

# Sameer Sapra

## List of Publications by Year in descending order

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105  
papers

5,276  
citations

81839

39  
h-index

85498

71  
g-index

107  
all docs

107  
docs citations

107  
times ranked

6962  
citing authors

#	ARTICLE	IF	CITATIONS
1	Insight into morphology dependent charge carrier dynamics in ZnSe/CdS nanoheterostructures. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 8519-8528.	1.3	6
2	Impact of Bifunctional Ligands on Charge Transfer Kinetics in CsPbBr <sub>3</sub> /CdSe/CdS/ZnS Nanohybrids. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 2591-2599.	2.1	6
3	MoSe <sub>2</sub> /SnS Nanoheterostructures for Water Splitting. <i>ACS Applied Nano Materials</i> , 2022, 5, 4293-4304.	2.4	22
4	Development of magnetic nanoparticle assisted aptamer-quantum dot based biosensor for the detection of Escherichia coli in water samples. <i>Science of the Total Environment</i> , 2022, 831, 154857.	3.9	18
5	Green Synthesis-Mediated Silver Nanoparticles Based Biocomposite Films for Wound Healing Application. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2022, 32, 2994-3011.	1.9	8
6	Cu <sub>2</sub> S decorated MoSe <sub>2</sub> nanosheets as counter electrode for quantum dot sensitized solar cells. <i>Materials Today: Proceedings</i> , 2021, 36, 605-608.	0.9	5
7	Colloidal lead-free Cs <sub>2</sub> AgBiBr <sub>6</sub> double perovskite nanocrystals: Synthesis, uniform thin-film fabrication, and application in solution-processed solar cells. <i>Nano Research</i> , 2021, 14, 1126-1134.	5.8	39
8	Nanoparticle-Stabilized Perforated Lamellar Morphology in Block Copolymer/Quantum Dot Hybrids. <i>Macromolecules</i> , 2021, 54, 1216-1223.	2.2	8
9	MoSe <sub>2</sub> /Cu <sub>2</sub> S/GaAs Heterostructure-Based Self-Biased Two Color-Band Photodetectors with High Detectivity. <i>Journal of Physical Chemistry C</i> , 2021, 125, 10768-10776.	1.5	9
10	Enhanced Photoluminescence of Gold Nanoparticle/Quantum Dot Hybrids Confined in Hairy Polymer Nanofibers. <i>ChemNanoMat</i> , 2021, 7, 831-841.	1.5	5
11	Understanding the efficient electrocatalytic activities of MoSe <sub>2</sub> /Cu <sub>2</sub> S nanoheterostructures. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9837-9848.	5.2	31
12	Lead-Free Alloyed Double-Perovskite Nanocrystals of Cs <sub>2</sub> (Na <sub>x</sub> Ag <sub>1-x</sub> )BiBr <sub>6</sub> with Tunable Band Gap. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1954-1962.	1.5	36
13	Precursor-Mediated Synthesis of Shape-Controlled Colloidal CsPbBr <sub>3</sub> Perovskite Nanocrystals and Their Nanofiber-Directed Self-Assembly. <i>Chemistry of Materials</i> , 2020, 32, 721-733.	3.2	37
14	Enhanced photovoltaic performance of Y <sub>2</sub> O <sub>3</sub> :Ho <sup>3+</sup> /Yb <sup>3+</sup> upconversion nanophosphor based DSSC and investigation of color tunability in Ho <sup>3+</sup> /Tm <sup>3+</sup> /Yb <sup>3+</sup> tridoped Y <sub>2</sub> O <sub>3</sub> . <i>Journal of Alloys and Compounds</i> , 2020, 821, 153230.	2.8	33
15	Enhanced Photocurrent Owing to Shuttling of Charge Carriers across 4-Aminothiophenol-Functionalized MoSe <sub>2</sub> /CsPbBr <sub>3</sub> Nanohybrids. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 7317-7325.	4.0	35
16	Band Gap Engineering in Cs <sub>2</sub> (Na <sub>x</sub> Ag <sub>1-x</sub> )BiCl <sub>6</sub> Double Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5173-5181.	2.1	109
17	Fluorescence resonance energy transfer in multifunctional nanofibers designed via block copolymer self-assembly. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 16137-16146.	1.3	10
18	Solution-Processed Cubic GaN for Potential Lighting Applications. <i>MRS Advances</i> , 2019, 4, 567-574.	0.5	2

