. | 1.0 | 4 |
| 193 | Role of Nonequivalent Atomic Step Edges in the Growth of InGaN by Plasma-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JE02. | 0.8 | 4 |
| 194 | Effects of the Upper State Position and the Number of Wells on the Performance of Intersubband Quantum Well Detectors. NATO ASI Series Series B: Physics, 1992, , 57-63. | 0.2 | 3 |
| 195 | QWIP-LED PIXELLESS THERMAL IMAGING DEVICE. International Journal of High Speed Electronics and Systems, 2002, 12, 891-905. | 0.3 | 3 |
| 196 | Quantum-Cascade Lasers with One-Well Injector Operating at 1.59 THz (λ = 188.5 μm)., 2007,,. | | 3 |
| 197 | Quantum dots for terahertz generation. Journal of Physics Condensed Matter, 2008, 20, 384211. | 0.7 | 3 |
| 198 | Threeâ€dimensional localization of excitons in the InAs/GaAs wetting layer – magnetospectroscopic study. Physica Status Solidi (B): Basic Research, 2009, 246, 850-853. | 0.7 | 3 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 199 | Publisher's Note: Quantum oscillations in the microwave magnetoabsorption of a two-dimensional electron gas [Phys. Rev. B 81 , 201302(R) (2010)]. Physical Review B, 2010, 81, . | 1.1 | 3 |
| 200 | Trueâ€blue laser diodes grown by plasmaâ€assisted MBE on bulk GaN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 666-669. | 0.8 | 3 |
| 201 | Threading dislocations in MBE grown AlInSb metamorphic buffers: Revealed and counted. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, . | 0.6 | 3 |
| 202 | Precise control of time-varying effusion cell flux in molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 043407. | 0.9 | 3 |
| 203 | Raman investigation of molecular beam epitaxy grown InGaAlAs epilayers lattice matched to InP for low Al concentrations. Journal of Applied Physics, 1998, 83, 2266-2271. | 1.1 | 2 |
| 204 | QWIP-LED PIXELLESS THERMAL IMAGING DEVICE. Selected Topics in Electornics and Systems, 2003, , 299-313. | 0.2 | 2 |
| 205 | FURTHER EVIDENCE FOR A COLLAPSE OF THE EXCHANGE-ENHANCED SPIN SPLITTING IN TWO DIMENSIONAL SYSTEMS. International Journal of Modern Physics B, 2004, 18, 3597-3602. | 1.0 | 2 |
| 206 | Wafer-fused mid-infrared optical up-converter based on MOCVD grown InSb. , 2005, , . | | 2 |
| 207 | Device and application of quantum well photodetectors for terahertz region. , 2006, , . | | 2 |
| 208 | Photo detectors for multi-spectral sensing. , 2011, , . | | 2 |
| 209 | Quantum Hall induced currents and the magnetoresistance of a quantum point contact. New Journal of Physics, 2011, 13, 123020. | 1.2 | 2 |
| 210 | Role of nonequivalent atomic step edges in the growth of InGaN by plasma-assisted molecular beam epitaxy. Proceedings of SPIE, 2013, , . | 0.8 | 2 |
| 211 | Microscopic model for the magnetic-field-driven breakdown of the dissipationless state in the integer and fractional quantum Hall effect. Physical Review B, 2016, 94, . | 1.1 | 2 |
| 212 | QWIP Performance and Polarization Selection Rule. , 1998, , 50-59. | | 2 |
| 213 | Focal Plane Imaging Arrays Based on GaAs/AlGaAs Quantum Well Infrared Photodetectors. , 1997, , 311-318. | | 2 |
| 214 | Effects of biased and unbiased illuminations on two-dimensional electron gases in dopant-free GaAs/AlGaAs. Physical Review B, 2022, 105, . | 1.1 | 2 |
| 215 | Terahertz quantum well photodetectors. , 2006, , . | | 1 |
| 216 | Terahertz Quantum Cascade Lasers. , 2007, , . | | 1 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Quantum dots for terahertz devices. , 2007, , . | | 1 |
| 218 | Microwave absorption of a two-dimensional electron gas. AIP Conference Proceedings, 2007, , . | 0.3 | 1 |
| 219 | High contrast ratio, high uniformity multiple quantum well spatial light modulators. Journal of Semiconductors, 2010, 31, 034007. | 2.0 | 1 |
| 220 | Phonon and polaron enhanced IR-THz photodetectors. , 2011, , . | | 1 |
| 221 | Terahertz Quantum Cascade Lasers Based on Phonon Scattering Assisted Injection and Extraction. , 2012, , . | | 1 |
| 222 | THz quantum cascade lasers for operation above cryogenic temperatures. , 2013, , . | | 1 |
| 223 | Coherent manipulation of three-spin states in a GaAs/AlGaAs triple dot device. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 752-755. | 0.8 | 1 |
| 224 | Temperature Dependence of Photoresponse in p-Type GaAs/AlGaAs Multiple Quantum Wells: Theory and Experiment. Materials Research Society Symposia Proceedings, 1999, 607, 187. | 0.1 | 0 |
| 225 | Terahertz quantum well photodetectors. , 2005, , . | | 0 |
