Gururaj V Naik

List of Publications by Year
in descending order

63	6,054	218381	243296
papers	citations	26 h-index	44 g-index

66	66	66	6488
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Alternative Plasmonic Materials: Beyond Gold and Silver. Advanced Materials, 2013, 25, 3264-3294.	11.1	1,786
2	Oxides and nitrides as alternative plasmonic materials in the optical range [Invited]. Optical Materials Express, 2011, 1, 1090.	1.6	744
3	Refractory Plasmonics with Titanium Nitride: Broadband Metamaterial Absorber. Advanced Materials, 2014, 26, 7959-7965.	11.1	603
4	Titanium nitride as a plasmonic material for visible and near-infrared wavelengths. Optical Materials Express, 2012, 2, 478.	1.6	567
5	Demonstration of Al:ZnO as a plasmonic component for near-infrared metamaterials. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8834-8838.	3.3	304
6	Local Heating with Lithographically Fabricated Plasmonic Titanium Nitride Nanoparticles. Nano Letters, 2013, 13, 6078-6083.	4.5	253
7	Epitaxial superlattices with titanium nitride as a plasmonic component for optical hyperbolic metamaterials. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7546-7551.	3.3	198
8	Shape-Dependent Plasmonic Response and Directed Self-Assembly in a New Semiconductor Building Block, Indium-Doped Cadmium Oxide (ICO). Nano Letters, 2013, 13, 2857-2863.	4.5	182
9	Role of epsilon-near-zero substrates in the optical response of plasmonic antennas. Optica, 2016, 3, 339.	4.8	162
10	Towards CMOS-compatible nanophotonics: Ultra-compact modulators using alternative plasmonic materials. Optics Express, 2013, 21, 27326.	1.7	125
11	Semiconductors for plasmonics and metamaterials. Physica Status Solidi - Rapid Research Letters, 2010, 4, 295-297.	1.2	109
12	A comparative study of semiconductor-based plasmonic metamaterials. Metamaterials, 2011, 5, 1-7.	2.2	96
13	Plasmonic Resonances in Nanostructured Transparent Conducting Oxide Films. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 4601907-4601907.	1.9	87
14	Fully CMOS-compatible titanium nitride nanoantennas. Applied Physics Letters, 2016, 108, .	1.5	86
15	Temperature-dependent optical properties of titanium nitride. Applied Physics Letters, 2017, 110, .	1.5	83
16	Optical Properties of Gallium-Doped Zinc Oxideâ€"A Low-Loss Plasmonic Material: First-Principles Theory and Experiment. Physical Review X, 2013, 3, .	2.8	53
17	TiN/(Al,Sc)N metal/dielectric superlattices and multilayers as hyperbolic metamaterials in the visible spectral range. Physical Review B, 2014, 90, .	1.1	52
18	Electronic and optical properties of ScN and (Sc,Mn)N thin films deposited by reactive DC-magnetron sputtering. Journal of Applied Physics, 2013, 114, .	1.1	49

#	Article	IF	Citations
19	Development of epitaxial Al_x Sc_{1â^'x} N for artificially structured metal/semiconductor superlattice metamaterials. Physica Status Solidi (B): Basic Research, 2015, 252, 251-259.	0.7	46
20	Wavelength-Dependent Optical Force Imaging of Bimetallic Alâ€“Au Heterodimers. Nano Letters, 2018, 18, 2040-2046.	4.5	44
21	Ultrabroadband terahertz conductivity of highly doped ZnO and ITO. Optical Materials Express, 2015, 5, 566.	1.6	39
22	Macroscopically Aligned Carbon Nanotubes as a Refractory Platform for Hyperbolic Thermal Emitters. ACS Photonics, 2019, 6, 1602-1609.	3.2	35
23	Photon upconversion with hot carriers in plasmonic systems. Applied Physics Letters, 2015, 107, .	1.5	33
24	3D Imaging Using Extreme Dispersion in Optical Metasurfaces. ACS Photonics, 2021, 8, 1421-1429.	3.2	31
25	Hot-Carrier-Mediated Photon Upconversion in Metal-Decorated Quantum Wells. Nano Letters, 2017, 17, 4583-4587.	4.5	30
26	Nonâ€Hermitian Selective Thermal Emitters using Metalâ€“Semiconductor Hybrid Resonators. Advanced Materials, 2019, 31, e1904154.	11.1	22
27	Chemically Responsive Elastomers Exhibiting Unityâ€Order Refractive Index Modulation. Advanced Materials, 2018, 30, 1703912.	11.1	19
28	Macroscopically aligned carbon nanotubes for flexible and high-temperature electronics, optoelectronics, and thermoelectrics. Journal Physics D: Applied Physics, 2020, 53, 063001.	1.3	19
29	Optical absorption of hyperbolic metamaterial with stochastic surfaces. Optics Express, 2014, 22, 8893.	1.7	17
30	Alternative Plasmonic Materials. Handbook of Surface Science, 2014, 4, 189-221.	0.3	15
31	Optimum selective emitters for efficient thermophotovoltaic conversion. Applied Physics Letters, 2020, 116, .	1.5	15
32	Alternative Plasmonic Materials: Alternative Plasmonic Materials: Beyond Gold and Silver (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	11.1	13
33	Non-Hermitian metasurfaces for the best of plasmonics and dielectrics. Optical Materials Express, 2021, 11, 2326.	1.6	13
34	Non-Hermitian metasurface with non-trivial topology. Nanophotonics, 2022, 11, 1159-1165.	2.9	13
35	Large Optical Tunability from Charge Density Waves in 1T-TaS₂ under Incoherent Illumination. Nano Letters, 2020, 20, 7868-7873.	4.5	12
36	Titanium nitride as a plasmonic material for visible and near-infrared wavelengths [erratum]. Optical Materials Express, 2013, 3, 1658.	1.6	10

