Yanko Todorov

List of Publications by Year
in descending order

46 papers	1,073 citations	394421 19 h-index	395702 33 g-index
46 all docs	46 docs citations	46 times ranked	1101 citing authors

#	Article	IF	Citations
1	Broadband Enhancement of Midâ€Wave Infrared Absorption in a Multiâ€Resonant Nanocrystalâ€Based Device. Advanced Optical Materials, 2022, 10, .	7.3	12
2	Ultrafast Detection of TeraHertz Radiation with Miniaturized Optomechanical Resonator Driven by Dielectric Driving Force. ACS Photonics, 2022, 9, 1541-1546.	6.6	6
3	10 Gbit s^{â^ˆ'1} Free Space Data Transmission at 9ÂÂµm Wavelength With Unipolar Quantum Optoelectronics. Laser and Photonics Reviews, 2022, 16, .	8.7	35
4	Metamaterial engineering for optimized photon absorption in unipolar quantum devices. Optics Express, 2022, 30, 20515.	3.4	3
5	Engineering of patch antenna resonator losses through a metamaterial approach for unipolar quantum detectors. , 2022, , .		0
6	Monolithic Patch-Antenna THz Lasers with Extremely Low Beam Divergence and Polarization Control. ACS Photonics, 2021, 8, 412-417.	6.6	7
7	Bias Tunable Spectral Response of Nanocrystal Array in a Plasmonic Cavity. Nano Letters, 2021, 21, 6671-6677.	9.1	15
8	Optomechanical temporal sampling of terahertz signals. Applied Physics Letters, 2021, 119, 181103.	3.3	3
9	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
10	Semiconductor Quantum Plasmonics. Physical Review Letters, 2020, 125, 187401.	7.8	9
11	Absorption Engineering in an Ultrasubwavelength Quantum System. Nano Letters, 2020, 20, 4430-4436.	9.1	21
12	Quantum Theory of Multisubband Plasmonâ€" Phonon Coupling. Photonics, 2020, 7, 19.	2.0	5
13	Long-wavelength infrared photovoltaic heterodyne receivers using patch-antenna quantum cascade detectors. Applied Physics Letters, 2020, 116, .	3.3	33
14	High temperature metamaterial terahertz quantum detector. Applied Physics Letters, 2020, 117, .	3.3	23
15	Quasi-static and propagating modes in three-dimensional THz circuits. Optics Express, 2020, 28, 16982.	3.4	0
16	Semiconductor quantum plasmons for high frequency thermal emission. Nanophotonics, 2020, 10, 607-615.	6.0	1
17	Ultrastrong Lightâ€"Matter Coupling in Deeply Subwavelength THz LC Resonators. ACS Photonics, 2019, 6, 1207-1215.	6.6	37
18	Coulomb forces in THz electromechanical meta-atoms. Nanophotonics, 2019, 8, 2269-2277.	6.0	13

#	Article	IF	Citations
19	Patch Antenna Microcavities THz Quantum Cascade Lasers. , 2019, , .		1
20	Ultra-Small Mode Volume Three-Dimensional THz LC Metamaterial. , 2019, , .		0
21	Room-temperature nine-Âµm-wavelength photodetectors and GHz-frequency heterodyne receivers. Nature, 2018, 556, 85-88.	27.8	197
22	Midinfrared Ultrastrong Lightâ€"Matter Coupling for THz Thermal Emission. ACS Photonics, 2017, 4, 2550-2555.	6.6	33
23	Engineering the Losses and Beam Divergence in Arrays of Patch Antenna Microcavities for Terahertz Sources. Journal of Infrared, Millimeter, and Terahertz Waves, 2017, 38, 1321-1330.	2.2	2
24	Optomechanical terahertz detection with single meta-atom resonator. Nature Communications, 2017, 8, 1578.	12.8	44
25	Nanoscale electromagnetic confinement in THz circuit resonators. Optics Express, 2017, 25, 28718.	3.4	7
26	Ultra-strong lightâ€"matter coupling and superradiance using dense electron gases. Comptes Rendus Physique, 2016, 17, 861-873.	0.9	26
27	Ultra-subwavelength resonators for high temperature high performance quantum detectors. New Journal of Physics, 2016, 18, 113016.	2.9	38
28	Electrical excitation of superradiant intersubband plasmons. Applied Physics Letters, 2015, 107, .	3.3	9
29	Dipolar quantum electrodynamics of the two-dimensional electron gas. Physical Review B, 2015, 91, .	3.2	26
30	Three-dimensional THz lumped-circuit resonators. Optics Express, 2015, 23, 16838.	3.4	13
31	Radiatively Broadened Incandescent Sources. ACS Photonics, 2015, 2, 1663-1668.	6.6	15
32	Dipolar quantum electrodynamics theory of the three-dimensional electron gas. Physical Review B, 2014, 89, .	3.2	26
33	Few-Electron Ultrastrong Light-Matter Coupling in a Quantum<i>LC</i>Circuit. Physical Review X, 2014, 4, .	8.9	38
34	Antenna-coupled microcavities for enhanced infrared photo-detection. Applied Physics Letters, 2014, 104, .	3.3	68
35	Strong near field enhancement in THz nano-antenna arrays. Scientific Reports, 2013, 3, 1361.	3.3	69
36	Microring Diode Laser for THz Generation. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 472-478.	3.1	1

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37	Extremely sub-wavelength THz metal-dielectric wire microcavities. Optics Express, 2012, 20, 29121.	3.4	36
38	Intersubband polaritons in the electrical dipole gauge. Physical Review B, 2012, 85, .	3.2	102
39	Long-wavelength limit and Fano profiles of extraordinary transmission through metallic slit gratings in the THz range. Physical Review B, 2009, 80, .	3.2	10
40	Study of the Transmission of Subwavelength Metallic Grids in the THz Frequency Range. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 513-520.	2.9	11
41	Metal-dielectric cavities for subwavelength light confinement in the THz region. , 2008, , .		0
42	Purcell Enhancement of Spontaneous Emission from Quantum Cascades inside Mirror-Grating Metal Cavities at THz Frequencies. Physical Review Letters, 2007, 99, 223603.	7.8	34
43	Modal method for conical diffraction on a rectangular slit metallic grating in a multilayer structure. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, 3100.	1.5	26
44	Spontaneous emission enhancement in quantum cascade structures in the TeraHertz domain. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 524-527.	0.8	1
45	Dipole emission into rectangular metallic gratings with subwavelength slits. Physical Review B, 2005, 71, .	3.2	4
46	Strong near field enhancement in THz nano-antenna arrays. , 0, .		1