Santosh K Haram

List of Publications by Year
in descending order

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79	4,093	159585 30	114465 63
papers	citations	h-index	g-index

80	80	80	5338
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrochemistry and Electrogenerated Chemiluminescence from Silicon Nanocrystal Quantum Dots. Science, 2002, 296, 1293-1297.	12.6	1,012
2	Electrochemistry of CdS Nanoparticles:â€‰ A Correlation between Optical and Electrochemical Band Gaps. Journal of the American Chemical Society, 2001, 123, 8860-8861.	13.7	366
3	Synthesis and Characterization of Copper Sulfide Nanoparticles in Triton-X 100 Water-in-Oil Microemulsions. The Journal of Physical Chemistry, 1996, 100, 5868-5873.	2.9	229
4	Determination of Band Structure Parameters and the Quasiâ€Particle Gap of CdSe Quantum Dots by Cyclic Voltammetry. ChemPhysChem, 2008, 9, 2574-2579.	2.1	190
5	Some aspects of the role of surfactants in the formation of nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1998, 133, 69-75.	4.7	138
6	Quantum Confinement in CdTe Quantum Dots: Investigation through Cyclic Voltammetry Supported by Density Functional Theory (DFT). Journal of Physical Chemistry C, 2011, 115, 6243-6249.	3.1	134
7	Development of electrochemical biosensor based on tyrosinase immobilized in composite biopolymeric film. Analytical Biochemistry, 2006, 349, 72-77.	2.4	99
8	Structural, Electronic, and Optical Properties of Cu₂NiSnS₄: A Combined Experimental and Theoretical Study toward Photovoltaic Applications. Chemistry of Materials, 2017, 29, 3133-3142.	6.7	90
9	Electrochemical biosensor for catechol using agaroseâ€“guar gum entrapped tyrosinase. Journal of Biotechnology, 2007, 128, 80-85.	3.8	80
10	Chemical bath deposition of cubic copper (I) selenide and its room temperature transformation to the orthorhombic phase. Thin Solid Films, 1997, 302, 12-16.	1.8	79
11	Electrochemical Observation of a Metal/Insulator Transition by Scanning Electrochemical Microscopy. Journal of Physical Chemistry B, 2001, 105, 7474-7476.	2.6	72
12	SWCNT/BiVO₄ composites as anode materials for supercapacitor application. RSC Advances, 2014, 4, 17378-17381.	3.6	71
13	A novel inhibition based biosensor using urease nanoconjugate entrapped biocomposite membrane for potentiometric glyphosate detection. International Journal of Biological Macromolecules, 2018, 108, 32-40.	7.5	65
14	Electrocatalyst on Insulating Support?: Hollow Silica Spheres Loaded with Pt Nanoparticles for Methanol Oxidation. ACS Applied Materials & Interfaces, 2015, 7, 6590-6595.	8.0	60
15	Interaction between Quantum Dots of CdTe and Reduced Graphene Oxide: Investigation through Cyclic Voltammetry and Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 20944-20950.	3.1	58
16	Nanostructured MoS2/BiVO4 Composites for Energy Storage Applications. Scientific Reports, 2016, 6, 36294.	3.3	54
17	Electroless deposition on copper substrates and characterization of thin films of copper (I) selenide. Materials Research Bulletin, 1992, 27, 1185-1191.	5.2	53
18	Synthesis and Characterization of Cdâ^'DMSO Complex Capped CdS Nanoparticles. Chemistry of Materials, 2003, 15, 1296-1301.	6.7	53

