## Short hain Ligandâ€Passivated Stable α sPbI<su Perovskite Solar Cells

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**Citation Report** 

#	Article	IF	CITATIONS
1	<i>In situ</i> preparation of a CsPbBr <sub>3</sub> /black phosphorus heterostructure with an optimized interface and photodetector application. Nanoscale, 2019, 11, 16852-16859.	2.8	55
2	A Robust 2D Photoâ€Electrochemical Detector Based on NiPS <sub>3</sub> Flakes. Advanced Electronic Materials, 2019, 5, 1900726.	2.6	36
3	Managing Energy Loss in Inorganic Lead Halide Perovskites Solar Cells. Advanced Materials Interfaces, 2019, 6, 1901136.	1.9	19
4	Spray oated Colloidal Perovskite Quantum Dot Films for Highly Efficient Solar Cells. Advanced Functional Materials, 2019, 29, 1906615.	7.8	100
5	Inorganic perovskite solar cells: an emerging member of the photovoltaic community. Journal of Materials Chemistry A, 2019, 7, 21036-21068.	5.2	137
6	All-inorganic lead halide perovskites: a promising choice for photovoltaics and detectors. Journal of Materials Chemistry C, 2019, 7, 12415-12440.	2.7	95
7	Perovskite Quantum Dot Solar Cells with 15.6% Efficiency and Improved Stability Enabled by an α-CsPbI <sub>3</sub> /FAPbI <sub>3</sub> Bilayer Structure. ACS Energy Letters, 2019, 4, 2571-2578.	8.8	160
8	Improving Carbon Nanotubeâ€6ilicon Solar Cells by Solution Processable Metal Chlorides. Solar Rrl, 2019, 3, 1900147.	3.1	18
9	Recent Progress and Development in Inorganic Halide Perovskite Quantum Dots for Photoelectrochemical Applications. Small, 2020, 16, e1903398.	5.2	120
10	Alkylâ€Chainâ€Regulated Charge Transfer in Fluorescent Inorganic CsPbBr <sub>3</sub> Perovskite Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 4391-4395.	7.2	122
11	Alkylâ€Chainâ€Regulated Charge Transfer in Fluorescent Inorganic CsPbBr 3 Perovskite Solar Cells. Angewandte Chemie, 2020, 132, 4421-4425.	1.6	16
12	Low-Temperature Processing All-Inorganic Carbon-Based Perovskite Solar Cells up to 11.78% Efficiency via Alkali Hydroxides Interfacial Engineering. ACS Applied Energy Materials, 2020, 3, 401-410.	2.5	40
13	Unveiling the interfacial charge extraction kinetics in inorganic perovskite solar cells with formamidinium lead halide (FAPbX3) nanocrystals. Solar Energy, 2020, 195, 644-650.	2.9	17
14	Bifunctional Ytterbium (III) Chloride Driven Lowâ€Temperature Synthesis of Stable αâ€CsPbI <sub>3</sub> for Highâ€Efficiency Inorganic Perovskite Solar Cells. Small Methods, 2020, 4, 1900652.	4.6	35
15	Synthesis and optical applications of low dimensional metal-halide perovskites. Nanotechnology, 2020, 31, 152002.	1.3	31
16	Black Phosphorus: Degradation Mechanism, Passivation Method, and Application for In Situ Tissue Regeneration. Advanced Materials Interfaces, 2020, 7, 2001538.	1.9	33
17	Advances in Phase Stability of Cesium Lead Halide Perovskites. Solar Rrl, 2020, 4, 2000495.	3.1	13
18	Recent advances in interface engineering of all-inorganic perovskite solar cells. Nanoscale, 2020, 12, 17149-17164.	2.8	20

#	Article	IF	CITATIONS
19	Two-Photon Excitation Enhanced High-Efficiency and Phase-Conjugate Stimulated Mie Scattering of Perovskite Nanocrystals Suspended in <i>n</i> -Hexane. Journal of Physical Chemistry C, 2020, 124, 25944-25950.	1.5	3
20	High-performance vertical field-effect transistors based on all-inorganic perovskite microplatelets. Journal of Materials Chemistry C, 2020, 8, 12632-12637.	2.7	16
21	Photo-Induced Black Phase Stabilization of CsPbI3 QDs Films. Nanomaterials, 2020, 10, 1586.	1.9	8
22	Metal Halide Perovskite Nanocrystal Solar Cells: Progress and Challenges. Small Methods, 2020, 4, 2000419.	4.6	30
23	Doping in inorganic perovskite for photovoltaic application. Nano Energy, 2020, 78, 105354.	8.2	53
