

Daniel R Gamelin

List of Publications by Year in descending order

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177
papers

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citations

16437

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121
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182
all docs

182
docs citations

182
times ranked

13721
citing authors

#	ARTICLE	IF	CITATIONS
1	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021, 15, 10775-10981.	7.3	705
2	Photo-assisted electrodeposition of cobalt phosphate (Co-Pi) catalyst on hematite photoanodes for solar water oxidation. <i>Energy and Environmental Science</i> , 2011, 4, 1759.	15.6	620
3	Magnetic Quantum Dots: Synthesis, Spectroscopy, and Magnetism of Co ²⁺ - and Ni ²⁺ -Doped ZnO Nanocrystals. <i>Journal of the American Chemical Society</i> , 2003, 125, 13205-13218.	6.6	613
4	Electronic structure origins of polarity-dependent high-TC ferromagnetism in oxide-diluted magnetic semiconductors. <i>Nature Materials</i> , 2006, 5, 291-297.	13.3	475
5	High-Temperature Ferromagnetism in Ni ²⁺ -Doped ZnO Aggregates Prepared from Colloidal Diluted Magnetic Semiconductor Quantum Dots. <i>Physical Review Letters</i> , 2003, 91, 157202.	2.9	416
6	Mn ²⁺ -Doped CdSe Quantum Dots: New Inorganic Materials for Spin-Electronics and Spin-Photonics. <i>Advanced Functional Materials</i> , 2008, 18, 3873-3891.	7.8	395
7	Synthesis of Colloidal Mn ²⁺ :ZnO Quantum Dots and High-TC Ferromagnetic Nanocrystalline Thin Films. <i>Journal of the American Chemical Society</i> , 2004, 126, 9387-9398.	6.6	394
8	Colloidal Nanocrystals of Lead-Free Double-Perovskite (Elpasolite) Semiconductors: Synthesis and Anion Exchange To Access New Materials. <i>Nano Letters</i> , 2018, 18, 1118-1123.	4.5	394
9	Dual-Emitting Nanoscale Temperature Sensors. <i>Chemistry of Materials</i> , 2013, 25, 1283-1292.	3.2	388
10	Light-Induced Spontaneous Magnetization in Doped Colloidal Quantum Dots. <i>Science</i> , 2009, 325, 973-976.	6.0	297
11	Picosecond Quantum Cutting Generates Photoluminescence Quantum Yields Over 100% in Ytterbium-Doped CsPbCl ₃ Nanocrystals. <i>Nano Letters</i> , 2018, 18, 3792-3799.	4.5	292
12	Luminescent Colloidal Semiconductor Nanocrystals Containing Copper: Synthesis, Photophysics, and Applications. <i>Chemical Reviews</i> , 2016, 116, 10820-10851.	23.0	288
13	Tunable Dual Emission in Doped Semiconductor Nanocrystals. <i>Nano Letters</i> , 2010, 10, 3670-3674.	4.5	286
14	Direct Kinetic Correlation of Carriers and Ferromagnetism in Co ²⁺ :ZnO. <i>Physical Review Letters</i> , 2006, 97, 037203.	2.9	282
15	Zero-Reabsorption Doped-Nanocrystal Luminescent Solar Concentrators. <i>ACS Nano</i> , 2014, 8, 3461-3467.	7.3	281
16	Photoluminescence Temperature Dependence, Dynamics, and Quantum Efficiencies in Mn ²⁺ -Doped CsPbCl ₃ Perovskite Nanocrystals with Varied Dopant Concentration. <i>Chemistry of Materials</i> , 2017, 29, 8003-8011.	3.2	274
17	Doped Semiconductor Nanocrystals: Synthesis, Characterization, Physical Properties, and Applications. <i>Progress in Inorganic Chemistry</i> , 2005, , 47-126.	3.0	272
18	Composite photoanodes for photoelectrochemical solar water splitting. <i>Energy and Environmental Science</i> , 2010, 3, 1252.	15.6	259

