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	Leadâ€Dominated Hyperfine Interaction Impacting the Carrier Spin Dynamics in Halide Perovskites. Advanced Materials, 2022, 34, e2105263.	11.1	33
2	Room-Temperature Anomalous Coherent Excitonic Optical Stark Effect in Metal Halide Perovskite Quantum Dots. Nano Letters, 2022, 22, 808-814.	4.5	12
3	Thermal synthesis of conversion-type bismuth fluoride cathodes for high-energy-density Li-ion batteries. Communications Chemistry, 2022, 5, .	2.0	5
4	Perspective on design and technical challenges of Li-garnet solid-state batteries. Science and Technology of Advanced Materials, 2022, 23, 41-48.	2.8	15
5	Size Segregation and Atomic Structural Coherence in Spontaneous Assemblies of Colloidal Cesium Lead Halide Nanocrystals. Chemistry of Materials, 2022, 34, 594-608.	3.2	14
6	On the feasibility of all-solid-state batteries with LLZO as a single electrolyte. Scientific Reports, 2022, 12, 1177.	1.6	35
7	Nanoscale-Resolved Surface-to-Bulk Electron Transport in CsPbBr₃ Perovskite. Nano Letters, 2022, 22, 1067-1074.	4.5	6
8	Heterostructure from PbS Quantum Dot and Carbon Nanotube Inks for Highâ€Efficiency Nearâ€Infrared Lightâ€Emitting Fieldâ€Effect Transistors. Advanced Electronic Materials, 2022, 8, .	2.6	6
9	ACS Materials Au: Volume 2, Issue 2 Highlights and a Big Thank You for Nominating 2022 Rising Stars!. ACS Materials Au, 2022, 2, 72-73.	2.6	0
10	Seedâ€Crystalâ€Induced Cold Sintering Toward Metal Halide Transparent Ceramic Scintillators. Advanced Materials, 2022, 34, e2110420.	11.1	108
11	Amphiphilic Polymer Coâ€Network: A Versatile Matrix for Tailoring the Photonic Energy Transfer in Wearable Energy Harvesting Devices. Advanced Energy Materials, 2022, 12, .	10.2	10
12	Three Millennia of Nanocrystals. ACS Nano, 2022, 16, 5085-5102.	7.3	27
13	Ultrafast Electroâ€Absorption Switching in Colloidal CdSe/CdS Core/Shell Quantum Dots Driven by Intense THz Pulses. Advanced Optical Materials, 2022, 10, .	3.6	6
14	Liâ€“Garnet Solid-State Batteries with LLZO Scaffolds. Accounts of Materials Research, 2022, 3, 411-415.	5.9	17
15	Structural Diversity in Multicomponent Nanocrystal Superlattices Comprising Lead Halide Perovskite Nanocubes. ACS Nano, 2022, 16, 7210-7232.	7.3	18
16	Silicon oxycarbide-tin nanocomposite derived from a UV crosslinked single source preceramic precursor as high-performance anode materials for Li-ion batteries. Applied Materials Today, 2022, 27, 101424.	2.3	5
17	Atomic-Level Description of Thermal Fluctuations in Inorganic Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2022, 13, 3382-3391.	2.1	13
18	Reconfigurable halide perovskite nanocrystal memristors for neuromorphic computing. Nature Communications, 2022, 13, 2074.	5.8	89

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19	Room-Temperature, Highly Pure Single-Photon Sources from All-Inorganic Lead Halide Perovskite Quantum Dots. Nano Letters, 2022, 22, 3751-3760.	4.5	34
20	Compositional Variation in FAPb_{1â€“x}Sn_xI₃ and Its Impact on the Electronic Structure: A Combined Density Functional Theory and Experimental Study. ACS Applied Materials & Interfaces, 2022, 14, 34253-34261.	4.0	5
21	Ultra-narrow room-temperature emission from single CsPbBr3 perovskite quantum dots. Nature Communications, 2022, 13, 2587.	5.8	66
