

Saurabh S Soni

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6024946/publications.pdf>

Version: 2024-02-01

86
papers

2,693
citations

172457

29
h-index

214800

47
g-index

86
all docs

86
docs citations

86
times ranked

3310
citing authors

#	ARTICLE	IF	CITATIONS
1	Visible-Light Photocatalysis in Titania-Based Mesoporous Thin Films. <i>Advanced Materials</i> , 2008, 20, 1493-1498.	21.0	177
2	A Smart Flexible Zinc Battery with Cooling Recovery Ability. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7871-7875.	13.8	141
3	Quantitative SAXS Analysis of the P123/Water/Ethanol Ternary Phase Diagram. <i>Journal of Physical Chemistry B</i> , 2006, 110, 15157-15165.	2.6	134
4	Improved molecular architecture of DàA carbazole dyes: 9% PCE with a cobalt redox shuttle in dye sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21664-21671.	10.3	91
5	Micellar Structure of Silicone Surfactants in Water from Surface Activity, SANS and Viscosity Studies. <i>Journal of Physical Chemistry B</i> , 2002, 106, 2606-2617.	2.6	87
6	Silica gel supported SO ₃ H functionalised benzimidazolium based ionic liquid as a mild and effective catalyst for rapid synthesis of 1-amidoalkyl naphthols. <i>Journal of Molecular Catalysis A</i> , 2012, 353-354, 44-49.	4.8	86
7	Self-Assembled Solid-State Gel Catholyte Combating Iodide Diffusion and Self-Discharge for a Stable Flexible Aqueous Zn ₂ Battery. <i>Advanced Energy Materials</i> , 2020, 10, 2001997.	19.5	86
8	Highly Efficient One-Dimensional ZnO Nanowire-Based Dye-Sensitized Solar Cell Using a Metal-Free, DàA-Type, Carbazole Derivative with More than 5% Power Conversion. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 12629-12639.	8.0	85
9	Excess molar volumes, excess isentropic compressibilities, excess viscosities, relative permittivity and molar polarization deviations for methyl acetate+, ethyl acetate+, butyl acetate+, isoamyl acetate+, methyl propionate+, ethyl propionate+, ethyl butyrate+, methyl methacrylate+, ethyl methacrylate+, and butyl methacrylate+cyclohexane at T=298.15 and 303.15K. <i>Journal of Molecular Liquids</i> , 2013, 183, 102-112.	4.9	83
10	Aggregation behavior of pyridinium based ionic liquids in water Surface tension, ¹ H NMR chemical shifts, SANS and SAXS measurements. <i>Journal of Colloid and Interface Science</i> , 2012, 371, 52-61.	9.4	75
11	A Smart Flexible Zinc Battery with Cooling Recovery Ability. <i>Angewandte Chemie</i> , 2017, 129, 7979-7983.	2.0	59
12	Electrophoretically Deposited MoSe ₂ /WSe ₂ Heterojunction from Ultrasonically Exfoliated Nanocrystals for Enhanced Electrochemical Photoresponse. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4093-4102.	8.0	57
13	Symmetrical and unsymmetrical BrÄnsted acidic ionic liquids for the effective conversion of fructose to 5-hydroxymethyl furfural. <i>Catalysis Science and Technology</i> , 2013, 3, 469-474.	4.1	52
14	Microbial Selenium Nanoparticles (SeNPs) and Their Application as a Sensitive Hydrogen Peroxide Biosensor. <i>Applied Biochemistry and Biotechnology</i> , 2015, 177, 1386-1393.	2.9	46
15	Efficient power generating devices utilizing low intensity indoor lights via non-radiative energy transfer mechanism from organic ionic redox couples. <i>Nano Energy</i> , 2019, 60, 457-466.	16.0	44
16	A Smart Flexible Solid State Photovoltaic Device with Interfacial Cooling Recovery Feature through Thermoreversible Polymer Gel Electrolyte. <i>Small</i> , 2018, 14, e1800842.	10.0	42
17	Role of a phenothiazine/phenoxazine donor in solid ionic conductors for efficient solid state dye sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5373-5382.	10.3	40
18	Structure-efficiency relationship of newly synthesized 4-substituted donor-acceptor coumarins for dye-sensitized solar cells. <i>New Journal of Chemistry</i> , 2018, 42, 5267-5275.	2.8	40

