

# Govind Gupta

## List of Publications by Year in descending order

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244  
papers

6,663  
citations

61984

43  
h-index

95266

68  
g-index

247  
all docs

247  
docs citations

247  
times ranked

8585  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiwalled carbon nanotube/cement composites with exceptional electromagnetic interference shielding properties. Carbon, 2013, 56, 86-96.	10.3	277
2	Evolution of Hierarchical Hexagonal Stacked Plates of CuS from Liquid-Liquid Interface and its Photocatalytic Application for Oxidative Degradation of Different Dyes under Indoor Lighting. Environmental Science & Technology, 2010, 44, 6313-6318.	10.0	255
3	High permittivity polyaniline-barium titanate nanocomposites with excellent electromagnetic interference shielding response. Nanoscale, 2013, 5, 4330.	5.6	245
4	Faster response of NO <sub>2</sub> sensing in graphene-WO <sub>3</sub> nanocomposites. Nanotechnology, 2012, 23, 205501.	2.6	224
5	Fabrication of non-polar GaN based highly responsive and fast UV photodetector. Applied Physics Letters, 2017, 110, .	3.3	185
6	Mg <sub>3</sub> Sb <sub>2</sub> -based Zintl compound: a non-toxic, inexpensive and abundant thermoelectric material for power generation. RSC Advances, 2013, 3, 8504.	3.6	133
7	Optical and Photocatalytic Properties of Heavily F <sup>+</sup> -Doped SnO <sub>2</sub> Nanocrystals by a Novel Single-Source Precursor Approach. Inorganic Chemistry, 2011, 50, 5637-5645.	4.0	130
8	Correlation of sp <sup>3</sup> and sp <sup>2</sup> fraction of carbon with electrical, optical and nano-mechanical properties of argon-diluted diamond-like carbon films. Applied Surface Science, 2011, 257, 6804-6810.	6.1	113
9	Bimetallic Cu-Ni nanoparticles of varying composition (CuNi <sub>3</sub> , CuNi, Cu <sub>3</sub> Ni). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 331, 206-212.	4.7	112
10	Growth of MoS <sub>2</sub> -MoO <sub>3</sub> Hybrid Microflowers via Controlled Vapor Transport Process for Efficient Gas Sensing at Room Temperature. Advanced Materials Interfaces, 2018, 5, 1800071.	3.7	93
11	A Highly Responsive Self-Driven UV Photodetector Using GaN Nanoflowers. Advanced Electronic Materials, 2017, 3, 1700036.	5.1	92
12	Graphene Oxide-Coated Surface: Inhibition of Bacterial Biofilm Formation due to Specific Surface-Interface Interactions. ACS Omega, 2017, 2, 3070-3082.	3.5	84
13	Highly selective and reversible NO <sub>2</sub> gas sensor using vertically aligned MoS <sub>2</sub> flake networks. Nanotechnology, 2018, 29, 464001.	2.6	79
14	Microstructural and electrochromic properties of tungsten oxide thin films produced by surfactant mediated electrodeposition. Applied Surface Science, 2008, 254, 2342-2352.	6.1	78
15	ZnO/GaN heterojunction based self-powered photodetectors: Influence of interfacial states on UV sensing. Applied Surface Science, 2019, 478, 1081-1089.	6.1	78
16	Graphene Quantum Dot-Sensitized ZnO-Nanorod/GaN-Nanotower Heterostructure-Based High-Performance UV Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 47038-47047.	8.0	70
17	2D/3D Hybrid of MoS <sub>2</sub> /GaN for a High-Performance Broadband Photodetector. ACS Applied Electronic Materials, 2021, 3, 2407-2414.	4.3	70
18	Enhanced electrochemical performance of polypyrrole coated MoS <sub>2</sub> nanocomposites as electrode material for supercapacitor application. Journal of Electroanalytical Chemistry, 2016, 782, 278-287.	3.8	69