| 226 | Individual band mobilities in a double quantum well. AIP Conference Proceedings, 2005, , . | 0.3 | 0 |
| 227 | Charge Redistribution Spectroscopy as a Probe of Spin Phenomena in Quantum Dots. AIP Conference Proceedings, 2005, , . | 0.3 | 0 |
| 228 | Photon upconversion devices., 2006,,. | | 0 |
| 229 | <title>THz quantum semiconductor devices</title> ., 2006, 6029, 602901. | | 0 |
| 230 | Observation of resonant tunneling through a self-assembled InAs quantum dot layer. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 704-707. | 0.9 | 0 |
| 231 | Mid-infrared optical upconversion by integrating an InAsSb photodetector with a GaAs light emitting diode. , 2007, , . | | 0 |
| 232 | Mid-infrared optical upconversion by integrating an InAsSb photodetector with a GaAs light emitting diode., 2007,,. | | 0 |
| 233 | Weak antilocalization in a GaAs quantum well in the presence of a strong in-plane magnetic field. AIP Conference Proceedings, 2007, , . | 0.3 | 0 |
| 234 | Strong enhancement of responsivity and tunability of THz quantum-well photodetectors by magnetic field. , $2007, , .$ | | 0 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 235 | Excitonic Fock-Darwin Spectrum Of A Single Quantum Dot. AIP Conference Proceedings, 2007, , . | 0.3 | 0 |
| 236 | Magnetic-field-induced Stoner transition in a quantum Hall ferromagnet at high filling factors. AIP Conference Proceedings, 2007, , . | 0.3 | 0 |
| 237 | Photon upconversion devices for imaging. , 2008, , . | | 0 |
| 238 | Impact ionization in THz QWIPs., 2009, , . | | 0 |
| 239 | Multi-color infrared sensing with superlattice quantum dot structures and absorption enhancements., 2009,,. | | O |
| 240 | Designing phonons for active use in terahertz devices. , 2009, , . | | 0 |
| 241 | Waveguide design for bi-modal operation of THz quantum cascade lasers. , 2010, , . | | 0 |
| 242 | Design of Laser Transition Oscillator Strength for THz Quantum Cascade Lasers. , 2011, , . | | 0 |
| 243 | Room temperature photovoltaic response of split-off band infrared detectors with a graded barrier. , 2011, , . | | 0 |
| 244 | Intersubband impact ionization in THz QWIPs: shaping band structure reorganizations to design novel detectors. Proceedings of SPIE, $2011,\ldots$ | 0.8 | 0 |
| 245 | Terahertz detection by field effect transistors security imaging. Proceedings of SPIE, 2011, , . | 0.8 | 0 |
| 246 | Induced currents in the quantum Hall regime: Energy storage, persistence, and millimath xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mi></mml:mi> <mml:math display="inline" xmlns:mml="http://www.y3.org/1998/Math/MathML"><mml:math <="" math="" millimath="" td="" y=""><td>1.1</td><td>0</td></mml:math></mml:math> | 1.1 | 0 |
| 247 | display="inline"> <mml:mi>V</mml:mi> characteristics. Physical Review B, 2012, 86, . 199.5 K Operation of THz Quantum Cascade Lasers. , 2012, , . | | 0 |
| 248 | True-blue nitride laser diodes grown by plasma assisted MBE on low dislocation density GaN substrates. Proceedings of SPIE, 2013 , , . | 0.8 | 0 |
| 249 | Enhanced charge detection: Amplification factor, phase reversal and measurement time dependence., 2013,,. | | 0 |
| 250 | Renormalization of effective mass in self-assembled quantum dots due to electron-electron interactions. Journal of Physics: Conference Series, 2013, 456, 012002. | 0.3 | 0 |
| 251 | AlGaN cladding-free 482 nm continuous wave nitride laser diodes grown by plasma-assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 02C112. | 0.6 | 0 |
| 252 | Scanning Voltage Microscopy Study of Lasing and Non-lasing Terahertz Quantum Cascade Lasers. , 2015, , . | | 0 |

| # | Article | IF | CITATIONS |
|-----|--|----|-----------|
| 253 | Room temperature THz intersubband transitions in continuously-graded AlxGa1-xAs parabolic quantum wells. , 2019, , . | | O |
| 254 | Electrically Controlling Beam Pattern of THz Quantum Cascade Lasers. , 2010, , . | | 0 |
| 255 | Rate Equation Analysis of Three Phonon-Photon-Phonon Terahertz Quantum Cascade Lasers. , 2013, , . | | O |
| 256 | Terahertz Quantum Cascade Laser Performance for Structures with Variable Barrier Heights., 2013,,. | | 0 |
| 257 | A three-color voltage tunable quantum well intersubband photodetector for long wavelength infrared., 1994,, 123-133. | | O |
| 258 | A Unique Capability of Quantum Well Infrared Photodetectors: Multicolor and Multiband Response. , 1995, , 439-442. | | 0 |