Maksym Kovalenko

List of Publications by Year
in descending order

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382 papers	50,254 citations	3149 92 h-index	1627 215 g-index
397 all docs	397 docs citations	397 times ranked	32002 citing authors

#	Article	IF	Citations
1	Nanocrystals of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, and I): Novel Optoelectronic Materials Showing Bright Emission with Wide Color Gamut. Nano Letters, 2015, 15, 3692-3696.	4.5	6,814
2	Prospects of Colloidal Nanocrystals for Electronic and Optoelectronic Applications. Chemical Reviews, 2010, 110, 389-458.	23.0	3,708
3	Fast Anion-Exchange in Highly Luminescent Nanocrystals of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). Nano Letters, 2015, 15, 5635-5640.	4.5	1,938
4	Properties and potential optoelectronic applications of lead halide perovskite nanocrystals. Science, 2017, 358, 745-750.	6.0	1,755
5	Genesis, challenges and opportunities for colloidal lead halide perovskite nanocrystals. Nature Materials, 2018, 17, 394-405.	13.3	1,632
6	Highly Dynamic Ligand Binding and Light Absorption Coefficient of Cesium Lead Bromide Perovskite Nanocrystals. ACS Nano, 2016, 10, 2071-2081.	7.3	1,448
7	Low-threshold amplified spontaneous emission and lasing from colloidal nanocrystals of caesium lead halide perovskites. Nature Communications, 2015, 6, 8056.	5.8	1,278
8	Prospects of Nanoscience with Nanocrystals. ACS Nano, 2015, 9, 1012-1057.	7.3	1,005
9	Colloidal Nanocrystals with Molecular Metal Chalcogenide Surface Ligands. Science, 2009, 324, 1417-1420.	6.0	962
10	Detection of X-ray photons by solution-processed lead halide perovskites. Nature Photonics, 2015, 9, 444-449.	15.6	916
11	Lead Halide Perovskite Nanocrystals in the Research Spotlight: Stability and Defect Tolerance. ACS Energy Letters, 2017, 2, 2071-2083.	8.8	888
12	Bright triplet excitons in caesium lead halide perovskites. Nature, 2018, 553, 189-193.	13.7	716
13	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	7.3	705
14	Band-like transport, high electron mobility and high photoconductivity in all-inorganic nanocrystal arrays. Nature Nanotechnology, 2011, 6, 348-352.	15.6	655
15	Colloidal CsPbX₃ (X = Cl, Br, I) Nanocrystals 2.0: Zwitterionic Capping Ligands for Improved Durability and Stability. ACS Energy Letters, 2018, 3, 641-646.	8.8	647
16	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.	6.6	645
17	Near-infrared imaging with quantum-dot-sensitized organic photodiodes. Nature Photonics, 2009, 3, 332-336.	15.6	598
18	Harnessing Defect-Tolerance at the Nanoscale: Highly Luminescent Lead Halide Perovskite Nanocrystals in Mesoporous Silica Matrixes. Nano Letters, 2016, 16, 5866-5874.	4.5	501

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19	Monodisperse Antimony Nanocrystals for High-Rate Li-ion and Na-ion Battery Anodes: Nano versus Bulk. Nano Letters, 2014, 14, 1255-1262.	4.5	439
20	Detection of gamma photons using solution-grown single crystals of hybrid lead halide perovskites. Nature Photonics, 2016, 10, 585-589.	15.6	437
21	Synthesis of Cesium Lead Halide Perovskite Nanocrystals in a Droplet-Based Microfluidic Platform: Fast Parametric Space Mapping. Nano Letters, 2016, 16, 1869-1877.	4.5	425
22	Superfluorescence from lead halide perovskite quantum dot superlattices. Nature, 2018, 563, 671-675.	13.7	416
23	Dismantling the â€œRed Wallâ€•of Colloidal Perovskites: Highly Luminescent Formamidinium and Formamidiumâ€“Cesium Lead Iodide Nanocrystals. ACS Nano, 2017, 11, 3119-3134.	7.3	414