24	Monolayer Quantum-Dot Based Light-Sensor by a Photo-Electrochemical Mechanism. Micromachines, 2020, 11, 817.	1.4	0
25	Realizing Reduced Imperfections via Quantum Dots Interdiffusion in High Efficiency Perovskite Solar Cells. Advanced Materials, 2020, 32, e2003296.	11.1	50
26	Stable CsPbl <sub>3</sub> Nanocrystals Modified by Tetra- <i>n</i> butylammonium lodide for Light-Emitting Diodes. ACS Applied Nano Materials, 2020, 3, 9260-9267.	2.4	9
27	Alternating Current Electroluminescent Devices with Inorganic Phosphors for Deformable Displays. Cell Reports Physical Science, 2020, 1, 100213.	2.8	22
28	Highly Efficient and Air-Stable Heterostructured Perovskite Quantum Dot Solar Cells Using a Solid-State Cation-Exchange Reaction. ACS Applied Materials & Interfaces, 2020, 12, 57124-57133.	4.0	21
29	Effect of Oleamine on Microwave-Assisted Synthesis of Cesium Lead Bromide Perovskite Nanocrystals. Langmuir, 2020, 36, 13663-13669.	1.6	14
30	Dual Passivation of CsPbI <sub>3</sub> Perovskite Nanocrystals with Amino Acid Ligands for Efficient Quantum Dot Solar Cells. Small, 2020, 16, e2001772.	5.2	127
31	Back-Reflected Performance-Enhanced Flexible Perovskite Photodetectors through Substrate Texturing with Femtosecond Laser. ACS Applied Materials & Interfaces, 2020, 12, 26614-26623.	4.0	12
32	High brightness blue light-emitting diodes based on CsPb(Cl/Br) <sub>3</sub> perovskite QDs with phenethylammonium chloride passivation. Nanoscale, 2020, 12, 11728-11734.	2.8	42
33	All-Inorganic, Solution-Processed, Inverted CsPbI <sub>3</sub> Quantum Dot Solar Cells with a PCE of 13.1% Achieved via a Layer-by-Layer FAI Treatment. ACS Applied Energy Materials, 2020, 3, 5620-5627.	2.5	41
34	Metal Halide Perovskites in Quantum Dot Solar Cells: Progress and Prospects. Joule, 2020, 4, 1160-1185.	11.7	211
35	Internally-externally defects-tailored MAPbI3 perovskites with highly enhanced air stability and quantum yield. Chemical Engineering Journal, 2020, 399, 125715.	6.6	28
36	Surface Ligands Management for Efficient CsPbBrl <sub>2</sub> Perovskite Nanocrystal Solar Cells. Solar Rrl, 2020, 4, 2000102.	3.1	25

#	Article	IF	CITATIONS
37	Toward perovskite nanocrystalline solar cells: progress and potential. Journal of Materials Chemistry C, 2020, 8, 5321-5334.	2.7	22
38	Efficient All-Inorganic Perovskite Light-Emitting Diodes with Improved Operation Stability. ACS Applied Materials & Interfaces, 2020, 12, 18084-18090.	4.0	54
39	Bright Luminous and Stable CsPbBr 3 @PS Microspheres Prepared via Facile Antiâ€solvent Method using CTAB as Double Modifier. Chemistry - A European Journal, 2020, 26, 10528-10533.	1.7	11
40	Automated microfluidic screening of ligand interactions during the synthesis of cesium lead bromide nanocrystals. Molecular Systems Design and Engineering, 2020, 5, 1118-1130.	1.7	26
41	CsPbI <sub>3</sub> /PbSe Heterostructured Nanocrystals for High-Efficiency Solar Cells. ACS Energy Letters, 2020, 5, 2401-2410.	8.8	77
42	Stable CsPb <sub>1–<i>x</i></sub> Zn <i><sub>x</sub></i> I <sub>3</sub> Colloidal Quantum Dots with Ultralow Density of Trap States for High-Performance Solar Cells. Chemistry of Materials, 2020, 32, 6105-6113.	3.2	93
43	Efficient Bidentate Molecules Passivation Strategy for Highâ€Performance and Stable Inorganic CsPbI <sub>2</sub> Br Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000268.	3.1	21
44	Photoluminescence Loss and Recovery of α-CsPbI <sub>3</sub> Quantum Dots Originated from Chemical Equilibrium Shift of Oleylammonium. ACS Applied Materials & Interfaces, 2020, 12, 11769-11777.	4.0	21
45	Stability of Perovskite Light Sources: Status and Challenges. Advanced Optical Materials, 2020, 8, 1902012.	3.6	54