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19	Fabrication of sensitive bioelectrode based on atomically thin CVD grown graphene for cancer biomarker detection. <i>Biosensors and Bioelectronics</i> , 2018, 105, 173-181.	10.1	69
20	Functionalized Molybdenum Disulfide Nanosheets for 2D Hybrid Nanostructures: Photoinduced Charge Transfer and Enhanced Photoresponse. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1729-1738.	4.6	67
21	Rare earth metal oxide (RE <sub>2</sub> O <sub>3</sub> ; RE = Nd, Gd, and Yb) incorporated polyindole composites: gravimetric and volumetric capacitive performance for supercapacitor applications. <i>New Journal of Chemistry</i> , 2018, 42, 5295-5308.	2.8	64
22	Surface characterization of plasma-treated and PEG-grafted PDMS for micro fluidic applications. <i>Vacuum</i> , 2007, 81, 1094-1100.	3.5	63
23	Inorganic-organic nanohybrid of MoS <sub>2</sub> -PANI for advanced photocatalytic application. <i>International Nano Letters</i> , 2019, 9, 127-139.	5.0	63
24	Electronic Structure and Room Temperature Ferromagnetism in Gd-doped Cerium Oxide Nanoparticles for Hydrogen Generation via Photocatalytic Water Splitting. <i>Global Challenges</i> , 2019, 3, 1800090.	3.6	62
25	Binary Fe-Co Alloy Nanoparticles Showing Significant Enhancement in Electrocatalytic Activity Compared with Bulk Alloys. <i>Journal of Physical Chemistry C</i> , 2010, 114, 18779-18784.	3.1	60
26	Pit assisted oxygen chemisorption on GaN surfaces. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 15201-15208.	2.8	60
27	Investigation of cation (Sn <sup>2+</sup> ) and anion (N <sup>3-</sup> ) substitution in favor of visible light photocatalytic activity in the layered perovskite K <sub>2</sub> La <sub>2</sub> Ti <sub>3</sub> O <sub>10</sub> . <i>Journal of Hazardous Materials</i> , 2011, 189, 502-508.	12.4	59
28	Current advances in solar-blind photodetection technology: using Ga <sub>2</sub> O <sub>3</sub> and AlGaN. <i>Journal of Materials Chemistry C</i> , 2022, 10, 1573-1593.	5.5	59
29	Extenuation of Stress and Defects in GaN Films Grown on a Metal-Organic Chemical Vapor Deposition-GaN/c-Sapphire Substrate by Plasma-Assisted Molecular Beam Epitaxy. <i>Crystal Growth and Design</i> , 2015, 15, 2144-2150.	3.0	56
30	Structural, optical and magnetic properties of Fe-doped CeO <sub>2</sub> samples probed using X-ray photoelectron spectroscopy. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 10141-10153.	2.2	55
31	Fabrication of GaN nano-towers based self-powered UV photodetector. <i>Scientific Reports</i> , 2021, 11, 10859.	3.3	55
32	GaN Nanotowers Grown on Si (111) and Functionalized with Au Nanoparticles and ZnO Nanorods for Highly Responsive UV Photodetectors. <i>ACS Applied Nano Materials</i> , 2020, 3, 8104-8116.	5.0	53
33	Studies of nanostructured copper/hydrogenated amorphous carbon multilayer films. <i>Journal of Alloys and Compounds</i> , 2011, 509, 1285-1293.	5.5	51
34	In-Situ Integration of Waste Coconut Shell Derived Activated Carbon/Polypyrrole/Rare Earth Metal Oxide (Eu <sub>2</sub> O <sub>3</sub> ): A Novel Step Towards Ultrahigh Volumetric Capacitance. <i>Electrochimica Acta</i> , 2017, 251, 532-545.	5.2	50
35	Enlightening gallium nitride-based UV photodetectors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12348-12354.	5.5	50
36	Surface chemistry and electronic structure of nonpolar and polar GaN films. <i>Applied Surface Science</i> , 2015, 345, 440-447.	6.1	49