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19	Efficient fluorescence quenching of CdSe quantum dots on epitaxial GaAs nanostructures. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	4
20	GaN nanostructures by reactive ion etching: Mask and Maskless approach. Nano Structures Nano Objects, 2019, 18, 100284.	1.9	5
21	Effect of pressure and time on the self catalyzed growth of epitaxial GaAs nanostructures by MOCVD. Vacuum, 2019, 164, 343-348.	1.6	7
22	Colloidally synthesized defect-rich $\text{MoSe}_2$ nanosheets for superior catalytic activity. Bulletin of Materials Science, 2019, 42, 1.	0.8	12
23	Nickel Selenide Nanoparticles as a Cheap Alternative for Pt-Counter Electrode in Dye-Sensitized Solar Cells. Journal of Nanoscience and Nanotechnology, 2019, 19, 375-382.	0.9	4
24	$\text{MoSe}_2/\text{Cu}_2\text{S}$ Vertical $\text{p-n}$ Nanoheterostructures for High-Performance Photodetectors. ACS Applied Materials & Interfaces, 2019, 11, 4074-4083.	4.0	45
25	Fluorescence Quenching of CdTe Quantum Dots with Co (III) Complexes via Electrostatic Assembly Formation. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1413-1430.	1.4	5
26	Tuning the Electronic and Magnetic Properties of $\text{CuAlO}_2$ Nanocrystals Using Magnetic Dopants. ACS Omega, 2018, 3, 509-513.	1.6	13
27	Role of Tryptophan in Protein-Nanocrystals Interaction: Energy or Charge Transfer. Zeitschrift Fur Physikalische Chemie, 2018, 233, 41-54.	1.4	4
28	Surface Decides the Photoluminescence of Colloidal CdSe Nanoplatelets Based Core/Shell Heterostructures. Journal of Physical Chemistry C, 2018, 122, 820-829.	1.5	33
29	A Solution Processed CdSe Nanoplatelets Based Sensor for Cd Detection. , 2018, , .		0
30	Size-Tunable Synthesis of Colloidal Silver Sulfide Nanocrystals for Solution-Processed Photovoltaic Applications. ChemistrySelect, 2018, 3, 5620-5629.	0.7	11
31	Facile Green Synthesis of BiOBr Nanostructures with Superior Visible-Light-Driven Photocatalytic Activity. Materials, 2018, 11, 1273.	1.3	39
32	Biofabricated BiOI with enhanced photocatalytic activity under visible light irradiation. RSC Advances, 2018, 8, 29022-29030.	1.7	27
33	Evaluation of remineralization potential and mechanical properties of pit and fissure sealants fortified with nano-hydroxyapatite and nano-amorphous calcium phosphate fillers: An in vitro study. Journal of Conservative Dentistry, 2018, 21, 681.	0.3	29
34	Solvent-free, mechanochemical syntheses of bulk trihalide perovskites and their nanoparticles. Chemical Communications, 2017, 53, 3046-3049.	2.2	118
35	Quantum Dots in Visible-Light Photoredox Catalysis: Reductive Dehalogenations and C-H Arylation Reactions Using Aryl Bromides. Chemistry of Materials, 2017, 29, 5225-5231.	3.2	71
36	Efficient Charge Extraction from CdSe/ZnSe Dots-on-Plates Nanoheterostructures. ACS Omega, 2017, 2, 2231-2237.	1.6	12

