# Raffaele Colombelli

List of Publications by Year
in descending order



| 196 | 5,431 | 126858 | 95218 |
|---|---|---|---|
| papers | citations | 33 h-index | 68 g-index |

| 199 | 199 | 199 | 3479 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Ultrastrong Light-Matter Coupling Regime with Polariton Dots. Physical Review Letters, 2010, 105, 196402. | 2.9 | 358 |
| 2 | Electrically pumped photonic-crystal terahertz lasers controlled by boundary conditions. Nature, 2009, 457, 174-178. | 13.7 | 334 |
| 3 | Quantum Cascade Surface-Emitting Photonic Crystal Laser. Science, 2003, 302, 1374-1377. | 6.0 | 317 |
| 4 | Quantum cascade lasers: ultrahigh-speed operation, optical wireless communication, narrow linewidth, and far-infrared emission. IEEE Journal of Quantum Electronics, 2002, 38, 511-532. | 1.0 | 265 |
| 5 | Ultra-broadband semiconductor laser. Nature, 2002, 415, 883-887. | 13.7 | 246 |
| 6 | Far-infrared surface-plasmon quantum-cascade lasers at 21.5 Î¼m and 24 Î¼m wavelengths. Applied Physics Letters, 2001, 78, 2620-2622. | 1.5 | 193 |
| 7 | Strong Light-Matter Coupling in Subwavelength Metal-Dielectric Microcavities at Terahertz Frequencies. Physical Review Letters, 2009, 102, 186402. | 2.9 | 171 |
| 8 | Phase-locking of a 2.7-THz quantum cascade laser to a mode-locked erbium-doped fibre laser. Nature Photonics, 2010, 4, 636-640. | 15.6 | 166 |
| 9 | Optical properties of metal-dielectric-metal microcavities in the THz frequency range. Optics Express, 2010, 18, 13886. | 1.7 | 156 |
| 10 | Efficient power extraction in surface-emitting semiconductor lasers using graded photonic heterostructures. Nature Communications, 2012, 3, 952. | 5.8 | 120 |
| 11 | Wave engineering with THz quantum cascade lasers. Nature Photonics, 2013, 7, 691-701. | 15.6 | 118 |
| 12 | Resonant Second-Order Nonlinear Optical Processes in Quantum Cascade Lasers. Physical Review Letters, 2003, 90, 043902. | 2.9 | 105 |
| 13 | Quantum cascade lasers with double metal-semiconductor waveguide resonators. Applied Physics Letters, 2002, 80, 3060-3062. | 1.5 | 104 |
| 14 | Single-mode, tunable distributed-feedback and multiple-wavelength quantum cascade lasers. IEEE Journal of Quantum Electronics, 2002, 38, 569-581. | 1.0 | 90 |
| 15 | Design of mid-IR and THz quantum cascade laser cavities with complete TM photonic bandgap. Optics Express, 2007, 15, 5948. | 1.7 | 90 |
| 16 | Terahertz intersubband absorption in GaN/AlGaN step quantum wells. Applied Physics Letters, 2010, 97, . | 1.5 | 87 |
| 17 | Electrically Injected Cavity Polaritons. Physical Review Letters, 2008, 100, 136806. | 2.9 | 71 |
| 18 | Perfect energy-feeding into strongly coupled systems and interferometric control of polaritonÂabsorption. Nature Physics, 2014, 10, 830-834. | 6.5 | 71 |

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| 19 | Antenna-coupled microcavities for enhanced infrared photo-detection. Applied Physics Letters, 2014, 104, . | 1.5 | 68 |
| 20 | Short Terahertz Pulse Generation from a Dispersion Compensated Modelocked Semiconductor Laser. Laser and Photonics Reviews, 2017, 11, 1700013. | 4.4 | 67 |
| 21 | Limiting Factors to the Temperature Performance of THz Quantum Cascade Lasers Based on the Resonant-Phonon Depopulation Scheme. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 83-92. | 2.0 | 59 |
