# Jens Tomm

List of Publications by Year
in descending order

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| 222 | 2,726 | 201385 | 315357 |
|---|---|---|---|
| papers | citations | 27 h-index | 38 g-index |

| 231 | 231 | 231 | 1482 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Photoluminescence properties of ZnGa2O4:Mn powder phosphors. Journal of Applied Physics, 1995, 78, 5691-5695. | 1.1 | 89 |
| 2 | Mechanisms and fast kinetics of the catastrophic optical damage (COD) in GaAsâ€based diode lasers. Laser and Photonics Reviews, 2011, 5, 422-441. | 4.4 | 75 |
| 3 | Fast recombination processes in lead chalcogenide semiconductors studied via transient optical nonlinearities. Journal of Applied Physics, 1995, 77, 277-286. | 1.1 | 66 |
| 4 | Facet temperature reduction by a current blocking layer at the front facets of high-power InGaAs/AlGaAs lasers. Journal of Applied Physics, 2003, 93, 1848-1850. | 1.1 | 61 |
| 5 | Interdot carrier transfer in asymmetric bilayer InAsâ•GaAs quantum dot structures. Applied Physics Letters, 2005, 86, 063102. | 1.5 | 60 |
| 6 | Carrier transfer in self-assembled coupled InAs/GaAs quantum dots. Journal of Applied Physics, 2000, 88, 7162-7170. | 1.1 | 53 |
| 7 | InP quantum dots embedded in GaP:â€ƒOptical properties and carrier dynamics. Physical Review B, 2003, 67, . | 1.1 | 50 |
| 8 | Transient luminescence of dense InAs/GaAs quantum dot arrays. Physical Review B, 2003, 67, . | 1.1 | 50 |
| 9 | The dielectric function of PbS quantum dots in a glass matrix. Optical Materials Express, 2012, 2, 496. | 1.6 | 49 |
| 10 | Transient thermal properties of high-power diode laser bars. Applied Physics Letters, 2006, 89, 263506. | 1.5 | 42 |
| 11 | Staircase-like spectral dependence of ground-state luminescence time constants in high-density InAs/GaAs quantum dots. Applied Physics Letters, 2001, 78, 3214-3216. | 1.5 | 41 |
| 12 | Simultaneous quantification of strain and defects in high-power diode laser devices. Applied Physics Letters, 2002, 81, 3269-3271. | 1.5 | 39 |
| 13 | Optical nearâ€field photocurrent spectroscopy: A new technique for analyzing microscopic aging processes in optoelectronic devices. Applied Physics Letters, 1996, 69, 3981-3983. | 1.5 | 37 |
| 14 | Direct spectroscopic measurement of mounting-induced strain in high-power optoelectronic devices. Applied Physics Letters, 1998, 73, 3908-3910. | 1.5 | 37 |
| 15 | Optical and photoelectrical properties of oriented ZnO films. Journal of Applied Physics, 2000, 87, 1844-1848. | 1.1 | 37 |
| 16 | Catastrophic optical mirror damage in diode lasers monitored during single-pulse operation. Applied Physics Letters, 2009, 94, 191101. | 1.5 | 37 |
| 17 | Miniband-related 1.4â€“1.8ÂÎ¼m luminescence of Ge/Si quantum dot superlattices. Nanoscale Research Letters, 2006, 1, 137-153. | 3.1 | 36 |
| 18 | Infrared Photoluminescence in Narrow-Gap Semiconductors. Physica Status Solidi A, 1990, 122, 11-42. | 1.7 | 35 |

| # | Article | IF | Citations |
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| 19 | Aging properties of high power laser diode arrays analyzed by Fourier-transform photocurrent measurements. Applied Physics Letters, 1997, 71, 2233-2235. | 1.5 | 35 |
| 20 | Complementary thermoreflectance and micro-Raman analysis of facet temperatures of diode lasers. Applied Physics Letters, 2006, 89, 071104. | 1.5 | 35 |