#	ARTICLE	IF	CITATIONS
19	Ionic Conductivity through Thermoresponsive Polymer Gel: Ordering Matters. <i>Langmuir</i> , 2012, 28, 751-756.	3.5	38
20	Iodine induced 1-D lamellar self assembly in organic ionic crystals for solid state dye sensitized solar cells. <i>Nanoscale</i> , 2017, 9, 15949-15957.	5.6	38
21	Effect of self-assembly on triiodide diffusion in water based polymer gel electrolytes: An application in dye solar cell. <i>Journal of Colloid and Interface Science</i> , 2014, 425, 110-117.	9.4	37
22	Dual functional hetero-anthracene based single component organic ionic conductors as redox mediator cum light harvester for solid state photoelectrochemical cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4868-4877.	10.3	37
23	Hierarchically Porous Metal-Organic Gel Hosting Catholyte for Limiting Iodine Diffusion and Self-Discharge Control in Sustainable Aqueous Zinc Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21426-21435.	8.0	35
24	Dynamic Light Scattering and Viscosity Studies on the Association Behavior of Silicone Surfactants in Aqueous Solutions. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5382-5390.	2.6	34
25	Enhanced photovoltaic performance of meso-porous SnO ₂ based solar cells utilizing 2D MgO nanosheets sensitized by a metal-free carbazole derivative. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4291-4300.	10.3	34
26	Anisotropic One-Dimensional Aqueous Polymer Gel Electrolyte for Photoelectrochemical Devices: Improvement in Hydrophobic TiO ₂ -Dye/Electrolyte Interface. <i>ACS Applied Energy Materials</i> , 2018, 1, 3665-3673.	5.1	34
27	Synthesis and computational study of coumarin thiophene-based D-π-A azo bridge colorants for DSSC and NLOphoric application. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 394, 112466.	3.9	34
28	Harnessing the N-dopant ratio in carbon quantum dots for enhancing the power conversion efficiency of solar cells. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3182-3190.	4.9	32
29	Spectral sensitization of TiO ₂ by new hemicyanine dyes in dye solar cell yielding enhanced photovoltage: Probing chain length effect on performance. <i>Electrochimica Acta</i> , 2013, 88, 270-277.	5.2	31
30	Influence of N-Alkylpyridinium Halide Based Ionic Liquids on Micellization of P123 in Aqueous Solutions: A SANS, DLS, and NMR Study. <i>Langmuir</i> , 2014, 30, 14406-14415.	3.5	31
31	Humic Acid as a Sensitizer in Highly Stable Dye Solar Cells: Energy from an Abundant Natural Polymer Soil Component. <i>ACS Omega</i> , 2016, 1, 14-18.	3.5	31
32	Densities, Speeds of Sound, Excess Molar Volumes, and Excess Isentropic Compressibilities at <i>T</i> = (298.15 and 308.15) K for Methyl Methacrylate + 1-Alkanols (1-Butanol, 1-Pentanol, and 1-Heptanol) + Cyclohexane, + Benzene, + Toluene, + <i>p</i> -Xylene, and + Ethylbenzene. <i>Journal of Chemical & Engineering Data</i> , 2011, 56, 142-152.	1.9	29
33	Transferrable thin film of ultrasonically exfoliated MoSe ₂ nanocrystals for efficient visible-light photodetector. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2020, 119, 114019.	2.7	29
34	Time-dependent stereoselective Heck reaction using mesoporous Pd/TiO ₂ nanoparticles catalyst under sunlight. <i>Catalysis Science and Technology</i> , 2014, 4, 510-515.	4.1	28
35	Stable mesoporous Fe/TiO ₂ nanoparticles: A recoverable catalyst for solvent-free synthesis of propargylamine via CH activation. <i>Applied Catalysis A: General</i> , 2014, 488, 231-238.	4.3	27
36	Effect of ionic liquids on microstructures of micellar aggregates formed by PEO- <i>b</i> -PPO- <i>b</i> -PEO block copolymer in aqueous solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 462, 153-161.	4.7	27

