

Quantum and Dielectric Confinement Effects in Lower-Semiconductors

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Adsorption of Formic Acid on CH ₃ NH ₃ PbI ₃ Lead-Halide Organic-Inorganic Perovskites. Journal of Physical Chemistry C, 2019, 123, 22873-22886.	1.5	5
2	Exciton-Exciton Annihilation in Two-Dimensional Halide Perovskites at Room Temperature. Journal of Physical Chemistry Letters, 2019, 10, 5153-5159.	2.1	74
3	Structure-directing effects in (110)-layered hybrid perovskites containing two distinct organic moieties. Chemical Communications, 2019, 55, 9935-9938.	2.2	26
4	Polarization-Driven Self-Powered Photodetection in a Single-Phase Biaxial Hybrid Perovskite Ferroelectric. Angewandte Chemie, 2019, 131, 14646-14650.	1.6	28
5	Polarization-Driven Self-Powered Photodetection in a Single-Phase Biaxial Hybrid Perovskite Ferroelectric. Angewandte Chemie - International Edition, 2019, 58, 14504-14508.	7.2	114
6	Fluorinated Spacers Regulate the Emission and Bandgap of Two-Dimensional Single-Layered Lead Bromide Perovskites by Hydrogen Bonding. Journal of Physical Chemistry Letters, 2019, 10, 5271-5276.	2.1	28
7	Two-Dimensional Dion-Jacobson Hybrid Lead Iodide Perovskites with Aromatic Diammonium Cations. Journal of the American Chemical Society, 2019, 141, 12880-12890.	6.6	241
8	High-Temperature Antiferroelectric of Lead Iodide Hybrid Perovskites. Journal of the American Chemical Society, 2019, 141, 12470-12474.	6.6	108
9	Non-Coulombic behavior of electrostatic charge-charge interaction in three-layer heterostructures. Journal of Electrostatics, 2019, 102, 103377.	1.0	3
10	Mechanochromic and Electroluminescence Properties of a Layered Hybrid Perovskite Belonging to the <110> Series. European Journal of Inorganic Chemistry, 2019, 2019, 4527-4531.	1.0	15
11	Recent advances in atomic imaging of organic-inorganic hybrid perovskites. Nano Materials Science, 2019, 1, 260-267.	3.9	10
12	Hybrid Halide Perovskites: Discussions on Terminology and Materials. Angewandte Chemie, 2019, 131, 18078-18083.	1.6	17
13	Hybrid Halide Perovskites: Discussions on Terminology and Materials. Angewandte Chemie - International Edition, 2019, 58, 17912-17917.	7.2	56
14	Controlling the Growth Kinetics and Optoelectronic Properties of 2D/3D Lead-Tin Perovskite Heterojunctions. Advanced Materials, 2019, 31, e1905247.	11.1	36
15	Tuning Electronic Structure in Layered Hybrid Perovskites with Organic Spacer Substitution. Nano Letters, 2019, 19, 8732-8740.	4.5	41
16	Dual excitonic emissions and structural phase transition of octylammonium lead iodide 2D layered perovskite single crystal. Materials Research Express, 2019, 6, 124002.	0.8	15
17	Toward Phase Stability: Dion-Jacobson Layered Perovskite for Solar Cells. ACS Energy Letters, 2019, 4, 2960-2974.	8.8	124
18	Inorganic Cage Motion Dominates Excited-State Dynamics in 2D-Layered Perovskites (C _x H _{2x+1} NH ₃) ₂ PbI ₄ (x = 4). Journal of Physical Chemistry C, 2019, 123, 27904-27916.		