24	Monodisperse Formamidinium Lead Bromide Nanocrystals with Bright and Stable Green Photoluminescence. Journal of the American Chemical Society, 2016, 138, 14202-14205.	6.6	385
25	Fatty Acid Salts as Stabilizers in Size- and Shape-Controlled Nanocrystal Synthesis:â€‰ The Case of Inverse Spinel Iron Oxide. Journal of the American Chemical Society, 2007, 129, 6352-6353.	6.6	380
26	Monodisperse and Inorganically Capped Sn and Sn/SnO₂ Nanocrystals for High-Performance Li-Ion Battery Anodes. Journal of the American Chemical Society, 2013, 135, 4199-4202.	6.6	346
27	Coherent single-photon emission from colloidal lead halide perovskite quantum dots. Science, 2019, 363, 1068-1072.	6.0	345
28	Disphenoidal Zero-Dimensional Lead, Tin, and Germanium Halides: Highly Emissive Singlet and Triplet Self-Trapped Excitons and X-ray Scintillation. Journal of the American Chemical Society, 2019, 141, 9764-9768.	6.6	336
29	Gold/Iron Oxide Core/Hollowâ€Shell Nanoparticles. Advanced Materials, 2008, 20, 4323-4329.	11.1	308
30	Rationalizing and Controlling the Surface Structure and Electronic Passivation of Cesium Lead Halide Nanocrystals. ACS Energy Letters, 2019, 4, 63-74.	8.8	308
31	Efficient Blue Electroluminescence Using Quantum-Confined Two-Dimensional Perovskites. ACS Nano, 2016, 10, 9720-9729.	7.3	299
32	Single Cesium Lead Halide Perovskite Nanocrystals at Low Temperature: Fast Single-Photon Emission, Reduced Blinking, and Exciton Fine Structure. ACS Nano, 2016, 10, 2485-2490.	7.3	299
33	Polymer-Enhanced Stability of Inorganic Perovskite Nanocrystals and Their Application in Color Conversion LEDs. ACS Applied Materials & Interfaces, 2016, 8, 19579-19586.	4.0	295
34	Solution-Grown CsPbBr₃ Perovskite Single Crystals for Photon Detection. Chemistry of Materials, 2016, 28, 8470-8474.	3.2	294
35	Expanding the Chemical Versatility of Colloidal Nanocrystals Capped with Molecular Metal Chalcogenide Ligands. Journal of the American Chemical Society, 2010, 132, 10085-10092.	6.6	263
36	Coherent Nanotwins and Dynamic Disorder in Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 3819-3831.	7.3	246

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37	High-resolution remote thermometry and thermography using luminescent low-dimensional tin-halide perovskites. Nature Materials, 2019, 18, 846-852.	13.3	246
38	Highâ€Temperature Photoluminescence of CsPbX₃ (X = Cl, Br, I) Nanocrystals. Advanced Functional Materials, 2017, 27, 1606750.	7.8	242
39	Highly Emissive Selfâ€Trapped Excitons in Fully Inorganic Zeroâ€Dimensional Tin Halides. Angewandte Chemie - International Edition, 2018, 57, 11329-11333.	7.2	242
40	Lead Halide Perovskites and Other Metal Halide Complexes As Inorganic Capping Ligands for Colloidal Nanocrystals. Journal of the American Chemical Society, 2014, 136, 6550-6553.	6.6	241
41	Polar-solvent-free colloidal synthesis of highly luminescent alkylammonium lead halide perovskite nanocrystals. Nanoscale, 2016, 8, 6278-6283.	2.8	233
42	High-performance thermoelectric nanocomposites from nanocrystal building blocks. Nature Communications, 2016, 7, 10766.	5.8	224
43	Efficient Lone-Pair-Driven Luminescence: Structureâ€“Property Relationships in Emissive 5s² Metal Halides. , 2020, 2, 1218-1232.		220
44	High-energy-density dual-ion battery for stationary storage of electricity using concentrated potassium fluorosulfonylimide. Nature Communications, 2018, 9, 4469.	5.8	213
45	Efficient Aluminum Chlorideâ€“Natural Graphite Battery. Chemistry of Materials, 2017, 29, 4484-4492.	3.2	212