| 21 | Analysis of thermal images from diode lasers: Temperature profiling and reliability screening. Applied Physics Letters, 2005, 86, 203503. | 1.5 | 34 |
| 22 | Defect evolution during catastrophic optical damage of diode lasers. Semiconductor Science and Technology, 2011, 26, 075020. | 1.0 | 34 |
| 23 | Monitoring of aging properties of AlGaAs high-power laser arrays. Journal of Applied Physics, 1997, 81, 2059-2063. | 1.1 | 29 |
| 24 | Physical limits of semiconductor laser operation: A time-resolved analysis of catastrophic optical damage. Applied Physics Letters, 2010, 97, . | 1.5 | 29 |
| 25 | Catastrophic optical damage at front and rear facets of diode lasers. Applied Physics Letters, 2010, 97, 231101. | 1.5 | 29 |
| 26 | Thermal-mismatch strain relaxation mechanisms in heteroepitaxial lead chalcogenide layers on Si substrates. Semiconductor Science and Technology, 1993, 8, S337-S341. | 1.0 | 28 |
| 27 | Quantitative strain analysis in AlGaAs-based devices. Applied Physics Letters, 2003, 82, 4193-4195. | 1.5 | 28 |
| 28 | Microscopic Origins of Catastrophic Optical Damage in Diode Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 1500508-1500508. | 1.9 | 28 |
| 29 | Spectroscopic measurement of packaging-induced strains in quantum-well laser diodes. Journal of Applied Physics, 1999, 86, 1196-1201. | 1.1 | 27 |
| 30 | Spatially resolved spectroscopic strain measurements on high-power laser diode bars. Journal of Applied Physics, 2003, 93, 1354-1362. | 1.1 | 27 |
| 31 | Real-time thermal imaging of catastrophic optical damage in red-emitting high-power diode lasers. Applied Physics Letters, 2008, 92, 103514. | 1.5 | 27 |
| 32 | Temperature-power dependence of catastrophic optical damage in AlGaInP laser diodes. Applied Physics Letters, 2007, 91, 041115. | 1.5 | 26 |
| 33 | Surface recombination and facet heating in high-power diode lasers. Applied Physics Letters, 2008, 92, . | 1.5 | 26 |
| 34 | Deep level spectroscopy of high-power laser diode arrays. Journal of Applied Physics, 1998, 84, 1325-1332. | 1.1 | 25 |
| 35 | Eg versus x relation from photoluminescence and electron microprobe investigations in p-type Hg1â^'xCdxTe (0.35 â©½ x â©½ 0.7). Journal of Crystal Growth, 1988, 86, 593-598. | 0.7 | 24 |
| 36 | Strained InGaAs/GaPAsSb heterostructures grown on GaAs (001) for optoelectronic applications in the 1100â€“1550 nm range. Journal of Applied Physics, 2000, 88, 3004-3014. | 1.1 | 24 |

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| 37 | Spectroscopic method of strain analysis in semiconductor quantum-well devices. Journal of Applied Physics, 2004, 96, 4056-4065. | 1.1 | 24 |
| 38 | Transient carrier transfer in tunnel injection structures. Applied Physics Letters, 2008, 93, 031105. | 1.5 | 24 |
| 39 | How does external feedback cause AlGaAs-based diode lasers to degrade?. Applied Physics Letters, 2013, 102, 023502. | 1.5 | 24 |
| 40 | Excess carrier generation in femtosecond-laser processed sulfur doped silicon by means of sub-bandgap illumination. Applied Physics Letters, 2014, 104, 042107. | 1.5 | 24 |
| 41 | Deep level emission from high-power diode laser bars detected by multispectral infrared imaging. Applied Physics Letters, 2005, 87, 153503. | 1.5 | 23 |
| 42 | Photoelectric dichroism of oriented thin film CdS fabricated by pulsed-laser deposition. Solid State Communications, 2000, 116, 33-35. | 0.9 | 22 |
| 43 | High-Power Broad-Area Diode Lasers and Laser Bars. , 2000, , 173-223. | | 21 |
