# Dieter H Bimberg

List of Publications by Year
in descending order



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|---|---|---|---|
| 145 papers | 4,612 citations | 126907 33 h-index | 118850 62 g-index |
| 148 all docs | 148 docs citations | 148 times ranked | 3061 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Demonstration of electrically injected vertical-cavity surface-emitting lasers with post-supported high-contrast gratings. Photonics Research, 2022, 10, 1170. | 7.0 | 10 |
| 2 | Structural and compositional analysis of (InGa)(AsSb)/GaAs/GaP Stranskiâ€“Krastanov quantum dots. Light: Science and Applications, 2021, 10, 125. | 16.6 | 14 |
| 3 | On the importance of antimony for temporal evolution of emission from self-assembled (InGa)(AsSb)/GaAs quantum dots on GaP(001). New Journal of Physics, 2021, 23, 103029. | 2.9 | 10 |
| 4 | Novel VCSEL Designs for the next generation of photonic systems. , 2021, , . | | 1 |
| 5 | High-power, low resistance, single-mode, multi-aperture VCSELs. , 2021, , . | | 0 |
| 6 | Multi-aperture VCSELs: high power, low resistance, single mode. , 2021, , . | | 2 |
| 7 | High-power, single-mode, multi-aperture VCSELs for long-reach optical interconnects. , 2021, , . | | 1 |
| 8 | 910 nm Single-Mode VCSELs and its Application for Few-Mode Transmission over Graded-Index Single-Mode Fibers. , 2020, , . | | 2 |
| 9 | GaAs-based subwavelength grating on an AlOx layer for a vertical-cavity surface-emitting laser. OSA Continuum, 2020, 3, 317. | 1.8 | 3 |
| 10 | Optimization of VCSEL photon lifetime for minimum energy consumption at varying bit rates. Optics Express, 2020, 28, 18931. | 3.4 | 12 |
| 11 | Energy-Efficient 50+ Gb/s VCSELs for 200+ Gb/s Optical Interconnects. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-5. | 2.9 | 9 |
| 12 | Optical response of (InGa)(AsSb)/GaAs quantum dots embedded in a GaP matrix. Physical Review B, 2019, 100, . | 3.2 | 19 |
| 13 | Electronic states of (InGa)(AsSb)/GaAs/GaP quantum dots. Physical Review B, 2019, 100, . | 3.2 | 23 |
| 14 | Static and Dynamic Characteristics of In(AsSb)/ GaAs Submonolayer Lasers. IEEE Journal of Quantum Electronics, 2019, 55, 1-7. | 1.9 | 2 |
| 15 | Energy-efficient VCSELs for 200+ Gb/s optical interconnects. , 2019, , . | | 3 |
| 16 | Vertical-cavity surface-emitting lasers for data communication and sensing. Photonics Research, 2019, 7, 121. | 7.0 | 155 |
| 17 | Nanophotonics for a green internet. , 2019, , . | | 1 |
| 18 | MOVPEâ€Growth of InGaSb/AlP/GaP(001) Quantum Dots for Nanoscale Memory Applications. Physica Status Solidi (B): Basic Research, 2018, 255, 1800182. | 1.5 | 24 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | Comparison of optical feedback dynamics of InAs/GaAs quantum-dot lasers emitting solely on ground or excited states. Optics Letters, 2018, 43, 210. | 3.3 | 18 |
| 20 | Multimode optical feedback dynamics in InAs/GaAs quantum dot lasers emitting exclusively on ground or excited states: transition from short- to long-delay regimes. Optics Express, 2018, 26, 1743. | 3.4 | 23 |
| 21 | Semiconductor nanostructures for flying q-bits and green photonics. Nanophotonics, 2018, 7, 1245-1257. | 6.0 | 14 |