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37	Functionalized Molybdenum Disulfide Nanosheets for 0D-2D Hybrid Nanostructures: Photoinduced Charge Transfer and Enhanced Photoresponse. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1729-1738.	2.1	67
38	Synthesis of trap emission free cadmium sulfide quantum dots: Role of phosphonic acids and halide ions. <i>Journal of Colloid and Interface Science</i> , 2017, 491, 329-335.	5.0	16
39	Functionalized 2D-MoS <sub>2</sub> -Incorporated Polymer Ternary Solar Cells: Role of Nanosheet-Induced Long-Range Ordering of Polymer Chains on Charge Transport. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 34111-34121.	4.0	34
40	Coalesced nanomorphology, in situ, and ex situ applications of self assembled Gallium droplets grown by metal organic chemical vapor deposition. <i>Chemical Physics</i> , 2017, 493, 175-182.	0.9	3
41	Nanocrystal-Dye Interactions: Studying the Feasibility of Co-sensitization of Dyes with Semiconductor Nanocrystals. <i>ChemPhysChem</i> , 2017, 18, 2509-2516.	1.0	11
42	Long-Lived Emission in Type-II CdS/ZnSe Core/Crown Nanoplatelet Heterostructures. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27241-27246.	1.5	18
43	Instant Synthesis of White Light-Emitting Cd Chalcogenide Nanoclusters Using Homogenization Method. <i>ChemistrySelect</i> , 2017, 2, 11775-11782.	0.7	4
44	Size of the Organic Cation Tunes the Band Gap of Colloidal Organolead Bromide Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3270-3277.	2.1	118
45	Thickness-Dependent Charge Carrier Dynamics in CdSe/ZnSe/CdS Core/Barrier/Shell Nanoheterostructures. <i>ChemPhysChem</i> , 2016, 17, 692-698.	1.0	6
46	Cancer Cell Targeting Using Folic Acid/Anti-HER2 Antibody Conjugated Fluorescent CdSe/CdS/ZnS-Mercaptopropionic Acid and CdTe-Mercaptosuccinic Acid Quantum Dots. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 130-143.	0.9	14
47	Narrowing the size distribution of CdTe nanocrystals using digestive ripening. <i>Pramana - Journal of Physics</i> , 2015, 84, 1049-1054.	0.9	4
48	Localization and Dynamics of Long-Lived Excitations in Colloidal Semiconductor Nanocrystals with Dual Quantum Confinement. <i>ChemPhysChem</i> , 2015, 16, 1663-1669.	1.0	10
49	Cancer Cell Targeting Using Folic Acid/Anti-HER2 Antibody Conjugated Fluorescent CdSe/CdS/ZnS-MPA and CdTe-MSA Quantum Dots. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 9382-9395.	0.9	5
50	Electrically driven assembly of CdTe quantum dots into photoconductive microwires. <i>Journal of Materials Chemistry C</i> , 2015, 3, 1645-1648.	2.7	6
51	Probing the Mechanism of Fluorescence Quenching of QDs by Co(III)-Complexes: Size of QD and Nature of the Complex Both Dictate Energy and Electron Transfer Processes. <i>Journal of Physical Chemistry C</i> , 2015, 119, 22690-22699.	1.5	52
52	Photocatalysis from Fluorescence-Quenched CdSe/Au Nanoheterostructures: A Size-Dependent Study. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1909-1916.	2.1	52
53	Simultaneous Type-I/Type-II Emission from CdSe/CdS/ZnSe Nano-Heterostructures. <i>ACS Nano</i> , 2014, 8, 113-123.	7.3	76
54	Intracellular delivery of peptide cargos using iron oxide based nanoparticles: studies on antitumor efficacy of a BCL-2 converting peptide, NuBCP-9. <i>Nanoscale</i> , 2014, 6, 14473-14483.	2.8	11