46	Energetic and Entropic Contributions to Self-Assembly of Binary Nanocrystal Superlattices: Temperature as the Structure-Directing Factor. Journal of the American Chemical Society, 2010, 132, 11967-11977.	6.6	210
47	Manganese(II) in Tetrahedral Halide Environment: Factors Governing Bright Green Luminescence. Chemistry of Materials, 2019, 31, 10161-10169.	3.2	200
48	Bright Blue and Green Luminescence of Sb(III) in Double Perovskite Cs₂MInCl₆ (M = Na, K) Matrices. Chemistry of Materials, 2020, 32, 5118-5124.	3.2	196
49	The ground exciton state of formamidinium lead bromide perovskite nanocrystals is a singlet dark state. Nature Materials, 2019, 18, 717-724.	13.3	189
50	Bottom-up engineering of thermoelectric nanomaterials and devices from solution-processed nanoparticle building blocks. Chemical Society Reviews, 2017, 46, 3510-3528.	18.7	184
51	Inkjetâ€Printed Nanocrystal Photodetectors Operating up to 3â€‰Î¼m Wavelengths. Advanced Materials, 2007, 19, 3574-3578.	11.1	180
52	Rashba Effect in a Single Colloidal CsPbBr₃ Perovskite Nanocrystal Detected by Magneto-Optical Measurements. Nano Letters, 2017, 17, 5020-5026.	4.5	180
53	Polypyrenes as Highâ€Performance Cathode Materials for Aluminum Batteries. Advanced Materials, 2018, 30, e1705644.	11.1	180
54	Colloidal HgTe Nanocrystals with Widely Tunable Narrow Band Gap Energies:Â From Telecommunications to Molecular Vibrations. Journal of the American Chemical Society, 2006, 128, 3516-3517.	6.6	176

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55	Pyrite (FeS₂) nanocrystals as inexpensive high-performance lithium-ion cathode and sodium-ion anode materials. Nanoscale, 2015, 7, 9158-9163.	2.8	167
56	Direct Synthesis of Quaternary Alkylammonium-Capped Perovskite Nanocrystals for Efficient Blue and Green Light-Emitting Diodes. ACS Energy Letters, 2019, 4, 2703-2711.	8.8	161
57	Low-Cost Synthesis of Highly Luminescent Colloidal Lead Halide Perovskite Nanocrystals by Wet Ball Milling. ACS Applied Nano Materials, 2018, 1, 1300-1308.	2.4	159
58	Hybrid Metal Halides with Multiple Photoluminescence Centers. Angewandte Chemie - International Edition, 2019, 58, 18670-18675.	7.2	158
59	SnTe Nanocrystals:â€‰ A New Example of Narrow-Gap Semiconductor Quantum Dots. Journal of the American Chemical Society, 2007, 129, 11354-11355.	6.6	156
60	Perovskite-type superlattices from lead halide perovskite nanocubes. Nature, 2021, 593, 535-542.	13.7	152
61	Hydrogen-like Wannierâ€“Mott Excitons in Single Crystal of Methylammonium Lead Bromide Perovskite. ACS Nano, 2016, 10, 6363-6371.	7.3	151
62	Semiconductor Nanocrystals Functionalized with Antimony Telluride Zintl Ions for Nanostructured Thermoelectrics. Journal of the American Chemical Society, 2010, 132, 6686-6695.	6.6	149
63	Challenges and benefits of post-lithium-ion batteries. New Journal of Chemistry, 2020, 44, 1677-1683.	1.4	146
64	Single crystals of caesium formamidinium lead halide perovskites: solution growth and gamma dosimetry. NPG Asia Materials, 2017, 9, e373-e373.	3.8	145
65	Zeolite-Templated Carbon as an Ordered Microporous Electrode for Aluminum Batteries. ACS Nano, 2017, 11, 1911-1919.	7.3	143
66	Inorganically Functionalized PbSâ€“CdS Colloidal Nanocrystals: Integration into Amorphous Chalcogenide Glass and Luminescent Properties. Journal of the American Chemical Society, 2012, 134, 2457-2460.	6.6	142
67	Stable Ultraconcentrated and Ultradilute Colloids of CsPbX₃ (X = Cl, Br) Nanocrystals Using Natural Lecithin as a Capping Ligand. Journal of the American Chemical Society, 2019, 141, 19839-19849.	6.6	141
68	Exploration of Near-Infrared-Emissive Colloidal Multinary Lead Halide Perovskite Nanocrystals Using an Automated Microfluidic Platform. ACS Nano, 2018, 12, 5504-5517.	7.3	138
69	Monodisperse Colloidal Gallium Nanoparticles: Synthesis, Low Temperature Crystallization, Surface Plasmon Resonance and Li-Ion Storage. Journal of the American Chemical Society, 2014, 136, 12422-12430.	6.6	133
70	Luminescent and Photoconductive Layered Lead Halide Perovskite Compounds Comprising Mixtures of Cesium and Guanidinium Cations. Inorganic Chemistry, 2017, 56, 11552-11564.	1.9	130
71	An overview and prospective on Al and Al-ion battery technologies. Journal of Power Sources, 2021, 481, 228870.	4.0	130
72	Monodisperse SnSb nanocrystals for Li-ion and Na-ion battery anodes: synergy and dissonance between Sn and Sb. Nanoscale, 2015, 7, 455-459.	2.8	128

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73	Sensitized solar cells with colloidal PbSâ€“CdS coreâ€“shell quantum dots. Physical Chemistry Chemical Physics, 2014, 16, 736-742.	1.3	125
74	5.2% efficient PbS nanocrystal Schottky solar cells. Energy and Environmental Science, 2013, 6, 3054.	15.6	123
75	Guanidinium-Formamidinium Lead Iodide: A Layered Perovskite-Related Compound with Red Luminescence at Room Temperature. Journal of the American Chemical Society, 2018, 140, 3850-3853.	6.6	123
76	Solutionâ€Processable Nearâ€IR Photodetectors Based on Electron Transfer from PbS Nanocrystals to Fullerene Derivatives. Advanced Materials, 2009, 21, 683-687.	11.1	121
77	Counterion-Mediated Ligand Exchange for PbS Colloidal Quantum Dot Superlattices. ACS Nano, 2015, 9, 11951-11959.	7.3	121
78	Temperature dependent behaviour of lead sulfide quantum dot solar cells and films. Energy and Environmental Science, 2016, 9, 2916-2924.	15.6	119
79	Unraveling excitonâ€“phonon coupling in individual FAPbI3 nanocrystals emitting near-infrared single photons. Nature Communications, 2018, 9, 3318.	5.8	117
80	Kish Graphite Flakes as a Cathode Material for an Aluminum Chlorideâ€“Graphite Battery. ACS Applied Materials & Interfaces, 2017, 9, 28478-28485.	4.0	114
81	High Thermoelectric Performance in Crystallographically Textured n-Type Bi₂Te_{3â€“x}Se_x Produced from Asymmetric Colloidal Nanocrystals. ACS Nano, 2018, 12, 7174-7184.	7.3	114
82	Alkyl Chains of Surface Ligands Affect Polytypism of CdSe Nanocrystals and Play an Important Role in the Synthesis of Anisotropic Nanoheterostructures. Journal of the American Chemical Society, 2010, 132, 15866-15868.	6.6	113
83	Rechargeable Dualâ€Ion Batteries with Graphite as a Cathode: Key Challenges and Opportunities. Advanced Energy Materials, 2019, 9, 1901749.	10.2	112
84	Seedâ€Crystalâ€Induced Cold Sintering Toward Metal Halide Transparent Ceramic Scintillators. Advanced Materials, 2022, 34, e2110420.	11.1	108
85	Energy Transfer between Inorganic Perovskite Nanocrystals. Journal of Physical Chemistry C, 2016, 120, 13310-13315.	1.5	106
86	Unveiling the Shape Evolution and Halide-Ion-Segregation in Blue-Emitting Formamidinium Lead Halide Perovskite Nanocrystals Using an Automated Microfluidic Platform. Nano Letters, 2018, 18, 1246-1252.	4.5	106
87	Structure of Colloidal Quantum Dots from Dynamic Nuclear Polarization Surface Enhanced NMR Spectroscopy. Journal of the American Chemical Society, 2015, 137, 13964-13971.	6.6	105
88	Quasiâ€Seeded Growth of Ligandâ€Tailored PbSe Nanocrystals through Cationâ€Exchangeâ€Mediated Nucleation. Angewandte Chemie - International Edition, 2008, 47, 3029-3033.	7.2	103
89	Crystal symmetry breaking and vacancies in colloidal lead chalcogenide quantum dots. Nature Materials, 2016, 15, 987-994.	13.3	101
90	Coherent spin dynamics of electrons and holes in CsPbBr3 perovskite crystals. Nature Communications, 2019, 10, 673.	5.8	100

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91	A General Synthesis Strategy for Monodisperse Metallic and Metalloid Nanoparticles (In, Ga, Bi, Sb, Zn,) Tj ETQq1 1 0.784314 rgBT /O 635-647.	3.2	99
92	Engineering Color-Stable Blue Light-Emitting Diodes with Lead Halide Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 21655-21660.	4.0	98
93	Opportunities and challenges for quantum dot photovoltaics. Nature Nanotechnology, 2015, 10, 994-997.	15.6	97
94	Efficient and Inexpensive Sodiumâ€“Magnesium Hybrid Battery. Chemistry of Materials, 2015, 27, 7452-7458.	3.2	96
95	Supramolecular Approach for Fine-Tuning of the Bright Luminescence from Zero-Dimensional Antimony(III) Halides. , 2020, 2, 845-852.		94
96	Surface Functionalization of Semiconductor and Oxide Nanocrystals with Small Inorganic Oxoanions (PO₄^{3â€“}, MoO₄^{2â€“}) and Polyoxometalate Ligands. ACS Nano, 2014, 8, 9388-9402.	7.3	92
97	Highly Monodisperse Bismuth Nanoparticles and Their Three-Dimensional Superlattices. Journal of the American Chemical Society, 2010, 132, 15158-15159.	6.6	91
98	Tuning the Magnetic Properties of Metal Oxide Nanocrystal Heterostructures by Cation Exchange. Nano Letters, 2013, 13, 586-593.	4.5	91
99	Origin of the increased open circuit voltage in PbSâ€“CdS coreâ€“shell quantum dot solar cells. Journal of Materials Chemistry A, 2015, 3, 1450-1457.	5.2	91
100	Crystallographically Textured Nanomaterials Produced from the Liquid Phase Sintering of Bi_xSb_{2â€“x}Te₃ Nanocrystal Building Blocks. Nano Letters, 2018, 18, 2557-2563.	4.5	89
101	Reconfigurable halide perovskite nanocrystal memristors for neuromorphic computing. Nature Communications, 2022, 13, 2074.	5.8	89
102	Optical Properties of Organic Semiconductor Blends with Nearâ€Infrared Quantumâ€Dot Sensitizers for Light Harvesting Applications. Advanced Energy Materials, 2011, 1, 802-812.	10.2	88
103	Underestimated Effect of a Polymer Matrix on the Light Emission of Single CsPbBr₃ Nanocrystals. Nano Letters, 2019, 19, 3648-3653.	4.5	88
104	Facile Droplet-based Microfluidic Synthesis of Monodisperse IVâ€“VI Semiconductor Nanocrystals with Coupled In-Line NIR Fluorescence Detection. Chemistry of Materials, 2014, 26, 2975-2982.	3.2	87
105	Unraveling the Coreâ€“Shell Structure of Ligand-Capped Sn/SnOxNanoparticles by Surface-Enhanced Nuclear Magnetic Resonance, MÃ¶ssbauer, and X-ray Absorption Spectroscopies. ACS Nano, 2014, 8, 2639-2648.	7.3	87
106	Inexpensive colloidal SnSb nanoalloys as efficient anode materials for lithium- and sodium-ion batteries. Journal of Materials Chemistry A, 2016, 4, 7053-7059.	5.2	86
107	Large-Area Ordered Superlattices from Magnetic WÃ¼stite/Cobalt Ferrite Core/Shell Nanocrystals by Doctor Blade Casting. ACS Nano, 2010, 4, 423-431.	7.3	83
108	Excitonâ€“Exciton Interaction and Optical Gain in Colloidal CdSe/CdS Dot/Rod Nanocrystals. Advanced Materials, 2009, 21, 4942-4946.	11.1	82

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109	Microfluidic Reactors Provide Preparative and Mechanistic Insights into the Synthesis of Formamidinium Lead Halide Perovskite Nanocrystals. Chemistry of Materials, 2017, 29, 8433-8439.	3.2	81
110	Hybrid 0D Antimony Halides as Airâ€Stable Luminophores for Highâ€Spatialâ€Resolution Remote Thermography. Advanced Materials, 2021, 33, e2007355.	11.1	80