| 22 | Quantum cascade intersubband polariton light emitters. Semiconductor Science and Technology, 2005, 20, 985-990. | 1.0 | 54 |
| 23 | High-speed operation of GaN/AlGaN quantum cascade detectors at Î»â‰ˆ1.55â€‚Î¼m. Applied Physics Letters, 2008, 93, . | 1.5 | 52 |
| 24 | Generating ultrafast pulses of light from quantum cascade lasers. Optica, 2015, 2, 944. | 4.8 | 52 |
| 25 | Intersubband absorption of cubic GaN/Al(Ga)N quantum wells in the near-infrared to terahertz spectral range. Physical Review B, 2011, 83, . | 1.1 | 50 |
| 26 | Semiconductor Surface Plasmon Sources. Physical Review Letters, 2010, 104, 226806. | 2.9 | 49 |
| 27 | Coupling of a surface plasmon with localized subwavelength microcavity modes. Applied Physics Letters, 2011, 98, . | 1.5 | 49 |
| 28 | Graded photonic crystal terahertz quantum cascade lasers. Applied Physics Letters, 2010, 96, . | 1.5 | 44 |
| 29 | Ultrafast response of harmonic modelocked THz lasers. Light: Science and Applications, 2020, 9, 51. | 7.7 | 42 |
| 30 | GaN-based quantum dot infrared photodetector operating at 1.38â€…[micro sign]m. Electronics Letters, 2005, 41, 1077. | 0.5 | 39 |
| 31 | Intraband absorption of doped GaNâˆ•AlN quantum dots at telecommunication wavelengths. Applied Physics Letters, 2005, 87, 101912. | 1.5 | 39 |
| 32 | Optical critical coupling into highly confining metal-insulator-metal resonators. Applied Physics Letters, 2013, 103, . | 1.5 | 38 |
| 33 | Terahertz microcavity lasers with subwavelength mode volumes and thresholds in the milliampere range. Applied Physics Letters, 2007, 90, 091113. | 1.5 | 37 |
| 34 | Fast amplitude modulation up to 1.5 GHz of mid-IR free-space beams at room-temperature. Nature Communications, 2021, 12, 799. | 5.8 | 35 |
| 35 | Photovoltaic probe of cavity polaritons in a quantum cascade structure. Applied Physics Letters, 2007, 90, 201101. | 1.5 | 32 |
| 36 | Ultrafast Quantum-Well Photodetectors Operating at 10 Î¼m with a Flat Frequency Response up to 70 GHz at Room Temperature. ACS Photonics, 2021, 8, 464-471. | 3.2 | 32 |

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| 37 | Millimeter wave photonics with terahertz semiconductor lasers. Nature Communications, 2021, 12, 1427. | 5.8 | 31 |
| 38 | Predictable surface emission patterns in terahertz photonic-crystal quantum cascade lasers. Optics Express, 2009, 17, 9491. | 1.7 | 30 |
| 39 | Perspectives for Intersubband Polariton Lasers. Physical Review X, 2015, 5, . | 2.8 | 29 |
| 40 | Resonant second harmonic generation in ZnSe bulk microcavity. Applied Physics Letters, 1999, 74, 1945-1947. | 1.5 | 26 |
| 41 | Terahertz quantum cascade lasers in a magnetic field. Applied Physics Letters, 2003, 83, 3873-3875. | 1.5 | 26 |
| 42 | A semiconductor laser device for the generation of surface-plasmons upon electrical injection. Optics Express, 2009, 17, 9391. | 1.7 | 26 |
| 43 | Threshold reduction in quantum cascade lasers with partially undoped, dual-wavelength interdigitated cascades. Applied Physics Letters, 2002, 80, 2845-2847. | 1.5 | 25 |
| 44 | Intersubband electroluminescent devices operating in the strong-coupling regime. Physical Review B, 2010, 82, . | 1.1 | 25 |
| 45 | Sub-diffraction-limit semiconductor resonators operating on the fundamental magnetic resonance. Applied Physics Letters, 2012, 100, . | 1.5 | 25 |