46	Biexcitons in 2D (iso-BA) <sub>2</sub> PbI <sub>4</sub> perovskite crystals. Nanophotonics, 2020, 9, 2001-2006.	2.9	19
47	Enhanced Photocurrent Owing to Shuttling of Charge Carriers across 4-Aminothiophenol-Functionalized MoSe <sub>2</sub> –CsPbBr <sub>3</sub> Nanohybrids. ACS Applied Materials & Interfaces, 2020, 12, 7317-7325.	4.0	35
48	High Efficiency Mesoscopic Solar Cells Using CsPbI <sub>3</sub> Perovskite Quantum Dots Enabled by Chemical Interface Engineering. Journal of the American Chemical Society, 2020, 142, 3775-3783.	6.6	156
49	Dependence of stability and electronic and optical properties of perovskite quantum dots on capping ligand chain length. Journal of Chemical Physics, 2020, 152, 034701.	1.2	13
50	Application of perovskite nanocrystals (NCs)/quantum dots (QDs) in solar cells. Nano Energy, 2020, 73, 104757.	8.2	77
51	Highly luminescent and stable CH3NH3PbBr3 quantum dots with 91.7% photoluminescence quantum yield: Role of guanidinium bromide dopants. Journal of Alloys and Compounds, 2020, 832, 154990.	2.8	13
52	Interphases, Interfaces, and Surfaces of Active Materials in Rechargeable Batteries and Perovskite Solar Cells. Advanced Materials, 2021, 33, e1905245.	11.1	30
53	Ni2+-doped CsPbI3 perovskite nanocrystals with near-unity photoluminescence quantum yield and superior structure stability for red light-emitting devices. Chemical Engineering Journal, 2021, 413, 127547.	6.6	80
54	Allâ€Inorganic CsPbl <sub>3</sub> Quantum Dot Solar Cells with Efficiency over 16% by Defect Control. Advanced Functional Materials, 2021, 31, 2005930.	7.8	101

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55	Emerging perovskite quantum dot solar cells: feasible approaches to boost performance. Energy and Environmental Science, 2021, 14, 224-261.	15.6	94
56	Status and Outlook of Metal–Inorganic Semiconductor–Metal Photodetectors. Laser and Photonics Reviews, 2021, 15, .	4.4	67
57	Anchoring of CsPbBr <sub>3</sub> perovskite quantum dots on BN nanostructures for enhanced efficiency and stability: a comparative study. Journal of Materials Chemistry C, 2021, 9, 842-850.	2.7	14
58	B-site doping of CsPbI3 quantum dot to stabilize the cubic structure for high-efficiency solar cells. Chemical Engineering Journal, 2021, 421, 127822.	6.6	27
59	Two-dimensional semiconducting antimonene in nanophotonic applications – A review. Chemical Engineering Journal, 2021, 406, 126876.	6.6	38
60	Stability of the CsPbI <sub>3</sub> perovskite: from fundamentals to improvements. Journal of Materials Chemistry A, 2021, 9, 11124-11144.	5.2	78
61	All-inorganic lead-free metal halide perovskite quantum dots: progress and prospects. Chemical Communications, 2021, 57, 7465-7479.	2.2	28
62	Engineering Sr-doping for enabling long-term stable FAPb <sub>1â^'x</sub> Sr <sub>x</sub> I <sub>3</sub> quantum dots with 100% photoluminescence quantum yield. Journal of Materials Chemistry C, 2021, 9, 1555-1566.	2.7	23
63	Poly(vinylidene fluoride)-passivated CsPbBr <sub>3</sub> perovskite quantum dots with near-unity photoluminescence quantum yield and superior stability. Journal of Materials Chemistry C, 2021, 9, 1983-1991.	2.7	28
64	Aromatic amine-assisted pseudo-solution-phase ligand exchange in CsPbI <sub>3</sub> perovskite quantum dot solar cells. Chemical Communications, 2021, 57, 7906-7909.	2.2	29
65	All-inorganic perovskite quantum dots as light-harvesting, interfacial, and light-converting layers toward solar cells. Journal of Materials Chemistry A, 2021, 9, 18947-18973.	5.2	19
66	Highly Soluble CsPbBr <sub>3</sub> Perovskite Quantum Dots for Solution-Processed Light-Emission Devices. ACS Applied Nano Materials, 2021, 4, 1162-1174.	2.4	16