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55	Investigation of the Photophysical and Electrical Characteristics of CuInS <sub>2</sub> QDs/SWCNT Hybrid Nanostructure. <i>Journal of Physical Chemistry C</i> , 2014, 118, 11409-11416.	1.5	15
56	Quantum Dots Self Assembly Based Interface for Blood Cancer Detection. <i>Langmuir</i> , 2013, 29, 8753-8762.	1.6	30
57	Electron transfer from CdSe/ZnS core-shell quantum dots to cobalt(III) complexes. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 15888.	1.3	32
58	Wurtzite or zinc blende? Surface decides the crystal structure of nanocrystals. <i>CrystEngComm</i> , 2013, 15, 5458.	1.3	43
59	Tumor cell targeting using folate conjugated core/shell CdSe/CdS/ZnS nano rods. , 2013, , .		1
60	Synthesis of Core-Shell Quantum Dots and Their Potential Application. <i>Springer Proceedings in Physics</i> , 2013, , 85-93.	0.1	3
61	Enhanced performance of organic photovoltaic devices by incorporation of tetrapod-shaped CdSe nanocrystals in polymer-fullerene systems. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 785-790.	0.8	18
62	Nanopatterned Cadmium Selenide Langmuir-Blodgett Platform for Leukemia Detection. <i>Analytical Chemistry</i> , 2012, 84, 3082-3089.	3.2	46
63	Chitosan encapsulated quantum dots platform for leukemia detection. <i>Biosensors and Bioelectronics</i> , 2012, 38, 107-113.	5.3	67
64	Cellular interaction of folic acid conjugated superparamagnetic iron oxide nanoparticles and its use as contrast agent for targeted magnetic imaging of tumor cells. <i>International Journal of Nanomedicine</i> , 2012, 7, 3503.	3.3	54
65	Localized Surface Plasmon Resonance-Based Fiber Optic U-Shaped Biosensor for the Detection of Blood Glucose. <i>Plasmonics</i> , 2012, 7, 261-268.	1.8	144
66	Selective capturing and detection of <i>Salmonella typhi</i> on polycarbonate membrane using bioconjugated quantum dots. <i>Talanta</i> , 2011, 84, 952-962.	2.9	24
67	Detection of Bioconjugated Quantum Dots Passivated with Different Ligands for Bio-Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 3834-3842.	0.9	13
68	BIOCONJUGATED QUANTUM DOTS BASED RAPID DETECTION OF PATHOGENIC BACTERIA FROM WATER SAMPLES. <i>International Journal of Nanoscience</i> , 2011, 10, 199-203.	0.4	3
69	Origin of the Enhanced Photoluminescence from Semiconductor CdSeS Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2149-2153.	2.1	126
70	Growth Mechanism of Cadmium Sulfide Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 304-308.	2.1	14
71	The Importance of Surface in Core-Shell Semiconductor Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22514-22518.	1.5	32
72	Real-time magnetic resonance imaging and quantification of lipoprotein metabolism in vivo using nanocrystals. <i>Nature Nanotechnology</i> , 2009, 4, 193-201.	15.6	159

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73	Luminescence in Mn-doped CdS nanocrystals. Bulletin of Materials Science, 2008, 31, 561-568.	0.8	51
74	Decorated wires as a reaction product of the microwave-assisted synthesis of CdSe in the presence of glycine. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 317, 737-741.	2.3	5
75	Tuning shades of white light with multi-color quantum-dot-quantum-well emitters based on onion-like CdSe/ZnS heteronanocrystals. Nanotechnology, 2008, 19, 335203.	1.3	45
76	White emitting CdS quantum dot nanoluminophores hybridized on near-ultraviolet LEDs for high-quality white light generation and tuning. New Journal of Physics, 2008, 10, 023026.	1.2	55
77	Dual-color emitting quantum-dot-quantum-well CdSe-ZnS heteronanocrystals hybridized on InGaN/GaN light emitting diodes for high-quality white light generation. Applied Physics Letters, 2008, 92, .	1.5	74
78	Selective enhancement of surface-state emission and simultaneous quenching of interband transition in white-luminophor CdS nanocrystals using localized plasmon coupling. New Journal of Physics, 2008, 10, 083035.	1.2	39
79	Multi-layered CdSe/ZnS/CdSe heteronanocrystals to generate and tune white light. , 2008, , .		1
80	Growth of Semiconducting Nanocrystals of CdS and ZnS. Journal of Nanoscience and Nanotechnology, 2007, 7, 1726-1729.	0.9	12
81	White CdS Nanoluminophore based Tunable Hybrid Light Emitting Diodes. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
82	Synthesis of CdSe Nanocrystals in a Noncoordinating Solvent: Effect of Reaction Temperature on Size and Optical Properties. Journal of Nanoscience and Nanotechnology, 2007, 7, 1965-1968.	0.9	26
83	Temperature dependence of exciton transfer in hybrid quantum well/nanocrystal heterostructures. Applied Physics Letters, 2007, 91, .	1.5	35
84	CdTe Nanowire Networks: Fast Self-Assembly in Solution, Internal Structure, and Optical Properties. Journal of Physical Chemistry C, 2007, 111, 18927-18931.	1.5	47
85	Bright White-Light Emission from Semiconductor Nanocrystals: by Chance and by Design. Advanced Materials, 2007, 19, 569-572.	11.1	233
86	CdSe Nanorod Synthesis: A New Approach. Small, 2007, 3, 1886-1888.	5.2	43
87	White-light emission from a blend of CdSeS nanocrystals of different Se:S ratio. Nanotechnology, 2007, 18, 075401.	1.3	72
88	A Study of Mn <sup>2+</sup> Doping in CdS Nanocrystals. Chemistry of Materials, 2007, 19, 3252-3259.	3.2	138
89	Phosphine-free synthesis of monodisperse CdSe nanocrystals in olive oil. Journal of Materials Chemistry, 2006, 16, 3391.	6.7	132
90	Unraveling Internal Structures of Highly Luminescent PbSe Nanocrystallites Using Variable-Energy Synchrotron Radiation Photoelectron Spectroscopy. Journal of Physical Chemistry B, 2006, 110, 15244-15250.	1.2	52

