

# Sanjeev Kumar

## List of Publications by Year in descending order

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101  
papers

1,278  
citations

361413

20  
h-index

477307

29  
g-index

102  
all docs

102  
docs citations

102  
times ranked

1175  
citing authors

#	ARTICLE	IF	CITATIONS
1	On-Demand Reconfigurable WiMAX/WLAN UWB-X Band High Isolation 2 <sup>nd</sup> -2 MIMO Antenna for Imaging Applications. IETE Journal of Research, 2023, 69, 5993-6005.	2.6	10
2	Magnetolectric coupling susceptibility in novel lead-free 0 <sup>th</sup> type multiferroic particulate composites of (1-x)Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> -(x)CoCr <sub>0.4</sub> Fe <sub>1.6</sub> O <sub>4</sub> . Materials Chemistry and Physics, 2022, 282, 126004.	4.0	6
3	Microstructural tuning: A route towards realization of enhanced pyroelectric figure of merits of Sr and Zr doped barium titanate ceramics. Materials Today Communications, 2022, 31, 103302.	1.9	1
4	Investigations on magnetolectric response in binary ferroelectric {0.94Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> (NBT)-0.06Ba <sub>0.85</sub> Sr <sub>0.15</sub> Zr <sub>0.1</sub> Ti <sub>0.9</sub> O <sub>3</sub> (BSZT)}-ferrimagnetic (NiFe <sub>2</sub> O <sub>4</sub> ) particulate composites. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	4
5	Thermoelectric rectification in graphene based Y-junction. , 2022, 167, 207242.		2
6	Self-biased characteristics of NZCF/BCZT layered magnetolectric composites: A novel coupling paradigm in magnetolectricity. Materials Chemistry and Physics, 2022, 287, 126302.	4.0	4
7	Strain mediated magnetolectric coupling response in Ba <sub>0.85</sub> Ca <sub>0.15</sub> Ti <sub>0.9</sub> Zr <sub>0.1</sub> O <sub>3</sub> CoFe <sub>1.95</sub> Mg <sub>0.05</sub> O <sub>4</sub> particulate multiferroic composites. Journal of Materials Science: Materials in Electronics, 2022, 33, 14264-14280.	2.2	1
8	Quad-band polarization sensitive terahertz metamaterial absorber using Gemini-shaped structure. Results in Optics, 2022, 8, 100254.	2.0	9
9	Investigation of structural, dielectric, and magnetolectric properties of K <sub>0.5</sub> Na <sub>0.5</sub> NbO <sub>3</sub> MnFe <sub>2</sub> O <sub>4</sub> lead free composite system. Journal of Alloys and Compounds, 2021, 857, 158251.	5.5	10
10	Observation of Shubnikov <sup>de</sup> Haas Oscillations, Planar Hall Effect, and Anisotropic Magnetoresistance at the Conducting Interface of EuO <sub>3</sub> KTaO <sub>3</sub> . Advanced Quantum Technologies, 2021, 4, .	3.9	33
11	Effect of polar nano region dynamics on pyroelectric energy conversion efficiency of doped BaTiO <sub>3</sub> . Journal of Alloys and Compounds, 2021, 857, 157605.	5.5	5
12	Thermoelectric Effect in Graphene-Based Three-Terminal Junction. IEEE Nanotechnology Magazine, 2021, 20, 733-738.	2.0	3
13	Comparative radio <sup>frequency</sup> and crosstalk analysis of carbon <sup>based</sup> nano <sup>interconnects</sup> . IET Circuits, Devices and Systems, 2021, 15, 493-503.	1.4	1
14	Enhanced room temperature multiferroic behaviour of Ni-doped Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> ceramics. Journal of Materials Science: Materials in Electronics, 2021, 32, 10255-10265.	2.2	5
15	InGaAs self-switching diode-based THz bridge rectifier. Semiconductor Science and Technology, 2021, 36, 075017.	2.0	4
16	Magnetolectric coupling enhancement in lead-free <sup>ABCTZ</sup> xNZFO composites. Journal of Materials Science: Materials in Electronics, 2021, 32, 17512-17523.	2.2	15
17	Enhanced dielectric response under applied magnetic field in 0 <sup>th</sup> particulate composites of (1 <sup>st</sup> x)PbZr <sub>0.95</sub> Ti <sub>0.05</sub> O <sub>3</sub> -(x)Ni <sub>0.7</sub> Zn <sub>0.3</sub> Fe <sub>2</sub> O <sub>4</sub> . Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	4
18	Flattening of free energy profile and enhancement of energy storage efficiency near morphotropic phase boundary in lead-free BZT-xBCT. Journal of Alloys and Compounds, 2021, 873, 159824.	5.5	16