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19	Band Gap Bowing at Nanoscale: Investigation of CdS_xSe_{1â€“x} Alloy Quantum Dots through Cyclic Voltammetry and Density Functional Theory. Journal of Physical Chemistry C, 2013, 117, 7376-7383.	3.1	52
20	Rudimentary simple method for the decoration of graphene oxide with silver nanoparticles: Their application for the amperometric detection of glucose in the human blood samples. Electrochimica Acta, 2015, 161, 108-114.	5.2	51
21	Electroless deposition of orthorhombic copper (I) selenide and its room temperature phase transformation to cubic structure. Thin Solid Films, 1994, 238, 21-26.	1.8	48
22	Filling and coating of multiwalled carbon nanotubes with silver by DC electrophoresis. Carbon, 2007, 45, 2126-2129.	10.3	48
23	Scanning Electrochemical Microscopy. 42. Studies of the Kinetics and Photoelectrochemistry of Thin Film CdS/Electrolyte Interfaces. Journal of Physical Chemistry B, 2001, 105, 8192-8195.	2.6	47
24	Micelle assisted morphological evolution of silver nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 301, 475-480.	4.7	44
25	Reduction of graphene oxide by 100 MeV Au ion irradiation and its application as H₂O₂sensor. Journal Physics D: Applied Physics, 2015, 48, 365105.	2.8	43
26	Effect of Nonionic Surfactants on the Kinetics of Disproportion of Copper Sulfide Nanoparticles in the Aqueous Sols. Chemistry of Materials, 2001, 13, 1789-1793.	6.7	42
27	Outer Sphere Electroreduction of CCl₄ in 1-Butyl-3-methylimmidazolium Tetrafluoroborate: An Example of Solvent Specific Effect of Ionic Liquid. Journal of Physical Chemistry B, 2009, 113, 2848-2853.	2.6	40
28	Citrate-capped quantum dots of CdSe for the selective photometric detection of silver ions in aqueous solutions. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 168, 60-65.	3.5	37
29	Molecular structures and biological evaluation of 2-chloro-3-(n-alkylamino)-1,4-napthoquinone derivatives as potent antifungal agents. Journal of Molecular Structure, 2014, 1059, 68-74.	3.6	36
30	Metal free, carbon-TiO2 based composites for the visible light photocatalysis. Solar Energy, 2017, 144, 127-133.	6.1	33
31	Synthesis and Characterization of Uncapped <I>Î³</I>-Fe₂O₃ Nanoparticles Prepared by Flame Pyrolysis of Ferrocene in Ethanol. Journal of Nanoscience and Nanotechnology, 2006, 6, 2155-2158.	0.9	29
32	Biopolymer-Polyaniline Composite for a Wide Range Ammonia Gas Sensor. IEEE Sensors Journal, 2016, 16, 4318-4325.	4.7	29
33	Designing a 3D nanoporous network via self-assembly of WO₃ nanorods for improved electrocapacitive performance. CrystEngComm, 2018, 20, 6683-6694.	2.6	26
34	A facile methodology for the design of functionalized hollow silica spheres. Journal of Colloid and Interface Science, 2010, 346, 265-269.	9.4	25
35	Experimental and Theoretical Study into Interface Structure and Band Alignment of the Cu₂Zn_{1â€“x}Cd_xSnS₄ Heterointerface for Photovoltaic Applications. ACS Applied Energy Materials, 2020, 3, 5153-5162.	5.1	25
36	Controlled synthesis of Cu nanoparticles in fused silica and BK7 glasses using ion beam induced defects. Surface and Coatings Technology, 2005, 196, 96-99.	4.8	24