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19	Imaging Excited State Dynamics in Layered 2D Perovskites with Transient Absorption Microscopy. <i>Journal of Physical Chemistry A</i> , 2019, 123, 11012-11021.	1.1	21
20	Intrinsic Strong Linear Dichroism of Multilayered 2D Hybrid Perovskite Crystals toward Highly Polarized Sensitive Photodetection. <i>Advanced Optical Materials</i> , 2019, 7, 1901049.	3.6	35
21	Toward a New Energy Era: Self-Driven Integrated Systems Based on Perovskite Solar Cells. <i>Solar Rrl</i> , 2019, 3, 1900320.	3.1	9
22	Seven-Layered 2D Hybrid Lead Iodide Perovskites. <i>CheM</i> , 2019, 5, 2593-2604.	5.8	79
23	Phase-Transition-Induced Carrier Mass Enhancement in 2D Ruddlesden-Popper Perovskites. <i>ACS Energy Letters</i> , 2019, 4, 2386-2392.	8.8	38
24	Optical Constants and Effective-Medium Origins of Large Optical Anisotropies in Layered Hybrid Organic/Inorganic Perovskites. <i>ACS Nano</i> , 2019, 13, 10745-10753.	7.3	24
25	Scaling of the free and the relaxed exciton in perovskites $(\text{RNH}_3)_2(\text{CH}_3\text{NH}_3)\text{Pb}_{1-3x}\text{Pb}_{3x+1}$ large sized monolayers. <i>Journal of Applied Physics</i> , 2019, 126, 085502.	1.1	1
26	Optical Properties of Layered Hybrid Organic-Inorganic Halide Perovskites: A Tight-Binding GW-BSE Study. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6189-6196.	2.1	51
27	Layered Lead Iodide of [Methylhydrazinium] ₂ Pb ₄ with a Reduced Band Gap: Thermochromic Luminescence and Switchable Dielectric Properties Triggered by Structural Phase Transitions. <i>Chemistry of Materials</i> , 2019, 31, 8563-8575.	3.2	72
28	Excitons in 2D Organic-Inorganic Halide Perovskites. <i>Trends in Chemistry</i> , 2019, 1, 380-393.	4.4	146
29	From 2D to 1D Electronic Dimensionality in Halide Perovskites with Stepped and Flat Layers Using Propylammonium as a Spacer. <i>Journal of the American Chemical Society</i> , 2019, 141, 10661-10676.	6.6	66
30	Direct-Bandgap 2D Silver-Bismuth Iodide Double Perovskite: The Structure-Directing Influence of an Oligothiophene Spacer Cation. <i>Journal of the American Chemical Society</i> , 2019, 141, 7955-7964.	6.6	151
31	Small Cyclic Diammonium Cation Templated (110)-Oriented 2D Halide (X = I, Br, Cl) Perovskites with White-Light Emission. <i>Chemistry of Materials</i> , 2019, 31, 3582-3590.	3.2	101
32	Spin-dependent charge transport through 2D chiral hybrid lead-iodide perovskites. <i>Science Advances</i> , 2019, 5, eaay0571.	4.7	275
33	Electronic properties of Pb-I deficient lead halide perovskites. <i>Journal of Chemical Physics</i> , 2019, 151, 234704.	1.2	7
34	Resonant free-carrier absorption in 2D hybrid organic-inorganic perovskites: The Rashba effect or small polarons?. <i>Journal of Chemical Physics</i> , 2019, 151, 204106.	1.2	1
35	Spectral Signatures of Positive and Negative Polarons in Lead-Halide Perovskite Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1027-1041.	1.5	11
36	Manipulation of Dipolar Polarization at Steady States for a Quasi-2D Organic-Inorganic Hybrid Perovskite with a Nanorod Network. <i>Solar Rrl</i> , 2020, 4, 1900378.	3.1	6

#	ARTICLE	IF	CITATIONS
37	Reversible Thermochromism and Strong Ferromagnetism in Two-Dimensional Hybrid Perovskites. <i>Angewandte Chemie</i> , 2020, 132, 209-214.	1.6	21
38	Tuning the Energetic Landscape of Ruddlesden-Popper Perovskite Films for Efficient Solar Cells. <i>ACS Energy Letters</i> , 2020, 5, 39-46.	8.8	47