| 22 | Strain analysis from nano-beam electron diffraction: Influence of specimen tilt and beam convergence. Ultramicroscopy, 2018, 190, 45-57. | 1.9 | 17 |
| 23 | Morphology and valence band offset of GaSb quantum dots grown on GaP(001) and their evolution upon capping. Nanotechnology, 2017, 28, 225601. | 2.6 | 8 |
| 24 | Fabrication and room temperature operation of semiconductor nano-ring lasers using a general applicable membrane transfer method. Applied Physics Letters, 2017, 110, 171105. | 3.3 | 12 |
| 25 | Comparison between high- and zero-contrast gratings as VCSEL mirrors. Optics Communications, 2017, 389, 35-41. | 2.1 | 12 |
| 26 | How can we accommodate the rapidly increasing power consumption of the internet? â€œGreenâ€•optical interconnects based on novel VCSELs. , 2017, , . | | 0 |
| 27 | Spectral Efficiency and Energy Efficiency of Pulse-Amplitude Modulation Using 1.3 Î¼m Wafer-Fusion VCSELs for Optical Interconnects. ACS Photonics, 2017, 4, 2018-2024. | 6.6 | 16 |
| 28 | Thermal analysis of high-bandwidth and energy-efficient 980â€‰nm VCSELs with optimized quantum well gain peak-to-cavity resonance wavelength offset. Applied Physics Letters, 2017, 111, . | 3.3 | 14 |
| 29 | Large Bandwidth, Small Current Density, and Temperature Stable 980-nm VCSELs. IEEE Journal of Quantum Electronics, 2017, 53, 1-8. | 1.9 | 20 |
| 30 | Quantum-Dot Semiconductor Optical Amplifiers for Energy-Efficient Optical Communication. Nanoscience and Technology, 2017, , 37-74. | 1.5 | 8 |
| 31 | Quantum-Dot Mode-Locked Lasers: Sources for Tunable Optical and Electrical Pulse Combs. Nanoscience and Technology, 2017, , 75-106. | 1.5 | 5 |
| 32 | Astigmatism-free high-brightness 1060 nm edge-emitting lasers with narrow circular beam profile. Optics Express, 2016, 24, 30514. | 3.4 | 15 |
| 33 | Strong amplitude-phase coupling in submonolayer quantum dots. Applied Physics Letters, 2016, 109, 201102. | 3.3 | 18 |
| 34 | High-contrast-grating-based Fabry-PÃ©rot filter array for monolithic multiwavelength VCSEL arrays. , 2016, , . | | 0 |
| 35 | Vertical-cavity surface-emitting lasers with nanostructures for optical interconnects. Frontiers of Optoelectronics, 2016, 9, 249-258. | 3.7 | 8 |
| 36 | Impact of Photon Lifetime on the Temperature Stability of 50 Gb/s 980 nm VCSELs. IEEE Photonics Technology Letters, 2016, 28, 2327-2330. | 2.5 | 40 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | 1060-nm High Brightness Picosecond Pulse Generation in Photonic Band Crystal Lasers. IEEE Photonics Technology Letters, 2016, 28, 2086-2089. | 2.5 | 0 |
| 38 | Hole localization energy of 1.18â€‰eV in GaSb quantum dots embedded in GaP. Physica Status Solidi (B): Basic Research, 2016, 253, 1877-1881. | 1.5 | 10 |
| 39 | Novel types of photonic band crystal high power and high brightness semiconductor lasers. Frontiers of Optoelectronics, 2016, 9, 225-237. | 3.7 | 4 |
| 40 | Nanophotonics for future data communication and ethernet networks. , 2015, , . | | 0 |
| 41 | Fast gain and phase recovery of semiconductor optical amplifiers based on submonolayer quantum dots. Applied Physics Letters, 2015, 107, . | 3.3 | 17 |
| 42 | Temperature-Stable, Energy-Efficient, and High-Bit Rate Oxide-Confined 980-nm VCSELs for Optical Interconnects. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 405-413. | 2.9 | 19 |