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19	Nanocrystals for Luminescent Solar Concentrators. <i>Nano Letters</i> , 2015, 15, 1315-1323.	4.5	241
20	Direct Observation of sp ^d Exchange Interactions in Colloidal Mn ²⁺ - and Co ²⁺ -Doped CdSe Quantum Dots. <i>Nano Letters</i> , 2007, 7, 1037-1043.	4.5	207
21	Singlet-Triplet Splittings in the Luminescent Excited States of Colloidal Cu ⁺ :CdSe, Cu ⁺ :InP, and CuInS ₂ Nanocrystals: Charge-Transfer Configurations and Self-Trapped Excitons. <i>Journal of the American Chemical Society</i> , 2015, 137, 13138-13147.	6.6	193
22	Spectroscopy of Mixed-Valence CuA-Type Centers: Ligand-Field Control of Ground-State Properties Related to Electron Transfer. <i>Journal of the American Chemical Society</i> , 1998, 120, 5246-5263.	6.6	192
23	Water-Soluble Dual-Emitting Nanocrystals for Ratiometric Optical Thermometry. <i>Journal of the American Chemical Society</i> , 2011, 133, 14978-14980.	6.6	184
24	Colloidal Transition-Metal-Doped ZnO Quantum Dots. <i>Journal of the American Chemical Society</i> , 2002, 124, 15192-15193.	6.6	181
25	Spin-Polarizable Excitonic Luminescence in Colloidal Mn ²⁺ -Doped CdSe Quantum Dots. <i>Nano Letters</i> , 2008, 8, 1197-1201.	4.5	180
26	Nb-Doped Colloidal TiO ₂ Nanocrystals with Tunable Infrared Absorption. <i>Chemistry of Materials</i> , 2013, 25, 3383-3390.	3.2	177
27	Mechanistic insights into solar water oxidation by cobalt-phosphate-modified Fe_2O_3 photoanodes. <i>Energy and Environmental Science</i> , 2015, 8, 577-584.	15.6	164
28	Excited-State Contributions to Ground-State Properties of Mixed-Valence Dimers: Spectral and Electronic-Structural Studies of $[\text{Fe}_2(\text{OH})_3(\text{tmtacn})_2]^{2+}$ -Related to the $[\text{Fe}_2\text{S}_2]^+$ Active Sites of Plant-Type Ferredoxins. <i>Journal of the American Chemical Society</i> , 1996, 118, 8085-8097.	6.6	162
29	Kinetic analysis of photoelectrochemical water oxidation by mesostructured Co-Pi/Fe ₂ O ₃ photoanodes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2986-2994.	5.2	162
30	Nanocrystal Diffusion Doping. <i>Journal of the American Chemical Society</i> , 2013, 135, 14380-14389.	6.6	159
31	Luminescence in colloidal Mn ²⁺ -doped semiconductor nanocrystals. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1582-1589.	1.4	153
32	Exciton Storage by Mn ²⁺ in Colloidal Mn ²⁺ -Doped CdSe Quantum Dots. <i>Nano Letters</i> , 2008, 8, 2949-2953.	4.5	150
33	Charge-controlled magnetism in colloidal doped semiconductor nanocrystals. <i>Nature Nanotechnology</i> , 2009, 4, 681-687.	15.6	145
34	Quantum-Cutting Ytterbium-Doped CsPb(Cl _{1-x} Br _x) ₃ Perovskite Thin Films with Photoluminescence Quantum Yields over 190%. <i>ACS Energy Letters</i> , 2018, 3, 2390-2395.	8.8	136
35	Charge-Tunable Quantum Plasmons in Colloidal Semiconductor Nanocrystals. <i>ACS Nano</i> , 2014, 8, 1065-1072.	7.3	134
36	Photochemical Electronic Doping of Colloidal CdSe Nanocrystals. <i>Journal of the American Chemical Society</i> , 2013, 135, 18782-18785.	6.6	132