39	Reversible Thermochromism and Strong Ferromagnetism in Two-Dimensional Hybrid Perovskites. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 203-208.	7.2	75
40	Multiband $k\text{-p}$ Model for Tetragonal Crystals: Application to Hybrid Halide Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 808-817.	2.1	27
41	Dimensional Reduction of $\text{Cs}_2\text{AgBiBr}_6$: A 2D Hybrid Double Perovskite with Strong Polarization Sensitivity. <i>Angewandte Chemie</i> , 2020, 132, 3457-3461.	1.6	18
42	Dimensional Reduction of $\text{Cs}_2\text{AgBiBr}_6$: A 2D Hybrid Double Perovskite with Strong Polarization Sensitivity. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3429-3433.	7.2	78
43	Modulating Band Alignment in Mixed Dimensionality 3D/2D Perovskites by Surface Termination Ligand Engineering. <i>Chemistry of Materials</i> , 2020, 32, 105-113.	3.2	19
44	Organic intercalation engineering of quasi-2D Dion-Jacobson CsPb_3 perovskites. <i>Materials Horizons</i> , 2020, 7, 1042-1050.	6.4	55
45	Solid-State NMR and NQR Spectroscopy of Lead-Halide Perovskite Materials. <i>Journal of the American Chemical Society</i> , 2020, 142, 19413-19437.	6.6	76
46	Reversible multicolor chromism in layered formamidinium metal halide perovskites. <i>Nature Communications</i> , 2020, 11, 5234.	5.8	48
47	Implicit Tandem Organic-Inorganic Hybrid Perovskite Solar Cells Based on Internal Dye Sensitization: Robotized Screening, Synthesis, Device Implementation, and Theoretical Insights. <i>Journal of the American Chemical Society</i> , 2020, 142, 18437-18448.	6.6	18
48	Traps in metal halide perovskites: characterization and passivation. <i>Nanoscale</i> , 2020, 12, 22425-22451.	2.8	26
49	Even-Parity Self-Trapped Excitons Lead to Magnetic Dipole Radiation in Two-Dimensional Lead Halide Perovskites. <i>ACS Nano</i> , 2020, 14, 8958-8968.	7.3	23
50	Lateral Photodetectors Based on Double-Cable Polymer/Two-Dimensional Perovskite Heterojunction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 8826-8834.	4.0	27
51	Pressure-Suppressed Carrier Trapping Leads to Enhanced Emission in Two-Dimensional Perovskite $(\text{HA})_2(\text{GA})\text{Pb}_2\text{I}_7$. <i>Angewandte Chemie</i> , 2020, 132, 17686-17692.	1.6	26
52	A layered hybrid rare-earth double-perovskite-type molecule-based compound with electrical and optical response properties. <i>Journal of Materials Chemistry C</i> , 2020, 8, 16349-16353.	2.7	17
53	Unraveling the Microstructure of Layered Metal Halide Perovskite Films. <i>Small Structures</i> , 2020, 1, 2000074.	6.9	8
54	Ultrathin Single-Crystalline 2D Perovskite Photoconductor for High-Performance Narrowband and Wide Linear Dynamic Range Photodetection. <i>Small</i> , 2020, 16, e2005626.	5.2	26

#	ARTICLE	IF	CITATIONS
55	Universal Strategy of 3D and 2D Hybrid Perovskites Single Crystal Growth via In Situ Solvent Conversion. <i>Chemistry of Materials</i> , 2020, 32, 9805-9812.	3.2	18
56	Giant and Broadband Multiphoton Absorption Nonlinearities of a 2D Organometallic Perovskite Ferroelectric. <i>Advanced Materials</i> , 2020, 32, e2002972.	11.1	51
57	First-Principles Study on the Photoelectric Properties of CsGeI ₃ under Hydrostatic Pressure. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 5055.	1.3	19
58	Database of Two-Dimensional Hybrid Perovskite Materials: Open-Access Collection of Crystal Structures, Band Gaps, and Atomic Partial Charges Predicted by Machine Learning. <i>Chemistry of Materials</i> , 2020, 32, 7383-7388.	3.2	102
59	Influence of the Vibrational Modes from the Organic Moieties in 2D Lead Halides on Excitonic Recombination and Phase Transition. <i>Advanced Optical Materials</i> , 2020, 8, 2001431.	3.6	19
