Mohan Singh Mehata

List of Publications by Year
in descending order

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78	2,407	257101 24	223531 46
papers	citations	h-index	g-index

82	82	82	2539
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of halide ions on the fluorescence properties of 3â€aminoquinoline in aqueous medium. Luminescence, 2023, 38, 1192-1198.	1.5	1
2	Solvatochromism and estimation of ground and excited state dipole moments of 6-aminoquinoline. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 267, 120498.	2.0	11
3	A parallel investigation of un-doped and manganese ion-doped zinc selenide quantum dots at cryogenic temperature and application as an optical temperature sensor. Materials Chemistry and Physics, 2022, 276, 125349.	2.0	11
4	Sunlight-driven MoS2 nanosheets mediated degradation of dye (crystal violet) for wastewater treatment. Journal of Molecular Structure, 2022, 1249, 131651.	1.8	23
5	Photoluminescence turn-off based dual analytes (Hg2+ and Pb2+) sensor in aqueous medium using 3-marcaptoproponic acid protected Mn2+ doped ZnSe quantum dots. Chemical Physics Letters, 2022, 787, 139270.	1.2	2
6	Surface plasmon resonance allied applications of silver nanoflowers synthesized from Breynia vitis-idaea leaf extract. Dalton Transactions, 2022, 51, 2726-2736.	1.6	21
7	Catalytic activity of silver nanoparticles synthesized using Crinum asiaticum (Sudarshan) leaf extract. Materials Today: Proceedings, 2022, 56, 3714-3720.	0.9	6
8	Green Synthesis of Silver Nanoparticles Using Abutilon theophrasti Leaves and their Photocatalytic Activity for Water Treatment. Springer Proceedings in Physics, 2022, , 63-73.	0.1	1
9	Exploration of grown cobalt-doped zinc oxide nanoparticles and photodegradation of industrial dye. Materials Research Bulletin, 2022, 150, 111795.	2.7	17
10	Thermally grown indium (In) thin-film for creating ohmic contact and In-bumps for HgCdTe-based IR detectors. Applied Surface Science, 2022, 596, 153501.	3.1	6
11	Reinvestigation on Photoluminescence of 7-Hydroxyflavone in aqueous medium: Proficient fluorescence enhancement. Journal of Photochemistry and Photobiology A: Chemistry, 2022, , 114014.	2.0	2
12	Synthesis and characterization of thermally-evaporated CdS thin-films. Materials Today: Proceedings, 2022, 67, 643-647.	0.9	2
13	Synthesis of photoactivated highly fluorescent Mn2+-doped ZnSe quantum dots as effective lead sensor in drinking water. Materials Research Bulletin, 2021, 134, 111121.	2.7	34
14	Reinvestigation of the photophysics of 3-aminobenzoic acid in neat and mixed binary solvents. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 247, 119100.	2.0	4
15	Experimental and theoretical interpretations of spectral behavior of 6-methoxyflavone. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 404, 112945.	2.0	9
16	Revisiting the photochemistry 2,5â€dihydroxy benzoic acid (gentisic acid): Solvent and pH effect. Journal of Physical Organic Chemistry, 2021, 34, e4168.	0.9	3
17	An efficient excited-state proton transfer fluorescence quenching based probe (7-hydroxyquinoline) for sensing trivalent cations in aqueous environment. Journal of Molecular Liquids, 2021, 326, 115379.	2.3	16
18	Synthesis of fluorescent graphene quantum dots from graphene oxide and their application in fabrication of GQDs@AgNPs nanohybrids and sensing of H2O2. Ceramics International, 2021, 47, 19063-19072.	2.3	17