67	Seedsâ€Assisted Spaceâ€Confined Growth of Allâ€Inorganic Perovskite Arrays for Ultralowâ€Threshold Singleâ€Mode Lasing. Laser and Photonics Reviews, 2021, 15, 2000428.	4.4	24
68	Highly Stable Perovskite Quantum Dots Modified by Europium Complex for Dual-Responsive Optical Encoding. ACS Nano, 2021, 15, 6266-6275.	7.3	44
69	Perovskite Nanocrystals: Synthesis, Stability, and Optoelectronic Applications. Small Structures, 2021, 2, 2000124.	6.9	53
70	Thickness-Attuned CsPbBr <sub>3</sub> Nanosheets with Enhanced <i>p</i> -Type Field Effect Mobility. Journal of Physical Chemistry Letters, 2021, 12, 1560-1566.	2.1	17
71	Allâ€Inorganic Leadâ€Free Perovskite(â€Like) Single Crystals: Synthesis, Properties, and Applications. Small Methods, 2021, 5, e2001308.	4.6	60
72	Stability of Quantum Dot Solar Cells: A Matter of (Life)Time. Advanced Energy Materials, 2021, 11, 2003457.	10.2	57

#	Article	IF	CITATIONS
73	Polymeric Hole Transport Materials for Red CsPbI3 Perovskite Quantum-Dot Light-Emitting Diodes. Polymers, 2021, 13, 896.	2.0	7
74	Highly Luminescent and Stable CsPbI <sub>3</sub> Perovskite Nanocrystals with Sodium Dodecyl Sulfate Ligand Passivation for Red-Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2021, 12, 2437-2443.	2.1	71
75	Ligandâ€Mediated Synthesis of Mixedâ€Phase Mn 2+ â€Doped Cesium Lead Chloride Nanocrystals. ChemNanoMat, 2021, 7, 651-657.	1.5	1
76	The Impact of Precursor Ratio on the Synthetic Production, Surface Chemistry, and Photovoltaic Performance of CsPbl <sub>3</sub> Perovskite Quantum Dots. Solar Rrl, 2021, 5, 2100090.	3.1	17
77	Material exploration via designing spatial arrangement of octahedral units: a case study of lead halide perovskites. Frontiers of Optoelectronics, 2021, 14, 252-259.	1.9	66
78	Role of Methyl Acetate in Highly Reproducible Efficient CsPbI <sub>3</sub> Perovskite Quantum Dot Solar Cells. Journal of Physical Chemistry C, 2021, 125, 8469-8478.	1.5	29
79	Quantum Dots for Photovoltaics: A Tale of Two Materials. Advanced Energy Materials, 2021, 11, 2100354.	10.2	77
80	Defect Passivation of CsPbBr <sub>3</sub> with AgBr for Highâ€Performance Allâ€Inorganic Perovskite Solar Cells. Advanced Energy and Sustainability Research, 2021, 2, 2000099.	2.8	18
81	Allâ€Inorganic Halide Perovskite Nanocrystals: Future Prospects and Challenges to Go Lead Free. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100185.	0.8	1
82	CsPbI <sub>3</sub> Perovskite Quantum Dot Solar Cells with Both High Efficiency and Phase Stability Enabled by Br Doping. ACS Applied Energy Materials, 2021, 4, 6688-6696.	2.5	17
83	Perovskite Quantum Dot Solar Cells: An Overview of the Current Advances and Future Perspectives. Solar Rrl, 2021, 5, 2100205.	3.1	12
84	Research progress of absorber film of inorganic perovskite solar cells: Fabrication techniques and additive engineering in defect passivation. Materials Science in Semiconductor Processing, 2021, 127, 105666.	1.9	24
85	Progress in halide-perovskite nanocrystals with near-unity photoluminescence quantum yield. Trends in Chemistry, 2021, 3, 499-511.	4.4	63
86	Advances in cesium lead iodide perovskite solar cells: Processing science matters. Materials Today, 2021, 47, 156-169.	8.3	25
87	Optimization of sensitized perovskite solar cells with Zn–Cu–In–Se quantum dots to increase quantum efficiency. Journal of Materials Science: Materials in Electronics, 2021, 32, 21106-21123.	1.1	0
88	Ligandâ€Free MAPbl <sub>3</sub> Quantum Dot Solar Cells Based on Nanostructured Insulating Matrices. Solar Rrl, 2021, 5, 2100204.	3.1	16
89	Water-Dispersible CsPbBr3 Perovskite Nanocrystals with Ultra-Stability and its Application in Electrochemical CO2 Reduction. Nano-Micro Letters, 2021, 13, 172.	14.4	20
