Angshuman Nag

List of Publications by Year
in descending order

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112 papers	12,482 citations	26630 56 h-index	24258 110 g-index
113 all docs	113 docs citations	113 times ranked	11941 citing authors

#	Article	IF	Citations
1	Iodineâ€“Iodine Interactions Suppressing Phase Transitions of 2D Layered Hybrid (I-(CH₂)_n-NH₃)₂PbI₄ (n =) Tj ETQq1 1 0.784314 rgBT /O	1.7	114
2	Sb³⁺â€“Er³⁺â€Codoped Cs₂NaInCl₆for Emitting Blue and Shortâ€Wave Infrared Radiation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	62
3	Sb³⁺â€“Er³⁺â€Codoped Cs₂NaInCl₆for Emitting Blue and Shortâ€Wave Infrared Radiation. Angewandte Chemie, 2022, 134, .	2.0	3
4	Yb³⁺â€Doped Phenylethylammonium Lead Bromide 2D Layered Hybrid Perovskite for Nearâ€Infrared Emission. ChemNanoMat, 2022, 8, .	2.8	2
5	Challenges and Strategies to Design Phosphors for Future White Light Emitting Diodes. Journal of Physical Chemistry C, 2022, 126, 8553-8564.	3.1	33
6	Chiral Methylbenzylammonium Bismuth Iodide with Zero-Dimensional Perovskite Derivative Structure. Journal of Physical Chemistry C, 2022, 126, 9889-9897.	3.1	19
7	Effect of chirality on the optical properties of layered hybrid perovskiteR- andS-Î±-methylbenzylammonium lead iodide. Chemical Communications, 2022, 58, 7650-7653.	4.1	10
8	Leadâ€Free Double Perovskite Cs₂AgInCl₆. Angewandte Chemie, 2021, 133, 11696-11707.	2.0	36
9	Leadâ€Free Double Perovskite Cs₂AgInCl₆. Angewandte Chemie - International Edition, 2021, 60, 11592-11603.	13.8	168
10	Mn²⁺â€Doped Metal Halide Perovskites: Structure, Photoluminescence, and Application. Laser and Photonics Reviews, 2021, 15, .	8.7	167
11	Dielectric confinement for designing compositions and optoelectronic properties of 2D layered hybrid perovskites. Physical Chemistry Chemical Physics, 2021, 23, 82-93.	2.8	24
12	Colloidal BaZrS₃ chalcogenide perovskite nanocrystals for thin film device fabrication. Nanoscale, 2021, 13, 1616-1623.	5.6	46
13	Neural Networks for Analysis of Optical Properties in 2D Layered Hybrid Lead Halide Perovskites. Journal of Physical Chemistry C, 2021, 125, 5251-5259.	3.1	7
14	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	14.6	705
15	Introducing Intermolecular Cationâ€Ï€ Interactions for Waterâ€Stable Low Dimensional Hybrid Lead Halide Perovskites. Angewandte Chemie, 2021, 133, 18413-18419.	2.0	6
16	Introducing Intermolecular Cationâ€Ï€ Interactions for Waterâ€Stable Low Dimensional Hybrid Lead Halide Perovskites. Angewandte Chemie - International Edition, 2021, 60, 18265-18271.	13.8	64
17	Temperatureâ€Dependent Photoluminescence of Hexafluorobenzeneâ€Intercalated Phenethylammonium Tin Iodide 2D Perovskite. Chemistry - an Asian Journal, 2021, 16, 2745-2751.	3.3	3
18	Origin of Luminescence in Sb³⁺- and Bi³⁺-Doped Cs₂SnCl₆ Perovskites: Excited State Relaxation and Spinâ€“Orbit Coupling. Journal of Physical Chemistry Letters, 2021, 12, 10002-10008.	4.6	49