| 44 | Transient spectroscopy of InAs quantum dot molecules. Applied Physics Letters, 2004, 85, 284-286. | 1.5 | 20 |
| 45 | PbS:Glass as broad-bandwidth near-infrared light source material. Optics Express, 2013, 21, 2287. | 1.7 | 20 |
| 46 | Facet degradation of high-power diode laser arrays. Applied Physics A: Materials Science and Processing, 2000, 70, 377-381. | 1.1 | 19 |
| 47 | Observation of deep level defects within the waveguide of red-emitting high-power diode lasers. Applied Physics Letters, 2006, 88, 133513. | 1.5 | 19 |
| 48 | Emitter failure and thermal facet load in high-power laser diode arrays. Applied Physics A: Materials Science and Processing, 1998, 66, 483-486. | 1.1 | 18 |
| 49 | Device deformation during low-frequency pulsed operation of high-power diode bars. Applied Physics Letters, 2004, 84, 3525-3527. | 1.5 | 18 |
| 50 | Time-resolved analysis of catastrophic optical damage in 975 nm emitting diode lasers. Applied Physics Letters, 2010, 96, 251105. | 1.5 | 18 |
| 51 | A new model for the absorption coefficient of narrowâ€gap (Hg,Cd)Te that simultaneously considers band tails and band filling. Journal of Applied Physics, 1993, 73, 3486-3492. | 1.1 | 17 |
| 52 | Nanoscopic measurements of surface recombination velocity and diffusion length in a semiconductor quantum well. Applied Physics Letters, 2002, 81, 346-348. | 1.5 | 17 |
| 53 | Optimized annealing conditions identified by analysis of radiative recombination in dilute Ga(As,N). Applied Physics Letters, 2003, 83, 1343-1345. | 1.5 | 17 |
| 54 | Detection of carbon monoxide, carbon dioxide and sulfur dioxide with pulsed tunable PbS1-xSex-diode lasers. Collection of Czechoslovak Chemical Communications, 1989, 54, 284-296. | 1.0 | 17 |

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| 55 | By-emitter degradation analysis of high-power laser bars. Journal of Applied Physics, 2005, 98, 063101. | 1.1 | 16 |
| 56 | Thermal properties and degradation behavior of red-emitting high-power diode lasers. Applied Physics Letters, 2006, 89, 181112. | 1.5 | 16 |
| 57 | Microthermography of diode lasers: The impact of light propagation on image formation. Journal of Applied Physics, 2009, 105, 014502. | 1.1 | 16 |
| 58 | Near-field dynamics of broad area diode laser at very high pump levels. AIP Advances, 2011, 1, . | 0.6 | 16 |
| 59 | Kinetics of catastrophic optical damage in GaN-based diode lasers. Semiconductor Science and Technology, 2015, 30, 072001. | 1.0 | 16 |
| 60 | High single-spatial-mode pulsed power from 980â€‰nm emitting diode lasers. Applied Physics Letters, 2012, 101, . | 1.5 | 15 |
| 61 | Spontaneous and stimulated emission dynamics of PbS quantum dots in a glass matrix. Physical Review B, 2013, 87, . | 1.1 | 15 |
| 62 | Nonresonant tunneling carrier transfer in bilayer asymmetricInAsâ•GaAsquantum dots. Physical Review B, 2005, 71, . | 1.1 | 14 |
| 63 | Cavity-enhanced thermal emission from semiconductor lasers. Journal of Applied Physics, 2008, 103, 104508. | 1.1 | 14 |
| 64 | Time resolved studies of catastrophic optical mirror damage in red-emitting laser diodes. Journal of Applied Physics, 2010, 107, 123116. | 1.1 | 14 |
| 65 | The impact of temperature and strain-induced band gap variations on current competition and emitter power in laser bars. Applied Physics Letters, 2011, 98, . | 1.5 | 14 |
| 66 | On the nature of the excitonic luminescence in narrow-gap Hg1â‾xCdxTe (x â‰Š 0.3). Journal of Crystal Growth, 1994, 138, 175-181. | 0.7 | 13 |