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37	In-plane electrical bias tunable optical properties of 1T-TaS₂ [Invited]. Optical Materials Express, 2019, 9, 497.	1.6	9
38	In-situ power monitoring scheme and its application in dynamic voltage and threshold scaling for digital CMOS integrated circuits. , 2010, , .		8
39	Light-induced reorganization of charge density wave stacking in 1T-TaS2. Applied Physics Letters, 2021, 118, .	1.5	8
40	Semiconductor plasmonic metamaterials for near-infrared and telecommunication wavelength. , 2010, , .		5
41	Semiconductors for high selectivity thermal emitters. Journal of Optics (United Kingdom), 2018, 20, 084001.	1.0	5
42	Equilibration of Photogenerated Charge Carriers in Plasmonic Core@Shell Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 23631-23638.	1.5	4
43	Reorganization of CDW stacking in 1T-TaS2 by an in-plane electrical bias. APL Materials, 2021, 9, 111103.	2.2	4
44	Poly-ols Based Solâ€“Gel Synthesis of Zinc Oxide Thin Films. Journal of the Electrochemical Society, 2011, 158, H85.	1.3	2
45	Metal Nitrides for Plasmonic Applications. , 2012, , .		2
46	Plasmonic modulator using CMOS-compatible material platform. , 2014, , .		2
47	Nanostructured Transparent Conductive Oxide Films for Plasmonic Applications. , 2013, , .		2
48	Nitrides as alternative materials for localized surface plasmon applications. , 2012, , .		2
49	CMOS Compatible Ultra-Compact Modulator. , 2014, , .		1
50	Alternative Plasmonic Materials. , 2018, , 252-264.		1
51	All-semiconductor metamaterial with negative refraction in the near-infrared. , 2012, , .		0
52	Optical functions of nanocrystalline ZnO containing voids and doped with Ga. Proceedings of SPIE, 2012, , .	0.8	0
53	A Titanium Nitride based Metamaterial for Applications in the Visible. , 2013, , .		0
54	Low-Loss Plasmonic Titanium Nitride Strip Waveguides. , 2014, , .		0

#	Article	IF	Citations
55	Ultrabroadband terahertz characterization of highly doped ZnO and ITO. , 2015, , .		0
56	Low light quantum phase transition in 1T-TaS2 at room temperature. , 2021, , .		0
57	Radiative Decay Engineering with Hyperbolic Metamaterials. , 2010, , .		0
58	Effect of Metallic and Hyperbolic Metamaterial Surface on Electric and Magnetic Dipole Emission. , 2011, , .		0
59	Ceramic Plasmonic Components for Optical Metamaterials. , 2011, , .		0
60	The Road Ahead for Metamaterials: Improved Material Building Blocks. , 2012, , .		0
61	Fully CMOS-Compatible TiN Nanoantennas. , 2016, , .		0
62	Topological Thermal Emission in Non-Hermitian Selective Thermal Emitters. , 2020, , .		0
63	Scaling electrical percolation networks based on renormalization group theory. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	0