22	Ligands Mediate Anion Exchange between Colloidal Lead-Halide Perovskite Nanocrystals. Nano Letters, 2022, 22, 4340-4346.	4.5	29
23	The LandÃ© factors of electrons and holes in lead halide perovskites: universal dependence on the band gap. Nature Communications, 2022, 13, .	5.8	28
24	Direct analysis of nanoparticles in organic solvents by ICPMS with microdroplet injection. Journal of Analytical Atomic Spectrometry, 2022, 37, 1738-1750.	1.6	3
25	Flexible, Free-Standing Polymer Membranes Sensitized by CsPbX3 Nanocrystals as Gain Media for Low Threshold, Multicolor Light Amplification. ACS Photonics, 2022, 9, 2385-2397.	3.2	7
26	Advances and challenges of aluminumâ€“sulfur batteries. Communications Chemistry, 2022, 5, .	2.0	15
27	Stability of perovskite materials and devices. Materials Today, 2022, 58, 275-296.	8.3	35
28	Impact of anisotropy in spin-orbit coupling on the magneto-optical properties of bulk lead halide perovskites. Physical Review B, 2022, 106, .	1.1	4
29	Amplified Spontaneous Emission Threshold Dependence on Determination Method in Dye-Doped Polymer and Lead Halide Perovskite Waveguides. Molecules, 2022, 27, 4261.	1.7	8
30	An overview and prospective on Al and Al-ion battery technologies. Journal of Power Sources, 2021, 481, 228870.	4.0	130
31	Expanding the 0D Rb 7 M 3 X 16 (M=Sb, Bi; X=Br, I) Family: Dualâ€Band Luminescence in Rb 7 Sb 3 Br 16. Helvetica Chimica Acta, 2021, 104, e2000206.	1.0	10
32	S-Rich PbS Quantum Dots: A Promising p-Type Material for Optoelectronic Devices. Chemistry of Materials, 2021, 33, 320-326.	3.2	17
33	Temperature-Dependent Charge Carrier Transfer in Colloidal Quantum Dot/Graphene Infrared Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 848-856.	4.0	16
34	Laser Patterning of Highâ€Massâ€Loading Graphite Anodes for Highâ€Performance Liâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 464-468.	2.4	19
35	Enhanced Roomâ€Temperature Photoluminescence Quantum Yield in Morphology Controlled Jâ€Aggregates. Advanced Science, 2021, 8, 1903080.	5.6	16
36	Exploiting the Lability of Metal Halide Perovskites for Doping Semiconductor Nanocomposites. ACS Energy Letters, 2021, 6, 581-587.	8.8	12

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37	Pressureâ€Induced Perovskiteâ€toâ€nonâ€Perovskite Phase Transition in CsPbBr 3. Helvetica Chimica Acta, 2021, 104, e2000222.	1.0	8
38	AlCl 3 â€Saturated Ionic Liquid Anolyte with an Excess of AlCl 3 for Alâ€“Graphite Dualâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 929-933.	2.4	1
39	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. Nature Communications, 2021, 12, 981.	5.8	67
40	Colloidal HgTe Quantum Dot/Graphene Phototransistor with a Spectral Sensitivity Beyond 3ÂÂµm. Advanced Science, 2021, 8, 2003360.	5.6	30
41	Lone-Pair-Induced Structural Ordering in the Mixed-Valent 0D Metal-Halides Rb₂₃Bi^{III}_xSb^{III}_{7â€“x}Sb^V₁₂Cl₆ (0 â‰¤ x â‰¤ 7). Chemistry of Materials, 2021, 33, 2408-2419.	8.6	15
42	Light-Induced Paramagnetism in Colloidal Ag+-Doped CdSe Nanoplatelets. Journal of Physical Chemistry Letters, 2021, 12, 2892-2899.	2.1	17
43	Perovskite-type superlattices from lead halide perovskite nanocubes. Nature, 2021, 593, 535-542.	13.7	152
44	Break-Even Analysis of All-Solid-State Batteries with Li-Garnet Solid Electrolytes. ACS Energy Letters, 2021, 6, 2202-2207.	8.8	32
