Sayantan Sil

List of Publications by Year in Descending Order

34 papers	350 citations	12 h-index	17 g-index
34 ext. papers	472 ext. citations	3.5 avg, IF	3.62 L-index

#	Paper	IF	Citations
34	Exploring the studies of charge transportation of an aromatic acid based Co(II)-Metallogel scaffold fabricated Schottky device. *Journal of Physics and Chemistry of Solids*, **2022**, 160, 110300	3.9	2
33	Investigation of conduction kinetics in Al/CuInSe2 Schottky device utilizing impedance spectroscopy (IS) measurement and study of its photosensing behaviour. *Journal of Physics and Chemistry of Solids*, **2021**, 150, 109878	3.9	3
32	Improved charge transport properties of graphene incorporated tin oxide based Schottky diode over pure one. *Journal of Physics and Chemistry of Solids*, **2021**, 148, 109706	3.9	3
31	Study of A.C. conductivity and dielectric behaviour of hydrothermally synthesised molybdenum disulphide. *Journal of Materials Science: Materials in Electronics*, **2021**, 32, 168-181	2.1	0
30	Investigating the effect of applied bias on methylammonium lead iodide perovskite by electrical and positron annihilation spectroscopic studies. *Journal Physics D: Applied Physics*, **2021**, 54, 465502	3	1
29	Electronic charge transport phenomena directed smart fabrication of Metal-Semiconductor based electronic junction device by a supramolecular Mn(II)-Metallogel. *Journal of Molecular Liquids*, **2021**, 338, 116769	6	3
28	Elucidation of Inhomogeneous Heterojunction Performance of Al/Cu5FeS4 Schottky Diode With a Gaussian Distribution of Barrier Heights. *IEEE Transactions on Electron Devices*, **2020**, 67, 2082-2087	2.9	7
27	NMR study of defect-induced magnetism in methylammonium lead iodide perovskite. *Physical Review B*, **2020**, 101,	3.3	7
26	Defect induced room temperature ferromagnetism in methylammonium lead iodide perovskite. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2020**, 384, 126278	2.3	10
25	Sonochemical synthesis of nanospherical TiO2 within graphene oxide nanosheets and its application as a photocatalyst and a Schottky diode. *FlatChem*, **2020**, 22, 100180	5.1	5
24	Anthracene-Based Fluorophore and Its Re(I) Complexes: Investigation of Electrical Properties and Schottky Diode Behavior. *ACS Omega*, **2020**, 5, 29465-29476	3.9	
23	Energy-Inexpensive Galvanic Deposition of BiOI on Electrodes and Its Conversion to 3D Porous BiVO4-Based Photoanode. *Journal of Physical Chemistry C*, **2020**, 124, 18930-18945	3.8	3
22	Influence of Axial Linkers on Polymerization in Paddle-Wheel Cu(II) Coordination Polymers for the Application of Optoelectronics Devices. *Crystal Growth and Design*, **2019**, 19, 6283-6290	3.5	12
21	Effect of graphene on improved photosensitivity of MoS2-graphene composite based Schottky diode. *Materials Research Bulletin*, **2019**, 118, 110507	5.1	13
20	Enhancement of Electrical Conductivity due to Structural Distortion from Linear to Nonlinear Dicarboxylato-Bridged Zn(II) 1D-Coordination Polymers. *Crystal Growth and Design*, **2019**, 19, 2632-2641	3.5	16
19	Exploration of temperature dependent dielectric relaxation and correlated barrier hopping (CBH) conduction mechanism of hydrothermally synthesized CuO nanoflakes. *Materials Research Express*, **2019**, 6, 1050d1	1.7	3
18	Designing of Pb(II)-Based Novel Coordination Polymers (CPs): Structural Elucidation and Optoelectronic Application. *ACS Omega*, **2019**, 4, 19959-19968	3.9	8

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17	Photosensitive Schottky barrier diode behavior of a semiconducting Co(iii)-Na complex with a compartmental Schiff base ligand.. *RSC Advances*, **2019**, 9, 34710-34719	3.7	10
16	Improvement of charge transport for hydrothermally synthesized Cd0.8Fe0.2S over co-precipitation method: A comparative study of structural, optical and magnetic properties. *Materials Science in Semiconductor Processing*, **2019**, 91, 133-145	4.3	21
15	Bias Voltage-Dependent Impedance Spectroscopy Analysis of Hydrothermally Synthesized ZnS Nanoparticles. *Journal of Materials Engineering and Performance*, **2018**, 27, 2727-2733	1.6	9
14	Equivalent circuit analysis of Al/rGO-TiO2 metal-semiconductor interface via impedance spectroscopy: Graphene induced improvement in carrier mobility and lifetime. *Materials Science in Semiconductor Processing*, **2018**, 82, 104-111	4.3	11
13	Experimental and theoretical overview on bias dependent Debye relaxation and conduction mechanism of Cd 1-x Zn x S film and its significance in signal transport network. *Materials Chemistry and Physics*, **2018**, 213, 23-34	4.4	7
12	Possibility to Use Hydrothermally Synthesized CuFeS2 Nanocomposite as an Acceptor in Hybrid Solar Cell. *Journal of Materials Engineering and Performance*, **2018**, 27, 2649-2654	1.6	9
11	Bias dependent conduction and relaxation mechanism study of Cu5FeS4 film and its significance in signal transport network. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 5014-5024	2.1	22
10	Analysis of temperature dependent electrical performance of Al/CuO/ITO Schottky barrier diode and explanation of inhomogeneous barrier heights by double Gaussian distribution. *AIP Advances*, **2018**, 8, 125104	1.5	5
9	Lattice-Defect-Induced Piezo Response in Methylammonium-Lead-Iodide Perovskite Based Nanogenerator. *ChemistrySelect*, **2018**, 3, 5304-5312	1.8	15
8	Impedance Spectroscopy Study of Hydrothermally Synthesized Nano-semiconducting Bornite (Cu 5 FeS 4). *Materials Today: Proceedings*, **2018**, 5, 9948-9957	1.4	1
7	Analysis of interfaces in Bornite (Cu 5 FeS 4) fabricated Schottky diode using impedance spectroscopy method and its photosensitive behavior. *Materials Research Bulletin*, **2018**, 106, 337-345	5.1	29
6	Investigation of Ion-Mediated Charge Transport in Methylammonium Lead Iodide Perovskite. *Journal of Physical Chemistry C*, **2017**, 121, 5515-5522	3.8	13
5	Synthesis of rGOZn0.8Cd0.2S via in situ reduction of GO for the realization of a Schottky diode with low barrier height and highly enhanced photoresponsivity. *New Journal of Chemistry*, **2017**, 41, 5476-5486	3.6	43
4	Network analysis of semiconducting Zn 1-x Cd x S based photosensitive device using impedance spectroscopy and current-voltage measurement. *Applied Surface Science*, **2017**, 420, 566-578	6.7	30
3	Temperature dependent properties of Al/rGO-ZnCdS Schottky diode and analysis of barrier inhomogeneities by double Gaussian distribution. *Materials Letters*, **2017**, 204, 184-187	3.3	14
2	Positron Annihilation Spectroscopic Investigation on the Origin of Temperature-Dependent Electrical Response in Methylammonium Lead Iodide Perovskite. *Journal of Physical Chemistry Letters*, **2017**, 8, 1745-1751	6.4	14
1	Development of large area nanostructured silicon-hydrogen alloy material with improved stability for solar cell application by argon dilution method. *Electronic Materials Letters*, **2016**, 12, 456-461	2.9	1