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19	Enhanced magnetoelectric coupling in environmental friendly lead-free Ni <sub>0.8</sub> Zn <sub>0.2</sub> Fe <sub>2</sub> O <sub>4</sub> –Ba <sub>0.85</sub> Ca <sub>0.15</sub> Zr <sub>0.1</sub> Ti <sub>0.9</sub> O <sub>3</sub> laminate composites. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 25481-25492.	2.2	5
20	Critical behavior of relaxor Pb <sub>0.91</sub> La <sub>0.09</sub> Zr <sub>0.65</sub> Ti <sub>0.35</sub> O <sub>3</sub> : Interplay between polar nano regions, electrocaloric and energy storage response. <i>Journal of Alloys and Compounds</i> , 2021, 884, 161067.	5.5	7
21	An Ultrathin Compact Polarization-Sensitive Triple-band Microwave Metamaterial Absorber. <i>Journal of Electronic Materials</i> , 2021, 50, 1506-1513.	2.2	25
22	Thermoelectric rectification in a graphene-based triangular ballistic rectifier (G-TBR). <i>Journal of Computational Electronics</i> , 2021, 20, 2308-2316.	2.5	5
23	A Highly Efficient and Low Noise n <sup>+</sup> -ZnO/p-Si Heterojunction Based UV Detector. , 2021, , .		0
24	Investigations on multiferroic properties of lead free (1-x)BCZT-xCZFMo based particulate ceramic composites. <i>Solid State Sciences</i> , 2020, 108, 106380.	3.2	17
25	Enhancement in the piezoelectric properties in lead-free BZT-xBCT dense ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 21651-21660.	2.2	7
26	Insights on improved room temperature ferromagnetism in chemically co-precipitated Ru-doped ZnS nanopowders. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	2.3	3
27	RF analysis of intercalated graphene nanoribbon-based global-level interconnects. <i>Journal of Computational Electronics</i> , 2020, 19, 1002-1013.	2.5	7
28	A highly efficient bilayer graphene/ZnO/silicon nanowire based heterojunction photodetector with broadband spectral response. <i>Nanotechnology</i> , 2020, 31, 405205.	2.6	56
29	Graphene-based tunable multi-band metamaterial polarization-insensitive absorber for terahertz applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 11878-11886.	2.2	38
30	Ultra-thin metamaterial perfect absorbers for single-/dual-/multi-band microwave applications. <i>IET Microwaves, Antennas and Propagation</i> , 2020, 14, 390-396.	1.4	58
31	Strongly enhanced polarization and dielectric breakdown strength of PZT95/5 by doping of Ce <sup>4+</sup> and Nb <sup>5+</sup> . <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 13104-13110.	2.2	4
32	Enhanced pyroelectric figure of merits in Sr and Zr co-doped porous BaTiO <sub>3</sub> ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 2337-2346.	2.2	13
33	The modified magnetodielectric response in KNN-CZFMo based particulate multiferroic composite system. <i>Journal of Advanced Dielectrics</i> , 2020, 10, 2050024.	2.4	4
34	Enhanced Optoelectronic Properties of Bilayer Graphene/HgCdTe-Based Single- and Dual-Junction Photodetectors in Long Infrared Regime. <i>IEEE Nanotechnology Magazine</i> , 2019, 18, 781-789.	2.0	45
35	Temperature dependent structural and electrical analysis of Cr-doped multiferroic GaFeO <sub>3</sub> ceramics. <i>Materials Research Express</i> , 2019, 6, 115704.	1.6	3
36	Impact of Powder-mixed Electrical Discharge Machining on Surface Hardness of AISI D3 Die Steel. , 2019, , .		2