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37	Nickel-shell assisted growth of nickel-cobalt hydroxide nanofibres and their symmetric/asymmetric supercapacitive characteristics. <i>Journal of Power Sources</i> , 2016, 325, 762-771.	7.8	49
38	GaN-UV photodetector integrated with asymmetric metal semiconductor metal structure for enhanced responsivity. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 8958-8963.	2.2	49
39	Ag@Au alloy nanoparticles prepared by electro-exploding wire technique. <i>Journal of Nanoparticle Research</i> , 2008, 10, 1027-1036.	1.9	48
40	Probing a Bifunctional Luminomagnetic Nanophosphor for Biological Applications: a Photoluminescence and Time-Resolved Spectroscopic Study. <i>Small</i> , 2011, 7, 1767-1773.	10.0	48
41	High yield synthesis of electrolyte heating assisted electrochemically exfoliated graphene for electromagnetic interference shielding applications. <i>RSC Advances</i> , 2015, 5, 19074-19081.	3.6	47
42	Boron-doped few-layer graphene nanosheet gas sensor for enhanced ammonia sensing at room temperature. <i>RSC Advances</i> , 2020, 10, 1007-1014.	3.6	46
43	Effect of nominal doping of Ag and Ni on the crystalline structure and photo-catalytic properties of mesoporous titania. <i>Materials Chemistry and Physics</i> , 2010, 124, 600-608.	4.0	45
44	Effect of Ni doping on the microstructure and high Curie temperature ferromagnetism in sol-gel derived titania powders. <i>Materials Chemistry and Physics</i> , 2012, 133, 471-479.	4.0	45
45	Size and alloying induced shift in core and valence bands of Pd-Ag and Pd-Cu nanoparticles. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	45
46	Electrochemical and magnetic properties of nanostructured $\text{CoMn}_2\text{O}_4$ and $\text{Co}_2\text{MnO}_4$ . <i>RSC Advances</i> , 2015, 5, 84988-84998.	3.6	45
47	Environment-Friendly Mesoporous Magnetite Nanoparticles-Based Hydroelectric Cell. <i>Journal of Physical Chemistry C</i> , 2018, 122, 5908-5916.	3.1	45
48	Turning Hazardous Diesel Soot into High Performance Carbon/ $\text{MnO}_2$ Supercapacitive Energy Storage Material. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 450-459.	6.7	43
49	Au-Nanoplasmonics-Mediated Surface Plasmon-Enhanced GaN Nanostructured UV Photodetectors. <i>ACS Omega</i> , 2020, 5, 14535-14542.	3.5	43
50	Current Transport and Band Alignment Study of $\text{MoS}_2/\text{GaN}$ and $\text{MoS}_2/\text{AlGaN}$ Heterointerfaces for Broadband Photodetection Application. <i>ACS Applied Electronic Materials</i> , 2020, 2, 710-718.	4.3	43
51	Synthesis of hydrophilic carbon black; role of hydrophilicity in maintaining the hydration level and protonic conduction. <i>RSC Advances</i> , 2013, 3, 3917.	3.6	42
52	Ultrafast photoresponse and enhanced photoresponsivity of Indium Nitride based broad band photodetector. <i>Solar Energy Materials and Solar Cells</i> , 2017, 172, 376-383.	6.2	42
53	A high-performance hydrogen sensor based on a reverse-biased $\text{MoS}_2/\text{GaN}$ heterojunction. <i>Nanotechnology</i> , 2019, 30, 314001.	2.6	42
54	Redox behavior and optical response of nanostructured poly(3,4-ethylenedioxythiophene) films grown in a camphorsulfonic acid based micellar solution. <i>Electrochimica Acta</i> , 2008, 53, 3189-3199.	5.2	41

