Shashwati Sen

List of Publications by Year
in descending order

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116 papers	3,203 citations	147801 31 h-index	161849 54 g-index
117 all docs	117 docs citations	117 times ranked	3907 citing authors

#	Article	IF	Citations
1	Synthesis and Characterization of Polypyrrole (PPy) Thin Films. Soft Nanoscience Letters, 2011, 01, 6-10.	0.8	363
2	Copper doped SnO2 nanowires as highly sensitive H2S gas sensor. Sensors and Actuators B: Chemical, 2009, 138, 587-590.	7.8	155
3	Synthesis of Fe 2 O 3 nanoparticles for nitrogen dioxide gas sensing applications. Ceramics International, 2013, 39, 6453-6460.	4.8	140
4	Nitrogen dioxide (NO2) sensing performance of p-polypyrrole/n-tungsten oxide hybrid nanocomposites at room temperature. Organic Electronics, 2015, 16, 195-204.	2.6	124
5	Fabrication of nanostructured ZnO thin film sensor for NO2 monitoring. Ceramics International, 2012, 38, 2685-2692.	4.8	118
6	Novel method for fabrication of room temperature polypyrroleâ€“ZnO nanocomposite NO2 sensor. Measurement: Journal of the International Measurement Confederation, 2012, 45, 1989-1996.	5.0	103
7	Solâ€“gel synthesis of nickel oxide thin films and their characterization. Thin Solid Films, 2012, 520, 4835-4840.	1.8	98
8	Room Temperature Ammonia Gas Sensor Based on Polyaniline-TiO$_{2}$ Nanocomposite. IEEE Sensors Journal, 2011, 11, 3417-3423.	4.7	90
9	Room temperature operating ammonia sensor based on tellurium thin films. Sensors and Actuators B: Chemical, 2004, 98, 154-159.	7.8	81
10	Growth of SnO2/W18O49 nanowire hierarchical heterostructure and their application as chemical sensor. Sensors and Actuators B: Chemical, 2010, 147, 453-460.	7.8	78
11	Fussy nanofibrous network of polyaniline (PANi) for NH3 detection. Synthetic Metals, 2012, 162, 1822-1827.	3.9	72
12	Structural, Morphological, Optical, and Electrical Properties of PANi-ZnO Nanocomposites. International Journal of Polymeric Materials and Polymeric Biomaterials, 2012, 61, 809-820.	3.4	67
13	Facile and efficient route for preparation of polypyrroleâ€ZnO nanocomposites: Microstructural, optical, and charge transport properties. Journal of Applied Polymer Science, 2012, 125, E541.	2.6	67
14	Measurements on room temperature gas sensing properties of CSA doped polyanilineâ€“ZnO nanocomposites. Measurement: Journal of the International Measurement Confederation, 2012, 45, 243-249.	5.0	65
15	Nanocrystalline CuO thin films: synthesis, microstructural and optoelectronic properties. Journal of Materials Science: Materials in Electronics, 2012, 23, 1492-1499.	2.2	64
16	Highly sensitive hydrogen sulphide sensors operable at room temperature. Sensors and Actuators B: Chemical, 2006, 115, 270-275.	7.8	63
17	Polypyrrole Thin Film: Room Temperature Ammonia Gas Sensor. IEEE Sensors Journal, 2011, 11, 2137-2141.	4.7	63
18	Polypyrroleâ€“ZnO hybrid sensor: Effect of camphor sulfonic acid doping on physical and gas sensing properties. Synthetic Metals, 2012, 162, 1598-1603.	3.9	55

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19	Synthesis of Tellurium Nanostructures by Physical Vapor Deposition and Their Growth Mechanism. Crystal Growth and Design, 2008, 8, 238-242.	3.0	54
20	Development of nanostructured polyanilineâ€“titanium dioxide gas sensors for ammonia recognition. Journal of Applied Polymer Science, 2012, 125, 1418-1424.	2.6	54
21	Degradation behavior of MgB2 superconductor. Physica C: Superconductivity and Its Applications, 2001, 363, 208-214.	1.2	53
22	New Method for Fabrication of CSA Doped PANi- ${m TiO}_{2}$ Thin-Film Ammonia Sensor. IEEE Sensors Journal, 2011, 11, 2980-2985.	4.7	46
23	New process for synthesis of ZnO thin films: Microstructural, optical and electrical characterization. Journal of Alloys and Compounds, 2011, 509, 10055-10061.	5.5	44
24	Novel method for fabrication of NiO sensor for NO2 monitoring. Journal of Materials Science: Materials in Electronics, 2013, 24, 368-375.	2.2	44
25	Facile method of synthesis of polyaniline-SnO2 hybrid nanocomposites: Microstructural, optical and electrical transport properties. Synthetic Metals, 2013, 178, 1-9.	3.9	42
26	New process for synthesis of nickel oxide thin films and their characterization. Journal of Alloys and Compounds, 2011, 509, 9065-9070.	5.5	37
27	Novel method of fabrication of polyanilineâ€“CdS nanocomposites: Structural, morphological and optoelectronic properties. Ceramics International, 2012, 38, 3999-4007.	4.8	36
28	Nanocrystalline SnO2 thin films: Structural, morphological, electrical transport and optical studies. Journal of Alloys and Compounds, 2013, 563, 300-306.	5.5	36
29	Enhanced Field-Emission from SnO₂:WO_{2.72} Nanowire Heterostructures. ACS Applied Materials & Interfaces, 2011, 3, 4730-4735.	8.0	33
30	Organicâ€“Inorganic Composite Films Based on Gd₃Ga₃Al₂O₁₂:Ce Scintillator Nanoparticles for X-ray Imaging Applications. ACS Applied Materials & Interfaces, 2017, 9, 37310-37320.	8.0	33
31	Effect of grain boundaries on paraconductivity of YBa 2 Cu 3 O x. Journal of Physics and Chemistry of Solids, 2002, 63, 1797-1803.	4.0	32
32	Fabrication of Nanocrystalline TiO₂ Thin Film Ammonia Vapor Sensor. Journal of Sensor Technology, 2011, 01, 9-16.	1.0	31
33	Camphor Sulfonic Acid Doped Polyaniline-Titanium Dioxide Nanocomposite: Synthesis, Structural, Morphological, and Electrical Properties. International Journal of Polymeric Materials and Polymeric Biomaterials, 2011, 60, 979-987.	3.4	29
34	Thermally stimulated luminescence process in copper and silver co-doped lithium tetraborate single crystals and its implication to dosimetry. Journal of Luminescence, 2013, 137, 28-31.	3.1	29
35	Chlorine gas sensors using one-dimensional tellurium nanostructures. Talanta, 2009, 77, 1567-1572.	5.5	28
36	Photo-luminescence properties of Cu and Ag doped Li2B4O7 single crystals at low temperatures. Journal of Luminescence, 2012, 132, 1101-1105.	3.1	28

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37	New process for fabrication of polyanilineâ€“CdS nanocomposites: Structural, morphological and optoelectronic investigations. Journal of Physics and Chemistry of Solids, 2013, 74, 236-244.	4.0	28
38	Polypyrroleâ€“ZnO nanohybrids: effect of CSA doping on structure, morphology and optoelectronic properties. Applied Nanoscience (Switzerland), 2013, 3, 423-429.	3.1	27
39	Synthesis and characterization of MgB2 superconductor. Physica C: Superconductivity and Its Applications, 2001, 363, 149-154.	1.2	23
40	Tunable blue-green emission from ZnS(Ag) nanostructures grown by hydrothermal synthesis. Journal of Materials Research, 2018, 33, 3963-3970.	2.6	23
41	Luminescence properties of CaF2:Mn optically transparent ceramic. Journal of Luminescence, 2015, 166, 222-226.	3.1	22
42	Fabrication, properties and thermo-luminescent dosimetric application of CaF2:Mn transparent ceramic. Nuclear Instruments & Methods in Physics Research B, 2012, 287, 51-55.	1.4	21
43	Magnetic field dependent microwave absorption studies on a MgB2superconductor. Superconductor Science and Technology, 2001, 14, 572-575.	3.5	18
44	Effect of deposition conditions on the microstructure and gas-sensing characteristics of Te thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 131, 156-161.	3.5	18
45	Tunable photoluminescence properties of Dy3+ doped LLZO phosphors for WLED and dosimetry applications. Ceramics International, 2022, 48, 1402-1407.	4.8	17
46	Growth of CsI:Tl crystals in carbon coated silica crucibles by the gradient freeze technique. Journal of Crystal Growth, 2012, 351, 88-92.	1.5	16
47	Development of nanostructured ZnO thin film sensor for NO₂detection. Journal of Experimental Nanoscience, 2014, 9, 482-490.	2.4	16
48	Structural and luminescence properties of Gd2Si2O7:Ce prepared by solution combustion followed by heat treatment. Journal of Alloys and Compounds, 2015, 630, 68-73.	5.5	16
49	Probing Molecular Packing at Engineered Interfaces in Organic Field Effect Transistor and Its Correlation with Charge Carrier Mobility. ACS Applied Materials & Interfaces, 2015, 7, 10169-10177.	8.0	16
50	Investigations on Substrate Temperature-Induced Growth Modes of Organic Semiconductors at Dielectric/semiconductor Interface and Their Correlation with Threshold Voltage Stability in Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2016, 8, 3376-3385.	8.0	16
51	Optically stimulated luminescence in Ag doped Li2B4O7 single crystal and its sensitivity to neutron detection and dosimetry in OSL mode. Radiation Measurements, 2016, 88, 14-19.	1.4	15
52	Anisotropy of critical current density inc-axis-orientedMgB2thin films. Physical Review B, 2002, 65, .	3.2	14
53	Performance characteristics of thermal neutron detectors based on Li6Y(BO3)3:Ce single crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 804, 189-193.	1.6	14
54	Silver doped lithium tetraborate (Li2B4O7) single crystals as efficient dosimeter material with sub-micro-Gy sensitivity. Journal of Luminescence, 2015, 157, 333-337.	3.1	14

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55	Iâˆ’Vcharacteristic measurements to study the nature of the vortex state and dissipation inMgB2thin films. Physical Review B, 2002, 66, .	3.2	13
56	Understanding energy transfer in Ce doped Li6Gd(BO3)3: A study of millisecond decay kinetics in 77â€“300K range. Journal of Luminescence, 2013, 137, 208-213.	3.1	12
57	Study on post-deposition annealing influenced contribution of hole and electron trapping to threshold voltage stability in organic field effect transistors. Materials Science in Semiconductor Processing, 2015, 30, 18-24.	4.0	12
58	Growth and gas-sensing studies of metal oxide semiconductor nanostructures. International Journal of Nanotechnology, 2010, 7, 883.	0.2	11
59	Photoluminescence and photoconductivity studies on NaBi(WO4)2 single crystals: A promising Cherenkov radiator. Journal of Luminescence, 2012, 132, 41-45.	3.1	11
60	Deposition and in-situ characterization of Tiâ€“Zrâ€“V alloy thin films annealed at different temperatures under ultra-high vacuum conditions. Journal of Alloys and Compounds, 2015, 651, 375-381.	5.5	11
61	Positron annihilation studies in theMgB2superconductor. Physical Review B, 2002, 66, .	3.2	10
62	Structural and optical properties of Gd2SiO5 prepared from hydrothermally synthesized powder. Journal of Alloys and Compounds, 2014, 592, 12-18.	5.5	10
63	Timing characteristics of Ce doped Gd₃Ga₃Al₂O₁₂ single crystals in comparison with CsI(Tl) scintillators. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2213-2218.	1.8	10
64	Anomalous vibrational behavior of two dimensional tellurium: Layer thickness and temperature dependent Raman spectroscopic study. Applied Surface Science, 2020, 531, 147303.	6.1	10
65	Effect of OH content in the quartz crucible on the growth and quality of CsI single crystals and remedies. Journal of Crystal Growth, 2020, 544, 125710.	1.5	10
66	Growth of epitaxial multilayers consisting of alternately stacked superconducting YBa2Cu3O7âˆ’Î´ and colossal magnetoresistive La1âˆ’xPbxMnO3 layers. Journal of Crystal Growth, 2002, 243, 134-142.	1.5	9
67	Effect of interface pinning on dissipation, volume pinning force and measurement of upper critical magnetic field in MgB2 thin films. Physica C: Superconductivity and Its Applications, 2003, 385, 313-321.	1.2	9
68	Tellurium Nano-Structure Based NO Gas Sensor. Journal of Nanoscience and Nanotechnology, 2009, 9, 5278-5282.	0.9	9
69	Improvement of the scintillation properties of Gd₃ Ga₃ Al₂ O₁₂ :Ce,B single crystals having tailored defect structure. Physica Status Solidi - Rapid Research Letters, 2015, 9, 530-534.	2.4	9
70	Difficulties and improvement in growth of Europium doped Strontium Iodide (SrI2:Eu2+) scintillator single crystal for radiation detection applications. Journal of Alloys and Compounds, 2018, 747, 989-993.	5.5	9
71	Angular dependence of vortex glass transition in YBa2Cu3Ox thin films. Physica C: Superconductivity and Its Applications, 1999, 324, 137-142.	1.2	8
72	Comment on High-Quality Luminescent Tellurium Nanowires of Several Nanometers in Diameter and High Aspect Ratio Synthesized by a Poly (Vinyl Pyrrolidone)-Assisted Hydrothermal Process. Langmuir, 2007, 23, 10873-10873.	3.5	8

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73	Field emission studies of Te nanorods grown on Si (111) substrate. Vacuum, 2009, 83, 1307-1310.	3.5	8
74	Poly(3-hexylthiophene) based field-effect transistors with gate SiO2 dielectric modified by multi-layers of 3-aminopropyltrimethoxysilane. Thin Solid Films, 2009, 517, 6124-6128.	1.8	7
75	Temperature dependent photoluminescence studies in CsI:Tl films with varying thicknesses. Physica Status Solidi (B): Basic Research, 2014, 251, 748-754.	1.5	7
76	Development and characterization of polycrystalline transparent CsI plate for X-ray radiography applications. Ceramics International, 2021, 47, 2187-2193.	4.8	7
77	Andreev reflections on aMgB2superconductor. Physical Review B, 2002, 66, .	3.2	5
78	Thermoelectric properties of AgCrSe2. AIP Conference Proceedings, 2012, , .	0.4	5
79	Effect of annealing on microstructural and optoelectronic properties of nanocrystalline TiO2 thin films. Journal of Experimental Nanoscience, 2013, 8, 500-508.	2.4	5
80	Synthesis of gadolinium silicate by hydrothermal method. AIP Conference Proceedings, 2013, , .	0.4	5
81	Growth and characterization of lithium yttrium borate single crystals. AIP Conference Proceedings, 2014, , .	0.4	5
82	Crystals for Thermal Neutron Detection. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800224.	1.8	5
83	Impurity concentration dependent electrical conduction in germanium crystals at low temperatures. Bulletin of Materials Science, 2019, 42, 1.	1.7	5
84	A study of vortex motion in YBa2Cu3Ox thin films as revealed by the simultaneous appearance of longitudinal and transverse voltages. Physica C: Superconductivity and Its Applications, 2001, 363, 140-148.	1.2	4
85	Critical current density of MgB2thin films and the effect of interface pinning. Superconductor Science and Technology, 2004, 17, S524-S527.	3.5	4
86	Growth and luminescence properties of Ce doped Li6Gd(BO3)3 single crystals. , 2012, , .		3
87	Growth and optical properties of partially transparent Eu doped CaF2 ceramic. AIP Conference Proceedings, 2014, , .	0.4	3
88	PERFORMANCE COMPARISON OF pâ€“n JUNCTION DIODES USING ZINC OXIDE AND COPPER PHTHALOCYANINE HYBRID NANOCOMPOSITES AND BILAYER HETEROSTRUCTURES. Nano, 2014, 09, 1450062.	1.0	3
89	Influence of active layer thickness on contribution of hole and electron trapping to threshold voltage instability in organic field effect transistors. Superlattices and Microstructures, 2015, 86, 536-545.	3.1	3
90	Effects of film thickness on scintillation characteristics of columnar CsI:Tl films exposed to high gamma radiation doses. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 810, 14-18.	1.6	3

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91	Comment On â€œ1D Tellurium Nanostructures: Photothermally Assisted Morphologyâ€Controlled Synthesis and Applications in Preparing Functional Nanoscale Materialsâ€• Advanced Functional Materials, 2009, 19, 3191-3192.	14.9	2
92	Growth of germanium single crystals by Czochralski technique. AIP Conference Proceedings, 2012, , .	0.4	2
93	Preparation and characterization of CsI:Tl thick films on silica glass substrate. , 2014, , .		2
94	Preparation and characterization of MgB2 superconductor. Pramana - Journal of Physics, 2002, 58, 867-870.	1.8	1
95	Effect of substrate temperature on electrical and magnetic properties of epitaxial La1â^'x Pb x MnO3 films. Pramana - Journal of Physics, 2002, 58, 1065-1067.	1.8	1
96	Synthesis And Luminescence Studies Of Mn doped CaF[sub 2]. , 2010, , .		1
97	STRUCTURE AND MAGNETIC PROPERTIES OF Co-DOPED SnO₂ NANOWIRES. International Journal of Nanoscience, 2011, 10, 967-971.	0.7	1
98	Synthesis of optically transparent ceramic of CaF2 doped with Mn and Ce for thermoluminescent dosimetry. , 2012, , .		1
99	Thermoelectric properties of transition metal intercalated layered TiSe2. , 2012, , .		1
100	Effect of porosity on impedance of CaF[sub 2] ceramic. , 2013, , .		1
101	Scintillation yield uniformity studies on single crystals of Tl doped CsI. , 2013, , .		1
102	Development of Fe[sub 2]O[sub 3] sensor for NO[sub 2] detection. , 2013, , .		1
103	NH3 sensor based on CSA doped PANi-SnO2 nanohybrid. , 2014, , .		1
104	Structural and magnetic properties of Cr doped BiFeO3 multiferroic nanoparticles. AIP Conference Proceedings, 2017, , .	0.4	1
105	Growth and characterization of SrI2:Eu2+ single crystal for gamma ray detector applications. AIP Conference Proceedings, 2018, , .	0.4	1
106	Growth of silver doped Li[sub 2]B[sub 4]O[sub 7] single crystals for dosimetric application. , 2013, , .		1
107	Microwave absorption studies of MgB2 superconductor. Pramana - Journal of Physics, 2002, 58, 799-802.	1.8	0
108	Synthesis and characterization of copper nanostructures on silicon substrates. Journal of Physics: Conference Series, 2008, 114, 012043.	0.4	0

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109	Study of H[sub 2]S Sensitivity of Pure and Cu Doped SnO[sub 2] Single Nanowire Sensors. , 2009, , .		0
110	Hierarchical Nano Heterostructures of SnO2-WOX: Growth and Sensing Studies. Integrated Ferroelectrics, 2010, 120, 56-63.	0.7	0
111	Comparison of optical properties of pure and doped lithium tetraborate single crystals and glasses. , 2012, , .		0
112	CSA doped polypyrrole-zinc oxide thin film sensor. , 2013, , .		0
113	Effect of Ce concentration on optical properties of Li[sub 6]Gd(BO[sub 3])[sub 3] single crystals. , 2013, , .		0
114	Bridgman-Stockbarger growth of SrI2:Eu2+ single crystal. , 2018, , .		0
115	Low operating voltage bistable memory characteristics of tellurium thin films. AIP Conference Proceedings, 2019, , .	0.4	0
116	Multi-component garnet scintillator powder: Synthesis and characterization for x ray detection. AIP Conference Proceedings, 2020, , .	0.4	0