45	Surface Functionalization of CsPbBr₃ Îanocrystals for Photonic Applications. ACS Applied Nano Materials, 2021, 4, 5084-5097.	2.4	14
46	Ultrafast Electro-Optic Modulation in CdSe/CdS Quantum Dots by intense THz Pulses. , 2021, , .		0
47	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	7.3	705
48	Perovskite Quantum Dots for Superâ€Resolution Optical Microscopy: Where Strong Photoluminescence Blinking Matters. Advanced Optical Materials, 2021, 9, 2100620.	3.6	10
49	Quantifying Photoinduced Polaronic Distortions in Inorganic Lead Halide Perovskite Nanocrystals. Journal of the American Chemical Society, 2021, 143, 9048-9059.	6.6	33
50	On the Mechanism of Alkylammonium Ligands Binding to the Surface of CsPbBr₃ Nanocrystals. Chemistry of Materials, 2021, 33, 5962-5973.	3.2	39
51	Efficient Amplified Spontaneous Emission from Solution-Processed CsPbBr₃ Nanocrystal Microcavities under Continuous Wave Excitation. ACS Photonics, 2021, 8, 2120-2129.	3.2	21
52	Temperature-Independent Dielectric Constant in CsPbBr₃ Nanocrystals Revealed by Linear Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 8088-8095.	2.1	19
53	Local Structure of Multinary Hybrid Lead Halide Perovskites Investigated by Nuclear Quadrupole Resonance Spectroscopy. Chemistry of Materials, 2021, 33, 6965-6973.	3.2	13
54	ACS Materials Au: Open for You. ACS Materials Au, 2021, 1, 1-2.	2.6	0

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55	Perovskite Quantum Dots for Superâ€Resolution Optical Microscopy: Where Strong Photoluminescence Blinking Matters (Advanced Optical Materials 18/2021). Advanced Optical Materials, 2021, 9, 2170073.	3.6	0
56	Building a Better Liâ€Garnet Solid Electrolyte/Metallic Li Interface with Antimony. Advanced Energy Materials, 2021, 11, 2102086.	10.2	70
57	Shape-Directed Co-Assembly of Lead Halide Perovskite Nanocubes with Dielectric Nanodisks into Binary Nanocrystal Superlattices. ACS Nano, 2021, 15, 16488-16500.	7.3	25
58	Scalable PbS Quantum Dot Solar Cell Production by Blade Coating from Stable Inks. ACS Applied Materials & Interfaces, 2021, 13, 5195-5207.	4.0	76
59	Energy harvesting textiles: using wearable luminescent solar concentrators to improve the efficiency of fiber solar cells. Journal of Materials Chemistry A, 2021, 9, 25974-25981.	5.2	10
60	All-Optical Coherent Lifting of Spin-Degeneracy in CsPbBr3 Nanocrystals. , 2021, , .		0
61	Hybrid 0D Antimony Halides as Airâ€Stable Luminophores for Highâ€Spatialâ€Resolution Remote Thermography. Advanced Materials, 2021, 33, e2007355.	11.1	80
62	Monodisperse Long-Chain Sulfobetaine-Capped CsPbBr₃ Nanocrystals and Their Superfluorescent Assemblies. ACS Central Science, 2021, 7, 135-144.	5.3	75
63	Luminescent Lead Halide Ionic Liquids for High-Spatial-Resolution Fast Neutron Imaging. ACS Photonics, 2021, 8, 3357-3364.	3.2	2
64	Optical Probing of Crystal Lattice Configurations in Single CsPbBr₃ Nanoplatelets. Nano Letters, 2021, 21, 9085-9092.	4.5	19
65	Unraveling the shell growth pathways of Pd-Pt core-shell nanocubes at atomic level by in situ liquid cell electron microscopy. Applied Physics Reviews, 2021, 8, 041407.	5.5	4
66	ACS Materials Au: Issue 2 Highlights and Call for 2022 Rising Stars. ACS Materials Au, 2021, 1, 89-91.	2.6	0