| 43 | 230â€‰s room-temperature storage time and 1.14â€‰eV hole localization energy in In0.5Ga0.5As quantum dots on a GaAs interlayer in GaP with an AlP barrier. Applied Physics Letters, 2015, 106, . | 3.3 | 23 |
| 44 | Temperature-Dependent Impedance Characteristics of Temperature-Stable High-Speed 980-nm VCSELs. IEEE Photonics Technology Letters, 2015, 27, 832-835. | 2.5 | 15 |
| 45 | High Temperature Operation of 1060-nm High-Brightness Photonic Band Crystal Lasers With Very Low Astigmatism. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 722-727. | 2.9 | 16 |
| 46 | Impact of the Oxide-Aperture Diameter on the Energy Efficiency, Bandwidth, and Temperature Stability of 980-nm VCSELs. Journal of Lightwave Technology, 2015, 33, 825-831. | 4.6 | 44 |
| 47 | Flying qubits and entangled photons. Laser and Photonics Reviews, 2014, 8, 276-290. | 8.7 | 14 |
| 48 | Temperature-Stable 980-nm VCSELs for 35-Gb/s Operation at 85 Â°C With 139-fJ/bit Dissipated Heat. IEEE Photonics Technology Letters, 2014, 26, 2349-2352. | 2.5 | 20 |
| 49 | Impact of the Quantum Well Gain-to-Cavity Etalon Wavelength Offset on the High Temperature Performance of High Bit Rate 980-nm VCSELs. IEEE Journal of Quantum Electronics, 2014, 50, 613-621. | 1.9 | 36 |
| 50 | Correction to â€œEnergy Efficiency of Directly Modulated Oxide-confined High Bit Rate 850Ânm VCSELs for Optical Interconnectsâ€•[Jul/Aug 13 1702212]. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 335-335. | 2.9 | 0 |
| 51 | GaSb quantum dots on GaAs with high localization energy of 710 meV and an emission wavelength of 1.3 Âµm. Journal of Crystal Growth, 2014, 404, 48-53. | 1.5 | 11 |
| 52 | Two dimensional analysis of finite size high-contrast gratings for applications in VCSELs. Optics Express, 2014, 22, 11804. | 3.4 | 32 |
| 53 | Energy Efficiency of Directly Modulated Oxide-Confined High Bit Rate 850-nm VCSELs for Optical Interconnects. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 1702212-1702212. | 2.9 | 57 |
| 54 | Error-Free Transmission Over 1-km OM4 Multimode Fiber at 25 Gb/s Using a Single Mode Photonic Crystal Vertical-Cavity Surface-Emitting Laser. IEEE Photonics Technology Letters, 2013, 25, 1823-1825. | 2.5 | 40 |

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|---|---|---|---|
| 55 | Leakage-Assisted Transverse Mode Selection in Vertical-Cavity Surface-Emitting Lasers With Thick Large-Diameter Oxide Apertures. IEEE Journal of Quantum Electronics, 2013, 49, 1034-1039. | 1.9 | 5 |
| 56 | Collective Light Emission Revisited: Reservoir Induced Coherence. Physical Review Letters, 2013, 110, 113604. | 7.8 | 19 |
| 57 | 85-fJ Dissipated Energy Per Bit at 30 Gb/s Across 500-m Multimode Fiber Using 850-nm VCSELs. IEEE Photonics Technology Letters, 2013, 25, 1638-1641. | 2.5 | 22 |
| 58 | Theory and experiment of submonolayer quantum-dot metal-cavity surface-emitting microlasers. Optics Express, 2013, 21, 30336. | 3.4 | 19 |
| 59 | Spatial structure of In0.25Ga0.75As/GaAs/GaP quantum dots on the atomic scale. Applied Physics Letters, 2013, 102, . | 3.3 | 13 |
| 60 | High-Speed and Temperature-Stable, Oxide-Confined 980-nm VCSELs for Optical Interconnects. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 1701207-1701207. | 2.9 | 17 |