60	The Emergence of Halide Layered Double Perovskites. <i>ACS Energy Letters</i> , 2020, 5, 3591-3608.	8.8	88
61	Progress and Prospects of Solution-Processed Two-Dimensional Semiconductor Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2020, 124, 21895-21908.	1.5	32
62	Organic-to-inorganic structural chirality transfer in a 2D hybrid perovskite and impact on Rashba-Dresselhaus spin-orbit coupling. <i>Nature Communications</i> , 2020, 11, 4699.	5.8	200
63	Charge carrier dynamics in two-dimensional hybrid perovskites: Dionâ€“Jacobson <i>vs.</i> Ruddlesdenâ€“Popper phases. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22009-22022.	5.2	72
64	Exploiting two-dimensional hybrid perovskites incorporating secondary amines for high-performance array photodetection. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12848-12853.	2.7	9
65	Alternative Organic Spacers for More Efficient Perovskite Solar Cells Containing Ruddlesdenâ€“Popper Phases. <i>Journal of the American Chemical Society</i> , 2020, 142, 19705-19714.	6.6	83
66	2Dâ€“3D Cs ₂ PbI ₂ Cl ₂ â€“CsPbI _{2.5} Br _{0.5} Mixed-Dimensional Films for All-Inorganic Perovskite Solar Cells with Enhanced Efficiency and Stability. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4138-4146.	2.1	40
67	Roomâ€“Temperature Ferroelectric Material Composed of a Twoâ€“Dimensional Metal Halide Double Perovskite for Xâ€“ray Detection. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13879-13884.	7.2	116
68	Roomâ€“Temperature Ferroelectric Material Composed of a Twoâ€“Dimensional Metal Halide Double Perovskite for Xâ€“ray Detection. <i>Angewandte Chemie</i> , 2020, 132, 13983-13988.	1.6	31
69	Band Gap-Tunable, Chiral Hybrid Metal Halides Displaying Second-Harmonic Generation. <i>Chemistry of Materials</i> , 2020, 32, 4801-4807.	3.2	67
70	Negative Pressure Engineering with Large Cage Cations in 2D Halide Perovskites Causes Lattice Softening. <i>Journal of the American Chemical Society</i> , 2020, 142, 11486-11496.	6.6	84
71	Spatial Charge Separation as the Origin of Anomalous Stark Effect in Fluorine 2D Hybrid Perovskites. <i>Advanced Functional Materials</i> , 2020, 30, 2000228.	7.8	12
72	Exciton-band tuning induced by the width of the cation in 2D lead iodide perovskite hybrids. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2023-2028.	3.2	12

#	ARTICLE	IF	CITATIONS
73	Photosupercapacitors: A perspective of planar and flexible dual functioning devices. Wiley Interdisciplinary Reviews: Energy and Environment, 2020, 9, e377.	1.9	4
74	Correlation of Dielectric Confinement and Excitonic Binding Energy in 2D Layered Hybrid Perovskites Using Temperature Dependent Photoluminescence. Journal of Physical Chemistry C, 2020, 124, 16177-16185.	1.5	59
75	Ultrafast charge carrier dynamics in quantum confined 2D perovskite. Journal of Chemical Physics, 2020, 152, 214705.	1.2	12
76	A chiral lead-free photoactive hybrid material with a narrow bandgap. Inorganic Chemistry Frontiers, 2020, 7, 2770-2777.	3.0	16
77	Three-Dimensional Lead Iodide Perovskitoid Hybrids with High X-ray Photoresponse. Journal of the American Chemical Society, 2020, 142, 6625-6637.	6.6	82
78	Broad-band emission in metal halide perovskites: Mechanism, materials, and applications. Materials Science and Engineering Reports, 2020, 141, 100548.	14.8	208
79	Exciton Polarons in Two-Dimensional Hybrid Metal-Halide Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 3173-3184.	2.1	100
