Angela Vasanelli

List of Publications by Year
in descending order

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62 papers	1,454 citations	304602 22 h-index	315616 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.	13.7	197
2	Continuous Absorption Background and Decoherence in Quantum Dots. Physical Review Letters, 2002, 89, 216804.	2.9	150
3	Charge-Induced Coherence between Intersubband Plasmons in a Quantum Structure. Physical Review Letters, 2012, 109, 246808.	2.9	91
4	Electrically Injected Cavity Polaritons. Physical Review Letters, 2008, 100, 136806.	2.9	71
5	Strong near field enhancement in THz nano-antenna arrays. Scientific Reports, 2013, 3, 1361.	1.6	69
6	Antenna-coupled microcavities for enhanced infrared photo-detection. Applied Physics Letters, 2014, 104, .	1.5	68
7	Patch antenna terahertz photodetectors. Applied Physics Letters, 2015, 106, .	1.5	61
8	Superradiant Emission from a Collective Excitation in a Semiconductor. Physical Review Letters, 2015, 115, 187402.	2.9	51
9	Role of elastic scattering mechanisms in GaInAsâˆ•AlInAs quantum cascade lasers. Applied Physics Letters, 2006, 89, 172120.	1.5	45
10	Influence of the material parameters on quantum cascade devices. Applied Physics Letters, 2008, 93, 131108.	1.5	41
11	Transition from strong to ultrastrong coupling regime in mid-infrared metal-dielectric-metal cavities. Applied Physics Letters, 2011, 98, .	1.5	38
12	Ultrastrong Lightâ€“Matter Coupling in Deeply Subwavelength THz LC Resonators. ACS Photonics, 2019, 6, 1207-1215.	3.2	37
13	Extremely sub-wavelength THz metal-dielectric wire microcavities. Optics Express, 2012, 20, 29121.	1.7	36
14	Investigation of spectral gain narrowing in quantum cascade lasers using terahertz time domain spectroscopy. Applied Physics Letters, 2008, 93, 101115.	1.5	35
15	10 Gbit s^{âˆ’1} Free Space Data Transmission at 9ÂÂµm Wavelength With Unipolar Quantum Optoelectronics. Laser and Photonics Reviews, 2022, 16, .	4.4	35
16	Dark current analysis of quantum cascade detectors by magnetoresistance measurements. Physical Review B, 2008, 77, .	1.1	33
17	Midinfrared Ultrastrong Lightâ€“Matter Coupling for THz Thermal Emission. ACS Photonics, 2017, 4, 2550-2555.	3.2	33
18	Long-wavelength infrared photovoltaic heterodyne receivers using patch-antenna quantum cascade detectors. Applied Physics Letters, 2020, 116, .	1.5	33

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19	Photovoltaic probe of cavity polaritons in a quantum cascade structure. Applied Physics Letters, 2007, 90, 201101.	1.5	32
20	Energy levels and far-infrared absorption of multi-stacked dots. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 11, 41-50.	1.3	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.	3.2	27
22	Ultra-strong lightâ€“matter coupling and superradiance using dense electron gases. Comptes Rendus Physique, 2016, 17, 861-873.	0.3	26
23	High temperature metamaterial terahertz quantum detector. Applied Physics Letters, 2020, 117, .	1.5	23
24	Absorption Engineering in an Ultrasubwavelength Quantum System. Nano Letters, 2020, 20, 4430-4436.	4.5	21
25	Radiatively Broadened Incandescent Sources. ACS Photonics, 2015, 2, 1663-1668.	3.2	15
26	Bias Tunable Spectral Response of Nanocrystal Array in a Plasmonic Cavity. Nano Letters, 2021, 21, 6671-6677.	4.5	15
27	Stark effects and electro-optical properties of strongly stacked dots. Solid State Communications, 2001, 118, 459-463.	0.9	14
28	Coulomb forces in THz electromechanical meta-atoms. Nanophotonics, 2019, 8, 2269-2277.	2.9	13
29	Mixing Properties of Room Temperature Patchâ€Antenna Receivers in a Midâ€Infrared (Î»Âª‰ˆÂ9ÂÂµm) Heterodyne System. Laser and Photonics Reviews, 2020, 14, 1900207.	4.4	12
30	Broadband Enhancement of Midâ€Wave Infrared Absorption in a Multiâ€Resonant Nanocrystalâ€Based Device. Advanced Optical Materials, 2022, 10, .	3.6	12
31	Stark-tunable electroluminescence from cavity polariton states. Applied Physics Letters, 2008, 93, 171105.	1.5	11
32	Direct surface cyclotron resonance terahertz emission from a quantum cascade structure. Applied Physics Letters, 2012, 100, .	1.5	9
33	Electrical excitation of superradiant intersubband plasmons. Applied Physics Letters, 2015, 107, .	1.5	9
34	Semiconductor Quantum Plasmonics. Physical Review Letters, 2020, 125, 187401.	2.9	9
35	Nanoscale electromagnetic confinement in THz circuit resonators. Optics Express, 2017, 25, 28718.	1.7	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.	4.4	7

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37	Sub-nanometrically resolved chemical mappings of quantum-cascade laser active regions. Semiconductor Science and Technology, 2016, 31, 055017.	1.0	6
38	Ultrafast Detection of TeraHertz Radiation with Miniaturized Optomechanical Resonator Driven by Dielectric Driving Force. ACS Photonics, 2022, 9, 1541-1546.	3.2	6
39	Electronic Structure, Stark Effect and Optical Properties of Multistacked Dots. Japanese Journal of Applied Physics, 2001, 40, 1955-1957.	0.8	5
40	Near- and mid-infrared intersubband absorption in top-down GaN/AlN nano- and micro-pillars. Nanotechnology, 2019, 30, 054002.	1.3	5
41	Quantum Theory of Multisubband Plasmonâ€“ Phonon Coupling. Photonics, 2020, 7, 19.	0.9	5
42	Optomechanical temporal sampling of terahertz signals. Applied Physics Letters, 2021, 119, 181103.	1.5	3
43	Metamaterial engineering for optimized photon absorption in unipolar quantum devices. Optics Express, 2022, 30, 20515.	1.7	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, , .	0.3	1
46	QUANTUM EFFICIENCY OF A 2-LEVEL InAs/AlSb QUANTUM CASCADE STRUCTURE. International Journal of Modern Physics B, 2007, 21, 1471-1475.	1.0	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.	2.9	1
49	10 Gbit s^{â^'1} Free Space Data Transmission at 9ÂÂµm Wavelength With Unipolar Quantum Optoelectronics (Laser Photonics Rev. 16(2)/2022). Laser and Photonics Reviews, 2022, 16, .	4.4	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, .	3.6	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, , .	0.3	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.	0.3	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.	4.4	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.	1.7	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