| 61 | Room-Temperature Hysteresis in a Hole-Based Quantum Dot Memory Structure. Journal of Nanotechnology, 2013, 2013, 1-4. | 3.4 | 4 |
| 62 | Electro-optical resonance modulation of vertical-cavity surface-emitting lasers. Optics Express, 2012, 20, 5099. | 3.4 | 32 |
| 63 | VCSEL-Based Light Sourcesâ€"Scalability Challenges for VCSEL-Based Multi-100- Gb/s Systems. IEEE Photonics Journal, 2012, 4, 1831-1843. | 2.0 | 19 |
| 64 | Energy-Efficient VCSELs for Interconnects. IEEE Photonics Journal, 2012, 4, 652-656. | 2.0 | 36 |
| 65 | Progress on single mode VCSELs for data- and tele-communications. Proceedings of SPIE, 2012, , . | 0.8 | 21 |
| 66 | Cavity-Volume Scaling Law of Quantum-Dot Metal-Cavity Surface-Emitting Microlasers. IEEE Photonics Journal, 2012, 4, 1103-1114. | 2.0 | 15 |
| 67 | Strain effects and band parameters in MgO, ZnO, and CdO. Applied Physics Letters, 2012, 101, . | 3.3 | 67 |
| 68 | Energy-efficient 1.3 μm short-cavity VCSELs for 30 Gb/s error-free optical links. , 2012, , . | | 3 |
| 69 | Generation of ultra-wideband triplet pulses based on four-wave mixing and phase-to-intensity modulation conversion. Optics Express, 2012, 20, 20222. | 3.4 | 22 |
| 70 | Wide-Range Wavelength Conversion of 40-Gb/s NRZ-DPSK Signals Using a 1.3-$mu$m Quantum-Dot Semiconductor Optical Amplifier. IEEE Photonics Technology Letters, 2012, 24, 1163-1165. | 2.5 | 17 |
| 71 | Temperature-Dependent Characteristics of Single-Mode InAs Submonolayer Quantum-Dot Lasers. IEEE Photonics Technology Letters, 2012, 24, 906-908. | 2.5 | 22 |
| 72 | Lateral-Longitudinal Modes of High-Power Inhomogeneous Waveguide Lasers. IEEE Journal of Quantum Electronics, 2012, 48, 123-128. | 1.9 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Polarization switching and polarization mode hopping in quantum dot vertical-cavity surface-emitting lasers. Optics Express, 2011, 19, 2476. | 3.4 | 28 |
| 74 | 40 Gb/s wavelength conversion via four-wave mixing in a quantum-dot semiconductor optical amplifier. Optics Express, 2011, 19, 3788. | 3.4 | 29 |
| 75 | 80 Gb/s wavelength conversion using a quantum-dot semiconductor optical amplifier and optical filtering. Optics Express, 2011, 19, 5134. | 3.4 | 32 |
| 76 | Metal-cavity surface-emitting microlaser with hybrid metal-DBR reflectors. Optics Letters, 2011, 36, 2447. | 3.3 | 30 |
| 77 | Progress on High-Speed 980â€‰nm VCSELs for Short-Reach Optical Interconnects. Advances in Optical Technologies, 2011, 2011, 1-15. | 0.8 | 37 |
| 78 | Quantum dots: promises and accomplishments. Materials Today, 2011, 14, 388-397. | 14.2 | 157 |
| 79 | Pulse Broadening in Quantum-Dot Mode-Locked Semiconductor Lasers: Simulation, Analysis, and Experiments. IEEE Journal of Quantum Electronics, 2011, 47, 935-943. | 1.9 | 27 |
| 80 | 1550-nm High-Speed Short-Cavity VCSELs. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1158-1166. | 2.9 | 124 |
| 81 | Theory of Metal-Cavity Surface-Emitting Microlasers and Comparison With Experiment. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1681-1692. | 2.9 | 8 |
| 82 | Tilted Wave Lasers: A Way to High Brightness Sources of Light. IEEE Journal of Quantum Electronics, 2011, 47, 1014-1027. | 1.9 | 22 |