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37	Analysis of nonlinear characteristics of a graphene based four-terminal ballistic rectifier using a drift-diffusion model. <i>Nanoscale Advances</i> , 2019, 1, 4119-4127.	4.6	6
38	Extraction of Trench Capacitance and Reverse Recovery Time of InGaAs Self-Switching Diode. <i>IEEE Nanotechnology Magazine</i> , 2019, 18, 925-931.	2.0	9
39	Crystal structure correlation of ferroelectric and dielectric properties of Nb doped PZT95/5. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 5014-5020.	2.2	3
40	The role of a weakly coordinating thioether group in ligation controlled molecular self-assemblies and their inter-conversions in Ni(II) complexes of L-methionine derived ligand. <i>New Journal of Chemistry</i> , 2019, 43, 11222-11232.	2.8	5
41	Bilayer Graphene/HgCdTe Based Self-powered Mid-wave IR nBn Photodetector. , 2019, , .		3
42	Drift diffusion modelling of three branch junction (TBR) based nano-rectifier. , 2019, , .		3
43	Investigations on structural, optical and magnetic properties of Fe and Dy co-doped ZnO nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 3850-3855.	2.2	21
44	Effect of sintering temperature on structure and properties of GaFeO <sub>3</sub> . <i>Journal of Alloys and Compounds</i> , 2018, 737, 646-654.	5.5	15
45	A Highly Efficient Bilayer Graphene-HgCdTe Heterojunction Based $\text{p}^+\text{-n}$ Photodetector for Long Wavelength Infrared (LWIR). , 2018, , .		5
46	Dual Band Graphene Based Metamaterial Absorber for Terahertz Applications. , 2018, , .		8
47	Bilayer graphene/HgCdTe based very long infrared photodetector with superior external quantum efficiency, responsivity, and detectivity. <i>RSC Advances</i> , 2018, 8, 39579-39592.	3.6	34
48	Ultra-thin and Dual Band Metamaterial Absorber for Terahertz Applications. , 2018, , .		3
49	Effect of Zn doping on structural and ferroelectric properties of GaFeO <sub>3</sub> for futuristic spintronic applications. , 2018, , .		0
50	Performance evaluation of the WEDM process of aeronautics super alloy. <i>Materials and Manufacturing Processes</i> , 2018, 33, 1793-1808.	4.7	27
51	Gd doping effect on structural, electrical and magnetic properties of ZnO thin films synthesized by sol-gel spin coating technique. <i>Electronic Materials Letters</i> , 2017, 13, 129-135.	2.2	13
52	Relaxor dielectric behavior in BaTiO <sub>3</sub> substituted BiFeO <sub>3</sub> –PbTiO <sub>3</sub> multiferroic system. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 10420-10426.	2.2	11
53	Multiferroic effects in MFe <sub>2</sub> O <sub>4</sub> /BaTiO <sub>3</sub> (M = Mn, Co, Ni, Zn) nanocomposites. <i>Journal of Alloys and Compounds</i> , 2017, 709, 344-355.	5.5	36
54	Significant reduction in the leakage current of Cr-doped GaFeO <sub>3</sub> synthesized by sol-gel method. <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1.	2.3	13