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55	Charge transfer, lattice distortion, and quantum confinement effects in Pd, Cu, and Pd@Cu nanoparticles; size and alloying induced modifications in binding energy. Applied Physics Letters, 2011, 98, .	3.3	40
56	Enhanced Electrocatalytic Activity of Copper@Cobalt Nanostructures. Journal of Physical Chemistry C, 2011, 115, 14526-14533.	3.1	39
57	Colloidal lead-free Cs <sub>2</sub> AgBiBr <sub>6</sub> double perovskite nanocrystals: Synthesis, uniform thin-film fabrication, and application in solution-processed solar cells. Nano Research, 2021, 14, 1126-1134.	10.4	39
58	Electro-optical response of tungsten oxide thin film nanostructures processed by a template-assisted electrodeposition route. Acta Materialia, 2007, 55, 6095-6107.	7.9	37
59	Surface-Engineered Nanostructure-Based Efficient Nonpolar GaN Ultraviolet Photodetectors. ACS Omega, 2018, 3, 2304-2311.	3.5	37
60	Selective gas sensing response from different loading of Ag in sol-gel mesoporous titania powders. Sensors and Actuators B: Chemical, 2011, 159, 112-120.	7.8	36
61	Phase control of nanostructured iron oxide for application to biosensor. Journal of Materials Chemistry B, 2013, 1, 464-474.	5.8	36
62	Defect induced broadband visible to near-infrared luminescence in ZnAl <sub>2</sub> O <sub>4</sub> nanocrystals. Applied Surface Science, 2019, 480, 945-950.	6.1	36
63	Ultra-thin GaN nanostructures based self-powered ultraviolet photodetector via non-homogeneous Au-GaN interfaces. Optical Materials, 2020, 102, 109820.	3.6	36
64	Layered vanadium oxide nanofibers as impressive electrocatalyst for hydrogen evolution reaction in acidic medium. Electrochimica Acta, 2019, 312, 89-99.	5.2	34
65	Correlation of growth temperature with stress, defect states and electronic structure in an epitaxial GaN film grown on c-sapphire via plasma MBE. Physical Chemistry Chemical Physics, 2016, 18, 8005-8014.	2.8	33
66	Photoconductivity and characterization of nitrogen incorporated hydrogenated amorphous carbon thin films. Journal of Applied Physics, 2012, 112, .	2.5	31
67	Optical band gap tuning of Ag doped Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. Journal of Materials Science: Materials in Electronics, 2017, 28, 11300-11305.	2.2	31
68	Edge enriched cobalt ferrite nanorods for symmetric/asymmetric supercapacitive charge storage. Electrochimica Acta, 2018, 283, 708-717.	5.2	31
69	Structural, vibrational and electronic properties of CuO nanoparticles synthesized via exploding wire technique. Ceramics International, 2018, 44, 2478-2484.	4.8	30
70	Probing the correlation between structure, carrier dynamics and defect states of epitaxial GaN film on (112̄,0) sapphire grown by rf-molecular beam epitaxy. RSC Advances, 2015, 5, 73261-73267.	3.6	29
71	Bio-functionalization of grade V titanium alloy with type I human collagen for enhancing and promoting human periodontal fibroblast cell adhesion – an in-vitro study. Colloids and Surfaces B: Biointerfaces, 2018, 161, 1-9.	5.0	29
72	Oxygen vacancy induced electrical conduction and room temperature ferromagnetism in system BaSn <sub>1-x</sub> Ni <sub>x</sub> O <sub>3</sub> (0 ≤ x ≤ 1/2). Applied Physics Express, 2017, 4, 116304.	10.6	28