90	Bidentate ligand modified CsPbI2Br quantum dots as an interface for high-performance carbon-based perovskite solar cells. Materials Science in Semiconductor Processing, 2021, 131, 105847.	1.9	20

#	Article	IF	CITATIONS
91	Room-temperature quaternary alkylammonium passivation toward morphology-controllable CsPbBr3 nanocrystals with excellent luminescence and stability for white LEDs. Chemical Engineering Journal, 2021, 417, 129349.	6.6	17
92	Controllable synthesis of CdSe/ZnS core–shell quantum dots by one-step thermal injection and application in light-emitting diodes. Journal of Materials Science: Materials in Electronics, 2021, 32, 22024-22034.	1.1	6
93	Defect Passivation for Perovskite Solar Cells: from Molecule Design to Device Performance. ChemSusChem, 2021, 14, 4354-4376.	3.6	43
94	Mn <sup>2+</sup> â€Doped CsPbI <sub>3</sub> Nanocrystals for Perovskite Lightâ€Emitting Diodes with High Luminance and Improved Device Stability. Advanced Photonics Research, 2021, 2, 2100137.	1.7	12
95	Current status on synthesis, properties and applications of CsPbX <sub>3</sub> (XÂ=ÂCl, Br, I) perovskite quantum dots/nanocrystals. Nanotechnology, 2021, 32, 502007.	1.3	13
96	Multidentate ligand approach for conjugation of perovskite quantum dots to biomolecules. Journal of Colloid and Interface Science, 2021, 603, 758-770.	5.0	23
97	Development of perovskite solar cells by incorporating quantum dots. Chemical Engineering Journal, 2021, 426, 131588.	6.6	28
98	CsPbl3 quantum dots/polypyrrole microrod 0D/1D heterostructure: Synthesis, formation mechanism and enhanced charge transport property. Materials Chemistry and Physics, 2021, 274, 125193.	2.0	6
99	Enhanced device performance of quantum-dot light-emitting diodes via 2,2′-Bipyridyl ligand exchange. Organic Electronics, 2021, 99, 106326.	1.4	7
100	Improved open-circuit voltage of CsPbI3 quantum dot solar cells by PMMA interlayer. Journal of Alloys and Compounds, 2022, 891, 161985.	2.8	6
101	Metal Halide Perovskite/2D Material Heterostructures: Syntheses and Applications. Small Methods, 2021, 5, e2000937.	4.6	24
102	Thermal and photo stability of all inorganic lead halide perovskite nanocrystals. Physical Chemistry Chemical Physics, 2021, 23, 17113-17128.	1.3	25
103	One-pot reprecipitation strategy to synthesize CsPbX <sub>3</sub> /Pb <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> composite nanocrystals. Journal of Materials Chemistry C, 2021, 9, 466-471.	2.7	9
104	Wide-bandgap organic–inorganic hybrid and all-inorganic perovskite solar cells and their application in all-perovskite tandem solar cells. Energy and Environmental Science, 2021, 14, 5723-5759.	15.6	114
105	Inorganic lead-free cesium copper chlorine nanocrystal for highly efficient and stable warm white light-emitting diodes. Photonics Research, 2021, 9, 187.	3.4	44
106	Surface passivation by congeneric quantum dots for high-performance and stable CsPbBr3-based photodetectors. Journal of Materials Chemistry C, 2021, 9, 10089-10100.	2.7	11
107	The chemistry of colloidal semiconductor nanocrystals: From metal-chalcogenides to emerging perovskite. Coordination Chemistry Reviews, 2020, 418, 213333.	9.5	23
108	Electroluminescence of Perovskite Nanocrystals with Ligand Engineering. Trends in Chemistry, 2020, 2, 837-849.	4.4	22

#	Article	IF	CITATIONS
109	Design of high performance and low resistive loss graphene solar cells. Journal of the European Optical Society-Rapid Publications, 2020, 16, .	0.9	5
110	Surface Chemistry Engineering of Perovskite Quantum Dots: Strategies, Applications, and Perspectives. Advanced Materials, 2022, 34, e2105958.	11.1	128
111	Homojunction Perovskite Quantum Dot Solar Cells with over 1µmâ€Thick Photoactive Layer. Advanced Materials, 2022, 34, e2105977.	11.1	47
