# Angela Vasanelli

List of Publications by Year
in descending order



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|---|---|---|---|
| 62 papers | 1,454 citations | 304743 22 h-index | 315739 38 g-index |
| 62 all docs | 62 docs citations | 62 times ranked | 1430 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Room-temperature nine-Âµm-wavelength photodetectors and GHz-frequency heterodyne receivers. Nature, 2018, 556, 85-88. | 27.8 | 197 |
| 2 | Continuous Absorption Background and Decoherence in Quantum Dots. Physical Review Letters, 2002, 89, 216804. | 7.8 | 150 |
| 3 | Charge-Induced Coherence between Intersubband Plasmons in a Quantum Structure. Physical Review Letters, 2012, 109, 246808. | 7.8 | 91 |
| 4 | Electrically Injected Cavity Polaritons. Physical Review Letters, 2008, 100, 136806. | 7.8 | 71 |
| 5 | Strong near field enhancement in THz nano-antenna arrays. Scientific Reports, 2013, 3, 1361. | 3.3 | 69 |
| 6 | Antenna-coupled microcavities for enhanced infrared photo-detection. Applied Physics Letters, 2014, 104, . | 3.3 | 68 |
| 7 | Patch antenna terahertz photodetectors. Applied Physics Letters, 2015, 106, . | 3.3 | 61 |
| 8 | Superradiant Emission from a Collective Excitation in a Semiconductor. Physical Review Letters, 2015, 115, 187402. | 7.8 | 51 |
| 9 | Role of elastic scattering mechanisms in GaInAsâˆ•AlInAs quantum cascade lasers. Applied Physics Letters, 2006, 89, 172120. | 3.3 | 45 |
| 10 | Influence of the material parameters on quantum cascade devices. Applied Physics Letters, 2008, 93, 131108. | 3.3 | 41 |
| 11 | Transition from strong to ultrastrong coupling regime in mid-infrared metal-dielectric-metal cavities. Applied Physics Letters, 2011, 98, . | 3.3 | 38 |
| 12 | Ultrastrong Lightâ€"Matter Coupling in Deeply Subwavelength THz LC Resonators. ACS Photonics, 2019, 6, 1207-1215. | 6.6 | 37 |
| 13 | Extremely sub-wavelength THz metal-dielectric wire microcavities. Optics Express, 2012, 20, 29121. | 3.4 | 36 |
| 14 | Investigation of spectral gain narrowing in quantum cascade lasers using terahertz time domain spectroscopy. Applied Physics Letters, 2008, 93, 101115. | 3.3 | 35 |
| 15 | 10 Gbit s<sup>â^'1</sup> Free Space Data Transmission at 9ÂÂµm Wavelength With Unipolar Quantum Optoelectronics. Laser and Photonics Reviews, 2022, 16, . | 8.7 | 35 |
| 16 | Dark current analysis of quantum cascade detectors by magnetoresistance measurements. Physical Review B, 2008, 77, . | 3.2 | 33 |
| 17 | Midinfrared Ultrastrong Lightâ€"Matter Coupling for THz Thermal Emission. ACS Photonics, 2017, 4, 2550-2555. | 6.6 | 33 |
| 18 | Long-wavelength infrared photovoltaic heterodyne receivers using patch-antenna quantum cascade detectors. Applied Physics Letters, 2020, 116, . | 3.3 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Photovoltaic probe of cavity polaritons in a quantum cascade structure. Applied Physics Letters, 2007, 90, 201101. | 3.3 | 32 |
| 20 | Energy levels and far-infrared absorption of multi-stacked dots. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 11, 41-50. | 2.7 | 27 |
| 21 | Room-Temperature, Wide-Band, Quantum Well Infrared Photodetector for Microwave Optical Links at 4.9 Î¼m Wavelength. ACS Photonics, 2018, 5, 3689-3694. | 6.6 | 27 |
| 22 | Ultra-strong lightâ€“matter coupling and superradiance using dense electron gases. Comptes Rendus Physique, 2016, 17, 861-873. | 0.9 | 26 |
| 23 | High temperature metamaterial terahertz quantum detector. Applied Physics Letters, 2020, 117, . | 3.3 | 23 |
| 24 | Absorption Engineering in an Ultrasubwavelength Quantum System. Nano Letters, 2020, 20, 4430-4436. | 9.1 | 21 |
| 25 | Radiatively Broadened Incandescent Sources. ACS Photonics, 2015, 2, 1663-1668. | 6.6 | 15 |
| 26 | Bias Tunable Spectral Response of Nanocrystal Array in a Plasmonic Cavity. Nano Letters, 2021, 21, 6671-6677. | 9.1 | 15 |
| 27 | Stark effects and electro-optical properties of strongly stacked dots. Solid State Communications, 2001, 118, 459-463. | 1.9 | 14 |
| 28 | Coulomb forces in THz electromechanical meta-atoms. Nanophotonics, 2019, 8, 2269-2277. | 6.0 | 13 |
| 29 | Mixing Properties of Room Temperature Patchâ€Antenna Receivers in a Midâ€Infrared (Î»Ââ‰ˆÂ9ÂÂµm) Heterodyne System. Laser and Photonics Reviews, 2020, 14, 1900207. | 8.7 | 12 |
| 30 | Broadband Enhancement of Midâ€Wave Infrared Absorption in a Multiâ€Resonant Nanocrystalâ€Based Device. Advanced Optical Materials, 2022, 10, . | 7.3 | 12 |
| 31 | Stark-tunable electroluminescence from cavity polariton states. Applied Physics Letters, 2008, 93, 171105. | 3.3 | 11 |
| 32 | Direct surface cyclotron resonance terahertz emission from a quantum cascade structure. Applied Physics Letters, 2012, 100, . | 3.3 | 9 |
| 33 | Electrical excitation of superradiant intersubband plasmons. Applied Physics Letters, 2015, 107, . | 3.3 | 9 |
| 34 | Semiconductor Quantum Plasmonics. Physical Review Letters, 2020, 125, 187401. | 7.8 | 9 |
| 35 | Nanoscale electromagnetic confinement in THz circuit resonators. Optics Express, 2017, 25, 28718. | 3.4 | 7 |
| 36 | Tunability of the Freeâ€Spectral Range by Microwave Injection into a Midâ€Infrared Quantum Cascade Laser. Laser and Photonics Reviews, 2020, 14, 1900389. | 8.7 | 7 |