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37	CZTS/CdS: interface properties and band alignment study towards photovoltaic applications. Journal of Materials Science: Materials in Electronics, 2018, 29, 4201-4210.	2.2	24
38	Self electro-catalysis of hydroquinone on gold electrode in aqueous un-buffered media. Electrochemistry Communications, 2009, 11, 994-996.	4.7	23
39	Efficient charge transport in surface engineered TiO2 nanoparticulate photoanodes leading to improved performance in quantum dot sensitized solar cells. Solar Energy, 2019, 181, 195-202.	6.1	23
40	Synthesis and molecular structure of a zinc complex of the vitamin K3 analogue phthiocol. Journal of Molecular Structure, 2013, 1048, 223-229.	3.6	22
41	Mechanistic aspects of nitrate ion reduction on silverelectrode: estimation of Oâ€“NO₂^{â˙}bond dissociation energy using cyclic voltammetry. New Journal of Chemistry, 2009, 33, 207-210.	2.8	21
42	Voltammetry investigation on copper zinc tin sulphide /selenide (CZTSxSe1-x) alloy nanocrystals: Estimation of composition dependent band edge parameters. Solar Energy Materials and Solar Cells, 2016, 155, 273-279.	6.2	21
43	Electrochemical Evaluation of Dopant Energetics and the Modulation of Ultrafast Carrier Dynamics in Cu-Doped CdSe Nanocrystals. Journal of Physical Chemistry C, 2017, 121, 27233-27240.	3.1	21
44	Construction of Ag/AgCl Reference Electrode from Used Felt-Tipped Pen Barrel for Undergraduate Laboratory. Journal of Chemical Education, 2009, 86, 355.	2.3	20
45	Boosting the Efficiency of Quantum Dot-Sensitized Solar Cells through Formation of the Cation-Exchanged Hole Transporting Layer. Langmuir, 2018, 34, 50-57.	3.5	20
46	High sensitive determination of dopamine through catalytic oxidation and preconcentration over gold-multiwall carbon nanotubes composite modified electrode. Materials Science and Engineering C, 2019, 103, 109788.	7.3	20
47	Synthesis and Characterization of Stable Organosols of Silver Nanoparticles by Electrochemical Dissolution of Silver in DMSO. Journal of Physical Chemistry B, 2006, 110, 20889-20894.	2.6	19
48	Agaroseâ€“guar gum assisted synthesis of processable polyaniline composite: morphology and electro-responsive characteristics. RSC Advances, 2014, 4, 59716-59725.	3.6	19
49	Î³-Ray-Assisted Synthesis of a Ptâ€“Sn Bimetallic Composite Loaded on Grapheneâ€“Graphitic Carbon Nitride Hybrid: A Cocktail Electrocatalyst for the Methanol Oxidation Reaction. ACS Omega, 2021, 6, 13579-13587.	3.5	17
50	Interaction of reduced graphene oxide with free radicals and silver clusters. Chemical Physics Letters, 2012, 529, 54-58.	2.6	16
51	Nitrogen doped Graphene Oxides as an efficient electrocatalyst for the Hydrogen evolution Reaction; Composition based Electrodics Investigation. Electrochimica Acta, 2016, 200, 53-58.	5.2	16
52	Photoelectrochemical responses of orthorhombic and cubic copper selenides. Journal of Electroanalytical Chemistry, 1995, 396, 63-68.	3.8	15
53	Kinetic Analysis of the Oxygen Evolution Reaction (OER) Performed with a Cobaltâ€Phosphate Electrocatalyst. ChemistrySelect, 2017, 2, 3323-3328.	1.5	15
54	Inhibiting Interfacial Charge Recombination for Boosting Power Conversion Efficiency in CdSe{Au} Nanohybrid Sensitized Solar Cell. Journal of Physical Chemistry C, 2018, 122, 13277-13284.	3.1	15