#	ARTICLE	IF	CITATIONS
37	Organic Ionic Plastic Crystals as Hole Transporting Layer for Stable and Efficient Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2001460.	14.9	27
38	Visible light induced cell damage of Gram positive bacteria by N-doped TiO ₂ mesoporous thin films. <i>Thin Solid Films</i> , 2013, 531, 559-565.	1.8	26
39	Study on the Effects of Nonelectrolyte Additives on the Phase, Thermodynamics, and Structural Changes in Micelles of Silicone Surfactants in Aqueous Solutions from Surface Activity, Small Angle Neutron Scattering, and Viscosity Measurements. <i>Langmuir</i> , 2003, 19, 6668-6677.	3.5	25
40	Sulfonic acid functionalized solid acid: an alternative eco-friendly approach for transesterification of non-edible oils with high free fatty acids. <i>Monatshefte für Chemie</i> , 2013, 144, 1735-1741.	1.8	24
41	Influence of m-fluorine substituted phenylene spacer dyes in dye-sensitized solar cells. <i>Organic Electronics</i> , 2016, 39, 371-379.	2.6	24
42	Pd doped SiO ₂ nanoparticles: an efficient recyclable catalyst for Suzuki, Heck and Sonogashira reactions. <i>RSC Advances</i> , 2014, 4, 32826-32833.	3.6	23
43	Synergistic 2D MoSe ₂ @WSe ₂ nanohybrid heterostructure toward superior hydrogen evolution and flexible supercapacitor. <i>Nanoscale</i> , 2022, 14, 6636-6647.	5.6	23
44	Surface Activity, SANS, and Viscosity Studies in Aqueous Solutions of Oxyethylene and Oxybutylene Di- and Triblock Copolymers. <i>Journal of Physical Chemistry B</i> , 2002, 106, 13069-13077.	2.6	22
45	Design, synthesis and DSSC performance of o-fluorine substituted phenylene spacer sensitizers: effect of TiO ₂ thickness variation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 28485-28491.	2.8	22
46	Multi- π -Dentate Carbazole Based Schiff Base Dyes with Chlorovinylene Group in Spacer for Dye-Sensitized Solar Cells: A Combined Theoretical and Experimental Study.. <i>ChemistrySelect</i> , 2019, 4, 4044-4056.	1.5	22
47	Gel polymer electrolyte based on PVDF-HFP:PMMA incorporated with propylene carbonate (PC) and diethyl carbonate (DEC) plasticizers : electrical, morphology, structural and electrochemical properties. <i>Materials Research Express</i> , 2020, 7, 025301.	1.6	22
48	Effect of structural manipulation in hetero-tri-aryl amine donor-based D π A sensitizers in dye-sensitized solar cells. <i>New Journal of Chemistry</i> , 2018, 42, 4361-4371.	2.8	21
49	Flexible Self-Powered Electrochemical Photodetector Functionalized by Multilayered Tantalum Diselenide Nanocrystals. <i>Advanced Optical Materials</i> , 2021, 9, 2100993.	7.3	21
50	Effect of non-electrolyte additives on micellization and clouding behavior of silicone surfactant in aqueous solutions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 377, 205-211.	4.7	20
51	Effect of mono- and di-anchoring dyes based on o,m-difluoro substituted phenylene spacer in liquid and solid state dye sensitized solar cells. <i>Dyes and Pigments</i> , 2020, 174, 108021.	3.7	20
52	Ionic liquid induced sphere-to-ribbon transition in the block copolymer mediated synthesis of silver nanoparticles. <i>RSC Advances</i> , 2013, 3, 8398.	3.6	19
53	Hybrid AgNP@TiO ₂ thin film based photoanode for dye sensitized solar cell. <i>Perspectives in Science</i> , 2016, 8, 46-49.	0.6	19
54	Immobilization of <i>Agrobacterium tumefaciens</i> d-psicose 3-epimerase onto titanium dioxide for bioconversion of rare sugar. <i>Enzyme and Microbial Technology</i> , 2020, 140, 109605.	3.2	19

#	ARTICLE	IF	CITATIONS
55	Sulphonate anchored hemicyanine dyes for dye solar cell: A study on dipole moment and polarity. <i>Journal of Renewable and Sustainable Energy</i> , 2015, 7, .	2.0	17
56	Photocatalytic activity of Fe doped ZnS nanoparticles and carrier mediated ferromagnetism. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 1691-1701.	6.7	17
57	Effect of donor modification on the photo-physical and photo-voltaic properties of N-alkyl/aryl amine based chromophores. <i>New Journal of Chemistry</i> , 2019, 43, 8970-8981.	2.8	17
58	Effect of fluorine substitution and position on phenylene spacer in carbazole based organic sensitizers for dye sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 28579-28587.	2.8	16
59	Evolution of rhodium(III) and iridium(III) chelates as metallonucleases. <i>Polyhedron</i> , 2016, 110, 73-84.	2.2	15
60	Low cost and efficient hetero-anthracene based small organic hole transporting materials for solid state photoelectrochemical cells. <i>Materials Today Energy</i> , 2018, 9, 496-505.	4.7	15
61	Contribution in Light Harvesting by Solid Ionic Conductors for Efficient Photoelectrochemical Cells: An Effect of an Identical Donor Molecule in Sensitizers and Electrolytes. <i>ACS Applied Energy Materials</i> , 2020, 3, 7073-7082.	5.1	15
62	A dual-response naphthalene-armed calix[4]arene based fluorescence receptor for Zr(IV) and Fe(II) via Ligand to metal charge transfer. <i>Sensors and Actuators B: Chemical</i> , 2021, 331, 129417.	7.8	15
63	Twisted donor substituted simple thiophene dyes retard the dye aggregation and charge recombination in dye-sensitized solar cells. <i>Organic Electronics</i> , 2017, 50, 25-32.	2.6	14
64	Synthesis of novel colorants for DSSC to study effect of alkyl chain length alteration of auxiliary donor on light to current conversion efficiency. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 377, 119-129.	3.9	14
65	Ultrasonically Exfoliated Nanocrystal-Based Z-Scheme SnSe ₂ /WSe ₂ Heterojunction for a Superior Electrochemical Photoresponse. <i>Journal of Physical Chemistry C</i> , 2021, 125, 14729-14740.	3.1	14
66	The solvatochromism and aggregation-induced enhanced emission of triphenylamine substituted styrene derivatives and its application in dye sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 376, 12-21.	3.9	11
67	Superior electrochemical activity of CdSe thin film by chromium substitutional doping. <i>Journal of Alloys and Compounds</i> , 2021, 862, 158016.	5.5	11
68	Ni doped ZnS nanoparticles as photocatalyst: Can mixed phase be optimized for better performance?. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 4708-4718.	6.7	10
69	â€™ Shape Aâ€™Type Designed Small Hole Conductors for Efficient Indoor and Outdoor Staging from Solid Dyeâ€™Sensitized Solar Cells and Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100206.	5.8	10
70	Real-time photovoltaic parameters assessment of carbon quantum dots showing strong blue emission. <i>RSC Advances</i> , 2022, 12, 1352-1360.	3.6	10
71	Synthesis, Characterization and Curing of Cresol â€™ Furfural Resins. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2009, 58, 509-516.	3.4	9
72	Design and development of dithienopyrrolobenzothiadiazole (DTPBT)-based rigid conjugated polymers with improved hole mobilities. <i>Polymer</i> , 2020, 211, 123089.	3.8	7