| 46 | Subwavelength metallic waveguides as a tool for extreme confinement of THz surface waves. Scientific Reports, 2013, 3, 1369. | 1.6 | 25 |
| 47 | Surface-emitting terahertz quantum cascade lasers with continuous-wave power in the tens of milliwatt range. Applied Physics Letters, 2014, 104, 091112. | 1.5 | 25 |
| 48 | Quantum well infrared photo-detectors operating in the strong light-matter coupling regime. Applied Physics Letters, 2019, 114, . | 1.5 | 25 |
| 49 | Excitons bound by photon exchange. Nature Physics, 2021, 17, 31-35. | 6.5 | 25 |
| 50 | Conduction-band offset of single InAs monolayers on GaAs. Applied Physics Letters, 2000, 76, 1146-1148. | 1.5 | 24 |
| 51 | Room-temperature operation of Î»â‰ˆ7.5Î¼m surface-plasmon quantum cascade lasers. Applied Physics Letters, 2006, 88, 181103. | 1.5 | 24 |
| 52 | Terahertz time domain spectroscopy of phonon-depopulation based quantum cascade lasers. Applied Physics Letters, 2009, 94, 251108. | 1.5 | 24 |
| 53 | Surface-emitting quantum cascade lasers with metallic photonic-crystal resonators. Applied Physics Letters, 2009, 94, 221101. | 1.5 | 24 |
| 54 | Short infrared wavelength quantum cascade detectors based on m-plane ZnO/ZnMgO quantum wells. Applied Physics Letters, 2018, 113, . | 1.5 | 24 |

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| 55 | Mid-infrared intersubband polaritons in dispersive metal-insulator-metal resonators. Applied Physics Letters, 2014, 105, . | 1.5 | 23 |
| 56 | Room-temperature intersubband emission of GaN/AlN quantum wells at =2.3â€…[micro sign]m. Electronics Letters, 2006, 42, 1308. | 0.5 | 22 |
| 57 | Vertical subwavelength mode confinement in terahertz and mid-infrared quantum cascade lasers. Applied Physics Letters, 2011, 98, . | 1.5 | 22 |
| 58 | Circuit-tunable sub-wavelength THz resonators: hybridizing optical cavities and loop antennas. Optics Express, 2014, 22, 21302. | 1.7 | 21 |
| 59 | THz quantum cascade lasers operating on the radiative modes of a 2D photonic crystal. Optics Letters, 2014, 39, 3962. | 1.7 | 21 |
| 60 | Towards strong light-matter coupling at the single-resonator level with sub-wavelength mid-infrared nano-antennas. Applied Physics Letters, 2016, 109, . | 1.5 | 21 |
| 61 | Strong coupling of ionizing transitions. Optica, 2019, 6, 354. | 4.8 | 21 |
| 62 | Ultrafast terahertz detectors based on three-dimensional meta-atoms. Optica, 2017, 4, 1451. | 4.8 | 20 |
| 63 | III-nitride on silicon electrically injected microrings for nanophotonic circuits. Optics Express, 2019, 27, 11800. | 1.7 | 20 |
| 64 | Quantum tailoring of optical transitions in InxGa1â^'xAs/AlAs strained quantum wells. Applied Physics Letters, 1998, 73, 2621-2623. | 1.5 | 19 |
| 65 | Polaronic excitons inZnxCd1â^'xSe/ZnSequantum wells. Physical Review B, 2000, 61, 1700-1703. | 1.1 | 19 |
| 66 | Low threshold THz QC lasers with thin core regions. Electronics Letters, 2007, 43, 285. | 0.5 | 19 |
| 67 | In Situ Generation of Surface Plasmon Polaritons Using a Near-Infrared Laser Diode. Nano Letters, 2012, 12, 4693-4697. | 4.5 | 19 |
| 68 | Terahertz master-oscillator power-amplifier quantum cascade lasers. Applied Physics Letters, 2016, 109, . | 1.5 | 19 |