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91	Fast and Spatially Resolved Environmental Probing Using Stimuli-Responsive Polymer Layers and Fluorescent Nanocrystals. <i>Advanced Materials</i> , 2006, 18, 1453-1457.	11.1	99
92	Simultaneous control of nanocrystal size and nanocrystal-nanocrystal separation in CdS nanocrystal assembly. <i>Pramana - Journal of Physics</i> , 2005, 65, 565-570.	0.9	54
93	Magnetic Properties of Doped II-VI Semiconductor Nanocrystals. <i>Journal of Nanoscience and Nanotechnology</i> , 2005, 5, 1503-1508.	0.9	16
94	Emission Properties of Manganese-Doped ZnS Nanocrystals. <i>Journal of Physical Chemistry B</i> , 2005, 109, 1663-1668.	1.2	236
95	Electronic structure of and quantum size effect in III-V and II-VI semiconducting nanocrystals using a realistic tight binding approach. <i>Physical Review B</i> , 2005, 72, .	1.1	91
96	ELECTRONIC STRUCTURE OF SEMICONDUCTOR NANOCRYSTALS: AN ACCURATE TIGHT-BINDING DESCRIPTION. <i>International Journal of Nanoscience</i> , 2005, 04, 893-899.	0.4	0
97	Understanding the quantum size effects in ZnO nanocrystals. <i>Journal of Materials Chemistry</i> , 2004, 14, 661.	6.7	297
98	Synthesis and Characterization of Mn-Doped ZnO Nanocrystals. <i>Journal of Physical Chemistry B</i> , 2004, 108, 6303-6310.	1.2	279
99	Evolution of the electronic structure with size in II-VI semiconductor nanocrystals. <i>Physical Review B</i> , 2004, 69, .	1.1	289
100	An accurate description of quantum size effects in InP nanocrystallites over a wide range of sizes. <i>Journal Physics D: Applied Physics</i> , 2003, 36, 1595-1598.	1.3	21
101	Optical and Magnetic Properties of Manganese-Doped Zinc Sulfide Nanoclusters. <i>Journal of Nanoscience and Nanotechnology</i> , 2003, 3, 392-400.	0.9	39
102	Realistic tight-binding model for the electronic structure of II-VI semiconductors. <i>Physical Review B</i> , 2002, 66, .	1.1	83
103	Influence of Quantum Confinement on the Electronic and Magnetic Properties of (Ga,Mn)As Diluted Magnetic Semiconductor. <i>Nano Letters</i> , 2002, 2, 605-608.	4.5	101
104	Blue emission from cysteine ester passivated cadmium sulfide nanoclusters. <i>Chemical Communications</i> , 2001, , 2188-2189.	2.2	58
105	Size-Selected Zinc Sulfide Nanocrystallites: Synthesis, Structure, and Optical Studies. <i>Chemistry of Materials</i> , 2000, 12, 1018-1024.	3.2	361