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37	Redox Chemistries and Plasmon Energies of Photodoped In ₂ O ₃ and Sn-Doped In ₂ O ₃ (ITO) Nanocrystals. <i>Journal of the American Chemical Society</i> , 2015, 137, 518-524.	6.6	132
38	Delayed Exciton Emission and Its Relation to Blinking in CdSe Quantum Dots. <i>Nano Letters</i> , 2015, 15, 7718-7725.	4.5	130
39	Room-Temperature Electron Spin Dynamics in Free-Standing ZnO Quantum Dots. <i>Physical Review Letters</i> , 2007, 98, 186804.	2.9	119
40	Controlling Carrier Densities in Photochemically Reduced Colloidal ZnO Nanocrystals: Size Dependence and Role of the Hole Quencher. <i>Journal of the American Chemical Society</i> , 2013, 135, 16569-16577.	6.6	117
41	Anion Exchange and the Quantum-Cutting Energy Threshold in Ytterbium-Doped CsPb(Cl _{1-x} Br _x) ₃ Perovskite Nanocrystals. <i>Nano Letters</i> , 2019, 19, 1931-1937.	4.5	114
42	Inorganic Cluster Syntheses of TM ²⁺ -Doped Quantum Dots (CdSe, CdS, CdSe/CdS): Physical Property Dependence on Dopant Locale. <i>Journal of the American Chemical Society</i> , 2007, 129, 9808-9818.	6.6	113
43	Electronic Doping and Redox-Potential Tuning in Colloidal Semiconductor Nanocrystals. <i>Accounts of Chemical Research</i> , 2015, 48, 1929-1937.	7.6	111
44	Anion Exchange in Cesium Lead Halide Perovskite Nanocrystals and Thin Films Using Trimethylsilyl Halide Reagents. <i>Chemistry of Materials</i> , 2018, 30, 4887-4891.	3.2	103
45	Photoluminescence Blinking and Reversible Electron Trapping in Copper-Doped CdSe Nanocrystals. <i>Nano Letters</i> , 2015, 15, 4045-4051.	4.5	95
46	Stable Photogenerated Carriers in Magnetic Semiconductor Nanocrystals. <i>Journal of the American Chemical Society</i> , 2006, 128, 3910-3911.	6.6	93
47	Bright CuInS ₂ /CdS nanocrystal phosphors for high-gain full-spectrum luminescent solar concentrators. <i>Chemical Communications</i> , 2015, 51, 9129-9132.	2.2	91
48	Size-Dependent Trap-Assisted Auger Recombination in Semiconductor Nanocrystals. <i>Nano Letters</i> , 2013, 13, 1810-1815.	4.5	89
49	Giant Excitonic Zeeman Splittings in Colloidal Co ²⁺ -Doped ZnSe Quantum Dots. <i>Journal of the American Chemical Society</i> , 2006, 128, 13195-13203.	6.6	88
50	Mid-Gap States and Normal vs Inverted Bonding in Luminescent Cu ⁺ - and Ag ⁺ -Doped CdSe Nanocrystals. <i>Journal of the American Chemical Society</i> , 2017, 139, 6411-6421.	6.6	88
51	Excited-State Distortions and Electron Delocalization in Mixed-Valence Dimers: A Vibronic Analysis of the Near-IR Absorption and Resonance Raman Profiles of [Fe ₂ (OH) ₃ (tmtacn) ₂] ²⁺ . <i>Inorganic Chemistry</i> , 1996, 35, 4323-4335.	1.9	80
52	Structural Diversity in Cesium Bismuth Halide Nanocrystals. <i>Chemistry of Materials</i> , 2019, 31, 4685-4697.	3.2	80
53	A Selective Cation Exchange Strategy for the Synthesis of Colloidal Yb ³⁺ -Doped Chalcogenide Nanocrystals with Strong Broadband Visible Absorption and Long-Lived Near-Infrared Emission. <i>Journal of the American Chemical Society</i> , 2017, 139, 11814-11824.	6.6	77
54	Single-Particle Photoluminescence Spectra, Blinking, and Delayed Luminescence of Colloidal CuInS ₂ Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2016, 120, 17136-17142.	1.5	76

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55	Spectroscopy of Photovoltaic and Photoconductive Nanocrystalline Co ²⁺ -Doped ZnO Electrodes. <i>Journal of Physical Chemistry B</i> , 2005, 109, 14486-14495.	1.2	74
56	Highly anisotropic excitons and multiple phonon bound states in a van der Waals antiferromagnetic insulator. <i>Nature Nanotechnology</i> , 2021, 16, 655-660.	15.6	72
57	Lanthanide-Doped CaS and SrS Luminescent Nanocrystals: A Single-Source Precursor Approach for Doping. <i>Journal of the American Chemical Society</i> , 2014, 136, 16533-16543.	6.6	71
58	Effects of Surface Chemistry on the Photophysics of Colloidal InP Nanocrystals. <i>ACS Nano</i> , 2019, 13, 14198-14207.	7.3	71
59	Excited-State Exchange Coupling in Bent Mn(III)-O-Mn(III) Complexes: Dominance of the π/σ Superexchange Pathway and Its Possible Contributions to the Reactivities of Binuclear Metalloproteins. <i>Journal of the American Chemical Society</i> , 2000, 122, 8511-8523.	6.6	70
60	Comparison of extra electrons in colloidal n-type Al ³⁺ -doped and photochemically reduced ZnO nanocrystals. <i>Chemical Communications</i> , 2012, 48, 9352.	2.2	70
61	Photoluminescence Brightening via Electrochemical Trap Passivation in ZnSe and Mn ²⁺ -Doped ZnSe Quantum Dots. <i>Journal of the American Chemical Society</i> , 2012, 134, 6819-6825.	6.6	67
62	Size Dependence of Negative Trion Auger Recombination in Photodoped CdSe Nanocrystals. <i>Nano Letters</i> , 2014, 14, 353-358.	4.5	67
63	Quantum-cutting Yb ³⁺ -doped perovskite nanocrystals for monolithic bilayer luminescent solar concentrators. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9279-9288.	5.2	67
64	Spectroscopic Characterization of an Engineered Purple CuA Center in Azurin. <i>Inorganic Chemistry</i> , 1998, 37, 191-198.	1.9	66
65	Quantum oscillations in magnetically doped colloidal nanocrystals. <i>Nature Nanotechnology</i> , 2011, 6, 112-115.	15.6	66
66	Analysis of Optical Losses in High-Efficiency CuInS ₂ -Based Nanocrystal Luminescent Solar Concentrators: Balancing Absorption versus Scattering. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3252-3260.	1.5	66
67	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. <i>Joule</i> , 2022, 6, 8-15.	11.7	66
68	Colloidal Transition-Metal-Doped Quantum Dots. , 2010, , 397-453.		64
69	Tuning the Potentials of Extra Electrons in Colloidal n-Type ZnO Nanocrystals via Mg ²⁺ Substitution. <i>Journal of the American Chemical Society</i> , 2012, 134, 7937-7943.	6.6	63
70	Computational Studies of the Electronic Structures of Copper-Doped CdSe Nanocrystals: Oxidation States, Jahn-Teller Distortions, Vibronic Bandshapes, and Singlet-Triplet Splittings. <i>Journal of Physical Chemistry C</i> , 2016, 120, 5714-5723.	1.5	63
71	Effect of Protons on the Redox Chemistry of Colloidal Zinc Oxide Nanocrystals. <i>Journal of the American Chemical Society</i> , 2013, 135, 8492-8495.	6.6	62
72	Light-induced ferromagnetism in moiré superlattices. <i>Nature</i> , 2022, 604, 468-473.	13.7	61