| 69 | Advanced and reliable GaAs/AlGaAs ICP-DRIE etching for optoelectronic, microelectronic and microsystem applications. Microelectronic Engineering, 2018, 202, 42-50. | 1.1 | 19 |
| 70 | A hybrid plasmonic semiconductor laser. Applied Physics Letters, 2013, 102, . | 1.5 | 18 |
| 71 | Monolithic echo-less photoconductive switches as a high-resolution detector for terahertz time-domain spectroscopy. Applied Physics Letters, 2017, 110, . | 1.5 | 18 |
| 72 | Terahertz electroluminescence from superlattice quantum cascade structures. Journal of Applied Physics, 2002, 91, 3526-3529. | 1.1 | 17 |

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| 73 | Optimized surface-emitting photonic-crystal terahertz quantum cascade lasers with reduced resonator dimensions. Applied Physics Letters, 2010, 97, 131101. | 1.5 | 17 |
| 74 | Room temperature strong light-matter coupling in three dimensional terahertz meta-atoms. Applied Physics Letters, 2016, 108, . | 1.5 | 17 |
| 75 | Resonant intersubband polariton-LO phonon scattering in an optically pumped polaritonic device. Applied Physics Letters, 2018, 112, . | 1.5 | 17 |
| 76 | Injection of midinfrared surface plasmon polaritons with an integrated device. Applied Physics Letters, 2010, 97, . | 1.5 | 16 |
| 77 | Polarized single-lobed surface emission in mid-infrared, photonic-crystal, quantum-cascade lasers. Optics Letters, 2010, 35, 859. | 1.7 | 16 |
| 78 | High order sideband generation in terahertz quantum cascade lasers. Applied Physics Letters, 2013, 102, . | 1.5 | 16 |
| 79 | Echo-Less Photoconductive Antenna Sources for High-Resolution Terahertz Time-Domain Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 20-25. | 2.0 | 16 |
| 80 | Immunity of intersubband polaritons to inhomogeneous broadening. Physical Review B, 2017, 96, . | 1.1 | 15 |
| 81 | Realization of Harmonic Oscillator Arrays with Graded Semiconductor Quantum Wells. Physical Review Letters, 2020, 125, 097403. | 2.9 | 15 |
| 82 | Nitride intersubband devices: prospects and recent developments. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1987-1995. | 0.8 | 14 |
| 83 | Effect of transverse mode structure on the far field pattern of metal-metal terahertz quantum cascade lasers. Journal of Applied Physics, 2008, 104, 124513. | 1.1 | 14 |
| 84 | Surface-emitting mid-infrared quantum cascade lasers with high-contrast photonic crystal resonators. Optics Express, 2010, 18, 11979. | 1.7 | 14 |
| 85 | Design of an integrated coupler for the electrical generation of surface plasmon polaritons. Optics Express, 2011, 19, 18155. | 1.7 | 14 |
| 86 | High temperature, single mode, long infrared (Î»â€‰=â€‰17.8â€‰Î¼m) InAs-based quantum cascade lasers. Applied Physics Letters, 2014, 105, 111118. | 1.5 | 14 |
| 87 | Phase-locked arrays of surface-emitting graded-photonic-heterostructure terahertz semiconductor lasers. Optics Express, 2015, 23, 6915. | 1.7 | 14 |
| 88 | Intersubband Polariton-Polariton Scattering in a Dispersive Microcavity. Physical Review Letters, 2022, 128, . | 2.9 | 14 |
| 89 | Lasing mode pattern of a quantum cascade photonic crystal surface-emitting microcavity laser. Applied Physics Letters, 2004, 84, 4164-4166. | 1.5 | 13 |
| 90 | Low temperature near-field scanning optical microscopy on infrared and terahertz photonic-crystal quantum cascade lasers. Applied Physics Letters, 2011, 98, . | 1.5 | 13 |