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19	Temperature-dependent photoluminescence and decay times of different phases of grown TiO2 nanoparticles: Carrier dynamics and trap states. Ceramics International, 2021, 47, 32534-32544.	2.3	11
20	Structural, Electronic and NLO Properties of 6-aminoquinoline: A DFT/TD-DFT Study. Journal of Fluorescence, 2021, 31, 1719-1729.	1.3	18
21	Investigation of grown ZnS film on HgCdTe substrate for passivation of infrared photodetector. Thin Solid Films, 2021, 731, 138751.	0.8	11
22	Green synthesis of silver nanoparticles using Kalanchoe pinnata leaves (life plant) and their antibacterial and photocatalytic activities. Chemical Physics Letters, 2021, 778, 138760.	1.2	46
23	Green route synthesis of silver nanoparticles using plants/ginger extracts with enhanced surface plasmon resonance and degradation of textile dye. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 273, 115418.	1.7	64
24	Rapid optical sensor for recognition of explosive 2,4,6-TNP traces in water through fluorescent ZnSe quantum dots. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 260, 119937.	2.0	25
25	Interaction between Picric Acid and 5-aminoquinoline: A Theoretical Study. , 2021, 8, 63-69.		0
26	Enhanced photoinduced catalytic activity of transition metal ions incorporated TiO2 nanoparticles for degradation of organic dye: Absorption and photoluminescence spectroscopy. Optical Materials, 2020, 109, 110309.	1.7	37
27	Flavones Fluorescence-Based Dual Response Chemosensor for Metal Ions in Aqueous Media and Fluorescence Recovery. Journal of Fluorescence, 2020, 30, 759-772.	1.3	18
28	Modulation of Fluorescence properties of 5-Aminoquinoline by Ag+ in aqueous media via charge transfer. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 396, 112549.	2.0	14
29	Rapid sensing of lead metal ions in an aqueous medium by MoS2 quantum dots fluorescence turn-off. Materials Research Bulletin, 2020, 131, 110978.	2.7	58
30	Bright red emission from doubly doped YAG:Pr/Sm nanophosphor and color modulation. Optical Materials, 2020, 107, 110106.	1.7	4
31	Colloidal MoS2 quantum dots based optical sensor for detection of 2,4,6-TNP explosive in an aqueous medium. Optical Materials, 2020, 100, 109646.	1.7	32
32	Phase-dependent optical and photocatalytic performance of synthesized titanium dioxide (TiO2) nanoparticles. Optik, 2019, 193, 163011.	1.4	54
33	Luminescence properties and exciton dynamics of coreâ€“multi-shell semiconductor quantum dots leading to QLEDs. Dalton Transactions, 2019, 48, 7619-7631.	1.6	30
34	Wavefunction Engineering of Type-I/Type-II Excitons of CdSe/CdS Core-Shell Quantum Dots. Scientific Reports, 2019, 9, 2.	1.6	89
35	Steady state and time-resolved fluorescence study of 7,8-benzoquinoline: Reinvestigation of excited state protonation. Journal of Molecular Structure, 2019, 1180, 855-860.	1.8	10
36	Efficient fluorescence quenching of 5-aminoquinoline: Silver ion recognition study. Journal of Luminescence, 2019, 205, 475-481.	1.5	18

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37	Spectral and time-resolved properties of photoinduced hydroxyquinolines doped thin polymer films. Optical Materials, 2018, 75, 751-756.	1.7	6
38	Tunable single and double emission semiconductor nanocrystal quantum dots: a multianalyte sensor. Methods and Applications in Fluorescence, 2018, 6, 035006.	1.1	11
39	A 2 B corroles: Fluorescence signaling systems for sensing fluoride ions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 202, 207-213.	2.0	13
40	Facile Synthesis of Semiconducting Ultrathin Layer of Molybdenum Disulfide. Journal of Nanoscience and Nanotechnology, 2018, 18, 614-622.	0.9	1
41	Investigation of charge-separation/change in dipole moment of 7-azaindole: Quantitative measurement using solvatochromic shifts and computational approaches. Journal of Molecular Liquids, 2017, 231, 39-44.	2.3	15
42	Investigation of biocompatible and protein sensitive highly luminescent quantum dots/nanocrystals of CdSe, CdSe/ZnS and CdSe/CdS. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 179, 201-210.	2.0	47
43	Synthesis and optical properties of core-multi-shell CdSe/CdS/ZnS quantum dots: Surface modifications. Optical Materials, 2017, 64, 250-256.	1.7	38
44	Probing Charge-Transfer and Short-Lived Triplet States of a Biosensitive Molecule, 2,6-ANS: Transient Absorption and Time-Resolved Spectroscopy. ACS Omega, 2017, 2, 6782-6785.	1.6	1
45	Medicinal Plant Leaf Extract and Pure Flavonoid Mediated Green Synthesis of Silver Nanoparticles and their Enhanced Antibacterial Property. Scientific Reports, 2017, 7, 15867.	1.6	497
46	metaâ€Benziporphodimethenes: New Cellâ€Imaging Porphyrin Analogue Molecules. ChemistrySelect, 2016, 1, 3502-3509.	0.7	6
47	Experimental and theoretical study of hydroxyquinolines: hydroxyl group position dependent dipole moment and charge-separation in the photoexcited state leading to fluorescence. Methods and Applications in Fluorescence, 2016, 4, 045004.	1.1	11
48	Synthesis, characterization and fluorescence turn-on behavior of new porphyrin analogue: meta -benziporphodimethenes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 169, 58-65.	2.0	10
49	Controllable synthesis of silver nanoparticles using Neem leaves and their antimicrobial activity. Journal of Radiation Research and Applied Sciences, 2016, 9, 109-115.	0.7	311
50	Controlled synthesis and optical properties of tunable CdSe quantum dots and effect of pH. AIP Advances, 2015, 5, .	0.6	29
51	Enhancement of Charge Transfer and Quenching of Photoluminescence of Capped CdS Quantum Dots. Scientific Reports, 2015, 5, 12056.	1.6	37
52	Affinity of Smectite and Divalent Metal Ions (Mg2+, Ca2+, Cu2+) with L-leucine: An Experimental and Theoretical Approach Relevant to Astrobiology. Origins of Life and Evolution of Biospheres, 2015, 45, 411-426.	0.8	4
53	Spin mixed charge transfer states of iridium complex Ir(ppy)₃: transient absorption and time-resolved photoluminescence. RSC Advances, 2015, 5, 34094-34099.	1.7	30
54	TDDFT study of the polarity controlled ion-pair separation in an excited-state proton transfer reaction. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 128, 280-284.	2.0	43