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73	Electron Confinement Effects in the EPR Spectra of Colloidal n-Type ZnO Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2008, 112, 14331-14335.	1.5	58
74	Bimodal Bond-Length Distributions in Cobalt-Doped CdSe, ZnSe, and Cd _{1-x} Zn _x Se Quantum Dots. <i>Journal of the American Chemical Society</i> , 2007, 129, 3973-3978.	6.6	57
75	Photocharging ZnO Nanocrystals: Picosecond Hole Capture, Electron Accumulation, and Auger Recombination. <i>Journal of Physical Chemistry C</i> , 2012, 116, 20633-20642.	1.5	57
76	Orbital pathways for Mn ²⁺ carrier magnetic exchange coupling in diluted magnetic semiconductor quantum dots. <i>Physical Review B</i> , 2011, 84, .	1.1	56
77	Investigation of pure and Co ²⁺ -doped ZnO quantum dot electronic structures using the density functional theory: choosing the right functional. <i>New Journal of Physics</i> , 2008, 10, 055013.	1.2	55
78	Photodoping and Transient Spectroscopies of Copper-Doped CdSe/CdS Nanocrystals. <i>ACS Nano</i> , 2018, 12, 718-728.	7.3	53
79	Electrochemically Controlled Auger Quenching of Mn ²⁺ Photoluminescence in Doped Semiconductor Nanocrystals. <i>ACS Nano</i> , 2011, 5, 4158-4168.	7.3	52
80	Picosecond Dynamics of Excitonic Magnetic Polarons in Colloidal Diffusion-Doped Cd _x Mn _{1-x} Se Quantum Dots. <i>ACS Nano</i> , 2015, 9, 11177-11191.	7.3	52
81	Colloidal Nanocrystals of Wurtzite Zn _x Co _{1-x} O (0 ≤ x ≤ 1). <i>Journal of Physical Chemistry C</i> , 2008, 112, 7107-7116.	3.2	51
82	Electron Transfer Between Colloidal ZnO Nanocrystals. <i>Journal of the American Chemical Society</i> , 2011, 133, 4228-4231.	6.6	51
83	Giant Excitonic Exchange Splittings at Zero Field in Single Colloidal CdSe Quantum Dots Doped with Individual Mn ²⁺ Impurities. <i>Nano Letters</i> , 2016, 16, 6371-6377.	4.5	50
84	Moiré trions in MoSe ₂ /WSe ₂ heterobilayers. <i>Nature Nanotechnology</i> , 2021, 16, 1208-1213.	15.6	50
85	Dopant ⁺ Carrier Magnetic Exchange Coupling in Colloidal Inverted Core/Shell Semiconductor Nanocrystals. <i>Nano Letters</i> , 2009, 9, 4376-4382.	4.5	48
86	Redox Potentials of Colloidal n-Type ZnO Nanocrystals: Effects of Confinement, Electron Density, and Fermi-Level Pinning by Aldehyde Hydrogenation. <i>Journal of the American Chemical Society</i> , 2015, 137, 11163-11169.	6.6	47
87	Proton-Controlled Reduction of ZnO Nanocrystals: Effects of Molecular Reductants, Cations, and Thermodynamic Limitations. <i>Journal of the American Chemical Society</i> , 2016, 138, 1377-1385.	6.6	47
88	Photoluminescence Saturation in Quantum-Cutting Yb ³⁺ -Doped CsPb(Cl _x Br _{3-x}) ₃ Perovskite Nanocrystals: Implications for Solar Downconversion. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12474-12484.	1.5	47
89	Theoretical Characterization of Electronic Transitions in Co ²⁺ - and Mn ²⁺ -Doped ZnO Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2009, 113, 8710-8717.	1.5	46
90	Energetic Pinning of Magnetic Impurity Levels in Quantum-Confined Semiconductors. <i>Nano Letters</i> , 2006, 6, 2887-2892.	4.5	45