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19	â€œPlenty of Roomâ€•at the Interface of Hybrid Metal Halide Perovskite Single Crystals. Nano Letters, 2021, 21, 8529-8531.	9.1	12
20	Third Harmonic Upconversion and Self-Trapped Excitonic Emission in 1D Pyridinium Lead Iodide. Journal of Physical Chemistry C, 2021, 125, 22674-22683.	3.1	10
21	Intervalley polaronic biexcitons in metal halide perovskite quantum dots. Physical Review B, 2021, 104, .	3.2	15
22	Colloidal Sb³⁺-Doped Cs₂InCl₅Â·H₂O Perovskite Nanocrystals with Temperature-Dependent Luminescence. Journal of Physical Chemistry C, 2021, 125, 27671-27677.	3.1	16
23	ns² Electron (Bi³⁺ and Sb³⁺) Doping in Lead-Free Metal Halide Perovskite Derivatives. Chemistry of Materials, 2020, 32, 10255-10267.	6.7	178
24	Donâ€™t Let the Lead Out: New Material Chemistry Approaches for Sustainable Lead Halide Perovskite Solar Cells. ACS Omega, 2020, 5, 29631-29641.	3.5	60
25	Dual Excitonic Emission in Hybrid 2D Layered Tin Iodide Perovskites. Journal of Physical Chemistry C, 2020, 124, 21129-21136.	3.1	32
26	CsPbBr₃/ZnS Core/Shell Type Nanocrystals for Enhancing Luminescence Lifetime and Water Stability. ACS Energy Letters, 2020, 5, 1794-1796.	17.4	184
27	Correlation of Dielectric Confinement and Excitonic Binding Energy in 2D Layered Hybrid Perovskites Using Temperature Dependent Photoluminescence. Journal of Physical Chemistry C, 2020, 124, 16177-16185.	3.1	59
28	Bi³⁺â€Ł³⁺ and Bi³⁺â€Ÿb³⁺ Codoped Cs₂AgInCl₆ Double Perovskite Nearâ€Infrared Emitters. Angewandte Chemie, 2020, 132, 11403-11407.	2.0	24
29	Bi³⁺â€Ł³⁺ and Bi³⁺â€Ÿb³⁺ Codoped Cs₂AgInCl₆ Double Perovskite Nearâ€Infrared Emitters. Angewandte Chemie - International Edition, 2020, 59, 11307-11311.	13.8	223
30	Molecular Intercalation and Electronic Two Dimensionality in Layered Hybrid Perovskites. Angewandte Chemie - International Edition, 2020, 59, 11653-11659.	13.8	49
31	Molecular Intercalation and Electronic Two Dimensionality in Layered Hybrid Perovskites. Angewandte Chemie, 2020, 132, 11750-11756.	2.0	6
32	Revealing the Band Structure of FAPI Quantum Dot Film and Its Interfaces with Electron and Hole Transport Layer Using Time Resolved Photoemission. Journal of Physical Chemistry C, 2020, 124, 3873-3880.	3.1	10
33	Lanthanide doping in metal halide perovskite nanocrystals: spectral shifting, quantum cutting and optoelectronic applications. NPG Asia Materials, 2020, 12, .	7.9	179
34	g-C3N4:Sn-doped In2O3 (ITO) nanocomposite for photoelectrochemical reduction of water using solar light. Journal of Solid State Chemistry, 2020, 285, 121187.	2.9	17
35	Dual excitonic emissions and structural phase transition of octylammonium lead iodide 2D layered perovskite single crystal. Materials Research Express, 2019, 6, 124002.	1.6	15
36	Synthesis and optical properties of colloidal Cs2AgSb1â^'xBixCl6 double perovskite nanocrystals. Journal of Chemical Physics, 2019, 151, 161101.	3.0	28