112	Surface ligand engineering of CsPbBr3 perovskite nanowires for high-performance photodetectors. Journal of Colloid and Interface Science, 2022, 608, 2367-2376.	5.0	19
113	Strong Bidentate Coordination for Surface Passivation and Ligand-Shell Engineering of Lead Halide Perovskite Nanocrystals in the Strongly Quantum-Confined Regime. Journal of Physical Chemistry C, 2021, 125, 24521-24530.	1.5	4
114	Perovskite Quantum Dots for Photovoltaic Applications. Springer Series in Materials Science, 2020, , 243-254.	0.4	1
115	Application of Perovskite Quantum Dots as Absorber for Perovskite Solar Cell. Angewandte Chemie, 0, , e202112412.	1.6	8
116	Application of Perovskite Quantum Dots as an Absorber in Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, e202112412.	7.2	37
117	Metal halide perovskite quantum dots for amphiprotic bio-imaging. Coordination Chemistry Reviews, 2022, 452, 214313.	9.5	37
118	Magnetic all-inorganic perovskite nanocrystals demonstrating well-defined hybrid structure and superhydrophobic behavior towards movable and stable photoluminescence. Journal of Luminescence, 2022, 243, 118629.	1.5	0
119	Quantum Dot Passivation of Halide Perovskite Films with Reduced Defects, Suppressed Phase Segregation, and Enhanced Stability. Advanced Science, 2022, 9, e2102258.	5.6	35
120	Potential of MXene-Based Heterostructures for Energy Conversion and Storage. ACS Energy Letters, 2022, 7, 78-96.	8.8	69
121	Strong Edge Stress in Molecularly Thin Organic–Inorganic Hybrid Ruddlesden–Popper Perovskites and Modulations of Their Edge Electronic Properties. ACS Nano, 2022, 16, 261-270.	7.3	7
122	Tetraoctylammonium bromide-passivated CsPbI3â^'xBrx perovskite nanoparticles with improved stability for efficient red light-emitting diodes. Journal of Alloys and Compounds, 2022, 897, 163182.	2.8	12
123	Colloidal Quantum Dot Solar Cells: Progressive Deposition Techniques and Future Prospects on Largeâ€Area Fabrication. Advanced Materials, 2022, 34, e2107888.	11.1	39
124	Perovskite Quantum Dots in Solar Cells. Advanced Science, 2022, 9, e2104577.	5.6	49
125	Synergistic Regulation Effect of Nitrate and Calcium Ions for Highly Luminescent and Robust α sPbl <sub>3</sub> Perovskite. Small, 2022, 18, e2106147.	5.2	7
126	Past, present and future of indium phosphide quantum dots. Nano Research, 2022, 15, 4468-4489.	5.8	50

#	Article	IF	CITATIONS
127	CsPbI <sub>3</sub> perovskite quantum dot solar cells: opportunities, progress and challenges. Materials Advances, 2022, 3, 1931-1952.	2.6	17
128	Characteristics, properties, synthesis and advanced applications of 2D graphdiyne <i>versus</i> graphene. Materials Chemistry Frontiers, 2022, 6, 528-552.	3.2	14
129	Boosting Performance of CsPbI <sub>3</sub> Perovskite Solar Cells via the Synergy of Hydroiodic Acid and Deionized Water. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	9
130	Strategies for highly efficient and stable cesium lead iodide perovskite photovoltaics: mechanisms and processes. Journal of Materials Chemistry C, 2022, 10, 4999-5023.	2.7	19
131	Efficient CsPbBr <sub>3</sub> Nanoplatelet-Based Blue Light-Emitting Diodes Enabled by Engineered Surface Ligands. ACS Energy Letters, 2022, 7, 1137-1145.	8.8	52
132	Phase Regulation and Surface Passivation of Stable α-CsPbl <sub>3</sub> Nanocrystals with Dual-Mode Luminescence via Synergistic Effects of Ligands. Journal of Physical Chemistry C, 2022, 126, 5233-5243.	1.5	5
133	Doping Colloidal Quantum Dot Materials and Devices for Photovoltaics. Energies, 2022, 15, 2458.	1.6	6
135	Narrow Bandgap Metal Halide Perovskites: Synthesis, Characterization, and Optoelectronic Applications. Advanced Optical Materials, 2022, 10, .	3.6	7