80	Semiconductor Quantum Dots for Memories and Neuromorphic Computing Systems. Chemical Reviews, 2020, 120, 3941-4006.	23.0	203
81	Optoelectronic Properties of Two-Dimensional Bromide Perovskites: Influences of Spacer Cations. Journal of Physical Chemistry Letters, 2020, 11, 2955-2964.	2.1	50
82	Polarons in Halide Perovskites: A Perspective. Journal of Physical Chemistry Letters, 2020, 11, 3271-3286.	2.1	110
83	From bulk to molecularly thin hybrid perovskites. Nature Reviews Materials, 2020, 5, 482-500.	23.3	164
84	Molecular Intercalation and Electronic Two Dimensionality in Layered Hybrid Perovskites. Angewandte Chemie - International Edition, 2020, 59, 11653-11659.	7.2	49
85	Molecular Intercalation and Electronic Two Dimensionality in Layered Hybrid Perovskites. Angewandte Chemie, 2020, 132, 11750-11756.	1.6	6
86	Recent processes on light-emitting lead-free metal halide perovskites. Chemical Engineering Journal, 2020, 393, 124757.	6.6	65
87	Highly Distorted Chiral Two-Dimensional Tin Iodide Perovskites for Spin Polarized Charge Transport. Journal of the American Chemical Society, 2020, 142, 13030-13040.	6.6	198
88	Significance of Ambient Temperature Control for Highly Reproducible Layered Perovskite Light-Emitting Diodes. ACS Photonics, 2020, 7, 2489-2497.	3.2	15
89	Organic-Assisted Crystal Growth and Orientation of Quasi-2D Ruddlesden-Popper Perovskites for Solar Cells with Efficiency over 19%. Advanced Materials, 2020, 32, e2001470.	11.1	162
90	Pressure-Suppressed Carrier Trapping Leads to Enhanced Emission in Two-Dimensional Perovskite (HA) ₂ (GA)Pb ₂ I ₇ . Angewandte Chemie - International Edition, 2020, 59, 17533-17539.	7.2	71

#	ARTICLE	IF	CITATIONS
91	Tunable exciton binding energy in 2D hybrid layered perovskites through donor-acceptor interactions within the organic layer. <i>Nature Chemistry</i> , 2020, 12, 672-682.	6.6	120
92	Cation Engineering in Two-Dimensional Ruddlesden-Popper Lead Iodide Perovskites with Mixed Large A-Site Cations in the Cages. <i>Journal of the American Chemical Society</i> , 2020, 142, 4008-4021.	6.6	101
93	Strongly Emissive Lead-Free OD Cs ₃ Cu ₂ I ₅ Perovskites Synthesized by a Room Temperature Solvent Evaporation Crystallization for Down-Conversion Light-Emitting Devices and Fluorescent Inks. <i>Advanced Optical Materials</i> , 2020, 8, 1901723.	3.6	109
94	First-principles investigation on the stability and material properties of all-inorganic cesium lead iodide perovskites CsPbI ₃ polymorphs. <i>Physica B: Condensed Matter</i> , 2020, 585, 412118.	1.3	50
95	Control of Crystal Symmetry Breaking with Halogen-Substituted Benzylammonium in Layered Hybrid Metal-Halide Perovskites. <i>Journal of the American Chemical Society</i> , 2020, 142, 5060-5067.	6.6	65
96	Organic additive engineering toward efficient perovskite light-emitting diodes. <i>Informa-Å-MateriÅly</i> , 2020, 2, 1095-1108.	8.5	26
97	Advances in two-dimensional organic-inorganic hybrid perovskites. <i>Energy and Environmental Science</i> , 2020, 13, 1154-1186.	15.6	420
98	Bismuth-Based Zero-Dimensional Perovskite-like Materials: Effect of Benzylammonium on Dielectric Confinement and Photoconductivity. <i>Chemistry of Materials</i> , 2020, 32, 2647-2652.	3.2	27
99	Interfacial Electromechanics Predicts Phase Behavior of 2D Hybrid Halide Perovskites. <i>ACS Nano</i> , 2020, 14, 3353-3364.	7.3	11
100	Coordination Engineering of Single-Crystal Precursor for Phase Control in Ruddlesden-Popper Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 1904050.	10.2	56