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91	One-Pot Synthesis of Monodisperse Colloidal Copper-Doped CdSe Nanocrystals Mediated by Ligand-Copper Interactions. <i>Chemistry of Materials</i> , 2016, 28, 7375-7384.	3.2	45
92	Selenium Redox Reactivity on Colloidal CdSe Quantum Dot Surfaces. <i>Journal of the American Chemical Society</i> , 2016, 138, 11105-11108.	6.6	45
93	Tuning Equilibrium Compositions in Colloidal Cd _{1-x} Mn _x Se Nanocrystals Using Diffusion Doping and Cation Exchange. <i>ACS Nano</i> , 2016, 10, 910-918.	7.3	45
94	Single-Source Vapor Deposition of Quantum-Cutting Yb ³⁺ :CsPb(Cl _{1-x} Br _x) ₃ and Other Complex Metal-Halide Perovskites. <i>ACS Applied Energy Materials</i> , 2019, 2, 4560-4565.	2.5	44
95	Spin-on Spintronics: Ultrafast Electron Spin Dynamics in ZnO and Zn _{1-x} CoxO Sol-Gel Films. <i>Nano Letters</i> , 2011, 11, 3355-3360.	4.5	42
96	Absorption and Magnetic Circular Dichroism Analyses of Giant Zeeman Splittings in Diffusion-Doped Colloidal Cd _{1-x} Mn _x Se Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3076-3081.	2.1	42
97	Valence-Band Electronic Structures of Cu-Doped ZnS, Alloyed CuInZnS, and Ternary CuInS ₂ Nanocrystals: A Unified Description of Photoluminescence across Compositions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18124-18133.	1.5	42
98	Highly luminescent and catalytically active suprastructures of magic-sized semiconductor nanoclusters. <i>Nature Materials</i> , 2021, 20, 650-657.	13.3	42
99	Peromagnetic excited-state Mn dimers in Zn _{1-x} Mn _x quantum dots observed by time-resolved magnetophotoluminescence. <i>Physical Review B</i> , 2014, 89, 115407.	1.1	40
100	Soluble Supercapacitors: Large and Reversible Charge Storage in Colloidal Iron-Doped ZnO Nanocrystals. <i>Nano Letters</i> , 2018, 18, 3297-3302.	4.5	40
101	Detailed-balance analysis of Yb ³⁺ :CsPb(Cl _{1-x} Br _x) ₃ quantum-cutting layers for high-efficiency photovoltaics under real-world conditions. <i>Energy and Environmental Science</i> , 2019, 12, 2486-2495.	15.6	39
102	Spectroelectrochemical Measurement of Surface Electrostatic Contributions to Colloidal CdSe Nanocrystal Redox Potentials. <i>Chemistry of Materials</i> , 2016, 28, 7912-7918.	3.2	38
103	Luminescence Saturation via Mn ²⁺ Exciton Cross Relaxation in Colloidal Doped Semiconductor Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9300-9310.	1.5	37
104	Mid-gap electronic states in Zn _{1-x} Mn _x quantum dots. <i>Physical Review B</i> , 2010, 82, 115407.	1.1	36
105	Co ²⁺ and its dependence on ZnO. <i>Journal of Applied Physics</i> , 2006, 99, 08M112.	1.1	35
106	Spinodal Decomposition During Anion Exchange in Colloidal Mn ²⁺ -Doped CsPbX ₃ (X = Cl, Br) Perovskite Nanocrystals. <i>Chemistry of Materials</i> , 2019, 31, 7711-7722.	3.2	36
107	Coherent Spin Precession and Lifetime-Limited Spin Dephasing in CsPbBr ₃ Perovskite Nanocrystals. <i>Nano Letters</i> , 2020, 20, 8626-8633.	4.5	36
108	Manipulating polar ferromagnetism in transition-metal-doped ZnO: Why manganese is different from cobalt (invited). <i>Journal of Applied Physics</i> , 2006, 99, 08M112.	1.1	35