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37	Synthesis and Near-Infrared Emission of Yb-Doped Cs₂AgInCl₆ Double Perovskite Microcrystals and Nanocrystals. Journal of Physical Chemistry C, 2019, 123, 15787-15793.	3.1	136
38	Mn Doping in Centimeter-Sized Layered 2D Butylammonium Lead Bromide (BA₂PbBr₄) Single Crystals and Their Optical Properties. Journal of Physical Chemistry C, 2019, 123, 9420-9427.	3.1	68
39	Colloidal Synthesis, Optical Properties, and Hole Transport Layer Applications of Cu₂BaSnS₄ (CBTS) Nanocrystals. ACS Applied Energy Materials, 2019, 2, 3049-3055.	5.1	24
40	Postsynthesis Mn-doping in CsPbI₃ nanocrystals to stabilize the black perovskite phase. Nanoscale, 2019, 11, 4278-4286.	5.6	127
41	Are Chalcogenide Perovskites an Emerging Class of Semiconductors for Optoelectronic Properties and Solar Cell?. Chemistry of Materials, 2019, 31, 565-575.	6.7	88
42	Synthesis and Optical Properties of Colloidal M₃Bi₂I₉ (M = Cs, Rb) Perovskite Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 10643-10649.	3.1	95
43	Synthesis and luminescence of Mn-doped Cs₂AgInCl₆ double perovskites. Chemical Communications, 2018, 54, 5205-5208.	4.1	181
44	Phase Stabilized Î±-CsPbI3 Perovskite Nanocrystals for Photodiode Applications (Laser Photonics Rev.) Tj ETQq0 0 0 rgBT /Overlock 10 T	8.7	2
45	Can B-Site Doping or Alloying Improve Thermal- and Phase-Stability of All-Inorganic CsPbX₃ (X = Cl, Br, I) Perovskites?. ACS Energy Letters, 2018, 3, 286-289.	17.4	403
46	To Exchange or Not to Exchange. Suppressing Anion Exchange in Cesium Lead Halide Perovskites with PbSO₄â€“Oleate Capping. ACS Energy Letters, 2018, 3, 1049-1055.	17.4	119
47	Ligand Engineering to Improve the Luminance Efficiency of CsPbBr₃ Nanocrystal Based Light-Emitting Diodes. Journal of Physical Chemistry C, 2018, 122, 13767-13773.	3.1	69
48	Strategy to overcome recombination limited photocurrent generation in CsPbX3 nanocrystal arrays. Applied Physics Letters, 2018, 112, .	3.3	19
49	Internal Heterostructure of Anion-Exchanged Cesium Lead Halide Nanocubes. Journal of Physical Chemistry C, 2018, 122, 13399-13406.	3.1	44
50	Phase Stabilized Î±â€CsPbI₃ Perovskite Nanocrystals for Photodiode Applications. Laser and Photonics Reviews, 2018, 12, 1700209.	8.7	86
51	Possible Dual Bandgap in (C₄H₉NH₃)₂PbI₄ 2D Layered Perovskite: Single-Crystal and Exfoliated Few-Layer. ACS Energy Letters, 2018, 3, 2940-2946.	17.4	94
52	2D Nanocomposite of gâ€C₃N₄ and TiN Embedded Nâ€Doped Graphene for Photoelectrochemical Reduction of Water Using Sunlight. Advanced Materials Interfaces, 2018, 5, 1801488.	3.7	34
53	Postsynthesis Doping of Mn and Yb into CsPbX₃ (X = Cl, Br, or I) Perovskite Nanocrystals for Downconversion Emission. Chemistry of Materials, 2018, 30, 8170-8178.	6.7	191
54	Ultrafast exciton many-body interactions and hot-phonon bottleneck in colloidal cesium lead halide perovskite nanocrystals. Physical Review B, 2018, 98, .	3.2	89

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55	Lowâ€Bandgap Cs₄CuSb₂Cl₁₂ Layered Double Perovskite: Synthesis, Reversible Thermal Changes, and Magnetic Interaction. Chemistry - an Asian Journal, 2018, 13, 2085-2092.	3.3	70
56	Initiation and future prospects of colloidal metal halide double-perovskite nanocrystals: Cs₂AgBiX₆ (X = Cl, Br, I). Journal of Materials Chemistry A, 2018, 6, 21666-21675.	10.3	77
57	Luminescence, Plasmonic, and Magnetic Properties of Doped Semiconductor Nanocrystals. Angewandte Chemie - International Edition, 2017, 56, 7038-7054.	13.8	211
58	Dotierte Halbleiterâ€Nanokristalle: Lumineszenz, plasmonische und magnetische Eigenschaften. Angewandte Chemie, 2017, 129, 7144-7160.	2.0	10
59	Colloidal Mn-Doped Cesium Lead Halide Perovskite Nanoplatelets. ACS Energy Letters, 2017, 2, 537-543.	17.4	341
60	Ultrafast Exciton Dynamics in Colloidal CsPbBr₃ Perovskite Nanocrystals: Biexciton Effect and Auger Recombination. Journal of Physical Chemistry C, 2017, 121, 4734-4739.	3.1	152
61	Colloidal thallium halide nanocrystals with reasonable luminescence, carrier mobility and diffusion length. Chemical Science, 2017, 8, 4602-4611.	7.4	26
62	Beyond Colloidal Cesium Lead Halide Perovskite Nanocrystals: Analogous Metal Halides and Doping. ACS Energy Letters, 2017, 2, 1089-1098.	17.4	278
63	Size-Induced Enhancement of Carrier Density, LSPR Quality Factor, and Carrier Mobility in Crâ€“Sn Doped In₂O₃ Nanocrystals. Chemistry of Materials, 2017, 29, 9360-9368.	6.7	45
64	Terahertz Spectroscopic Probe of Hot Electron and Hole Transfer from Colloidal CsPbBr₃ Perovskite Nanocrystals. Nano Letters, 2017, 17, 5402-5407.	9.1	68
65	Colloidal Synthesis and Photophysics of M₃Sb₂I₉ (M=Cs and Rb) Nanocrystals: Leadâ€Free Perovskites. Angewandte Chemie, 2017, 129, 14375-14379.	2.0	146
66	Colloidal Synthesis and Photophysics of M₃Sb₂I₉ (M=Cs and Rb) Nanocrystals: Leadâ€Free Perovskites. Angewandte Chemie - International Edition, 2017, 56, 14187-14191.	13.8	185
67	Origin of the Substitution Mechanism for the Binding of Organic Ligands on the Surface of CsPbBr₃ Perovskite Nanocubes. Journal of Physical Chemistry Letters, 2017, 8, 4988-4994.	4.6	292
68	Colloidal Nanocomposite of TiN and N-Doped Few-Layer Graphene for Plasmonics and Electrocatalysis. ACS Energy Letters, 2017, 2, 2251-2256.	17.4	36
69	Terahertz Conductivity within Colloidal CsPbBr₃ Perovskite Nanocrystals: Remarkably High Carrier Mobilities and Large Diffusion Lengths. Nano Letters, 2016, 16, 4838-4848.	9.1	489
70	Delocalized Electrons Mediated Magnetic Coupling in Mnâ€“Sn Codoped In₂O₃ Nanocrystals: Plasmonics Shows the Way. Chemistry of Materials, 2016, 28, 3620-3624.	6.7	31
71	Defect-Mediated Electronâ€“Hole Separation in Colloidal Ag₂Sâ€“AgInS₂ Hetero Dimer Nanocrystals Tailoring Luminescence and Solar Cell Properties. Journal of Physical Chemistry C, 2016, 120, 19461-19469.	3.1	33
72	Excellent green but less impressive blue luminescence from CsPbBr₃perovskite nanocubes and nanoplatelets. Nanotechnology, 2016, 27, 325708.	2.6	110