101	Rigid Amine-Induced Pseudo-3D Lead-Free Bismuth Halide Perovskite with an Improved Band Edge for Visible-Light Absorption. <i>ChemSusChem</i> , 2020, 13, 2753-2760.	3.6	13
102	Fluorination of Organic Spacer Impacts on the Structural and Optical Response of 2D Perovskites. <i>Frontiers in Chemistry</i> , 2019, 7, 946.	1.8	14
103	Materials chemistry and engineering in metal halide perovskite lasers. <i>Chemical Society Reviews</i> , 2020, 49, 951-982.	18.7	263
104	Multilayered 2D Cesium-Based Hybrid Perovskite with Strong Polarization Sensitivity: Dimensional Reduction of CsPbBr ₃ . <i>Chemistry - A European Journal</i> , 2020, 26, 3494-3498.	1.7	16
105	Dual-source vacuum deposition of pure and mixed halide 2D perovskites: thin film characterization and processing guidelines. <i>Journal of Materials Chemistry C</i> , 2020, 8, 1902-1908.	2.7	15
106	Elucidating the Role of the Organic Cation in Tuning the Optical Response of Two-Dimensional Organic-Inorganic Halide Perovskites by Computational Investigation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 3224-3232.	1.5	4
107	Dimension-Tunable Circularly Polarized Luminescent Nanoassemblies with Emerging Selective Chirality and Energy Transfer. <i>ACS Nano</i> , 2020, 14, 2373-2384.	7.3	51
108	Stoichiometry Control for the Tuning of Grain Passivation and Domain Distribution in Green Quasi-2D Metal Halide Perovskite Films and Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2020, 30, 2001816.	7.8	41

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109	Metal Coordination Sphere Deformation Induced Highly Stokes-Shifted, Ultra Broadband Emission in 2D Hybrid Lead-Bromide Perovskites and Investigation of Its Origin. <i>Angewandte Chemie</i> , 2020, 132, 10883-10888.	1.6	7
110	Metal Coordination Sphere Deformation Induced Highly Stokes-Shifted, Ultra Broadband Emission in 2D Hybrid Lead-Bromide Perovskites and Investigation of Its Origin. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10791-10796.	7.2	42
111	Halogen-containing semiconductors: From artificial photosynthesis to unconventional computing. <i>Coordination Chemistry Reviews</i> , 2020, 415, 213316.	9.5	21
112	Insights on the opto-electronic structure of the inorganic mixed halide perovskites $\text{CsPb}(\text{I}_{1-x}\text{Br}_x)_3$ with low symmetry black phase. <i>Journal of Alloys and Compounds</i> , 2020, 832, 154847.	2.8	17
113	Frenkel-Holstein Hamiltonian applied to absorption spectra of quaterthiophene-based 2D hybrid organic-inorganic perovskites. <i>Journal of Chemical Physics</i> , 2020, 152, 144702.	1.2	8
114	Recent advances in synthesis and application of perovskite quantum dot based composites for photonics, electronics and sensors. <i>Science and Technology of Advanced Materials</i> , 2020, 21, 278-302.	2.8	34
115	Calculation of the biexciton shift in nanocrystals of inorganic perovskites. <i>Physical Review B</i> , 2020, 101, .	1.1	13
116	Exciton diffusion in two-dimensional metal-halide perovskites. <i>Nature Communications</i> , 2020, 11, 2035.	5.8	113
117	Anisotropic 2D excitons unveiled in organic-inorganic quantum wells. <i>Materials Horizons</i> , 2021, 8, 197-208.	6.4	17
118	The Key Role of the Interface in the Highly Sensitive Mechanochromic Luminescence Properties of Hybrid Perovskites. <i>Angewandte Chemie</i> , 2021, 133, 847-852.	1.6	2
119	Highly Thermostable and Efficient Formamidinium-Based Low-Dimensional Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 856-864.	7.2	75