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109	Tunneling in the Delayed Luminescence of Colloidal CdSe, Cu ⁺ -Doped CdSe, and CuInS ₂ Semiconductor Nanocrystals and Relationship to Blinking. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27040-27049.	1.5	35
110	Copper's Role in the Photoluminescence of Ag ⁺ -Cu ⁺ /InS ₂ Nanocrystals, from Copper-Doped AgInS ₂ ($x = 1/4$) to CuInS ₂ ($x = 1$). <i>Nano Letters</i> , 2019, 19, 1318-1325.	4.5	34
111	speciation and energy-transfer dynamics in quantum-cutting Ag^+ -doped Cu^+ -doped Cu^+ . <i>Physical Review Materials</i> , 2020, 4, .	0.9	33
112	The Influence of Dopants on the Nucleation of Semiconductor Nanocrystals from Homogeneous Solution. <i>Journal of Nanoscience and Nanotechnology</i> , 2005, 5, 1472-1479.	0.9	32
113	Hyperfine Coupling in Colloidal n-Type ZnO Quantum Dots: Effects on Electron Spin Relaxation. <i>Journal of Physical Chemistry C</i> , 2010, 114, 14467-14472.	1.5	32
114	Theoretical Characterization of Conduction-Band Electrons in Photodoped and Aluminum-Doped Zinc Oxide (AZO) Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26584-26590.	1.5	31
115	Single Magnetic Impurities in Colloidal Quantum Dots and Magic-Size Clusters. <i>Chemistry of Materials</i> , 2017, 29, 8023-8036.	3.2	31
116	Synthesis and Spectroscopy of Emissive, Surface-Modified, Copper-Doped Indium Phosphide Nanocrystals. , 2020, 2, 576-581.		31
117	Sub-band-gap photoconductivity in ZnO. <i>Physical Review B</i> , 2010, 81, .		30
118	Kinetics of Isovalent (Cd ²⁺) and Aliovalent (In ³⁺) Cation Exchange in Cd ²⁺ -Mn ²⁺ /Se Nanocrystals. <i>Journal of the American Chemical Society</i> , 2016, 138, 12885-12893.	6.6	30
119	Potentiometric Titrations for Measuring the Capacitance of Colloidal Photodoped ZnO Nanocrystals. <i>Journal of the American Chemical Society</i> , 2016, 138, 10605-10610.	6.6	30
120	Spin-orbit-coupled exciton-polariton condensates in lead halide perovskites. <i>Science Advances</i> , 2021, 7, eabj7667.	4.7	30
121	Potentiometric Measurements of Semiconductor Nanocrystal Redox Potentials. <i>Journal of the American Chemical Society</i> , 2016, 138, 4310-4313.	6.6	29
122	Cyclotron Splittings in the Plasmon Resonances of Electronically Doped Semiconductor Nanocrystals Probed by Magnetic Circular Dichroism Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1831-1836.	2.1	29
123	Copper-Coupled Electron Transfer in Colloidal Plasmonic Copper-Sulfide Nanocrystals Probed by <i>In Situ</i> Spectroelectrochemistry. <i>Journal of the American Chemical Society</i> , 2018, 140, 3434-3442.	6.6	28
124	Extremely Slow Spontaneous Electron Trapping in Photodoped n-Type CdSe Nanocrystals. <i>Chemistry of Materials</i> , 2017, 29, 3754-3762.	3.2	27
125	One-step synthesis of alloyed dual-emitting semiconductor nanocrystals. <i>Chemical Communications</i> , 2013, 49, 39-41.	2.2	26
126	Two-center formulation of Mn ²⁺ -electrons ⁺ d-exchange coupling in bulk and quantum-confined diluted magnetic semiconductors. <i>Physical Review B</i> , 2010, 82, .	1.1	25