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55	Surface Interaction of L-alanine on Hematite: An Astrobiological Implication. Origins of Life and Evolution of Biospheres, 2013, 43, 331-339.	0.8	8
56	Stark shifts and exciton dissociation in CdSe nanoparticle grafted conjugated polymer. Applied Physics Letters, 2012, 100, 151908.	1.5	11
57	Electroabsorption and Electrophotoluminescence of Poly(2,3-diphenyl-5-hexyl-p-phenylene vinylene). Journal of Physical Chemistry C, 2012, 116, 14789-14795.	1.5	10
58	Excited-State Proton Transfer via Hydrogen-Bonded Acetic Acid (AcOH) Wire for 6-Hydroxyquinoline. Journal of Physical Chemistry A, 2011, 115, 19-24.	1.1	68
59	Photo- and field-induced charge-separation and phosphorescence quenching in organometallic complex Ir(ppy)3. Applied Physics Letters, 2011, 98, .	1.5	7
60	Electric-Field-Induced Enhancement/Quenching of Photoluminescence of Ï€-Conjugated Polymer S3-PPV: Excitation Energy Dependence. Journal of Physical Chemistry B, 2010, 114, 6258-6265.	1.2	14
61	External Electric Field Effects on Optical Property and Excitation Dynamics of Capped CdS Quantum Dots Embedded in a Polymer Film. Journal of Physical Chemistry C, 2010, 114, 15594-15601.	1.5	34
62	Heat-initiated prebiotic formation of peptides from glycine/aspartic acid and glycine/valine in aqueous environment and clay suspension. International Journal of Astrobiology, 2009, 8, 107-115.	0.9	11
63	Electric field effects on state energy and molecular orientation of 2-hydroxyquinoline in solid polymer films. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 204, 39-45.	2.0	8
64	Electric Field Effects on Photoluminescence of Polyfluorene Thin Films: Dependence on Excitation Wavelength, Field Strength, and Temperature. Journal of Physical Chemistry C, 2009, 113, 11907-11915.	1.5	24
65	Electric-field-induced changes in fluorescence decay and spectrum of tris(8-hydroxyquinoline)aluminum in a polymer film. Chemical Physics Letters, 2008, 457, 62-65.	1.2	10
66	Proton Translocation and Electronic Relaxation along a Hydrogen-Bonded Molecular Wire in a 6-Hydroxyquinoline/Acetic Acid Complex. Journal of Physical Chemistry B, 2008, 112, 8383-8386.	1.2	24
67	Photoinduced excited state proton rearrangement of 6-hydroxyquinoline along a hydrogen-bonded acetic acid wire. Chemical Physics Letters, 2007, 436, 357-361.	1.2	24
68	Electroabsorption Spectroscopy of 6-Hydroxyquinoline Doped in Polymer Films:Â Stark Shifts and Orientational Effects. Journal of Physical Chemistry A, 2006, 110, 10985-10991.	1.1	22
69	Fluorescence Studies of Salicylic Acid Doped Poly(vinyl alcohol) Film as a Water/Humidity Sensor. Journal of Physical Chemistry A, 2004, 108, 2346-2352.	1.1	97
70	Fluorescence characteristics of protonated form of 6-hydroxyquinoline in NafionÂ® film. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 559-567.	2.0	13
71	Studies on the adsorption of peptides of glycine/alanine on montmorillonite clay with or without co-ordinated divalent cations. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 212, 43-50.	2.3	31
72	Spectroscopic Studies of 8-Hydroxyquinoline (8-HQ) Doped in Polymeric Matrices. Journal of Optics (India), 2002, 31, 1-7.	0.8	3

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73	Steady state and time-resolved spectroscopic studies of 7-hydroxyquinoline in various polymeric matrices. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2002, 58, 1589-1598.	2.0	19
74	Fluorescence quenching of 6-methoxyquinoline: an indicator for sensing chloride ion in aqueous media. Journal of Luminescence, 2002, 99, 47-52.	1.5	50
75	Excited-state intermolecular proton transfer reaction of 6-hydroxyquinoline in protic polar medium. Chemical Physics Letters, 2002, 359, 314-320.	1.2	41
76	Complexation of 6-hydroxyquinoline with trimethylamine in polar and non-polar solvents. Chemical Physics Letters, 2002, 366, 628-635.	1.2	16
77	Edge excitation red shift and charge transfer study of 6-methoxyquinoline in polymer matrices. Journal of Luminescence, 2001, 93, 275-280.	1.5	19
78	Temperature-Dependent Electric Field-Induced Optical Transitions of 2D Molybdenum Disulfide (MoS2) Thin Films: Temperature-Dependent Electroabsorption and Absorption. Journal of Physical Chemistry C, 0, , .	1.5	5