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| 91 | Electrical modulation of the complex refractive index in mid-infrared quantum cascade lasers. Optics Express, 2012, 20, 1172. | 1.7 | 13 |
| 92 | Long-infrared InAs-based quantum cascade lasers operating at 291â€‰K (Î»=19â€‰Î¼m) with metal-metal resonators. Applied Physics Letters, 2014, 104, 021106. | 1.5 | 13 |
| 93 | Nanospectroscopy of a single patch antenna strongly coupled to a mid-infrared intersubband transition in a quantum well. Applied Physics Letters, 2020, 117, . | 1.5 | 13 |
| 94 | Demonstration of air-guided quantum cascade lasers without top claddings. Optics Express, 2007, 15, 14861. | 1.7 | 12 |
| 95 | Surface-plasmon distributed-feedback mid-infrared quantum cascade lasers based on hybrid plasmon/air-guided modes. Electronics Letters, 2008, 44, 807. | 0.5 | 12 |
| 96 | Loss and Gain Measurements of Tensile-Strained Quantum Well Diode Lasers for Plasmonic Devices at Telecom Wavelengths. IEEE Journal of Quantum Electronics, 2012, 48, 73-78. | 1.0 | 12 |
| 97 | Short-wave infrared (Î»â€‰=â€‰3â€‰Î¼m) intersubband polaritons in the GaN/AlN system. Applied Physics Letters, 2017, 110, . | 1.5 | 12 |
| 98 | Quantum-Cascade Lasers With Heterogeneous Cascades: Multiple- Wavelength Operation. Optics and Photonics News, 2001, 12, 24. | 0.4 | 11 |
| 99 | Minimal group refractive index dispersion and gain evolution in ultra-broad-band quantum cascade lasers. IEEE Photonics Technology Letters, 2002, 14, 1671-1673. | 1.3 | 11 |
| 100 | Direct imaging of a laser mode via midinfrared near-field microscopy. Applied Physics Letters, 2007, 90, 201114. | 1.5 | 11 |
| 101 | Stark-tunable electroluminescence from cavity polariton states. Applied Physics Letters, 2008, 93, 171105. | 1.5 | 11 |
| 102 | Hybrid electronic-photonic subwavelength cavities operating at terahertz frequencies. Physical Review B, 2013, 87, . | 1.1 | 11 |
| 103 | Stable single-mode operation of surface-emitting terahertz lasers with graded photonic heterostructure resonators. Applied Physics Letters, 2013, 102, 231105. | 1.5 | 11 |
| 104 | Engineered far-fields of metal-metal terahertz quantum cascade lasers with integrated planar horn structures. Optics Express, 2016, 24, 2174. | 1.7 | 11 |
| 105 | High-speed THz spectroscopic imaging at ten kilohertz pixel rate with amplitude and phase contrast. Optics Express, 2019, 27, 10866. | 1.7 | 11 |
| 106 | Cavity-based photoconductive sources for real-time terahertz imaging. Photonics Research, 2020, 8, 858. | 3.4 | 11 |
| 107 | Unified Description of Saturation and Bistability of Intersubband Transitions in the Weak and Strong Light-Matter Coupling Regimes. Physical Review Letters, 2021, 127, 187401. | 2.9 | 11 |
| 108 | Intersubband electroluminescence from long-side-cleaved quantum-cascade lasers above threshold: Investigation of phonon bottleneck effects. Applied Physics Letters, 2000, 77, 3893-3895. | 1.5 | 10 |

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| 109 | Gigahertz modulation of tunable terahertz radiation from photomixers driven at telecom wavelengths. Applied Physics Letters, 2008, 93, . | 1.5 | 10 |
| 110 | Surface-plasmon distributed-feedback quantum cascade lasers operating pulsed, room temperature. Applied Physics Letters, 2009, 95, 091105. | 1.5 | 10 |