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127	Redox Brightening of Colloidal Semiconductor Nanocrystals Using Molecular Reductants. <i>Journal of the American Chemical Society</i> , 2012, 134, 16175-16177.	6.6	25
128	Surface Contributions to Mn ²⁺ Spin Dynamics in Colloidal Doped Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 457-463.	2.1	25
129	Unraveling Strain Gradient Induced Electromechanical Coupling in Twisted Double Bilayer Graphene Moiré Superlattices. <i>Advanced Materials</i> , 2021, 33, e2105879.	11.1	25
130	Reaction Dynamics of Proton-Coupled Electron Transfer from Reduced ZnO Nanocrystals. <i>ACS Nano</i> , 2015, 9, 10258-10267.	7.3	24
131	Built-in Potential in Fe ₂ O ₃ ∕Cr ₂ O ₃ Superlattices for Improved Photoexcited Carrier Separation. <i>Advanced Materials</i> , 2016, 28, 1616-1622.	11.1	24
132	Activationless Multiple-Site Concerted Proton∕Electron Tunneling. <i>Journal of the American Chemical Society</i> , 2018, 140, 7449-7452.	6.6	24
133	Modular Zwitterion-Functionalized Poly(isopropyl methacrylate) Polymers for Hosting Luminescent Lead Halide Perovskite Nanocrystals. <i>Chemistry of Materials</i> , 2021, 33, 3779-3790.	3.2	24
134	A Hybrid Quantum-Classical Model of Electrostatics in Multiply Charged Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26086-26095.	1.5	22
135	Current-Induced Magnetic Polarons in a Colloidal Quantum-Dot Device. <i>Nano Letters</i> , 2017, 17, 4768-4773.	4.5	22
136	Degenerately <i>n</i> -Doped Colloidal PbSe Quantum Dots: Band Assignments and Electrostatic Effects. <i>Nano Letters</i> , 2018, 18, 3893-3900.	4.5	22
137	Universal machine learning framework for defect predictions in zinc blende semiconductors. <i>Patterns</i> , 2022, 3, 100450.	3.1	22
138	Theoretical Evaluation of Spin-Dependent Auger De-Excitation in Mn ²⁺ -Doped Semiconductor Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11223-11231.	1.5	21
139	Excitonic Zeeman splittings in colloidal CdSe quantum dots doped with single magnetic impurities. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5232-5238.	2.7	21
140	Electrical Detection of Quantum Dot Hot Electrons Generated via a Mn ²⁺ -Enhanced Auger Process. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 126-130.	2.1	20
141	Enhanced Emission of Nanocrystal Solids Featuring Slowly Diffusive Excitons. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1477-1487.	1.5	20
142	Directed Exciton Magnetic Polaron Formation in a Single Colloidal Mn ²⁺ :CdSe/CdS Quantum Dot. <i>Nano Letters</i> , 2020, 20, 1896-1906.	4.5	20
143	Characterization of Excited-State Magnetic Exchange in Mn ²⁺ -Doped ZnO Quantum Dots Using Time-Dependent Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2011, 115, 20986-20991.	1.5	19
144	Photoluminescence in ZnO:Co ²⁺ (0.01%∕5%) Nanoparticles, Nanowires, Thin Films, and Single Crystals as a Function of Pressure and Temperature: Exploring Electron∕Phonon Interactions. <i>Chemistry of Materials</i> , 2014, 26, 1100-1107.	3.2	19

#	ARTICLE	IF	CITATIONS
145	Two-Dimensional van der Waals Nanoplatelets with Robust Ferromagnetism. <i>Nano Letters</i> , 2020, 20, 2100-2106.	4.5	19
146	Excited-State Double Exchange in Manganese-Doped ZnO Quantum Dots: A Time-Dependent Density-Functional Study. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1927-1931.	2.1	18
147	Electron Stability and Negative-Tetron Luminescence in Free-Standing Colloidal n-Type CdSe/CdS Quantum Dots. <i>ACS Nano</i> , 2017, 11, 10430-10438.	7.3	18
148	The impact of $2H \uparrow \downarrow 4I$ emission from Er^{3+} ions on ratiometric optical temperature sensing with Yb^{3+}/Er^{3+} co-doped upconversion materials. <i>Journal of Luminescence</i> , 2021, 236, 118006.	1.5	18
149	Organic building blocks at inorganic nanomaterial interfaces. <i>Materials Horizons</i> , 2022, 9, 61-87.	6.4	18
150	Charge-State Control of Mn^{2+} Spin Relaxation Dynamics in Colloidal n-Type $Zn_{1-x}Mn_xO$ Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1748-1753.	2.1	17
151	Thermal Tuning and Inversion of Excitonic Zeeman Splittings in Colloidal Doped CdSe Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1264-1268.	2.1	16
152	Valence-Band Mixing Effects in the Upper-Excited-State Magneto-Optical Responses of Colloidal Mn^{2+} -Doped CdSe Quantum Dots. <i>ACS Nano</i> , 2014, 8, 12669-12675.	7.3	16
153	Ferromagnetism and Spin-Polarized Luminescence in Lead-Free $CsEuCl_3$ Perovskite Nanocrystals and Thin Films. <i>ACS Nano</i> , 2022, 16, 2569-2576.	7.3	16
154	Direct Patterning of Perovskite Nanocrystals on Nanophotonic Cavities with Electrohydrodynamic Inkjet Printing. <i>Nano Letters</i> , 2022, 22, 5681-5688.	4.5	15
155	Effects of Crystallographic and Shape Anisotropies on Dopant-Carrier Exchange Interactions in Magnetic Semiconductor Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2014, 118, 7630-7636.	1.5	13
156	Insight into the Spin Properties in Undoped and Mn-Doped CdSe/CdS-Seeded Nanorods by Optically Detected Magnetic Resonance. <i>ACS Nano</i> , 2020, 14, 13478-13490.	7.3	13
157	Hydrothermal Synthesis of $Yb^{3+}:LuLiF_4$ Microcrystals and Laser Refrigeration of $Yb^{3+}:LuLiF_4/Si_3N_4$ Nitride Composite Nanostructures. <i>Laser and Photonics Reviews</i> , 2021, 15, 2100019.	4.4	12
158	Strong Dependence of Quantum-Dot Delayed Luminescence on Excitation Pulse Width. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3997-4003.	2.1	11
159	Ubiquitous Near-Band-Edge Defect State in Rare-Earth-Doped Lead-Halide Perovskites. <i>Chemistry of Materials</i> , 2022, 34, 3759-3769.	3.2	11
160	Modeling Equilibrium Binding at Quantum Dot Surfaces Using Cyclic Voltammetry. <i>Nano Letters</i> , 2020, 20, 2620-2624.	4.5	10
161	Hydrothermal Synthesis and Solid-State Laser Refrigeration of Ytterbium-Doped Potassium-Lutetium-Fluoride (KLF) Microcrystals. <i>Chemistry of Materials</i> , 2021, 33, 4417-4424.	3.2	10
162	Theoretical investigation of quantum confinement on the Rashba effect in ZnO semiconductor nanocrystals. <i>Journal of Chemical Physics</i> , 2020, 152, 014308.	1.2	8