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73	Band Edge Energies and Excitonic Transition Probabilities of Colloidal CsPbX₃ (X = Cl, Br,) Tj ETQq1 1 0.784314 rgBT /Ov	17.4	452
74	Reduction of Mn3+ to Mn2+ and near infrared plasmonics from Mnâ€“Sn codoped In2O3 nanocrystals. RSC Advances, 2016, 6, 79153-79159.	3.6	7
75	Electrical and Plasmonic Properties of Ligandâ€Free Sn⁴⁺â€Doped In₂O₃ (ITO) Nanocrystals. ChemPhysChem, 2016, 17, 710-716.	2.1	9
76	Colloidal CsPbBr₃ Perovskite Nanocrystals: Luminescence beyond Traditional Quantum Dots. Angewandte Chemie - International Edition, 2015, 54, 15424-15428.	13.8	841
77	Visible light-induced hydrogen generation using colloidal (ZnS)_{0.4}(AgInS₂)_{0.6} nanocrystals capped by S^{2â^'} ions. Journal of Materials Chemistry A, 2015, 3, 8276-8279.	10.3	23
78	Doping Controls Plasmonics, Electrical Conductivity, and Carrier-Mediated Magnetic Coupling in Fe and Sn Codoped In₂O₃ Nanocrystals: Local Structure Is the Key. Chemistry of Materials, 2015, 27, 892-900.	6.7	59
79	Inorganic Surface Ligands for Colloidal Nanomaterials. Zeitschrift Fur Physikalische Chemie, 2015, 229, 85-107.	2.8	47
80	Electronic grade and flexible semiconductor film employing oriented attachment of colloidal ligand-free PbS and PbSe nanocrystals at room temperature. Nanoscale, 2015, 7, 9204-9214.	5.6	23
81	Origin of Unusual Excitonic Absorption and Emission from Colloidal Ag₂S Nanocrystals: Ultrafast Photophysics and Solar Cell. Journal of Physical Chemistry Letters, 2015, 6, 3915-3922.	4.6	66
82	Microscopic description of the evolution of the local structure and an evaluation of the chemical pressure concept in a solid solution. Physical Review B, 2014, 89, .	3.2	26
83	Luminescence and solar cell from ligand-free colloidal AgInS2 nanocrystals. CrystEngComm, 2014, 16, 3605.	2.6	61
84	Origin of Photoluminescence and XAFS Study of (ZnS)_{1â€“x}(AgInS₂)_x Nanocrystals. Journal of Physical Chemistry Letters, 2014, 5, 167-173.	4.6	57
85	Seeded-growth, nanocrystal-fusion, ion-exchange and inorganic-ligand mediated formation of semiconductor-based colloidal heterostructured nanocrystals. CrystEngComm, 2014, 16, 9391-9407.	2.6	20
86	Organic-free colloidal semiconductor nanocrystals as luminescent sensors for metal ions and nitroaromatic explosives. Chemical Communications, 2014, 50, 4743.	4.1	33
87	Multifunctional Sn- and Fe-Codoped In₂O₃ Colloidal Nanocrystals: Plasmonics and Magnetism. Journal of Physical Chemistry Letters, 2014, 5, 2306-2311.	4.6	53
88	Interaction of CdSe and ZnO nanocrystals with electron-donor and -acceptor molecules. Chemical Physics Letters, 2013, 556, 200-206.	2.6	6
89	X-ray Photoelectron Spectroscopy: A Unique Tool To Determine the Internal Heterostructure of Nanoparticles. Chemistry of Materials, 2013, 25, 1222-1232.	6.7	92
90	Ligand-Free, Colloidal, and Luminescent Metal Sulfide Nanocrystals. Journal of Physical Chemistry Letters, 2013, 4, 1676-1681.	4.6	54