| 111 | Extraction-controlled terahertz frequency quantum cascade lasers with a diagonal LO-phonon extraction and injection stage. Optics Express, 2016, 24, 28583. | 1.7 | 10 |
| 112 | Giant optical nonlinearity interferences in quantum structures. Science Advances, 2019, 5, eaaw7554. | 4.7 | 10 |
| 113 | Far-Infrared and Ultra-High-Speed Quantum-Cascade Lasers. Optics and Photonics News, 2001, 12, 40. | 0.4 | 9 |
| 114 | Fabrication technologies for quantum cascade photonic-crystal microlasers. Nanotechnology, 2004, 15, 675-681. | 1.3 | 9 |
| 115 | New developments for nitride unipolar devices at 1.3â€“1.5Â Î¼m wavelengths. Superlattices and Microstructures, 2006, 40, 412-417. | 1.4 | 9 |
| 116 | Demonstration of a fully integrated superconducting receiver with a 27 THz quantum cascade laser. Optics Express, 2015, 23, 4453. | 1.7 | 9 |
| 117 | Direct Polariton-To-Electron Tunneling in Quantum Cascade Detectors Operating in the Strong Light-Matter Coupling Regime. Physical Review Applied, 2022, 17, . | 1.5 | 9 |
| 118 | InAs monolayers and the controlled introduction of deep levels in AlGaAs alloys. Applied Physics Letters, 1996, 68, 1534-1536. | 1.5 | 8 |
| 119 | GaN/AlN quantum dot photodetectors at 1.3â€“1.5Â Î¼m. Superlattices and Microstructures, 2006, 40, 262-267. | 1.4 | 8 |
| 120 | Continuous-wave operation of 2.7â€…THz photonic crystal quantum cascade lasers. Electronics Letters, 2010, 46, 1513. | 0.5 | 8 |
| 121 | Sub-wavelength energy concentration with electrically generated mid-infrared surface plasmons. Optics Express, 2012, 20, 13738. | 1.7 | 8 |
| 122 | Continuous wave operation of ~ 19 [micro sign]m surface-plasmon quantum cascade lasers. Electronics Letters, 2001, 37, 1023. | 0.5 | 7 |
| 123 | Proof-of-principle of surface detection with air-guided quantum cascade lasers. Optics Express, 2008, 16, 6387. | 1.7 | 7 |
| 124 | Femtosecond Broadband Frequency Switch of Terahertz Three-Dimensional Meta-Atoms. ACS Photonics, 2021, 8, 1097-1102. | 3.2 | 7 |
| 125 | III-V on CaF<sub>2</sub>: a possible waveguiding platform for mid-IR photonic devices. Optics Express, 2019, 27, 1672. | 1.7 | 7 |
| 126 | Surface-plasmon quantum cascade microlasers with highly deformed resonators. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 66-70. | 1.9 | 6 |

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| 127 | Integrated quantum cascade laser-modulator using vertically coupled cavities. Applied Physics Letters, 2009, 94, 211105. | 1.5 | 6 |
| 128 | Short Terahertz Pulse Generation from a Dispersion Compensated Modelocked Semiconductor Laser (Laser Photonics Rev. 11(4)/2017). Laser and Photonics Reviews, 2017, 11, 1770042. | 4.4 | 6 |
| 129 | Compact and sensitive heterodyne receiver at 2.7â€‰THz exploiting a quasi-optical HEB-QCL coupling scheme. Applied Physics Letters, 2019, 115, . | 1.5 | 6 |
| 130 | Acoustic-phonon-mediated polariton photoluminescence in a GaAs bulk microcavity. Physical Review B, 1999, 59, 10059-10063. | 1.1 | 5 |
| 131 | Optical Mode Control of Surface-Plasmon Quantum Cascade Lasers. IEEE Photonics Technology Letters, 2006, 18, 2499-2501. | 1.3 | 5 |
| 132 | Magnetic field effects in terahertz quantum-cascade lasers. Semiconductor Science and Technology, 2004, 19, S348-S350. | 1.0 | 4 |