#	ARTICLE	IF	CITATIONS
163	Tunable Band-Edge Potentials and Charge Storage in Colloidal Tin-Doped Indium Oxide (ITO) Nanocrystals. ACS Nano, 2021, 15, 14116-14124.	7.3	8
164	Uncovering the Influence of Ni ²⁺ Doping in Lead-Halide Perovskite Nanocrystals Using Optically Detected Magnetic Resonance Spectroscopy. Chemistry of Materials, 2022, 34, 1686-1698.	3.2	8
165	Defect formation in Yb-doped CsPbCl_3 from first principles with implications for quantum cutting. Physical Review Materials, 2022, 6, .	1.1	0
166	Sputtering-induced CoO formation in x-ray photoelectron spectroscopy of nanocrystalline $\text{Zn}_{1-x}\text{Co}_x\text{O}$ spinodal enrichment models. Journal of Applied Physics, 2010, 107, 103917.	1.1	7
167	Electron Beam Infrared Nano-Ellipsometry of Individual Indium Tin Oxide Nanocrystals. Nano Letters, 2020, 20, 7987-7994.	4.5	7
168	Coherent Spin Dynamics in Vapor-Deposited CsPbBr_3 Perovskite Thin Films. Chemistry of Materials, 2022, 34, 1937-1945.	3.2	7
169	Giant band splittings in EuS and EuSe magnetic semiconductor nanocrystals. Chemical Communications, 2020, 56, 5843-5846.	2.2	5
170	Imaging Infrared Plasmon Hybridization in Doped Semiconductor Nanocrystal Dimers. Journal of Physical Chemistry Letters, 2021, 12, 10270-10276.	2.1	5
171	Single-source flash sublimation of metal-halide semiconductors. , 2019, , .		3
172	Orientation of Individual Anisotropic Nanocrystals Identified by Polarization Fingerprint. ACS Nano, 2021, 15, 13579-13590.	7.3	2
173	Ultrafast spin dynamics in magnetic wide-bandgap semiconductors. Physica Status Solidi (B): Basic Research, 2014, 251, 1685-1693.	0.7	1
174	Using Redox Titrations to Probe the Role of Trivalent Impurity Ions in the Ferromagnetism of Colloidal EuS Nanocrystals. Chemistry of Materials, 2020, 32, 8633-8640.	3.2	0
175	Solar Quantum Cutting and Spectral Downconversion using Ytterbium-Doped Metal-Halide Perovskites. , 0, , .		0
176	A control and characterization of spin degrees of freedom of photo-generated carriers in colloidal seeded nanorods - via magnetic doping. , 0, , .		0
177	A study of Ni ²⁺ Doping in Lead-Halide Perovskite Nanocrystals by Optically Detected Magnetic Resonance Spectroscopy. , 0, , .		0