| 83 | CW substrate-free metal-cavity surface microemitters at 300 K. Semiconductor Science and Technology, 2011, 26, 014012. | 2.0 | 16 |
| 84 | GReen Data And Computer Communication. , 2011, , . | | 5 |
| 85 | Antimony-based quantum dot memories. Proceedings of SPIE, 2011, , . | 0.8 | 8 |
| 86 | Low Thermal Impedance of Substrate-Free Metal Cavity Surface-Emitting Microlasers. IEEE Photonics Technology Letters, 2011, 23, 1031-1033. | 2.5 | 13 |
| 87 | Numerical Simulation of Temporal and Spectral Variation of Gain and Phase Recovery in Quantum-Dot Semiconductor Optical Amplifiers. IEEE Journal of Quantum Electronics, 2010, 46, 405-413. | 1.9 | 28 |
| 88 | Effect of Inhomogeneous Broadening on Gain and Phase Recovery of Quantum-Dot Semiconductor Optical Amplifiers. IEEE Journal of Quantum Electronics, 2010, 46, 1670-1680. | 1.9 | 50 |
| 89 | Large-Signal Response of Semiconductor Quantum-Dot Lasers. IEEE Journal of Quantum Electronics, 2010, 46, 1755-1762. | 1.9 | 37 |
| 90 | Finite element simulation of the optical modes of semiconductor lasers. Physica Status Solidi (B): Basic Research, 2010, 247, 846-853. | 1.5 | 12 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 91 | Atomic Structure of Buried InAs Sub-Monolayer Depositions in GaAs. Applied Physics Express, 2010, 3, 105602. | 2.4 | 28 |
| 92 | Ultrafast VCSELs for Datacom. IEEE Photonics Journal, 2010, 2, 273-275. | 2.0 | 20 |
| 93 | Confined States of Individual Type-II GaSb/GaAs Quantum Rings Studied by Cross-Sectional Scanning Tunneling Spectroscopy. Nano Letters, 2010, 10, 3972-3977. | 9.1 | 28 |
| 94 | Linear and nonlinear semiconductor optical amplifiers. , 2010, , . | | 2 |
| 95 | Cross-Gain Modulation and Four-Wave Mixing for Wavelength Conversion in Undoped and p-Doped 1.3-<formula formulatype="inline"> <tex Notation="TeX">$muhbox{m}$</tex> </formula> Quantum Dot Semiconductor Optical Amplifiers. IEEE Photonics Journal, 2010, 2, 141-151. | 2.0 | 29 |
| 96 | Metal-cavity surface-emitting microlaser at room temperature. Applied Physics Letters, 2010, 96, . | 3.3 | 107 |
| 97 | 1.55 µm high-speed VCSELs enabling error-free fiber-transmission up to 25 Gbit/s. , 2010, , . | | 14 |
| 98 | Few-particle energies versus geometry and composition of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> quantum dots. Physical Review B, 2009, 79, . | 3.2 | 92 |
| 99 | High-Speed Small-Signal Cross-Gain Modulation in Quantum-Dot Semiconductor Optical Amplifiers at 1.3 $mu$m. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 749-756. | 2.9 | 26 |
| 100 | High-Brightness and Ultranarrow-Beam 850-nm GaAs/AlGaAs Photonic Band Crystal Lasers and Single-Mode Arrays. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 901-908. | 2.9 | 21 |
| 101 | Temperature-Dependent Small-Signal Analysis of High-Speed High-Temperature Stable 980-nm VCSELs. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 679-686. | 2.9 | 29 |
| 102 | Modeling Highly Efficient RCLED-Type Quantum-Dot-Based Single Photon Emitters. IEEE Journal of Quantum Electronics, 2009, 45, 1084-1088. | 1.9 | 4 |
| 103 | 22-Gb/s Long Wavelength VCSELs. Optics Express, 2009, 17, 17547. | 3.4 | 44 |
| 104 | Quantum Dots for Single- and Entangled-Photon Emitters. IEEE Photonics Journal, 2009, 1, 58-68. | 2.0 | 52 |
| 105 | Theoretical and Experimental Study of High-Speed Small-Signal Cross-Gain Modulation of Quantum-Dot Semiconductor Optical Amplifiers. IEEE Journal of Quantum Electronics, 2009, 45, 240-248. | 1.9 | 95 |
| 106 | InGaAs Quantum Dots Coupled to a Reservoir of Nonequilibrium Free Carriers. IEEE Journal of Quantum Electronics, 2009, 45, 1121-1128. | 1.9 | 28 |
| 107 | Quantum-Dot Semiconductor Mode-Locked Lasers and Amplifiers at 40 GHz. IEEE Journal of Quantum Electronics, 2009, 45, 1429-1435. | 1.9 | 36 |
| 108 | Polarization Switching in Quantum-Dot Vertical-Cavity Surface-Emitting Lasers. IEEE Photonics Technology Letters, 2009, 21, 1008-1010. | 2.5 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Magnetooptical properties of quantum dots: Influence of the piezoelectric field. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1163-1165. | 2.7 | 0 |
| 110 | Progress in Epitaxial Growth and Performance of Quantum Dot and Quantum Wire Lasers. Journal of Lightwave Technology, 2008, 26, 1540-1555. | 4.6 | 43 |
| 111 | High-Power Low-Beam Divergence Edge-Emitting Semiconductor Lasers with 1- and 2-D Photonic Bandgap Crystal Waveguide. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1113-1122. | 2.9 | 27 |
| 112 | Static gain saturation in quantum dot semiconductor optical amplifiers. Optics Express, 2008, 16, 8269. | 3.4 | 44 |
| 113 | Static Gain Saturation Model of Quantum-Dot Semiconductor Optical Amplifiers. IEEE Journal of Quantum Electronics, 2008, 44, 658-666. | 1.9 | 73 |
| 114 | Single-Lobe Single-Wavelength Lasing in Ultrabroad-Area Vertical-Cavity Surface-Emitting Lasers Based on the Integrated Filter Concept. IEEE Journal of Quantum Electronics, 2008, 44, 724-731. | 1.9 | 2 |
| 115 | Quantum Dots: Genesis, the Excitonic Zoo, and its Applications. , 2007, , . | | 1 |
| 116 | Collaborative Research Programs in Germany and the EU. , 2007, , . | | 0 |
| 117 | High-Speed Mode-Locked Quantum-Dot Lasers and Optical Amplifiers. Proceedings of the IEEE, 2007, 95, 1767-1778. | 21.3 | 53 |
| 118 | 20 Gb/s 85$^{circ}$C Error-Free Operation of VCSELs Based on Submonolayer Deposition of Quantum Dots. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1302-1308. | 2.9 | 56 |
| 119 | Coulomb Damped Relaxation Oscillations in Semiconductor Quantum Dot Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1242-1248. | 2.9 | 44 |
| 120 | Epitaxy of multimodal InAs/GaAs quantum dot ensembles. Journal of Crystal Growth, 2007, 298, 567-569. | 1.5 | 0 |
| 121 | Theory of relaxation oscillations in semiconductor quantum dot lasers. Applied Physics Letters, 2006, 89, 101107. | 3.3 | 50 |
| 122 | Dual Semiconductor Laser System With Rapid Time-Delay for Ultrafast Measurements. IEEE Photonics Technology Letters, 2006, 18, 2338-2340. | 2.5 | 1 |
| 123 | Ultrafast carrier dynamics in InGaAs quantum dot materials and devices. Journal of Optics, 2006, 8, S33-S46. | 1.5 | 75 |
| 124 | Theory of excitation transfer in coupled nanostructures â€“ from quantum dots to light harvesting complexes. Physica Status Solidi (B): Basic Research, 2006, 243, 2302-2310. | 1.5 | 48 |
| 125 | Onion-like growth of and inverted many-particle energies in quantum dots. Materials Science and Engineering C, 2005, 25, 698-704. | 7.3 | 2 |
| 126 | Quantum dots for lasers, amplifiers and computing. Journal Physics D: Applied Physics, 2005, 38, 2055-2058. | 2.8 | 143 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Quantum dots: lasers and amplifiers. Journal of Physics Condensed Matter, 2003, 15, R1063-R1076. | 1.8 | 87 |
| 128 | Direct Evidence of Nanoscale Carrier Localization in InGaN/GaN Structures Grown on Si Substrates. Japanese Journal of Applied Physics, 2003, 42, L1057-L1060. | 1.5 | 6 |
| 129 | Post-growth p-type doping enhancement for ZnSe-based lasers using a Li3N interlayer. Applied Physics Letters, 2002, 81, 4916-4918. | 3.3 | 15 |
| 130 | Self-Organized InGaAs Quantum Dots for Advanced Applications in Optoelectronics. Japanese Journal of Applied Physics, 2002, 41, 949-952. | 1.5 | 22 |
| 131 | ZnMgCdSe structures on InP grown by MOVPE. Journal of Crystal Growth, 2000, 221, 416-420. | 1.5 | 6 |
| 132 | Progress in Quantum Dot Lasers: 1100 nm, 1300 nm, and High Power Applications. Japanese Journal of Applied Physics, 2000, 39, 2341-2343. | 1.5 | 48 |
| 133 | Spontaneous ordering of nanostructures on crystal surfaces. Reviews of Modern Physics, 1999, 71, 1125-1171. | 45.6 | 925 |
| 134 | First observation of symmetry breaking in strained In0.7Ga0.3As/InP V-groove quantum wires. Physica E: Low-Dimensional Systems and Nanostructures, 1998, 2, 969-973. | 2.7 | 1 |
| 135 | Effects of growth interruption on uniformity of GaAs quantum wires formed on vicinal GaAs(110) surfaces by MBE. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1998, 51, 229-232. | 3.5 | 2 |
| 136 | InAs/GaAs Quantum Dots Grown by Metalorganic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 1997, 36, 4129-4133. | 1.5 | 20 |
| 137 | InGaAs/GaAs Quantum Dot Lasers with Ultrahigh Characteristic Temperature (T0=385K) Grown by Metal Organic Chemical Vapour Deposition. Japanese Journal of Applied Physics, 1997, 36, 4221-4223. | 1.5 | 60 |
| 138 | Gain and Threshold of Quantum Dot Lasers: Theory and Comparison to Experiments. Japanese Journal of Applied Physics, 1997, 36, 4181-4187. | 1.5 | 109 |
| 139 | Uniform GaAs quantum wires formed on vicinal GaAs (110) surfaces by two-step MBE growth. Superlattices and Microstructures, 1997, 22, 43-49. | 3.1 | 18 |
| 140 | Size-dependent luminescence of GaAs quantum wires on vicinal GaAs (110) surfaces with giant steps formed by MBE. Physica B: Condensed Matter, 1996, 227, 291-294. | 2.7 | 7 |
| 141 | Formation of AlGaAs quantum wires on vicinal GaAs(110) surfaces misoriented 3Â° toward (111)A by molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1995, 35, 295-298. | 3.5 | 3 |
| 142 | Disordering of CdZnSe/ZnSe Strained Layer Superlattices by Ion Implantation. Japanese Journal of Applied Physics, 1995, 34, 1159-1161. | 1.5 | 9 |
| 143 | Cathodoluminescence of strained quantum wells and layers. Superlattices and Microstructures, 1991, 9, 65-75. | 3.1 | 4 |
| 144 | Cathodoluminescence observation of GaAs-AlGas heterointerfaces.. Hyomen Kagaku, 1989, 10, 697-702. | 0.0 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Novel energy-efficient designs of vertical-cavity surface emitting lasers for the next generations of photonic systems. Japanese Journal of Applied Physics, 0, , . | 1.5 | 6 |