| 133 | Pulsed operation of long-wavelength (â‰ƒ11.3â€…[micro sign]m) MOVPE-grown quantum cascade lasers up to 350â€…K. Electronics Letters, 2005, 41, 1175. | 0.5 | 4 |
| 134 | Near-field analysis of metallic DFB lasers at telecom wavelengths. Optics Express, 2013, 21, 10422. | 1.7 | 4 |
| 135 | Surface emitting thermally assisted polaritonic light-emitting device. Applied Physics Letters, 2017, 110, . | 1.5 | 4 |
| 136 | Multi-Terahertz Sideband Generation on an Optical Telecom Carrier with a Quantum Cascade Laser. ACS Photonics, 2018, 5, 890-896. | 3.2 | 4 |
| 137 | A 5.7 THz GaN/AlGaN quantum cascade detector based on polar step quantum wells. Applied Physics Letters, 2022, 120, . | 1.5 | 4 |
| 138 | Evidence of electronic confinement in pseudomorphic Si/GaAs superlattices. Physical Review B, 1998, 57, R15100-R15103. | 1.1 | 3 |
| 139 | Intracavity near-field optical imaging of a mid-infrared quantum cascade laser mode. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 149, 270-274. | 1.7 | 3 |
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| 141 | Evidence of Intersubband Linewidth Narrowing Using Growth Interruption Technique. Photonics, 2019, 6, 38. | 0.9 | 3 |
| 142 | Quantum cascade photonic-crystal microlasers. , 2004, 5365, 228. | | 2 |
| 143 | Loss-reduction in midinfrared photonic crystal quantum cascade lasers using metallic waveguides. Optical Engineering, 2010, 49, 111112. | 0.5 | 2 |
| 144 | Monolithically integrated two-dimensional arrays of surface-emitting photonic-crystal terahertz lasers. Journal of Infrared, Millimeter, and Terahertz Waves, 2013, 34, 386-392. | 1.2 | 2 |

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| 145 | Development of high-speed, patch-antenna intersubband photodetectors at 10.3Î¼m. , 2019, , . | | 2 |
| 146 | A â€œJanusâ€•double sided mid-IR photodetector based on a MIM architecture. Applied Physics Letters, 2021, 119, 181102. | 1.5 | 2 |
| 147 | Laser Optics: Ultrabroadband Quantum Cascade Lasers. Optics and Photonics News, 2002, 13, 23. | 0.4 | 1 |
| 148 | Intraband photodetection at 1.3â€“1.5 Âµm in self-organized GaN/AlN quantum dots. Physica Status Solidi (B): Basic Research, 2006, 243, 3993-3997. | 0.7 | 1 |
| 149 | Surface-plasmon distributed-feedback mid-infrared quantum cascade lasers based on hybrid plasmon/air-guided modes. , 2008, , . | | 1 |
| 150 | Photonic Crystal THz Lasers with Controllable Surface Emission Patterns. Optics and Photonics News, 2009, 20, 37. | 0.4 | 1 |
| 151 | Phase-locking of surface-emitting THz quantum cascade laser arrays. Proceedings of SPIE, 2013, , . | 0.8 | 1 |
| 152 | Sub-wavelength THz resonators for ultra-fast THz detection. , 2017, , . | | 1 |
| 153 | Perspectives for intersubband polariton lasers. , 2015, , . | | 1 |
| 154 | Quantum cascade lasers and metal waveguides at Î» > 20 Î¼m. , 2002, , . | | 0 |
| 155 | FIR quantum cascade lasers at and THz emitters at. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 848-853. | 1.3 | 0 |
| 156 | Quantum Cascade Lasers and Photonic Crystal Technology: Surface-Emitting Microlasers. , 2004, , FMK1. | | 0 |
| 157 | Electrical injection of intersubband polaritons. , 2009, , . | | 0 |
| 158 | Low temperature near-field scanning optical microscopy of IR and THz surface-plasmon quantum cascade lasers. , 2010, , . | | 0 |