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73	Low bias operated, fast response SnSe thin film Vis-NIR photodetector on glass substrate using one-step thermal evaporation technique. Journal of Alloys and Compounds, 2021, 879, 160370.	5.5	28
74	XPS investigation of ion beam induced conversion of GaAs(001) surface into GaN overlayer. Applied Surface Science, 2009, 256, 517-520.	6.1	27
75	Application of $KZnF_3$ as a Single Source Precursor for the Synthesis of Nanocrystals of $ZnO:F$ and $ZnO:F$ ; Synthesis, Characterization, Optical, and Photocatalytic Properties. Journal of Physical Chemistry C, 2011, 115, 10131-10139.	3.1	27
76	Novel borothermal process for the synthesis of nanocrystalline oxides and borides of niobium. Dalton Transactions, 2011, 40, 7879.	3.3	27
77	High transmittance contrast in amorphous to hexagonal phase of $Ge_2Sb_2Te_5$ : Reversible NIR-window. Applied Physics Letters, 2017, 111, .	3.3	27
78	A strategy to design lanthanide doped dual-mode phosphor mediated spectral convertor for solar cell applications. Journal of Luminescence, 2018, 196, 207-213.	3.1	27
79	Electronic states of self stabilized L10 FePt alloy nanoparticles. Applied Physics A: Materials Science and Processing, 2012, 109, 403-408.	2.3	26
80	Role of surface composition in morphological evolution of GaAs nano-dots with low-energy ion irradiation. Nanoscale Research Letters, 2012, 7, 552.	5.7	26
81	Effect of Metal Contacts on a GaN/Sapphire-Based MSM Ultraviolet Photodetector. Journal of Electronic Materials, 2018, 47, 6086-6090.	2.2	26
82	Preparation of nanocrystalline Pd/SnO <sub>2</sub> thin films deposited on alumina substrate by reactive magnetron sputtering for efficient CO gas sensing. Materials Research Bulletin, 2022, 148, 111692.	5.2	26
83	Increase in the Thermoelectric Efficiency of the Disordered Phase of Layered Antiferromagnetic $CuCrS_2$ . Journal of Electronic Materials, 2011, 40, 2368-2373.	2.2	25
84	Recent progress of flexible NO <sub>2</sub> and NH <sub>3</sub> gas sensors based on transition metal dichalcogenides for room temperature sensing. Materials Today Chemistry, 2022, 23, 100726.	3.5	25
85	Reduction of Rocksalt Phase in $Ag_{1-x}Ge_x$ -Doped $Ge_2Sb_2Te_5$ as a Potential Material for Reversible Near-Infrared Window. Physical Review Applied, 2018, 10, 041101.	3.8	24
86	Enhanced near-infrared luminescence in zinc aluminate bestowed by fuel-blended combustion approach. Journal of Alloys and Compounds, 2019, 797, 148-158.	5.5	24
87	Correlation of donor-acceptor pair emission on the performance of GaN-based UV photodetector. Materials Science in Semiconductor Processing, 2019, 98, 59-64.	4.0	24
88	New Approach to Clean GaN Surfaces. Materials Focus, 2014, 3, 218-223.	0.4	22
89	Effect of growth temperature on defects in epitaxial GaN film grown by plasma assisted molecular beam epitaxy. AIP Advances, 2014, 4, 027114.	1.3	22
90	Wet chemical etching induced stress relaxed nanostructures on polar & non-polar epitaxial GaN films. Physical Chemistry Chemical Physics, 2017, 19, 8787-8801.	2.8	22

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91	Core/Shell Nanocrystal Tailored Carrier Dynamics in Hysteresisless Perovskite Solar Cells with $\sim 14.20\%$ Efficiency and Long Operational Stability. Journal of Physical Chemistry Letters, 2020, 11, 591-600.	4.6	21
92	Highly efficient luminescence from hybrid structures of ZnO/multi-walled carbon nanotubes for high performance display applications. Nanotechnology, 2010, 21, 475701.	2.6	20
93	Room temperature ferromagnetism in sol-gel prepared Co-doped ZnO. Materials Science in Semiconductor Processing, 2012, 15, 314-318.	4.0	20
94	Facile synthesis and photoluminescence spectroscopy of 3D-triangular GaN nano prism islands. Dalton Transactions, 2014, 43, 11855-11861.	3.3	20
95	Epitaxial growth of GaN nanostructure by PA-MBE for UV detection application. Applied Surface Science, 2018, 449, 186-192.	6.1	20
96	Improved optical properties of ion beam irradiated (K,Na)NbO <sub>3</sub> thin films. Journal of Alloys and Compounds, 2020, 823, 153794.	5.5	20
97	Investigating the role of oxygen and related defects in the self-biased and moderate-biased performance of $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$ solar-blind photodetectors. Journal Physics D: Applied Physics, 2021, 54, 165102.	2.8	20
98	Formation of Sb submonolayer phases on high index Si(5512) surface. Surface Science, 2005, 596, 206-211.	1.9	19
99	A study of the temperature dependence of adsorption and silicidation kinetics at the Mg/Si(111) interface. Thin Solid Films, 2007, 515, 8192-8196.	1.8	19
100	DNA hybridization on silicon nanowires. Thin Solid Films, 2010, 519, 1151-1155.	1.8	19
101	CuO Barrier Limited Corrosion of Solid $\text{Cu}_{2}\text{O}$ Leading to Preferential Transport of Cu(I) Ion for Hollow $\text{Cu}_{7}\text{S}_{4}$ Cube Formation. Journal of Physical Chemistry C, 2011, 115, 12275-12282.	3.1	19
102	Effect of lanthanum ( $\text{La}^{3+}$ ) doping on the structural and electrical properties of double perovskite $\text{Sr}_{2}\text{NiMo}_{6}$ . RSC Advances, 2016, 6, 22094-22102.	3.6	19
103	Epitaxial growth of high In-content In <sub>0.41</sub> Ga <sub>0.59</sub> N/GaN heterostructure on (11 $\bar{2}$ 0) Al <sub>2</sub> O <sub>3</sub> substrate. Journal of Alloys and Compounds, 2016, 658, 470-475.	5.5	19
104	Influence of metallic surface states on electron affinity of epitaxial AlN films. Applied Surface Science, 2017, 407, 255-259.	6.1	19
105	Determination of band alignment at two-dimensional MoS <sub>2</sub> /Si van der Waals heterojunction. Journal of Applied Physics, 2018, 123, .	2.5	19
106	Magnetron configurations dependent surface properties of SnO <sub>2</sub> thin films deposited by sputtering process. Vacuum, 2020, 177, 109353.	3.5	19
107	Performance analysis of anomalous photocatalytic activity of Cr-doped TiO <sub>2</sub> nanoparticles [ $\text{Cr}(x)\text{TiO}_{2}(1-x)$ ]. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	19
108	Electronic structure analysis of GaN films grown on r- and a-plane sapphire. Journal of Alloys and Compounds, 2015, 645, 230-234.	5.5	18