67	Highly Concentrated, Zwitterionic Ligand-Capped Mn²⁺:CsPb(Br_xCl_{1â€“x})₃ Nanocrystals as Bright Scintillators for Fast Neutron Imaging. ACS Energy Letters, 2021, 6, 4365-4373.	8.8	30
68	Synthesis and Characterization of the Ternary Nitride Semiconductor Zn₂VN₃: Theoretical Prediction, Combinatorial Screening, and Epitaxial Stabilization. Chemistry of Materials, 2021, 33, 9306-9316.	3.2	12
69	Scalable fabrication of efficient p-n junction lead sulfide quantum dot solar cells. Cell Reports Physical Science, 2021, 2, 100655.	2.8	11
70	To nano or not to nano for bright halide perovskite emitters. Nature Nanotechnology, 2021, 16, 1164-1168.	15.6	40
71	Stable Cesium Formamidinium Lead Halide Perovskites: A Comparison of Photophysics and Phase Purity in Thin Films and Single Crystals. Energy Technology, 2020, 8, 1901041.	1.8	19
72	Selfâ€Assembly of Proteinaceous Shells around Positively Charged Gold Nanomaterials Enhances Colloidal Stability in Highâ€Ionicâ€Strength Buffers. ChemBioChem, 2020, 21, 74-79.	1.3	11

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73	Improved Reproducibility of PbS Colloidal Quantum Dots Solar Cells Using Atomic Layerâ€“Deposited TiO₂. Energy Technology, 2020, 8, 1900887.	1.8	7
74	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
75	Tracking the Fluorescence Lifetimes of Cesium Lead Halide Perovskite Nanocrystals During Their Synthesis Using a Fully Automated Optofluidic Platform. Chemistry of Materials, 2020, 32, 27-37.	3.2	41
76	Solid-State NMR and NQR Spectroscopy of Lead-Halide Perovskite Materials. Journal of the American Chemical Society, 2020, 142, 19413-19437.	6.6	76
77	Polaron and Spin Dynamics in Organicâ€“Inorganic Lead Halide Perovskite Nanocrystals. Advanced Optical Materials, 2020, 8, 2001016.	3.6	23
78	The Pitfalls in Nonaqueous Electrochemistry of Alâ€ion and Al Dualâ€ion Batteries. Advanced Energy Materials, 2020, 10, 2002151.	10.2	45
79	Electrophoretic Deposition of Nanoporous Oxide Coatings from Concentrated CuO Nanoparticle Dispersions. Langmuir, 2020, 36, 8075-8085.	1.6	11
80	The dark exciton ground state promotes photon-pair emission in individual perovskite nanocrystals. Nature Communications, 2020, 11, 6001.	5.8	67
81	Unraveling the Origin of the Long Fluorescence Decay Component of Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2020, 14, 14939-14946.	7.3	22
82	On the Colloidal Stability of PbS Quantum Dots Capped with Methylammonium Lead Iodide Ligands. ACS Applied Materials & Interfaces, 2020, 12, 52959-52966.	4.0	17
83	Kinetic modelling of intraband carrier relaxation in bulk and nanocrystalline lead-halide perovskites. Physical Chemistry Chemical Physics, 2020, 22, 17605-17611.	1.3	5
84	Efficient Lone-Pair-Driven Luminescence: Structureâ€“Property Relationships in Emissive 5s² Metal Halides. , 2020, 2, 1218-1232.		220
85	Electron transport in iodide-capped core@shell PbTe@PbS colloidal nanocrystal solids. Applied Physics Letters, 2020, 117, .	1.5	2
86	Monodisperse CoSb nanocrystals as high-performance anode material for Li-ion batteries. Chemical Communications, 2020, 56, 13872-13875.	2.2	4
87	Building better dual-ion batteries. MRS Energy & Sustainability, 2020, 7, 1.	1.3	2
88	Aluminum electrolytes for Al dual-ion batteries. Communications Chemistry, 2020, 3, .	2.0	48