111	Crystal Structure, Morphology, and Surface Termination of Cyan-Emissive, Six-Monolayers-Thick CsPbBr₃ Nanoplatelets from X-ray Total Scattering. ACS Nano, 2019, 13, 14294-14307.	7.3	79
112	Exchangeâ€Coupled Bimagnetic WÃ¼stite/Metal Ferrite Core/Shell Nanocrystals: Size, Shape, and Compositional Control. Small, 2009, 5, 2247-2252.	5.2	78
113	Pick a Color MARIA: Adaptive Sampling Enables the Rapid Identification of Complex Perovskite Nanocrystal Compositions with Defined Emission Characteristics. ACS Applied Materials & Interfaces, 2018, 10, 18869-18878.	4.0	78
114	Aluminum Chlorideâ€Graphite Batteries with Flexible Current Collectors Prepared from Earthâ€Abundant Elements. Advanced Science, 2018, 5, 1700712.	5.6	77
115	A Small Cationic Organoâ€“Copper Cluster as Thermally Robust Highly Photo- and Electroluminescent Material. Journal of the American Chemical Society, 2020, 142, 373-381.	6.6	77
116	Cost-effective sol-gel synthesis of porous CuO nanoparticle aggregates with tunable specific surface area. Scientific Reports, 2019, 9, 11758.	1.6	76
117	Solid-State NMR and NQR Spectroscopy of Lead-Halide Perovskite Materials. Journal of the American Chemical Society, 2020, 142, 19413-19437.	6.6	76
118	Scalable PbS Quantum Dot Solar Cell Production by Blade Coating from Stable Inks. ACS Applied Materials & Interfaces, 2021, 13, 5195-5207.	4.0	76
119	Nanocrystal Superlattices with Thermally Degradable Hybrid Inorganicâ€“Organic Capping Ligands. Journal of the American Chemical Society, 2010, 132, 15124-15126.	6.6	75
120	Monodisperse Long-Chain Sulfobetaine-Capped CsPbBr₃ Nanocrystals and Their Superfluorescent Assemblies. ACS Central Science, 2021, 7, 135-144.	5.3	75
121	Evidence of Large Polarons in Photoemission Band Mapping of the Perovskite Semiconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CsPbBr</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2020, 124, 206402.	2.9	74
122	Solution-based synthesis and processing of Sn- and Bi-doped Cu₃SbSe₄nanocrystals, nanomaterials and ring-shaped thermoelectric generators. Journal of Materials Chemistry A, 2017, 5, 2592-2602.	5.2	73
123	Temperature Dependence of the Amplified Spontaneous Emission from CsPbBr₃ Nanocrystal Thin Films. Journal of Physical Chemistry C, 2018, 122, 5813-5819.	1.5	71
124	Building a Better Liâ€Garnet Solid Electrolyte/Metallic Li Interface with Antimony. Advanced Energy Materials, 2021, 11, 2102086.	10.2	70
125	Hybrid Solar Cells Using HgTe Nanocrystals and Nanoporous TiO2 Electrodes. Advanced Functional Materials, 2006, 16, 1095-1099.	7.8	69
126	Precisely Engineered Colloidal Nanoparticles and Nanocrystals for Li-Ion and Na-Ion Batteries: Model Systems or Practical Solutions?. Chemistry of Materials, 2014, 26, 5422-5432.	3.2	69

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127	Highly Stable, Nearâ€Unity Efficiency Atomically Flat Semiconductor Nanocrystals of CdSe/ZnS Heteroâ€Nanoplatelets Enabled by ZnSâ€Shell Hotâ€Injection Growth. Small, 2019, 15, e1804854.	5.2	67
128	The dark exciton ground state promotes photon-pair emission in individual perovskite nanocrystals. Nature Communications, 2020, 11, 6001.	5.8	67
129	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. Nature Communications, 2021, 12, 981.	5.8	67
130	Colloidal Tinâ€“Germanium Nanorods and Their Li-Ion Storage Properties. ACS Nano, 2014, 8, 2360-2368.	7.3	66
131	Ultra-narrow room-temperature emission from single CsPbBr3 perovskite quantum dots. Nature Communications, 2022, 13, 2587.	5.8	66
132	Aggregation-induced emission in lamellar solids of colloidal perovskite quantum wells. Science Advances, 2017, 3, eaaq0208.	4.7	65
133	Inexpensive Antimony Nanocrystals and Their Composites with Red Phosphorus as High-Performance Anode Materials for Na-ion Batteries. Scientific Reports, 2015, 5, 8418.	1.6	64
134	Copper sulfide nanoparticles as high-performance cathode materials for Mg-ion batteries. Scientific Reports, 2019, 9, 7988.	1.6	64
135	Colloidal CdSe Quantum Wells with Graded Shell Composition for Low-Threshold Amplified Spontaneous Emission and Highly Efficient Electroluminescence. ACS Nano, 2019, 13, 13899-13909.	7.3	64
136	High Infrared Photoconductivity in Films of Arsenic-Sulfide-Encapsulated Lead-Sulfide Nanocrystals. ACS Nano, 2014, 8, 12883-12894.	7.3	62
137	Long-Lived Hot Carriers in Formamidinium Lead Iodide Nanocrystals. Journal of Physical Chemistry C, 2017, 121, 12434-12440.	1.5	62
138	Exciton Recombination in Formamidinium Lead Triiodide: Nanocrystals versus Thin Films. Small, 2017, 13, 1700673.	5.2	62
139	Stoichiometric control of the density of states in PbS colloidal quantum dot solids. Science Advances, 2017, 3, eaao1558.	4.7	62
140	Lead Halide Perovskite Nanocrystals: From Discovery to Self-assembly and Applications. Chimia, 2017, 71, 461.	0.3	62
141	Localized holes and delocalized electrons in photoexcited inorganic perovskites: Watching each atomic actor by picosecond X-ray absorption spectroscopy. Structural Dynamics, 2017, 4, 044002.	0.9	61
142	Colloidal Bismuth Nanocrystals as a Model Anode Material for Rechargeable Mg-Ion Batteries: Atomistic and Mesoscale Insights. ACS Nano, 2018, 12, 8297-8307.	7.3	61
143	Vibrational dynamics in lead halide hybrid perovskites investigated by Raman spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 5604-5614.	1.3	61
144	Comparing Halide Ligands in PbS Colloidal Quantum Dots for Field-Effect Transistors and Solar Cells. ACS Applied Nano Materials, 2018, 1, 6882-6889.	2.4	60

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145	Long Exciton Dephasing Time and Coherent Phonon Coupling in CsPbBr₂Cl Perovskite Nanocrystals. Nano Letters, 2018, 18, 7546-7551.	4.5	60
146	Direct Synthesis of Bulk Boron-Doped Graphitic Carbon. Chemistry of Materials, 2017, 29, 3211-3218.	3.2	59
147	Nanocrystalline FeF₃ and MF₂ (M = Fe, Co, and Mn) from metal trifluoroacetates and their Li(Na)-ion storage properties. Journal of Materials Chemistry A, 2017, 5, 7383-7393.	5.2	59
148	Phonon Interaction and Phase Transition in Single Formamidinium Lead Bromide Quantum Dots. Nano Letters, 2018, 18, 4440-4446.	4.5	57
149	SnP nanocrystals as anode materials for Na-ion batteries. Journal of Materials Chemistry A, 2018, 6, 10958-10966.	5.2	56
150	The Rb₇Bi_{3â^'3x}Sb_{3x}Cl₁₆ Family: A Fully Inorganic Solid Solution with Roomâ€Temperature Luminescent Members. Angewandte Chemie - International Edition, 2020, 59, 14490-14497.	7.2	56
151	Negative Thermal Quenching in FASnI₃ Perovskite Single Crystals and Thin Films. ACS Energy Letters, 2020, 5, 2512-2519.	8.8	55
152	Langmuirâ^'Schaefer Deposition of Quantum Dot Multilayers. Langmuir, 2010, 26, 7732-7736.	1.6	54
153	Size-Dependent Biexciton Spectrum in CsPbBr₃ Perovskite Nanocrystals. ACS Energy Letters, 2019, 4, 2639-2645.	8.8	53
154	Nanoprinted Quantum Dotâ€“Graphene Photodetectors. Advanced Optical Materials, 2019, 7, 1900019.	3.6	53
155	Monodisperse CoSn₂ and FeSn₂ nanocrystals as high-performance anode materials for lithium-ion batteries. Nanoscale, 2018, 10, 6827-6831.	2.8	52
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