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109	Carrier relaxation dynamics in defect states of epitaxial GaN/AlN/Si using ultrafast transient absorption spectroscopy. RSC Advances, 2015, 5, 83969-83975.	3.6	18
110	Electrical, Thermal and Spectroscopic Characterization of Bulk Bi <sub>2</sub> Se <sub>3</sub> Topological Insulator. Journal of Superconductivity and Novel Magnetism, 2017, 30, 2031-2036.	1.8	18
111	Boosting Sensing Performance of Vacancy-Containing Vertically Aligned MoS <sub>2</sub> Using rGO Particles. IEEE Sensors Journal, 2019, 19, 10214-10220.	4.7	18
112	Impact on photon-assisted charge carrier transport by engineering electrodes of GaN based UV photodetectors. Journal of Alloys and Compounds, 2019, 785, 883-890.	5.5	18
113	Phase dependent radiation hardness and performance analysis of amorphous and polycrystalline Ga <sub>2</sub> O <sub>3</sub> solar-blind photodetector against swift heavy ion irradiation. Journal of Applied Physics, 2020, 128, .	2.5	18
114	Room temperature synthesis of perovskite (MAPbI <sub>3</sub> ) single crystal by anti-solvent assisted inverse temperature crystallization method. Journal of Crystal Growth, 2020, 537, 125598.	1.5	18
115	Adsorption induced faceting and superstructural phase diagram of the Sb/Si(5512) interface. Surface Science, 2006, 600, 2745-2751.	1.9	17
116	Electronic interaction and bipolar resistive switching in copper oxide-multilayer graphene hybrid interface: Graphene as an oxygen ion storage and blocking layer. Applied Physics Letters, 2011, 99, 222109.	3.3	17
117	Nanostructured GaN and AlGaIn/GaN heterostructure for catalyst-free low-temperature CO sensing. Applied Surface Science, 2019, 481, 379-384.	6.1	17
118	Excitation energy dependent switchable emission in SrZnO <sub>2</sub> nanophosphors: XAS and luminescence studies. Journal of Materials Chemistry C, 2020, 8, 3147-3155.	5.5	17
119	SnO <sub>2</sub> /Au multilayer heterostructure for efficient CO sensing. Materials Chemistry and Physics, 2020, 244, 122741.	4.0	17
120	Role of growth temperature on formation of single crystalline GaN nanorods on flexible titanium foil by laser molecular beam epitaxy. Journal of Crystal Growth, 2019, 509, 23-28.	1.5	16
121	Influence of active nitrogen species on surface and optical properties of epitaxial GaN films. Journal of Alloys and Compounds, 2016, 661, 461-465.	5.5	15
122	Clustering and layering of In adatoms on low and high index silicon surfaces: A comparative study. Surface Science, 2010, 604, 1972-1977.	1.9	14
123	Stabilization of Mn(IV) in nanostructured zinc manganese oxide and their facile transformation from nanospheres to nanorods. Journal of Materials Chemistry, 2011, 21, 8566.	6.7	14
124	Precursor ratio optimizations for the synthesis of colloidal CZTS nanoparticles for photocatalytic degradation of malachite green. Journal of Physics and Chemistry of Solids, 2018, 122, 8-18.	4.0	14
125	Assessment of optical, mechanical and nonlinear properties of potassium acid phthalate single crystal: a potential candidate for optoelectronic applications. Materials Research Express, 2020, 7, 015705.	1.6	14
126	Controlled growth of GaN nanorods directly on flexible Mo metal foil by laser molecular beam epitaxy. Materials Science in Semiconductor Processing, 2020, 111, 104988.	4.0	14