#	ARTICLE	IF	CITATIONS
73	Augmentation in photocurrent through organic ionic plastic crystals as an efficient redox mediator for solid-state mesoscopic photovoltaic devices. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1466-1476.	4.9	7
74	A synergistic effect of microwave/ultrasound and symmetrical acidic ionic liquids on transesterification of vegetable oils with high free fatty acid. <i>Biomass Conversion and Biorefinery</i> , 2014, 4, 301-309.	4.6	6
75	Surface Active and Association Behavior of Oxybutylene [~] Oxyethylene and Oxyethylene [~] Oxybutylene [~] Oxyethylene Copolymers in Aqueous Solutions. <i>Langmuir</i> , 2003, 19, 4597-4603.	3.5	5
76	Above 800 mV Open-Circuit Voltage in Solid-State Photovoltaic Devices Using Phosphonium Cation-Based Solid Ionic Conductors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22939-22947.	8.0	5
77	Benzyllic C ₃ â€”H Bond Oxidation on the (111) Facets of Octahedral Cu ₂ O Nanocrystals. <i>ACS Applied Nano Materials</i> , 2021, 4, 7840-7855.	5.0	4
78	Effect of redox active multivalent metal salts on micellization of amphiphilic block copolymer for energy storage devices via SANS, DLS and NMR. <i>Journal of Molecular Liquids</i> , 2021, 341, 116904.	4.9	4
79	Dithienopyrrolobenzothiadiazole [~] carbazole based D [~] A [~] ED [~] type conjugated material. <i>Nano Select</i> , 2020, 1, 491-498.	3.7	3
80	Yellowish-orange phosphorescent iridium(III) complexes of bis-cyclometalated ligand with pyrazolone derivatives: synthesis, characterization, photophysical and thermal properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 13778-13786.	2.2	3
81	Nonelectrolyte-Induced Micellar Shape Changes in Aqueous Solutions of Silicone Surfactants. <i>Journal of Dispersion Science and Technology</i> , 2014, 35, 1419-1426.	2.4	2
82	ZnO/CdS bi-layer nanostructures photoelectrode for dye-sensitized solar cells. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	2
83	Biphenyl [~] Amine [~] Based D [~] A [~] Sensitizers for DSSCs: Comparative Photo [~] Conversion Efficiency in Iodide/triiodide and Cobalt [~] Based Redox Electrolyte and DFT Study. <i>ChemistrySelect</i> , 2019, 4, 7371-7379.	1.5	2
84	Donor [~] acceptor [~] conjugated polymers based on terthiophene-3,4-dicarboxylate, dithienopyrrolobenzothiadiazole and thieno[3,4- <i>c</i>]pyrrole-4,6-dione units and their hole mobility. <i>New Journal of Chemistry</i> , 2022, 46, 8601-8610.	2.8	2
85	Excess molar volumes, excess isentropic compressibilities and relative permittivity deviations for the ternary mixtures of esters+glycols+organic solvents at different temperatures. <i>Journal of Molecular Liquids</i> , 2010, 157, 25-33.	4.9	1
86	Morphological study of electrophoretically deposited TiO ₂ film for DSSC application. , 2018, , .		0