120	Highly Thermostable and Efficient Formamidinium-Based Low-Dimensional Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2021, 133, 869-877.	1.6	12
121	Recent progress in low dimensional (quasi-2D) and mixed dimensional (2D/3D) tin-based perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2021, 5, 34-51.	2.5	24
122	Deterministic fabrication of arbitrary vertical heterostructures of two-dimensional Ruddlesden-Popper halide perovskites. <i>Nature Nanotechnology</i> , 2021, 16, 159-165.	15.6	90
123	Efficient interlayer exciton transport in two-dimensional metal-halide perovskites. <i>Materials Horizons</i> , 2021, 8, 639-644.	6.4	15
124	Dielectric confinement for designing compositions and optoelectronic properties of 2D layered hybrid perovskites. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 82-93.	1.3	24
125	Spin-Dependent Photovoltaic and Photogalvanic Responses of Optoelectronic Devices Based on Chiral Two-Dimensional Hybrid Organic-Inorganic Perovskites. <i>ACS Nano</i> , 2021, 15, 588-595.	7.3	85
126	The Physics of Interlayer Exciton Delocalization in Ruddlesden-Popper Lead Halide Perovskites. <i>Nano Letters</i> , 2021, 21, 405-413.	4.5	22

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127	Determination of Dielectric Functions and Exciton Oscillator Strength of Two-Dimensional Hybrid Perovskites. , 2021, 3, 148-159.		47
128	Lead-Free Halide Double Perovskites: Structure, Luminescence, and Applications. Small Structures, 2021, 2, 2000071.	6.9	71
129	The Key Role of the Interface in the Highly Sensitive Mechanochromic Luminescence Properties of Hybrid Perovskites. Angewandte Chemie - International Edition, 2021, 60, 834-839.	7.2	8
130	Enhanced Photocurrent of All-Inorganic Two-Dimensional Perovskite Cs ₂ PbCl ₂ via Pressure-Regulated Excitonic Features. Journal of the American Chemical Society, 2021, 143, 2545-2551.	6.6	79
131	Abnormal spatial heterogeneity governing the charge-carrier mechanism in efficient Ruddlesden-Popper perovskite solar cells. Energy and Environmental Science, 2021, 14, 4915-4925.	15.6	24
132	The 2D Halide Perovskite Rulebook: How the Spacer Influences Everything from the Structure to Optoelectronic Device Efficiency. Chemical Reviews, 2021, 121, 2230-2291.	23.0	506
133	Overcoming the carrier transport limitation in Ruddlesden-Popper perovskite films by using lamellar nickel oxide substrates. Journal of Materials Chemistry A, 2021, 9, 11741-11752.	5.2	28
134	First-principles study of photoelectric properties of CsSnBr ₃ under hydrostatic pressure. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 158801.	0.2	4
135	Organic-inorganic hybrid and inorganic halide perovskites: structural and chemical engineering, interfaces and optoelectronic properties. Journal Physics D: Applied Physics, 2021, 54, 133002.	1.3	27
136	Broadband and massive Stokes shift luminescence in fully inorganic 2D-layered perovskite CsPb ₂ Cl ₅ : single crystal growth and self-trapped exciton emission. Journal of Materials Chemistry C, 2021, 9, 7374-7383.	2.7	10
137	Wafer-sized 2D perovskite single crystal thin films for UV photodetectors. Journal of Materials Chemistry C, 2021, 9, 6498-6506.	2.7	26
138	Dynamic Motion of Organic Spacer Cations in Ruddlesden-Popper Lead Iodide Perovskites Probed by Solid-State NMR Spectroscopy. Chemistry of Materials, 2021, 33, 642-656.	3.2	33
139	Engineering fluorinated-cation containing inverted perovskite solar cells with an efficiency of >21% and improved stability towards humidity. Nature Communications, 2021, 12, 52.	5.8	94