136	Ligand engineering of perovskite quantum dots for efficient and stable solar cells. Journal of Energy Chemistry, 2022, 69, 626-648.	7.1	16
137	Multidentate passivation crosslinking perovskite quantum dots for efficient solar cells. Nano Energy, 2022, 96, 107140.	8.2	40
138	Designable and highly stable emissive CsPbI <sub>3</sub> perovskite quantum dots/polyvinylidene fluoride nanofiber composites. Optical Materials Express, 2022, 12, 109.	1.6	7
139	Large-scale continuous preparation of highly stable α-CsPbI <sub>3</sub> /m-SiO <sub>2</sub> nanocomposites by a microfluidics reactor for solid state lighting application. CrystEngComm, 2022, 24, 3852-3858.	1.3	4
140	Stability ascent in perovskite solar cells employing star poly(3-hexylthiophene)/quantum dot nanostructures. Organic Electronics, 2022, 108, 106547.	1.4	1
141	Recent Progress in the Stability of Red-Emissive Perovskite Nanocrystals for Light-Emitting Diodes. , 2022, 4, 1233-1254.		20
142	Enhancement on charge transfer properties of Cu <sub>12</sub> Sb <sub>4</sub> S <sub>13</sub> quantum dots hole transport materials by surface ligand modulation in perovskite solar cells. New Journal of Chemistry, 2022, 46, 11751-11758.	1.4	3
143	Cesium lead iodide electrospun fibrous membranes for white light-emitting diodes. Nanotechnology, 0, , .	1.3	Ο
144	Key Factors Affecting the Stability of CsPbI <sub>3</sub> Perovskite Quantum Dot Solar Cells: A Comprehensive Review. Advanced Materials, 2023, 35, .	11.1	19
145	Numerical simulation of bilayer perovskite quantum dot solar cell with 18.55% efficiency. Optical and Quantum Electronics, 2022, 54, .	1.5	7

#	Article	IF	CITATIONS
146	Mid-Infrared Optoelectronic Devices Based on Two-Dimensional Materials beyond Graphene: Status and Trends. Nanomaterials, 2022, 12, 2260.	1.9	16
147	Double‣ayer Quantum Dots as Interfacial Layer to Enhance the Performance of CsPbI <sub>3</sub> Solar Cells. Advanced Materials Interfaces, 0, , 2200813.	1.9	3
148	Experimental Determination of the Molar Absorption Coefficient of Cesium Lead Halide Perovskite Quantum Dots. Journal of Physical Chemistry Letters, 2022, 13, 6290-6297.	2.1	8
149	Aromatic Carboxylic Acid Ligand Management for CsPbBr <sub>3</sub> Quantum Dot Light-Emitting Solar Cells. ACS Applied Nano Materials, 2022, 5, 10495-10503.	2.4	6
150	Cesium Lead Iodide Perovskites: Optically Active Crystal Phase Stability to Surface Engineering. Micromachines, 2022, 13, 1318.	1.4	8
151	Selection, Preparation and Application of Quantum Dots in Perovskite Solar Cells. International Journal of Molecular Sciences, 2022, 23, 9482.	1.8	9
152	Organic Molecules in Allâ€Inorganic CsPbl <sub><i>x</i></sub> Br <sub>3â^³<i>x</i></sub> Perovskite Solar Cells: Interface Modifiers or Precursor Additives. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	5
153	Structural engineering of single-crystal-like perovskite nanocrystals for ultrasensitive photodetector applications. Journal of Materials Chemistry C, 2022, 10, 11401-11411.	2.7	6
154	Accurately Determining the Phase Transition Temperature of CsPbl <sub>3</sub> via Random-Phase Approximation Calculations and Phase-Transferable Machine Learning Potentials. Chemistry of Materials, 2022, 34, 8561-8576.	3.2	8
155	Ligand exchange engineering of FAPbI3 perovskite quantum dots for solar cells. Frontiers of Optoelectronics, 2022, 15, .	1.9	1
156	Light-Induced Charge Transfer to Achieve Deep-Red Emission in SrSc <sub>2</sub> O <sub>4</sub> :Bi toward Multiple Optical Applications. Chemistry of Materials, 2022, 34, 8831-8839.	3.2	6
157	Ligand-modified synthesis of shape-controllable and highly luminescent CsPbBr <sub>3</sub> perovskite nanocrystals under ambient conditions. Inorganic Chemistry Frontiers, 2022, 9, 6080-6090.	3.0	6