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91	Ultranarrow and Widely TunableMn2+-Induced Photoluminescence from Single Mn-Doped Nanocrystals of ZnS-CdS Alloys. Physical Review Letters, 2013, 110, 267401.	7.8	84
92	Low Voltage, Hysteresis Free, and High Mobility Transistors from All-Inorganic Colloidal Nanocrystals. Nano Letters, 2012, 12, 1813-1820.	9.1	137
93	First-Principles Study of the Effect of Organic Ligands on the Crystal Structure of CdS Nanoparticles. Journal of Physical Chemistry C, 2012, 116, 6507-6511.	3.1	22
94	Effect of Metal Ions on Photoluminescence, Charge Transport, Magnetic and Catalytic Properties of All-Inorganic Colloidal Nanocrystals and Nanocrystal Solids. Journal of the American Chemical Society, 2012, 134, 13604-13615.	13.7	156
95	Metal-free Inorganic Ligands for Colloidal Nanocrystals: S^{2â€“}, HS^{â€“}, Se^{2â€“}, HSe^{â€“}, Te^{2â€“}, HTe^{â€“}, TeS₃^{2â€“}, OH^{â€“}, and NH₂^{â€“} as Surface Ligands. Journal of the American Chemical Society, 2011, 133, 10612-10620.	13.7	645
96	Crystal Structure Engineering by Fine-Tuning the Surface Energy: The Case of CdE (E = S/Se) Nanocrystals. Journal of Physical Chemistry Letters, 2011, 2, 706-712.	4.6	51
97	Inorganic Analogues of Graphene. European Journal of Inorganic Chemistry, 2010, 2010, 4244-4250.	2.0	175
98	BCN: A Graphene Analogue with Remarkable Adsorptive Properties. Chemistry - A European Journal, 2010, 16, 149-157.	3.3	194
99	Search for new transparent conductors: Effect of Ge doping on the conductivity of , and. Solid State Communications, 2010, 150, 1679-1682.	1.9	6
100	Blue light emitting graphene-based materials and their use in generating white light. Solid State Communications, 2010, 150, 1774-1777.	1.9	114
101	Graphene analogue BCN: Femtosecond nonlinear optical susceptibility and hot carrier dynamics. Chemical Physics Letters, 2010, 499, 152-157.	2.6	33
102	Size-Dependent Tuning of Mn²⁺ d Emission in Mn²⁺-Doped CdS Nanocrystals: Bulk vs Surface. Journal of Physical Chemistry C, 2010, 114, 18323-18329.	3.1	80
103	Origin of the Enhanced Photoluminescence from Semiconductor CdSeS Nanocrystals. Journal of Physical Chemistry Letters, 2010, 1, 2149-2153.	4.6	126
104	Graphene Analogues of BN: Novel Synthesis and Properties. ACS Nano, 2010, 4, 1539-1544.	14.6	684
105	Solvothermal Synthesis of InP Quantum Dots. Journal of Nanoscience and Nanotechnology, 2009, 9, 5633-5636.	0.9	10
106	Luminescence in Mn-doped CdS nanocrystals. Bulletin of Materials Science, 2008, 31, 561-568.	1.7	51
107	To Dope Mn²⁺ in a Semiconducting Nanocrystal. Journal of the American Chemical Society, 2008, 130, 10605-10611.	13.7	237
108	Optically Bifunctional Heterostructured Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 8229-8233.	3.1	31

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109	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
110	White Light from Mn²⁺-Doped CdS Nanocrystals:â€‰ A New Approach. Journal of Physical Chemistry C, 2007, 111, 13641-13644.	3.1	146
111	White-light emission from a blend of CdSeS nanocrystals of different Se:S ratio. Nanotechnology, 2007, 18, 075401.	2.6	72
112	A Study of Mn2+Doping in CdS Nanocrystals. Chemistry of Materials, 2007, 19, 3252-3259.	6.7	138