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55	Room temperature synthesis of 1-hexanethiolate capped quantum dots, in Triton X-100 water-in-oil microemulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 337, 136-140.	4.7	14
56	Electrodics of methanol oxidation on Pt-f-multiwalled carbon nanotube composite, prepared by Î³-radiolysis. Electrochimica Acta, 2011, 56, 2081-2086.	5.2	14
57	Methanol oxidation reaction on Pt based electrocatalysts modified ultramicroelectrode (UME): Novel electrochemical method for monitoring rate of CO adsorption. Electrochimica Acta, 2018, 286, 287-295.	5.2	14
58	Synthesis of carbon nanotubes by catalytic vapor decomposition (CVD) method: Optimization of various parameters for the maximum yield. Pramana - Journal of Physics, 2007, 68, 51-60.	1.8	12
59	In situ Electrochemical Transformation of Ni₃S₂ and Ni₃S₂â€Ni from Sheets to Nanodisks: Towards Efficient Electrocatalysis for Hydrogen Evolution Reaction (HER). ChemistrySelect, 2016, 1, 6708-6712.	1.5	11
60	Highly resolved quantized double-layer charging of relatively larger dodecanethiol-passivated gold quantum dots. Journal of Applied Physics, 2004, 96, 5032-5036.	2.5	10
61	New route for preparation of luminescent mercaptoethanoate capped cadmium selenide quantum dots. Bulletin of Materials Science, 2008, 31, 291-296.	1.7	10
62	Siderophore mediated mineralization of struvite: A novel greener route of sustainable phosphate management. Water Research, 2021, 203, 117511.	11.3	10
63	Semiconductor Electrodes. , 2007, , 329-389.		8
64	Probing the effect of selenium substitution in kesterite-Cu2ZnSnS4 nanocrystals prepared by hot injection method. Journal of Materials Science: Materials in Electronics, 2019, 30, 14781-14790.	2.2	8
65	Development of self-supported 3D microporous solder alloy electrodes for scalable CO₂ electroreduction to formate. New Journal of Chemistry, 2019, 43, 6587-6596.	2.8	7
66	CZTS Se1â˜' nanocrystals: Composition dependent method of preparation, morphological characterization and cyclic voltammetry data analysis. Data in Brief, 2016, 8, 1072-1079.	1.0	6
67	Fabrication, characterization and electrochemical performance of single strand carbon fiber prepared by catalytic chemical vapor decomposition method. Electrochimica Acta, 2010, 55, 2022-2028.	5.2	5
68	Size-dependent quantized double layer charging of monolayer-protected silver nanoparticles. New Journal of Chemistry, 2014, 38, 1761.	2.8	4
69	Role of iron oxide impurities in electrocatalysis by multiwall carbon nanotubes: An investigation using a novel magnetically modified ITO electrodes. Bulletin of Materials Science, 2014, 37, 221-226.	1.7	4
70	Covalent conjugation of single-walled carbon nanotube with CYP101 mutant for direct electrocatalysis. Analytical Biochemistry, 2021, 626, 114204.	2.4	4
71	Synthesis and Characterization of Copper Sulphide Nanoparticles in Aqueous Surfactant Solutions. Adsorption Science and Technology, 1998, 16, 667-677.	3.2	3
72	Mapping of Electrocatalytic Sites on a Single Strand of Carbon Fiber Using Scanning Electrochemical Microscopy (SECM). Journal of Physical Chemistry C, 2012, 116, 9703-9708.	3.1	3

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73	Rapid and efficient sequestration of arsenic from contaminated water using hypertolerantBacillusL-148 sp.: a two-step process. Green Chemistry, 2019, 21, 2245-2251.	9.0	3
74	Catalytic activity and stability of silver supported on multiwalled carbon nanotubes. International Journal of Nanotechnology, 2011, 8, 988.	0.2	2
75	Room temperature synthesis of microemulsion mediated rutile TiO₂nanoparticles showing remarkable photocatalytic activity. International Journal of Materials Research, 2013, 104, 76-83.	0.3	2
76	Coupling Energy Capture and Storage â€“ Endeavoring to make a solar battery. Scientific Reports, 2018, 8, 12752.	3.3	2
77	Near room temperature approaches for the preparation of air-stable and crystalline CH3NH3PbI3. Materials Chemistry and Physics, 2016, 173, 491-497.	4.0	1
78	Interaction of lead selenide with reduced graphene oxide: investigation through cyclic voltammetry and spectroscopy. Journal of Materials Science: Materials in Electronics, 2016, 27, 12385-12391.	2.2	0
79	Investigation of bi/reduced graphene oxide electro-catalyst for CO2 reduction reaction. Materials Today: Proceedings, 2022, , .	1.8	0