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55	Gd doping induced weak ferromagnetic ordering in ZnS nanoparticles synthesized by low temperature co-precipitation technique. <i>Materials Chemistry and Physics</i> , 2017, 186, 124-130.	4.0	23
56	Large scale synthesis of uniform Au-Co alloy and multilayer nanowires using electrochemical deposition and their characterization. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 4530-4535.	2.2	1
57	III-V heterostructure based three terminal thermal rectifier. , 2017, , .		3
58	I-shaped metamaterial antenna for X-band applications. , 2017, , .		7
59	Structural, magnetic and electronic properties of iron doped barium strontium titanate. <i>RSC Advances</i> , 2016, 6, 112363-112369.	3.6	21
60	Structural, thermal and electrical characterizations of multiwalled carbon nanotubes and polyaniline composite. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	0
61	Tuning ferromagnetism in zinc oxide nanoparticles by chromium doping. <i>Applied Nanoscience (Switzerland)</i> , 2015, 5, 975-981.	3.1	15
62	Investigations on doping induced changes in structural, electronic structure and magnetic behavior of spintronic Cr-ZnS nanoparticles. <i>Superlattices and Microstructures</i> , 2015, 83, 785-795.	3.1	32
63	Enhanced magnetism in Cr-doped ZnO nanoparticles with nitrogen co-doping synthesized using sol-gel technique. <i>Applied Nanoscience (Switzerland)</i> , 2015, 5, 367-372.	3.1	36
64	Improved magnetism in Cr doped ZnS nanoparticles with nitrogen co-doping synthesized using chemical co-precipitation technique. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 9158-9163.	2.2	14
65	Electrochemical synthesis of highly crystalline copper nanowires. <i>AIP Conference Proceedings</i> , 2015, , .	0.4	0
66	Effect of Ni-doping concentration on structural, optical and magnetic properties of CdSe nanorods. <i>Materials Science in Semiconductor Processing</i> , 2014, 26, 1-6.	4.0	32
67	Effects of annealing on structural and magnetic properties of template synthesized cobalt nanowires useful as data storage and nano devices. <i>Journal of Materials Science: Materials in Electronics</i> , 2014, 25, 124-127.	2.2	16
68	Structural, optical and magnetic characterization of Ru doped ZnO nanorods. <i>Journal of Alloys and Compounds</i> , 2014, 588, 705-709.	5.5	43
69	Enhancement of room temperature ferromagnetism in Cd <sub>1-x</sub> Ni <sub>x</sub> Se nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2014, 25, 2267-2272.	2.2	4
70	Structural, optical and magnetic characterization of ZnO nanorods synthesized using hydrothermal technique at low temperature. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 70, 506-510.	2.4	8
71	Large-scale synthesis of Au-Ni alloy nanowires using electrochemical deposition. <i>Applied Nanoscience (Switzerland)</i> , 2013, 3, 101-107.	3.1	6
72	Structural, dielectric and magnetic characterization of large scale template synthesized Gd doped BiFeO <sub>3</sub> nanowires. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 2112-2115.	2.2	11

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73	Structural and magnetic characterization of electrochemically deposited Co-Cu multilayer nanowires. Journal of Materials Science: Materials in Electronics, 2013, 24, 1086-1089.	2.2	4
74	Room temperature ferromagnetism in Ni doped ZnS nanoparticles. Journal of Alloys and Compounds, 2013, 554, 357-362.	5.5	95
75	Structural, optical, and magnetic characterization of Co and N co-doped ZnO nanopowders. Journal of Materials Science, 2013, 48, 2618-2623.	3.7	18
76	Structural and optical properties of Na doped ZnO nanocrystalline thin films synthesized using sol-gel spin coating technique. Journal of Sol-Gel Science and Technology, 2013, 67, 50-55.	2.4	21
77	An Experimental Study of the Phenomenon of Surface Alloying by EDM Process Using Inconel Tool Electrode. , 2013, , .		2
78	LARGE SCALE SYNTHESIS OF Ag <sub>2</sub> S NANOWIRES AND THEIR ELECTRICAL CHARACTERIZATION. International Journal of Nanoscience, 2012, 11, 1250012.	0.7	2
79	Synthesis and characterization of Ni-doped CdSe nanoparticles: magnetic studies in 300-100 K temperature range. Applied Nanoscience (Switzerland), 2012, 2, 437-443.	3.1	16
80	Chemical Synthesis of AgCl Microstructures Using Etched Ion Track Polycarbonate Membranes. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2012, 42, 1242-1245.	0.6	4
81	Magnetic and structural characterization of transition metal co-doped CdS nanoparticles. Applied Nanoscience (Switzerland), 2012, 2, 127-131.	3.1	36
82	Large scale synthesis of polyaniline nanowires and their characterization. Journal of Materials Science: Materials in Electronics, 2012, 23, 1260-1262.	2.2	4
83	Fabrication and electrical characterization of highly ordered copper nanowires. Applied Nanoscience (Switzerland), 2012, 2, 7-13.	3.1	14
84	Electrochemical Deposition and Characterization of Cu-Ni Multilayer Nanowires. Science of Advanced Materials, 2012, 4, 1254-1257.	0.7	1
85	Synthesis and Characterization of ZnO Nanoparticles Using Combustion Method. AIP Conference Proceedings, 2011, , .	0.4	3
86	Electrochemical synthesis of copper nanowires in anodic alumina membrane and their impedance analysis. Superlattices and Microstructures, 2011, 50, 698-702.	3.1	18
87	Electrodeless growth of silver iodide nanowires in a polycarbonate membrane using chemical reaction. Journal of Materials Science: Materials in Electronics, 2011, 22, 244-247.	2.2	5
88	Optical studies of electrochemically synthesized CdS nanowires. Journal of Materials Science: Materials in Electronics, 2011, 22, 335-338.	2.2	5
89	Room temperature ferromagnetic behavior of Eu doped Cd <sub>1-x</sub> Zn <sub>x</sub> S nanoparticles. Journal of Materials Science: Materials in Electronics, 2011, 22, 523-526.	2.2	10
90	Room temperature magnetism in Ni-doped CdSe nanoparticles. Journal of Materials Science: Materials in Electronics, 2011, 22, 901-904.	2.2	11

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91	Room temperature ferromagnetism in solvothermally synthesized pure CdSe and CdSe:Ni nanorods. Journal of Materials Science: Materials in Electronics, 2011, 22, 1456-1459.	2.2	10
92	Investigating surface properties of OHNS die steel after electrical discharge machining with manganese powder mixed in the dielectric. International Journal of Advanced Manufacturing Technology, 2010, 50, 625-633.	3.0	28
93	LARGE-SCALE SYNTHESIS OF UNIFORM SILVER BROMIDE NANOWIRES USING ION TRACK MEMBRANE AS TEMPLATE. Functional Materials Letters, 2010, 03, 259-262.	1.2	0
94	Large-scale synthesis of uniform nickel nanowires and their characterisation. Journal of Experimental Nanoscience, 2010, 5, 126-133.	2.4	10
95	Synthesis and characterisation of selenium nanowires using template synthesis. Journal of Experimental Nanoscience, 2009, 4, 341-346.	2.4	15
96	ELECTROLYTIC TRANSPORT THROUGH CYLINDRICAL ETCHED PORES IN POLYETHYLENE TEREPHTHALATE TRACK-ETCHED MEMBRANE. Modern Physics Letters B, 2008, 22, 1415-1421.	1.9	1
97	MEASUREMENT OF AVERAGE ETCHED PORE RADIUS IN ION TRACK MEMBRANES THROUGH CONDUCTOMETRIC TECHNIQUE. Modern Physics Letters B, 2008, 22, 2993-2998.	1.9	4
98	EFFECT OF MICROWAVE IRRADIATION ON COPPER NANOWIRES SYNTHESIZED BY ELECTROCHEMICAL DEPOSITION THROUGH ION TRACK MEMBRANES AS TEMPLATES. Modern Physics Letters B, 2007, 21, 1351-1356.	1.9	2
99	On the preparation and asymmetric electric transport behavior of conical channels in polyethylene terephthalate. Radiation Measurements, 2003, 36, 757-760.	1.4	7
100	Electric Discharge Machining of 10 vol% Al <sub>2</sub> O <sub>3</sub> /Al Metal Matrix Composite - An Experimental Study. Materials Science Forum, 0, 751, 9-19.	0.3	7
101	Unique Signatures of Rashba Effect in Angle Resolved Magnetoresistance. Advanced Quantum Technologies, 0, , 2100105.	3.9	4