| 67 | Excitonic magnetoluminescence enhancement in semimagnetic. Semiconductor Science and Technology, 1996, 11, 1291-1301. | 1.0 | 13 |
| 68 | Properties of As+-implanted and annealed GaAs and InGaAs quantum wells: Structural and band-structure modifications. Journal of Applied Physics, 2004, 95, 1122-1126. | 1.1 | 13 |
| 69 | Thermal processes in high-power laser bars investigated by spatially resolved thermoreflectance. Journal of Materials Science: Materials in Electronics, 2008, 19, 150-154. | 1.1 | 13 |
| 70 | Effect of uniaxial stress on electroluminescence, valence band modification, optical gain, and polarization modes in tensile strainedp-AlGaAs/GaAsP/n-AlGaAs laser diode structures: Numerical calculations and experimental results. Journal of Applied Physics, 2012, 112, 093113. | 1.1 | 13 |
| 71 | A Luminescence Study in the Pb1â‾xEuxSe System. Physica Status Solidi A, 1990, 119, 711-719. | 1.7 | 12 |
| 72 | Effect of high-temperature annealing on GaInP/GaAs HBT structures grown by LP-MOVPE. Journal of Electronic Materials, 2000, 29, 205-209. | 1.0 | 12 |

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| 73 | Near-field photocurrent imaging of the optical mode profiles of semiconductor laser diodes. Applied Physics Letters, 2001, 78, 1463-1465. | 1.5 | 12 |
| 74 | Optically pumped semiconductor disk laser with graded and step indices. Applied Physics Letters, 2006, 89, 151120. | 1.5 | 12 |
| 75 | Infrared photoluminescence in p-Hg1â^'xCdxTe (0.23 â©½ Ã— â©½ 1) in magnetic fields up to 6T. Solid State Communications, 1990, 76, 1159-1164. | 0.9 | 11 |
| 76 | Valence band hybridizing in europium-alloyed lead selenide. Semiconductor Science and Technology, 1994, 9, 1033-1041. | 1.0 | 11 |
| 77 | Minority-carrier kinetics in heavily doped GaAs:C studied by transient photoluminescence. Journal of Applied Physics, 2002, 91, 5072-5078. | 1.1 | 11 |
| 78 | Electron-optical-phonon interaction in the In0.73Ga0.27Asâ€“AlAs intersubband laser. Applied Physics Letters, 2005, 87, 072104. | 1.5 | 11 |
| 79 | Infrared emission from the substrate of GaAs-based semiconductor lasers. Applied Physics Letters, 2008, 93, . | 1.5 | 11 |
| 80 | Gradual degradation of GaAsâ€based quantum well lasers, creation of defects, and generation of compressive strain. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1912-1915. | 0.8 | 11 |
| 81 | Spectroscopic analysis of packaging concepts for high-power diode laser bars. Applied Physics A: Materials Science and Processing, 2012, 107, 371-377. | 1.1 | 11 |
| 82 | Stimulated emission from PbSâ€quantum dots in glass matrix. Laser and Photonics Reviews, 2013, 7, L1. | 4.4 | 11 |
| 83 | High-power diode lasers under external optical feedback. Proceedings of SPIE, 2015, , . | 0.8 | 11 |
| 84 | Band offsets in Eu-containing lead chalcogenides and lead chalcogenide superlattices from spectroscopic data. Semiconductor Science and Technology, 1993, 8, S176-S179. | 1.0 | 10 |
| 85 | Far-infrared reflectivity study of lattice dynamics of narrow-gap HgCdMnTe semiconductors. Semiconductor Science and Technology, 1999, 14, 187-197. | 1.0 | 10 |
| 86 | Analysis of GaN based highâ€power diode lasers after singular degradation events. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700132. | 1.2 | 10 |
| 87 | Chip-carrier thermal barrier and its impact on lateral thermal lens profile and beam parameter product in high power broad area lasers. Journal of Applied Physics, 2018, 123, . | 1.1 | 10 |