140	Layer number dependent exciton dissociation and carrier recombination in 2D Ruddlesden-Popper halide perovskites. Journal of Materials Chemistry C, 2021, 9, 8966-8974.	2.7	18
141	Tetrazine molecules as an efficient electronic diversion channel in 2D organic-inorganic perovskites. Materials Horizons, 2021, 8, 1547-1560.	6.4	24
142	Compact TiO ₂ blocking-layer prepared by LbL for perovskite solar cells. Solar Energy, 2021, 214, 510-516.	2.9	7
143	0D, 1D, and 2D Supramolecular Nanoassemblies of a Porphyrin: Controllable Assembly, and Dimensionality-Dependent Catalytic Performances. Advanced Functional Materials, 2021, 31, 2100367.	7.8	26
144	FA ₂ PbBr ₄ : Synthesis, Structure, and Unusual Optical Properties of Two Polymorphs of Formamidinium-Based Layered (110) Hybrid Perovskite. Chemistry of Materials, 2021, 33, 1900-1907.	3.2	33

#	ARTICLE	IF	CITATIONS
145	Oriented Perovskite Growth Regulation Enables Sensitive Broadband Detection and Imaging of Polarized Photons Covering 300–1050 nm. <i>Advanced Materials</i> , 2021, 33, e2003852.	11.1	32
146	Nonlinear Photonics Using Low-Dimensional Metal-Halide Perovskites: Recent Advances and Future Challenges. <i>Advanced Materials</i> , 2021, 33, e2004446.	11.1	58
147	Insight on the Stability of Thick Layers in 2D Ruddlesden-Popper and Dion-Jacobson Lead Iodide Perovskites. <i>Journal of the American Chemical Society</i> , 2021, 143, 2523-2536.	6.6	79
148	Layer Shift Factor in Layered Hybrid Perovskites: Univocal Quantitative Descriptor of Composition-Structure-Property Relationships. <i>Chemistry of Materials</i> , 2021, 33, 1213-1217.	3.2	24
149	Neural Networks for Analysis of Optical Properties in 2D Layered Hybrid Lead Halide Perovskites. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5251-5259.	1.5	7
150	Mapping the Trap-State Landscape in 2D Metal-Halide Perovskites Using Transient Photoluminescence Microscopy. <i>Advanced Optical Materials</i> , 2021, 9, 2001875.	3.6	15
151	Anion Exchange of Ruddlesden-Popper Lead Halide Perovskites Produces Stable Lateral Heterostructures. <i>Journal of the American Chemical Society</i> , 2021, 143, 5212-5221.	6.6	37
152	High-performance quasi-2D perovskite light-emitting diodes: from materials to devices. <i>Light: Science and Applications</i> , 2021, 10, 61.	7.7	235
153	A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. <i>ACS Energy Letters</i> , 2021, 6, 1104-1123.	8.8	38
154	The photophysics of Ruddlesden-Popper perovskites: A tale of energy, charges, and spins. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	34
155	Engineering the Optical Emission and Robustness of Metal-Halide Layered Perovskites through Ligand Accommodation. <i>Advanced Materials</i> , 2021, 33, e2008004.	11.1	23
156	Cooperative Nature of Ferroelectricity in Two-Dimensional Hybrid Organic-Inorganic Perovskites. <i>Nano Letters</i> , 2021, 21, 3170-3176.	4.5	20
157	Cation Engineering for Resonant Energy Level Alignment in Two-Dimensional Lead Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2528-2535.	2.1	17
158	Engineering Elastic Properties of Isostructural Molecular Perovskite Ferroelectrics via B-Site Substitution. <i>Small</i> , 2021, 17, e2006021.	5.2	18
159	Metal-Free Photocatalysis: Two-Dimensional Nanomaterial Connection toward Advanced Organic Synthesis. <i>ACS Nano</i> , 2021, 15, 3621-3630.	7.3	81
160	Layered Arrangement of 1D Wavy Chains in the Lead-Free Hybrid Perovskite (PyrCO ₂ H) ