

# Sunil H Chaki

## List of Publications by Year in descending order

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104  
papers

2,077  
citations

279487

23  
h-index

288905

40  
g-index

104  
all docs

104  
docs citations

104  
times ranked

2670  
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-Dimensional Molybdenum Tungsten Diselenide Alloys: Photoluminescence, Raman Scattering, and Electrical Transport. ACS Nano, 2014, 8, 7130-7137.	7.3	208
2	Characterization of CuS nanocrystalline thin films synthesized by chemical bath deposition and dip coating techniques. Thin Solid Films, 2014, 550, 291-297.	0.8	111
3	Magnetite Fe <sub>3</sub> O <sub>4</sub> nanoparticles synthesis by wet chemical reduction and their characterization. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2015, 6, 035009.	0.7	109
4	Raman spectroscopic investigations on transition metal dichalcogenides MX <sub>2</sub> (M=Mo, W) Tj ETQq0,0 0 rgBT / 1,2 172	1.2	172
5	Covellite CuS " Single crystal growth by chemical vapour transport (CVT) technique and characterization. Materials Science in Semiconductor Processing, 2014, 27, 577-585.	1.9	72
6	Effect of indium and antimony doping in SnS single crystals. Materials Research Bulletin, 2015, 63, 173-180.	2.7	72
7	Characterization of CdSe thin films deposited by chemical bath solutions containing triethanolamine. Materials Science in Semiconductor Processing, 2013, 16, 915-922.	1.9	59
8	Wet chemical synthesis and characterization of SnS <sub>2</sub> nanoparticles. Applied Nanoscience (Switzerland), 2013, 3, 189-195.	1.6	53
9	SnS thin films deposited by chemical bath deposition, dip coating and SILAR techniques. Journal of Semiconductors, 2016, 37, 053001.	2.0	51
10	Structural, Thermal and Optical Properties of Nickel Oxide (NiO) Nanoparticles Synthesized by Chemical Precipitation Method. Advanced Materials Research, 0, 1141, 65-71.	0.3	45
11	Structural and optical analysis of Fe doped NiO nanoparticles synthesized by chemical precipitation route. Materials Research Bulletin, 2018, 106, 187-196.	2.7	45
12	Effect of Mn doping concentration on structural, vibrational and magnetic properties of NiO nanoparticles. Advanced Powder Technology, 2018, 29, 2394-2403.	2.0	45
13	Cadmium sulphide (CdS) thin films deposited by chemical bath deposition (CBD) and dip coating techniques" a comparative study. Materials Research Express, 2018, 5, 036406.	0.8	36
14	Growth and thermal studies of SnSe single crystals. Materials Letters, 2007, 61, 5188-5190.	1.3	34
15	Effect of pressure and temperature on Raman scattering and an anharmonicity study of tin dichalcogenide single crystals. Solid State Communications, 2015, 201, 54-58.	0.9	33
16	Synthesis, characterization, antimicrobial and antioxidant study of the facile sonochemically synthesized SnS <sub>2</sub> nanoparticles. Nano Structures Nano Objects, 2019, 18, 100286.	1.9	31
17	Synthesis and Characterizations of Undoped and Mn Doped CuS Nanoparticles. Advanced Science Letters, 2014, 20, 959-965.	0.2	31
18	Synthesis, characterization and antimicrobial study of wet chemical synthesized CuInSe <sub>2</sub> nanoparticles. Nano Structures Nano Objects, 2018, 16, 200-208.	1.9	30

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19	Study on structural, magnetic properties of undoped and Ni doped CdS nanoparticles. Materials Science in Semiconductor Processing, 2015, 31, 272-280.	1.9	29
20	CuO nanoparticles " Synthesis by wet precipitation technique and its characterization. Physica B: Condensed Matter, 2021, 610, 412950.	1.3	28
21	Sol-gel synthesis and thermal characterization of SnO <sub>2</sub> nanoparticles. Physica B: Condensed Matter, 2021, 613, 412987.	1.3	28
22	Growth, surface microtopographic and thermal studies of CuInS <sub>2</sub> . Journal of Crystal Growth, 2007, 308, 176-179.	0.7	27
23	CuAlS <sub>2</sub> thin films " Dip coating deposition and characterization. Journal of Science: Advanced Materials and Devices, 2017, 2, 215-224.	1.5	27
24	Characterization of Bi <sub>2</sub> S <sub>3</sub> nanorods prepared at room temperature. Materials Science in Semiconductor Processing, 2014, 21, 180-185.	1.9	26
25	Synthesis, structural and photoluminescence properties of nano-crystalline Cu doped NiO. Materials Research Express, 2017, 4, 105027.	0.8	25
26	Study of SnS <sub>2</sub> thin film deposited by spin coating technique. Materials Research Express, 2017, 4, 076402.	0.8	25
27	Structural And Magnetic Properties Of Undoped And Mn Doped CdS Nanoparticles Prepared By Chemical Co-precipitation Method. Advanced Materials Letters, 2014, 5, 671-677.	0.3	25
28	Characterization of CBD deposited CuInSe <sub>2</sub> thin film. Materials Science in Semiconductor Processing, 2018, 74, 329-335.	1.9	24
29	Growth and properties of CuInS <sub>2</sub> thin films. Bulletin of Materials Science, 1998, 21, 291-295.	0.8	23
30	Effect of Ag on structural, optical and luminescence properties of ZnS nanoparticles synthesized by microwave-assisted chemical route. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	23
31	Growth and characterizations of tin telluride (SnTe) single crystals. European Physical Journal Plus, 2020, 135, 1.	1.2	23
32	Pure SnSe, In and Sb doped SnSe single crystals " Growth, structural, surface morphology and optical bandgap study. Journal of Crystal Growth, 2019, 522, 16-24.	0.7	22
33	Thermal investigation of nanospheres and nanowhiskers of CuInS <sub>2</sub> . European Physical Journal Plus, 2021, 136, 1.	1.2	21
34	X-ray diffraction, X-ray photoelectron spectroscopy, and raman spectroscopy of undoped and Mn-doped ZnO nanoparticles prepared by microwave irradiation. Journal of Applied Spectroscopy, 2013, 79, 901-907.	0.3	20
35	Synthesis and characterization of different morphological SnS nanomaterials. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2014, 5, 045010.	0.7	20
36	Synthesis of manganese sulfide (MnS) thin films by chemical bath deposition and their characterization. Journal of Materials Research and Technology, 2017, 6, 123-128.	2.6	20

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37	Synthesis and Characterization of Tin Monosulphide Nanoparticles. <i>Advanced Science, Engineering and Medicine</i> , 2013, 5, 285-290.	0.3	19
38	Pressure and temperature dependence of Raman spectra and their anharmonic effects in Bi <sub>2</sub> Se <sub>3</sub> single crystal. <i>Physica B: Condensed Matter</i> , 2014, 433, 72-78.	1.3	18
39	Effect of Cobalt doping on ZnS nanoparticles synthesized by microwave irradiation. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 5029-5036.	1.1	17
40	Structural, morphological, optical, thermal and magnetic study of mackinawite FeS nanoparticles synthesized by wet chemical reduction technique. <i>Physica B: Condensed Matter</i> , 2018, 546, 59-66.	1.3	17
41	Alloy engineering to promote photodetection in In <sub>x</sub> Sn <sub>1-x</sub> S <sub>2</sub> and Sb <sub>x</sub> Sn <sub>1-x</sub> S <sub>2</sub> ternary alloys. <i>Materials Letters</i> , 2019, 236, 187-189.	1.3	17
42	Thermal decomposition studies of CuInS <sub>2</sub> . <i>Frontiers of Materials Science in China</i> , 2008, 2, 322-325.	0.5	16
43	Different morphology SnS nanomaterials. <i>Journal of Thermal Analysis and Calorimetry</i> , 2015, 120, 1261-1272.	2.0	15
44	Seebeck Coefficient and Optical Studies of Cadmium Doped CuInS <sub>2</sub> Single Crystal. <i>Acta Physica Polonica A</i> , 2009, 116, 221-225.	0.2	15
45	Influence of Mn doping on optical properties of ZnO nanoparticles synthesized by microwave irradiation. <i>Journal of Optics (India)</i> , 2013, 42, 328-334.	0.8	14
46	Chemical Bath Deposition of Lead Sulphide (PbS) Thin Film and their Characterization. <i>Solid State Phenomena</i> , 0, 209, 111-115.	0.3	14
47	Nonisothermal decomposition kinetics of pure and Mn-doped Fe <sub>3</sub> O <sub>4</sub> nanoparticles. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 132, 895-905.	2.0	14
48	Study of indium and antimony incorporation into SnS <sub>2</sub> single crystals. <i>Journal of Crystal Growth</i> , 2019, 507, 180-188.	0.7	14
49	Spectroscopy And Structural Study On CdSe Thin Films Deposited By Chemical Bath Deposition. <i>Advanced Materials Letters</i> , 2013, 4, 869-874.	0.3	14
50	Influence of deposition techniques on quality and photodetection properties of tin disulfide (SnS <sub>2</sub> ) thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 13118-13133.	1.1	13
51	Synthesis, characterization of CuO nanostrips and ultrasonic study of CuO-transformer oil nanofluids. <i>Materials Research Express</i> , 2019, 6, 045051.	0.8	13
52	Study of catalytic action of micro-particles and synthesized nanoparticles of CuS on cellulose pyrolysis. <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 117, 1137-1144.	2.0	12
53	Tuning of optical, thermal and antimicrobial capabilities of CdS nanoparticles with incorporated Mn prepared by chemical method. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 10866-10876.	1.1	12
54	Effect of indium and antimony doping on the transport properties of direct vapour transport (DVT) grown SnSe single crystals. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	12

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55	Effect of sulphur doping in SnSe single crystals on thermoelectric power. Materials Research Express, 2019, 6, 085910.	0.8	12
56	Pressure dependence electrical resistivity in DVT grown molybdenum dichalcogenides. High Pressure Research, 2008, 28, 133-140.	0.4	11
57	Thermal analysis of direct vapour transport technique grown tin selenide single crystals. Thermochimica Acta, 2020, 689, 178614.	1.2	11
58	Catalytic action of CuAlS <sub>2</sub> microparticles and nanoparticles in cellulose pyrolysis. Physica Scripta, 2015, 90, 045701.	1.2	10
59	Synthesis and thermal study of SnS nanoflakes. Journal of Asian Ceramic Societies, 2017, 5, 193-198.	1.0	10
60	Study of Sb <sub>2</sub> S <sub>3</sub> thin films deposited by SILAR method. Materials Research Express, 2018, 5, 056410.	0.8	10
61	Effect of Indium and Antimony Doping on SnS Photoelectrochemical Solar Cells. Chinese Physics Letters, 2014, 31, 106102.	1.3	9
62	Growth and electrical properties of zirconium trisulphide single crystals. Physica Status Solidi A, 1993, 140, 207-212.	1.7	8
63	Semiconducting behaviour and pressure dependence of electrical resistivity in tin monoselenide single crystals grown by a modified direct vapour transport technique. Journal of Materials Science: Materials in Electronics, 1994, 5, 287-290.	1.1	8
64	Raman scattering in 2H-MoS <sub>2</sub> single crystal. AIP Conference Proceedings, 2013, , .	0.3	8
65	Preparation and characterization of Bi <sub>2</sub> S <sub>3</sub> compound semiconductor. Bulletin of Materials Science, 2015, 38, 83-88.	0.8	8
66	Comparative study between pure and manganese doped copper sulphide (CuS) nanoparticles. Nano Express, 2021, 2, 010011.	1.2	8
67	Study of chemical vapour transport (CVT) grown WSe <sub>1.93</sub> single crystals. Materials Science in Semiconductor Processing, 2017, 61, 11-16.	1.9	7
68	Thermal Decomposition Study on CuInSe <sub>2</sub> Single Crystals. International Journal of Thermophysics, 2018, 39, 1.	1.0	7
69	Influence of Co-doping on the optical and magnetic properties of CdS nanoparticles. Journal of Materials Science: Materials in Electronics, 2018, 29, 11394-11403.	1.1	7
70	Investigation and fabrication of Cadmium Telluride (CdTe) single crystal as a photodetector. Physica B: Condensed Matter, 2021, 614, 413027.	1.3	7
71	Wet Chemical Synthesis and Characterization of MnS Nanoparticles. Advanced Materials Research, 0, 584, 243-247.	0.3	6
72	Thermal decomposition study of manganese sulfide (MnS) nanoparticles. AIP Conference Proceedings, 2018, , .	0.3	6

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73	Synthesis and Characterization of CuS Nanowhiskers. <i>Advanced Science Letters</i> , 2012, 17, 162-166.	0.2	6
74	High pressure studies on single crystals of zirconium sulphoselenides. <i>High Pressure Research</i> , 1992, 10, 535-539.	0.4	5
75	Structural, morphological and vibrational properties of Bi substituted $Sb_2S_3$ nanoparticles. <i>Materials Research Express</i> , 2018, 5, 105005.	0.8	5
76	Investigation of ultrasonic parameters and measurement of thermal conductivity of CuO-transformer oil nanofluids. <i>Materials Research Express</i> , 2019, 6, 0850f3.	0.8	5
77	Influence of Bi substitution on structural, optical and photoluminescence behaviour of $Sb_2S_3$ nanoparticles. <i>Materials Chemistry and Physics</i> , 2020, 240, 122276.	2.0	5
78	High pressure studies of cvt grown $Cu_2S$ single crystals. <i>High Pressure Research</i> , 1996, 15, 159-166.	0.4	4
79	Chemical Synthesis and Characterization of Lead Sulphide (PbS) Nanoparticles. , 2011, , .		4
80	Chemical bath deposited and dip coating deposited CuS thin films " Structure, Raman spectroscopy and surface study. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	4
81	Thermal Investigation of Direct Vapor Transport (DVT) Grown Quaternary $Cu_2ZnSnS_4$ Single Crystals. <i>International Journal of Thermophysics</i> , 2021, 42, 1.	1.0	4
82	Doping-induced changes in the structural, optical, magnetic and thermal properties of Ni:ZnS nanoparticles prepared by microwave-assisted chemical method. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	1.1	4
83	Kinetic stability of tin telluride nanoparticles synthesized by hydrothermal method. <i>Chemical Thermodynamics and Thermal Analysis</i> , 2022, 6, 100058.	0.7	4
84	Growth and microtopographic study of $CuAlS_2$ single crystals. , 2013, , .		3
85	Study on CdSe Nanoparticles Synthesized by Chemical Method. <i>Advanced Materials Research</i> , 2013, 665, 267-282.	0.3	3
86	Thermal decomposition study of SnSe single crystals. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	3
87	Growth and Characterizations of Rhenium Disulfide ( $ReS_2$ ) Single Crystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000687.	0.8	3
88	Optical and Thermal Studies of Pristine and Ni Doped CdS Nanoparticles with Antibacterial Applications. <i>Materials Focus</i> , 2017, 6, 398-406.	0.4	3
89	Synthesis and electrical transport properties of SnS nanoparticles. <i>AIP Conference Proceedings</i> , 2013, , .	0.3	2
90	Thermal decomposition study of $Mo_{0.6}W_{0.4}Se_2$ single crystals. , 2013, , .		2

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91	Study of surface microstructure and optical properties of as-grown Mo <sub>0.6</sub> W <sub>0.4</sub> Se <sub>2</sub> single crystals. AIP Conference Proceedings, 2013, , .	0.3	2
92	Thermal decomposition study of Mn doped Fe <sub>3</sub> O <sub>4</sub> nanoparticles. AIP Conference Proceedings, 2016, , .	0.3	2
93	Thermal study of wet chemical synthesized CuInSe <sub>2</sub> nanoparticles. European Physical Journal Plus, 2018, 133, 1.	1.2	2
94	Enhancing photo-detection properties of Sb <sub>0.15</sub> Sn <sub>0.85</sub> S <sub>2</sub> alloy. Materials Research Express, 2019, 6, 096303.	0.8	2
95	Characterization by X-Ray Peak Broadening Analysis of Wet Chemical Synthesized CuAlS <sub>2</sub> Nanoparticles. Advanced Science Letters, 2014, 20, 1181-1186.	0.2	2
96	Study on Transport Properties of Bi <sub>2</sub> Se <sub>3</sub> Single Crystals Grown by Vapor Phase Technique. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2012, 42, 1418-1425.	0.6	1
97	Synthesis and characterization of SnS nanowires. , 2015, , .		1
98	Photoluminescence study of Mn doped ZnS nanoparticles prepared by co-precipitation method. AIP Conference Proceedings, 2016, , .	0.3	1
99	Study of ac and dc electrical resistivity variation with high pressure of as-grown pure, indium and antimony doped SnS single crystals. Physica Scripta, 2019, 94, 105706.	1.2	1
100	Thermo-acoustic study of transformer oils through ultrasonic technique. Petroleum Science and Technology, 2020, 38, 493-500.	0.7	1
101	Sb <sub>2</sub> S <sub>3</sub> Microspheres Prepared by Solvothermal Method. Advanced Science Letters, 2014, 20, 1102-1106.	0.2	1
102	Growth, electrical transport properties and microtopographic studies of Mo <sub>0.3</sub> W <sub>0.7</sub> Se <sub>2</sub> single crystals. Materials Research Innovations, 2011, 15, 96-101.	1.0	0
103	Comparative study of glycine single crystals with additive of potassium nitrate in different concentration ratios. AIP Conference Proceedings, 2016, , .	0.3	0
104	Synthesis and characterization of 2D graphene sheets from graphite powder. AIP Conference Proceedings, 2018, , .	0.3	0