89	Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators. ACS Nano, 2020, 14, 14686-14697.	7.3	34
90	Excitonâ€“Ligand Interactions in PbS Quantum Dots Capped with Metal Chalcogenides. Journal of Physical Chemistry C, 2020, 124, 27848-27857.	1.5	5

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91	Lead-Halide Scalar Couplings in 207Pb NMR of APbX3 Perovskites (Aâ€‰=â€‰Cs, Methylammonium,) Tj ETQq1 1 0.784314 rgBT /O	1.6	51
92	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> Physical Review Letters, 2020, 124, 206402.	2.9	74
93	The Rb₇Bi_{3â^'3x}Sb_{3x}Cl₁₆ Family: A Fully Inorganic Solid Solution with Roomâ€Temperature Luminescent Members. Angewandte Chemie, 2020, 132, 14598-14605.	1.6	11
94	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
95	White CsPbBr₃: Characterizing the Oneâ€Dimensional Cesium Lead Bromide Polymorph. Helvetica Chimica Acta, 2020, 103, e2000080.	1.0	15
96	Nano-domains assisted energy transfer in amphiphilic polymer conetworks for wearable luminescent solar concentrators. Nano Energy, 2020, 76, 105039.	8.2	29
97	Supramolecular Approach for Fine-Tuning of the Bright Luminescence from Zero-Dimensional Antimony(III) Halides. , 2020, 2, 845-852.		94
98	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
99	Silicon oxycarbide-antimony nanocomposites for high-performance Li-ion battery anodes. Nanoscale, 2020, 12, 13540-13547.	2.8	22
100	Memories in the photoluminescence intermittency of single cesium lead bromide nanocrystals. Nanoscale, 2020, 12, 6795-6802.	2.8	17
101	Hot Carrier Dynamics in Perovskite Nanocrystal Solids: Role of the Cold Carriers, Nanoconfinement, and the Surface. Nano Letters, 2020, 20, 2271-2278.	4.5	40
102	CsPbBr₃ Nanocrystal Films: Deviations from Bulk Vibrational and Optoelectronic Properties. Advanced Functional Materials, 2020, 30, 1909904.	7.8	29
103	Negative Thermal Quenching in FASnI₃ Perovskite Single Crystals and Thin Films. ACS Energy Letters, 2020, 5, 2512-2519.	8.8	55
104	Bulk and Nanocrystalline Cesium Lead-Halide Perovskites as Seen by Halide Magnetic Resonance. ACS Central Science, 2020, 6, 1138-1149.	5.3	43
105	InGaN Nanohole Arrays Coated by Lead Halide Perovskite Nanocrystals for Solid-State Lighting. ACS Applied Nano Materials, 2020, 3, 2167-2175.	2.4	9
106	Vibrational dynamics in lead halide hybrid perovskites investigated by Raman spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 5604-5614.	1.3	61
107	Exclusive Electron Transport in Core@Shell PbTe@PbS Colloidal Semiconductor Nanocrystal Assemblies. ACS Nano, 2020, 14, 3242-3250.	7.3	19
108	Colloidal Antimony Sulfide Nanoparticles as a High-Performance Anode Material for Li-ion and Na-ion Batteries. Scientific Reports, 2020, 10, 2554.	1.6	23

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109	Colloidal-ALD-Grown Core/Shell CdSe/CdS Nanoplatelets as Seen by DNP Enhanced PASSâ€“PIETA NMR Spectroscopy. Nano Letters, 2020, 20, 3003-3018.	4.5	24
110	Challenges and benefits of post-lithium-ion batteries. New Journal of Chemistry, 2020, 44, 1677-1683.	1.4	146
111	Structural Evolution of Iron(III) Trifluoroacetate upon Thermal Decomposition: Chains, Layers, and Rings. Chemistry of Materials, 2020, 32, 2482-2488.	3.2	7