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|---|---|---|---|
| 37 | Sub-nanometrically resolved chemical mappings of quantum-cascade laser active regions. Semiconductor Science and Technology, 2016, 31, 055017. | 2.0 | 6 |
| 38 | Ultrafast Detection of TeraHertz Radiation with Miniaturized Optomechanical Resonator Driven by Dielectric Driving Force. ACS Photonics, 2022, 9, 1541-1546. | 6.6 | 6 |
| 39 | Electronic Structure, Stark Effect and Optical Properties of Multistacked Dots. Japanese Journal of Applied Physics, 2001, 40, 1955-1957. | 1.5 | 5 |
| 40 | Near- and mid-infrared intersubband absorption in top-down GaN/AlN nano- and micro-pillars. Nanotechnology, 2019, 30, 054002. | 2.6 | 5 |
| 41 | Quantum Theory of Multisubband Plasmonâ€“ Phonon Coupling. Photonics, 2020, 7, 19. | 2.0 | 5 |
| 42 | Optomechanical temporal sampling of terahertz signals. Applied Physics Letters, 2021, 119, 181103. | 3.3 | 3 |
| 43 | Metamaterial engineering for optimized photon absorption in unipolar quantum devices. Optics Express, 2022, 30, 20515. | 3.4 | 3 |
| 44 | Electric Field Effects in Stacked Dots. Physica Status Solidi A, 2002, 190, 551-554. | 1.7 | 2 |
| 45 | Electron Scattering Spectroscopy by High Magnetic Field in Mid-Infrared Quantum Cascade Lasers. AIP Conference Proceedings, 2007, , . | 0.4 | 1 |
| 46 | QUANTUM EFFICIENCY OF A 2-LEVEL InAs/AlSb QUANTUM CASCADE STRUCTURE. International Journal of Modern Physics B, 2007, 21, 1471-1475. | 2.0 | 1 |
| 47 | Strong near field enhancement in THz nano-antenna arrays. , 0, . | | 1 |
| 48 | Semiconductor quantum plasmons for high frequency thermal emission. Nanophotonics, 2020, 10, 607-615. | 6.0 | 1 |
| 49 | 10 Gbit s<sup>âˆ’1</sup> Free Space Data Transmission at 9ÂÂµm Wavelength With Unipolar Quantum Optoelectronics (Laser Photonics Rev. 16(2)/2022). Laser and Photonics Reviews, 2022, 16, . | 8.7 | 1 |
| 50 | Broadband Enhancement of Midâ€Wave Infrared Absorption in a Multiâ€Resonant Nanocrystalâ€Based Device (Advanced Optical Materials 9/2022). Advanced Optical Materials, 2022, 10, . | 7.3 | 1 |
| 51 | Non perturbative exciton-phonon coupling for a single GaAs quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 438-441. | 0.8 | 0 |
| 52 | Electrical injection of intersubband polaritons. , 2009, , . | | 0 |
| 53 | Cyclotron emission in a THz quantum cascade structure. AIP Conference Proceedings, 2011, , . | 0.4 | 0 |
| 54 | Light-matter strong coupling in the mid-infrared region with metallic microcavities. , 2011, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Intersubband plasmons induced negative refraction at mid-IR frequency in heterostructured semiconductor metamaterials. Journal of Physics: Conference Series, 2018, 1092, 012034. | 0.4 | 0 |
| 56 | Ultra-Small Mode Volume Three-Dimensional THz LC Metamaterial. , 2019, , . | | 0 |
| 57 | Quantum Cascade Lasers: Tunability of the Freeâ€Spectral Range by Microwave Injection into a Midâ€Infrared Quantum Cascade Laser (Laser Photonics Rev. 14(5)/2020). Laser and Photonics Reviews, 2020, 14, 2070030. | 8.7 | 0 |
| 58 | Microcavity Enhanced Quantum Well Infrared Photodetector. , 2013, , . | | 0 |
| 59 | GHz Heterodyne generation using Two DFB Mid-IR QCL lasers on a 9Î¼m QWIP. , 2018, , . | | 0 |
| 60 | Quasi-static and propagating modes in three-dimensional THz circuits. Optics Express, 2020, 28, 16982. | 3.4 | 0 |
| 61 | Engineering of patch antenna resonator losses through a metamaterial approach for unipolar quantum detectors. , 2022, , . | | 0 |
| 62 | High speed mid-infrared Stark modulator for optical data transmission up to 10 Gbit.s-1. , 2022, , . | | 0 |