158	Chemical conversion of electrodeposited PbO2 to the all-inorganic cesium lead halide perovskites CsPbBr3 and CsPbCl3. Electrochemistry Communications, 2022, 143, 107381.	2.3	1
159	Quantum onfined Dodecahedron CsPbBr <sub>3</sub> Quantum Dots by A Sequential Postâ€Treatment Strategy for Efficient Blue PeLEDs. Advanced Functional Materials, 2022, 32, .	7.8	6
160	In Situ Bonding Regulation of Surface Ligands for Efficient and Stable FAPbI <sub>3</sub> Quantum Dot Solar Cells. Advanced Science, 2022, 9, .	5.6	15
161	Design and performance optimization of carbon-based all-inorganic CsPbIBr2 perovskite battery with C60 buffer layer. Solar Energy, 2022, 246, 245-255.	2.9	3
162	Toward efficient hybrid solar cells comprising quantum dots and organic materials: progress, strategies, and perspectives. Journal of Materials Chemistry A, 2023, 11, 1013-1038.	5.2	8
163	Polymerizable Surfactant Ligand for Stabilization and Film Formation of CsPbBr <sub>3</sub> Nanocrystals. Langmuir, 2022, 38, 15253-15262.	1.6	0

#	Article	IF	CITATIONS
164	Metal Halide Hybrid Perovskites. , 0, , .		0
165	Perovskite quantum dots: Synthesis, applications, prospects, and challenges. Journal of Applied Physics, 2022, 132, .	1.1	7
166	Recent progress in perovskite solar cells: material science. Science China Chemistry, 2023, 66, 10-64.	4.2	53
167	Spacer Cation Alloying Enables Markedly Improved Chiroptical Properties of Twoâ€Dimensional Chiral Hybrid Perovskite Nanosheets. Advanced Optical Materials, 2023, 11, .	3.6	10
168	All–Inorganic Perovskite Quantum Dot–Based Blue Light–Emitting Diodes: Recent Advances and Strategies. Nanomaterials, 2022, 12, 4372.	1.9	5
169	Ligands in Lead Halide Perovskite Nanocrystals: From Synthesis to Optoelectronic Applications. Small, 2023, 19, .	5.2	18
170	Synthesis and Applications of Halide Perovskite Nanocrystals in Optoelectronics. Inorganics, 2023, 11, 39.	1.2	3
171	Enhancing Photoluminescence and Stability of CsPbI3 Perovskite Quantum Dots via Cysteine Post-Processing. Crystals, 2023, 13, 45.	1.0	3
172	Surface-Ligand-Modified CdSe/CdS Nanorods for High-Performance Light-Emitting Diodes. ACS Omega, 2023, 8, 3762-3767.	1.6	4
173	Halide-based perovskites in photonics: From photocatalysts to highly efficient optoelectronic devices. , 2023, , 547-600.		1
174	Exciton diffusion and dissociation in organic and quantumâ€dot solar cells. SmartMat, 2023, 4, .	6.4	12
175	Anisotropic Heavy-Metal-Free Semiconductor Nanocrystals: Synthesis, Properties, and Applications. Chemical Reviews, 2023, 123, 3625-3692.	23.0	9
176	Metal halide perovskite nanocrystals for biomedical engineering: Recent advances, challenges, and future perspectives. Coordination Chemistry Reviews, 2023, 482, 215073.	9.5	19
177	Ligand Chemistry of Inorganic Lead Halide Perovskite Nanocrystals. ACS Energy Letters, 2023, 8, 1152-1191.	8.8	70
178	Surface‣tabilized CsPbI <sub>3</sub> Nanocrystals with Tailored Organic Polymer Ligand Binding. Chemistry - A European Journal, 2023, 29, .	1.7	0
179	Dual Ions Passivating FAPbBr <sub>3</sub> Perovskite Quantum Dot Films via a Vacuum Drying Method for Stable and Efficient Solar Cells with an Ultrahigh Open-Circuit Voltage of over 1.67 V. ACS Applied Energy Materials, 2023, 6, 3486-3494.	2.5	2
180	The influence of the capping ligands on the optoelectronic performance, morphology, and ion liberation of CsPbBr3 perovskite quantum dots. Nano Research, 2023, 16, 10626-10633.	5.8	6
183	Perovskite-based LEDs and lasers. , 2023, , 519-548.		0

#	Article	IF	CITATIONS
198	Surface engineering in CsPbX <sub>3</sub> quantum dots: from materials to solar cells. Materials Chemistry Frontiers, 0, , .	3.2	0