112	Limitations of Chloroaluminate Ionic Liquid Anolytes for Aluminumâ€“Graphite Dual-Ion Batteries. ACS Energy Letters, 2020, 5, 545-549.	8.8	50
113	Element-Selective Probing of Photo-Driven Structural Changes in All-Inorganic Lead Perovskites. , 2020, , .		0
114	Rechargeable Dualâ€Ion Batteries with Graphite as a Cathode: Key Challenges and Opportunities. Advanced Energy Materials, 2019, 9, 1901749.	10.2	112
115	Patterned Quantum Dot Photosensitive FETs for Medium Frequency Optoelectronics. Advanced Materials Technologies, 2019, 4, 1900054.	3.0	10
116	A high-voltage concept with sodium-ion conducting Î²-alumina for magnesium-sodium dual-ion batteries. Communications Chemistry, 2019, 2, .	2.0	20
117	Silicon Oxycarbideâ€”Tin Nanocomposite as a Highâ€Powerâ€Density Anode for Liâ€Ion Batteries. Advanced Science, 2019, 6, 1901220.	5.6	30
118	High-resolution remote thermometry and thermography using luminescent low-dimensional tin-halide perovskites. Nature Materials, 2019, 18, 846-852.	13.3	246
119	Energy Transfer from Perovskite Nanocrystals to Dye Molecules Does Not Occur by FRET. Nano Letters, 2019, 19, 8896-8902.	4.5	21
120	Hybrid Metal Halides with Multiple Photoluminescence Centers. Angewandte Chemie - International Edition, 2019, 58, 18670-18675.	7.2	158
121	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
122	Size-Dependent Biexciton Spectrum in CsPbBr₃ Perovskite Nanocrystals. ACS Energy Letters, 2019, 4, 2639-2645.	8.8	53
123	Silicon Oxycarbide: Silicon Oxycarbideâ€”Tin Nanocomposite as a Highâ€Powerâ€Density Anode for Liâ€Ion Batteries (Adv. Sci. 19/2019). Advanced Science, 2019, 6, 1970116.	5.6	1
124	Manganese(II) in Tetrahedral Halide Environment: Factors Governing Bright Green Luminescence. Chemistry of Materials, 2019, 31, 10161-10169.	3.2	200
125	Hybrid Metal Halides with Multiple Photoluminescence Centers. Angewandte Chemie, 2019, 131, 18843-18848.	1.6	27
126	Cost-effective sol-gel synthesis of porous CuO nanoparticle aggregates with tunable specific surface area. Scientific Reports, 2019, 9, 11758.	1.6	76

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127	Building better all-solid-state batteries with Li-garnet solid electrolytes and metalloid anodes. Journal of Materials Chemistry A, 2019, 7, 21299-21308.	5.2	49
128	Anatase TiO₂ Nanorods as Cathode Materials for Aluminum-Ion Batteries. ACS Applied Nano Materials, 2019, 2, 6428-6435.	2.4	40
129	Setting an Upper Bound to the Biexciton Binding Energy in CsPbBr3 Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2019, 10, 5680-5686.	2.1	29
130	Microcarrier-Assisted Inorganic Shelling of Lead Halide Perovskite Nanocrystals. ACS Nano, 2019, 13, 11642-11652.	7.3	46
131	Zeolite-Templated Carbon as a Stable, High Power Magnesium-Ion Cathode Material. ACS Applied Materials & Interfaces, 2019, 11, 39902-39909.	4.0	22
132	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
133	Tunability and Scalability of Single-Atom Catalysts Based on Carbon Nitride. ACS Sustainable Chemistry and Engineering, 2019, 7, 5223-5230.	3.2	31
134	Underestimated Effect of a Polymer Matrix on the Light Emission of Single CsPbBr₃ Nanocrystals. Nano Letters, 2019, 19, 3648-3653.	4.5	88
135	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
136	Tuning Transport Properties in Thermoelectric Nanocomposites through Inorganic Ligands and Heterostructured Building Blocks. ACS Nano, 2019, 13, 6572-6580.	7.3	27