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127	Room temperature sputtered nanocrystalline SnO <sub>2</sub> thin films sensitized with Pd nanoparticles for high performance CO gas sensing application. <i>Optical Materials</i> , 2022, 128, 112362.	3.6	14
128	Bipolar resistive switching properties of Ti-CuO/(hexafluoro-hexa-peri-hexabenzocoronene)-Cu hybrid interface device: Influence of electronic nature of organic layer. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	13
129	Role of nanowire length on the performance of a self-driven NIR photodetector based on mono/bi-layer graphene (camphor)/Si-nanowire Schottky junction. <i>Nanotechnology</i> , 2020, 31, 225208.	2.6	13
130	Bulk growth of Iminodiacetic acid single crystal and its characterization for nonlinear optical applications. <i>Bulletin of Materials Science</i> , 2021, 44, 1.	1.7	13
131	Investigation on synthesis, growth, Hirshfeld surface and third order nonlinear optical properties of Urea-Succinic Acid single crystal: A potential candidate for self-defocusing lasing application. <i>Optical Materials</i> , 2022, 124, 112051.	3.6	13
132	van der Waals epitaxy of transition metal dichalcogenides via molecular beam epitaxy: looking back and moving forward. <i>Materials Advances</i> , 2022, 3, 6142-6156.	5.4	13
133	Physico-chemical characteristics of high performance polymer modified by low and atmospheric pressure plasma. <i>Surface Engineering and Applied Electrochemistry</i> , 2012, 48, 117-126.	0.8	12
134	Light Induced Electron-Phonon Scattering Mediated Resistive Switching in Nanostructured Nb Thin Film Superconductor. <i>Scientific Reports</i> , 2017, 7, 881.	3.3	12
135	X-ray Photoelectron Spectroscopy, Magnetotransport and Magnetisation Study of Nb <sub>2</sub> PdS <sub>5</sub> Superconductor. <i>Journal of Superconductivity and Novel Magnetism</i> , 2018, 31, 943-949.	1.8	12
136	Influence of temperature and Al/N ratio on structural, chemical & electronic properties of epitaxial AlN films grown via PAMBE. <i>Applied Surface Science</i> , 2018, 455, 919-923.	6.1	12
137	Studies of Ultrafast Transient Absorption Spectroscopy of Gold Nanorods in an Aqueous Solution. <i>ACS Omega</i> , 2019, 4, 12626-12631.	3.5	12
138	Significantly high electromagnetic shielding effectiveness in polypyrrole synthesized by eco-friendly and cost-effective technique. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49566.	2.6	12
139	Growth and luminescence characteristics of zinc oxide thin films deposited by ALD technique. <i>Journal of Luminescence</i> , 2021, 233, 117797.	3.1	12
140	Plasmonic Au Nanoparticles Sensitized MoS <sub>2</sub> , for Bifunctional NO <sub>2</sub> , and Light Sensing. <i>IEEE Sensors Journal</i> , 2021, 21, 4190-4197.	4.7	12
141	Influence of Temperature on Photodetection Properties of Honeycomb-like GaN Nanostructures. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100593.	3.7	12
142	A Comparative Photoelectron Spectroscopic Analysis of MBE and MOCVD Grown Epitaxial GaN Films. <i>Science of Advanced Materials</i> , 2015, 7, 546-551.	0.7	12
143	Dimension dependency of tungsten oxide for efficient gas sensing. <i>Environmental Science: Nano</i> , 2022, 9, 40-60.	4.3	12
144	Band alignment and Schottky behaviour of InN/GaN heterostructure grown by low-temperature low-energy nitrogen ion bombardment. <i>RSC Advances</i> , 2014, 4, 27308-27314.	3.6	11

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