| 88 | Experimental evidence of strain-induced gap shifts in PbTe epitaxial layers by photoluminescence. Physica Status Solidi A, 1988, 106, 509-514. | 1.7 | 9 |
| 89 | Infrared photoluminescence - a tool for HgCdTe crystal research. Crystal Research and Technology, 1990, 25, 1069-1078. | 0.6 | 9 |
| 90 | Near-field photocurrent spectroscopy of laser diode devices. Journal of Crystal Growth, 2000, 210, 296-302. | 0.7 | 9 |

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| 91 | Selective excitation and photoinduced bleaching of defects in InAlGaAs/GaAs high-power diode lasers. Applied Physics Letters, 2000, 77, 747-749. | 1.5 | 9 |
| 92 | Thermal properties of high-power diode lasers investigated by microthermography. , 2005, , . | | 9 |
| 93 | Reliability screening of diode lasers by multispectral infrared imaging. Journal of Applied Physics, 2006, 99, 053101. | 1.1 | 9 |
| 94 | Imaging Catastrophic Optical Mirror Damage in High-Power Diode Lasers. Journal of Electronic Materials, 2010, 39, 709-714. | 1.0 | 9 |
| 95 | Light-emitting tunneling nanostructures based on quantum dots in a Si and GaAs matrix. Semiconductors, 2012, 46, 1460-1470. | 0.2 | 9 |
| 96 | Photoluminescence lineshape of ZnO. AIP Advances, 2014, 4, 123001. | 0.6 | 9 |
| 97 | Temperature dependence of the fundamental excitonic resonance in lead-salt quantum dots. Applied Physics Letters, 2015, 107, . | 1.5 | 9 |
| 98 | In-situ spectroscopic analysis of the recombination kinetics in UVB LEDs during their operation. Applied Physics Letters, 2020, 117, 121104. | 1.5 | 9 |
| 99 | Stimulated emission at 1.54â€‰â€‰Î¼m from erbium/oxygen-doped silicon-based light-emitting diodes. Photonics Research, 2021, 9, 714. | 3.4 | 9 |
| 100 | Spin-flip effects in the magnetoluminescence and magnetoresistance of semimagnetic narrow-gapHg1â^'xâ^'yCdxMnyTe. Physical Review B, 1998, 58, 4531-4537. | 1.1 | 8 |
| 101 | Analysis of heat flows and their impact on the reliability of high-power diode lasers. , 2003, , . | | 8 |
| 102 | Mechanical strain and defect distributions in GaAs-based diode lasers monitored during operation. Applied Physics Letters, 2005, 86, 111908. | 1.5 | 8 |
| 103 | Spectroscopic strain measurement methodology: Degree-of-polarization photoluminescence versus photocurrent spectroscopy. Applied Physics Letters, 2006, 88, 133504. | 1.5 | 8 |
| 104 | Defect investigation and temperature analysis of high-power AlGaInP laser diodes during catastrophic optical damage. Journal of Materials Science: Materials in Electronics, 2008, 19, 155-159. | 1.1 | 8 |
| 105 | Temperature dependent luminescence from quantum dot arrays: phonon-assisted line broadening versus carrier escape-induced narrowing. Physica Status Solidi (B): Basic Research, 2010, 247, 347-352. | 0.7 | 8 |
| 106 | Emulation of the operation and degradation of high-power laser bars using simulation tools. Semiconductor Science and Technology, 2012, 27, 094012. | 1.0 | 8 |
| 107 | Some band structure related optical and photoelectrical properties of Pb1â^'xEuxSe (0â‰‰xâ‰‰0.2). Journal of Applied Physics, 1992, 72, 1399-1404. | 1.1 | 7 |
| 108 | Temperature dependent carrier escape from quantum well states in GaAs/GaAlAs graded index laser structures. Semiconductor Science and Technology, 1999, 14, 293-297. | 1.0 | 7 |

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| 109 | Uniformity tests of individual segments of interband cascade diode laser NanostacksÂ®. Journal of Applied Physics, 2002, 92, 2729-2733. | 1.1 | 7 |
| 110 | Midinfrared luminescence imaging and its application to the optimization of light-emitting diodes. Applied Physics Letters, 2005, 86, 041106. | 1.5 | 7 |
| 111 | A room-temperature continuous-wave operating midinfrared light emitting device. Journal of Applied Physics, 2006, 99, 114506. | 1.1 | 7 |
| 112 | Tuning of the interdot resonance in stacked InAs quantum dot arrays by an external electric field. Journal of Applied Physics, 2006, 100, 083704. | 1.1 | 7 |
| 113 | Gradual degradation of red-emitting high-power diode laser bars. Applied Physics Letters, 2007, 90, 171113. | 1.5 | 7 |
| 114 | Thermal properties of high power laser bars investigated by spatially resolved thermoreflectance spectroscopy. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 422-429. | 0.8 | 7 |
| 115 | Visualization of heat flows in high-power diode lasers by lock-in thermography. Applied Physics Letters, 2008, 92, 103513. | 1.5 | 7 |
| 116 | Short-wavelength infrared defect emission as a probe of degradation processes in 980 nm single-mode diode lasers. Laser and Photonics Reviews, 2014, 8, L59-L64. | 4.4 | 7 |
| 117 | Long-Term Aging and Quick Stress Testing of 980-nm Single-Spatial Mode Lasers. Journal of Lightwave Technology, 2015, 33, 4450-4456. | 2.7 | 7 |
| 118 | Dynamics of Broadband Lasing Cascade from a Single Dot-in-well InGaAs Microdisk. Scientific Reports, 2019, 9, 5635. | 1.6 | 7 |
| 119 | Strain in Lead Salt Layers. A Luminescence Study. Physica Status Solidi A, 1989, 114, 621-628. | 1.7 | 6 |
| 120 | On the Broadening Mechanisms Near theE0 Transition in Narrow-Gap (Hg, Cd)Te. Physica Status Solidi A, 1990, 121, 635-640. | 1.7 | 6 |
| 121 | Optical and photoelectrical properties of Hg0.6Cd0.4Te. Semiconductor Science and Technology, 1992, 7, 578-582. | 1.0 | 6 |
| 122 | Magnetoluminescence spectroscopic investigations in Hg0.7Cd0.3Te/Hg0.15Cd0.85Te superlattices. Semiconductor Science and Technology, 1995, 10, 469-475. | 1.0 | 6 |
| 123 | Photoluminescence decay time measurements from self-organized InAs/GaAs quantum dots grown on misoriented substrates. Nanotechnology, 2001, 12, 512-514. | 1.3 | 6 |
| 124 | Relaxation of packaging-induced strains in AlGaAs-based high-power diode laser arrays. Applied Physics Letters, 2005, 86, 101911. | 1.5 | 6 |
| 125 | Experimental observation of exciton splitting and relaxation dynamics from PbS quantum dots in a glass matrix. Physical Review B, 2014, 89, . | 1.1 | 6 |
| 126 | Direct Comparison of Photo- and Electroluminescence in Pb1â^'xSnxTe Diode Lasers. Physica Status Solidi A, 1983, 77, 175-179. | 1.7 | 5 |

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| 127 | Some aspects of the technology of lead salt diode lasers used in gas monitoring systems. Crystal Research and Technology, 1987, 22, 981-986. | 0.6 | 5 |
| 128 | Optical absorption and photoluminescence of narrowâ€Gap Hg<sub>1â^'x</sub>Cd<sub>x</sub>Mn<sub>y</sub>Se single crystals. Physica Status Solidi (B): Basic Research, 1996, 195, 595-609. | 0.7 | 5 |
| 129 | DRIP-XII Conference 2007. Journal of Materials Science: Materials in Electronics, 2008, 19, 1-3. | 1.1 | 5 |
| 130 | Mounting-induced strains in red-emitting (Al)InGaP laser diodes tuned by pressure. Applied Physics A: Materials Science and Processing, 2009, 97, 179-184. | 1.1 | 5 |
| 131 | InGaAs tunnel-injection structures with nanobridges: Excitation transfer and luminescence kinetics. Semiconductors, 2010, 44, 1050-1058. | 0.2 | 5 |
| 132 | Tunnel injection emitter structures with barriers comprising nanobridges. Physica Status Solidi - Rapid Research Letters, 2011, 5, 385-387. | 1.2 | 5 |
| 133 | Kinetics of Defect Propagation during the Catastrophic Optical Damage (COD) in Broad-Area Diode Lasers. Materials Science Forum, 2012, 725, 105-108. | 0.3 | 5 |
| 134 | Defect Propagation in Broad-Area Diode Lasers. Materials Science Forum, 0, 725, 101-104. | 0.3 | 5 |
| 135 | Surface InP/In0.48Ga0.52P quantum dots: Carrier recombination dynamics and their interaction with fluorescent dyes. Journal of Applied Physics, 2013, 114, 163510. | 1.1 | 5 |
| 136 | Defect temperature kinetics during catastrophic optical damage in high power diode lasers. , 2014, , . | | 5 |
| 137 | Transient surface modifications during singular heating events at diode laser facets. Semiconductor Science and Technology, 2016, 31, 055007. | 1.0 | 5 |
| 138 | Assessing the influence of the vertical epitaxial layer design on the lateral beam quality of high-power broad area diode lasers. Proceedings of SPIE, 2016, , . | 0.8 | 5 |
| 139 | Time-resolved photoluminescence from n-doped GaN/Al0.18Ga0.82N short-period superlattices probes carrier kinetics and long-term structural stability. Journal of Applied Physics, 2019, 125, . | 1.1 | 5 |
| 140 | Catastrophic Optical Damage in Semiconductor Lasers: Physics and New Results on InGaN Highâ€Power Diode Lasers. Physica Status Solidi - Rapid Research Letters, 2022, 16, 2100527. | 1.2 | 5 |
| 141 | <title>Optical diagnostics of quaternary narrow-gap semiconductors</title>. , 1994, 2113, 17. | | 4 |
| 142 | Distinct exciton-polaron resonance in the infrared edge emission of semimagneticHg1â^'xMnxTe. Physical Review B, 1995, 52, R11565-R11568. | 1.1 | 4 |
| 143 | <title>Diode laser testing by taking advantage of its photoelectric properties</title>. , 2002, , . | | 4 |
| 144 | Processing-induced strains at solder interfaces in extended semiconductor structures. Journal of Applied Physics, 2007, 101, 114512. | 1.1 | 4 |

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| 145 | New approaches towards the understanding of the catastrophic optical damage process in in-plane diode lasers. Proceedings of SPIE, 2009, , . | 0.8 | 4 |
| 146 | Nano-optical analysis of GaN-based diode lasers. Semiconductor Science and Technology, 2014, 29, 112001. | 1.0 | 4 |
| 147 | Shortwave infrared (SWIR) emission from 450 nm InGaN diode lasers. Optical Materials Express, 2016, 6, 2139. | 1.6 | 4 |
| 148 | Reliability of high power laser diodes with external optical feedback. , 2016, , . | | 4 |
| 149 | Kinetics of excitation transfer from Cr2+ to Fe2+ ions in co-doped ZnSe. Optics Letters, 2022, 47, 2129-2132. | 1.7 | 4 |
| 150 | On the dispersion of the refractive index in active layers of lead-salt injection lasers. Physica Status Solidi A, 1984, 86, 433-438. | 1.7 | 3 |
| 151 | Study of molecular beam epitaxial growth and optical characteristics of HgCdTe. Acta Physica Sinica (overseas Edition), 1996, 5, 370-376. | 0.1 | 3 |
| 152 | Waveguide Effect on the Image Formation Process in Near-field Photocurrent Spectroscopy of Semiconductor Laser Diodes. Surface and Interface Analysis, 1997, 25, 573-582. | 0.8 | 3 |
| 153 | Large optical cavity waveguides for high-power diode laser applications. , 2001, , . | | 3 |
| 154 | Transient thermal tuning properties of single emitters in actively cooled high-power cm-bar arrays. , 2004, , . | | 3 |
| 155 | Carrier dynamics in laterally strain-modulated InGaAs quantum wells. Applied Physics Letters, 2005, 87, 262103. | 1.5 | 3 |
| 156 | Screening of high-power diode laser bars by optical scanning. Applied Physics Letters, 2005, 87, 211110. | 1.5 | 3 |
| 157 | Identification of degradation mechanisms in high-power laser bars using by-emitter degradation studies. Journal of Materials Science: Materials in Electronics, 2008, 19, 145-149. | 1.1 | 3 |
| 158 | Screening of high power laser diode bars in terms of stresses and thermal profiles. , 2008, , . | | 3 |
| 159 | Two-dimensional carrier density distribution inside a high power tapered laser diode. Applied Physics Letters, 2011, 98, 221110. | 1.5 | 3 |
| 160 | Emission properties of diode laser bars during pulsed high-power operation. Semiconductor Science and Technology, 2011, 26, 092001. | 1.0 | 3 |
| 161 | Catastrophic optical bulk damage in InP 7xx emitting quantum dot diode lasers. Semiconductor Science and Technology, 2012, 27, 102001. | 1.0 | 3 |
| 162 | Effect of nanobridges on the emission spectra of a quantum dot-quantum well tunneling pair. Semiconductors, 2014, 48, 1178-1184. | 0.2 | 3 |

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| 163 | GaAs/GaP quantum dots: Ensemble of direct and indirect heterostructures with room temperature optical emission. Applied Physics Letters, 2016, 108, 102103. | 1.5 | 3 |
| 164 | Photoluminescence (PL) Techniques. Springer Series in Optical Sciences, 2016, , 143-211. | 0.5 | 3 |
| 165 | Ultrafast carrier dynamics in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mi>GaN</mml:mi></mml:mrow><mml:mo></ mathvariant="normal">N</mml:mi></mml:mrow></mml:math> superlattice. Physical Review B, 2018, 97, . | 1.1 | 3 |
| 166 | Catastrophic Optical Damage of GaN-Based Diode Lasers: Sequence of Events, Damage Pattern, and Comparison with GaAs-Based Devices. Journal of Electronic Materials, 2018, 47, 4959-4963. | 1.0 | 3 |
| 167 | Infrared emission bands and thermal effects for 440-nm-emitting GaN-based laser diodes. AIP Advances, 2020, 10, . | 0.6 | 3 |
| 168 | Ascending Si diffusion into growing GaN nanowires from the SiC/Si substrate: up to the solubility limit and beyond. Nanotechnology, 2020, 31, 294003. | 1.3 | 3 |
| 169 | Origin of yellow emissions from (In,Ga,Al)N based 450â€...nm emitting diode lasers. OSA Continuum, 2019, 2, 1496. | 1.8 | 3 |
| 170 | Photoluminescence spectra of Pb1â€“xSnxTe epitaxial layers and heterostruetures up to room temperature. Physica Status Solidi A, 1985, 88, 277-281. | 1.7 | 2 |
| 171 | Applied Infrared Photoluminescence in Lead Salt Crystals. Crystal Research and Technology, 1991, 26, 757-766. | 0.6 | 2 |
| 172 | Threshold of stimulated emission in multivalley lead salts. Journal of Applied Physics, 1995, 78, 7247-7254. | 1.1 | 2 |
| 173 | Magnetoluminescence properties of Hg1â^'xCdxTe epitaxial layers and superlattice structures grown by metalorganic molecular beam epitaxy. Journal of Electronic Materials, 1996, 25, 1203-1208. | 1.0 | 2 |
| 174 | <title>Laser-based facet inspection system</title>. , 1997, , . | | 2 |
| 175 | Photoluminescence excitation due to hot excitons in narrow-gap. Semiconductor Science and Technology, 1999, 14, 148-155. | 1.0 | 2 |
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