137	Copper sulfide nanoparticles as high-performance cathode materials for Mg-ion batteries. Scientific Reports, 2019, 9, 7988.	1.6	64
138	Engineering Color-Stable Blue Light-Emitting Diodes with Lead Halide Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 21655-21660.	4.0	98
139	Unraveling the Radiative Pathways of Hot Carriers upon Intense Photoexcitation of Lead Halide Perovskite Nanocrystals. ACS Nano, 2019, 13, 5799-5809.	7.3	15
140	The ground exciton state of formamidinium lead bromide perovskite nanocrystals is a singlet dark state. Nature Materials, 2019, 18, 717-724.	13.3	189
141	Transition metal trifluoroacetates (Mâ€‰=â€‰Fe, Co, Mn) as precursors for uniform colloidal metal difluoride and phosphide nanoparticles. Scientific Reports, 2019, 9, 6613.	1.6	11
142	Zeolite-Templated Carbon as the Cathode for a High Energy Density Dual-Ion Battery. ACS Applied Materials & Interfaces, 2019, 11, 17686-17696.	4.0	32
143	Ligand-Mediated Band Engineering in Bottom-Up Assembled SnTe Nanocomposites for Thermoelectric Energy Conversion. Journal of the American Chemical Society, 2019, 141, 8025-8029.	6.6	47
144	Nanoprinted Quantum Dotâ€“Graphene Photodetectors. Advanced Optical Materials, 2019, 7, 1900019.	3.6	53

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145	Overcoming the High-Voltage Limitations of Li-Ion Batteries Using a Titanium Nitride Current Collector. ACS Applied Energy Materials, 2019, 2, 974-978.	2.5	17
146	Coherent spin dynamics of electrons and holes in CsPbBr3 perovskite crystals. Nature Communications, 2019, 10, 673.	5.8	100
147	Robust Hydrophobic and Hydrophilic Polymer Fibers Sensitized by Inorganic and Hybrid Lead Halide Perovskite Nanocrystal Emitters. Frontiers in Chemistry, 2019, 7, 87.	1.8	21
148	Exciton Gating and Triplet Deshelving in Single Dye Molecules Excited by Perovskite Nanocrystal FRET Antennae. Journal of Physical Chemistry Letters, 2019, 10, 1055-1062.	2.1	14
149	Coherent single-photon emission from colloidal lead halide perovskite quantum dots. Science, 2019, 363, 1068-1072.	6.0	345
150	Guanidinium and Mixed Cesiumâ€“Guanidinium Tin(II) Bromides: Effects of Quantum Confinement and Out-of-Plane Octahedral Tilting. Chemistry of Materials, 2019, 31, 2121-2129.	3.2	24
151	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
152	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
153	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
154	Amplified Spontaneous Emission Threshold Reduction and Operational Stability Improvement in CsPbBr3 Nanocrystals Films by Hydrophobic Functionalization of the Substrate. Scientific Reports, 2019, 9, 17964.	1.6	46
155	Rationalizing and Controlling the Surface Structure and Electronic Passivation of Cesium Lead Halide Nanocrystals. ACS Energy Letters, 2019, 4, 63-74.	8.8	308
156	Hot-carrier cooling in lead-bromide perovskite materials. , 2019, , .		1
157	Temperature Dependence of the Amplified Spontaneous Emission from CsPbBr₃ Nanocrystal Thin Films. Journal of Physical Chemistry C, 2018, 122, 5813-5819.	1.5	71
158	Polypyrenes as Highâ€Performance Cathode Materials for Aluminum Batteries. Advanced Materials, 2018, 30, e1705644.	11.1	180
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