| 159 | Gain studies of phonon-depopulation based terahertz quantum cascade lasers using terahertz time domain spectroscopy. , 2010, , . | | 0 |
| 160 | Plasmonic waveguides for active semiconductor devices at telecom wavelengths using transverse-magnetic-polarized diode lasers. , 2011, , . | | 0 |
| 161 | Vertical Sub-Wavelength Mode Confinement in THz Quantum Cascade Lasers. , 2011, , . | | 0 |
| 162 | Near-field microscopy study of propagation and focusing of designer's surface plasmons polaritons at mid-infrared wavelength. , 2011, , . | | 0 |

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| 163 | Photonic heterostructures: A new concept for high power surface emission in THz quantum cascade lasers. , 2011, , . | | 0 |
| 164 | High power extraction in (THz) surface-emitting lasers using type-II photonic heterostructures. , 2012, , . | | 0 |
| 165 | Extreme confinement of THz surface waves by subwavelength metallic waveguides. , 2013, , . | | 0 |
| 166 | Engineered far-fields of metal-metal terahertz quantum cascade lasers with integrated planar horn structures. , 2016, , . | | 0 |
| 167 | Nonlinear frequency mixing in quantum cascade lasers: Towards broadband wavelength shifting and THz up-conversion. , 2016, , . | | 0 |
| 168 | Short pulse generation and dispersion in THz quantum cascade lasers. , 2016, , . | | 0 |
| 169 | Echo-less photoconductive antenna sources for high-resolution terahertz time-domain spectroscopy. , 2016, , . | | 0 |
| 170 | Monolithic echo-less photoconductive switches for high-resolution terahertz time-domain spectroscopy. , 2017, , . | | 0 |
| 171 | Cavity based THz photoconductive switch: towards high average power. , 2019, , . | | 0 |
| 172 | Cavity-mediated bound excitons. , 2019, , . | | 0 |
| 173 | Self-Starting Harmonic Emission and Active Harmonic Modelocking in THz QCLs. , 2019, , . | | 0 |
| 174 | Nano-IR study of light-matter interaction between intersubband transitions in quantum wells and patch antenna resonators by polymer expansion. , 2021, , . | | 0 |
| 175 | Oservation of bound excitons stabilised by the interaction with a photonic resonator. , 2021, , . | | 0 |
| 176 | Mid-infrared nano-imaging of current patterns in patch antenna resonators. , 2021, , . | | 0 |
| 177 | Enhanced light-matter coupling and optical pumping of THz intersubband polaritons. , 2021, , . | | 0 |
| 178 | Millimeter Wave Photonics with Terahertz Semiconductor Lasers. , 2021, , . | | 0 |
| 179 | Detection of strong light-matter interaction at the nano-scale in concealed optical cavities via a thermal transducer. , 2021, , . | | 0 |
| 180 | Quantum Cascade Photonic Crystal Microlasers for "Intra-Cavity" Mid-IR Spectroscopy of Biomolecules on a Chip. , 2006, , . | | 0 |

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| 181 | Surface emitting photonic crystal mid-infrared quantum cascade lasers. , 2009, , . | | 0 |
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| 183 | Terahertz time domain spectroscopy of phonondepopulation based quantum cascade lasers. , 2010, , . | | 0 |
| 184 | A semiconductor device for surface-plasmon generation. , 2010, , . | | 0 |
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| 186 | Long-infrared InAs-based quantum cascade lasers. , 2015, , . | | 0 |
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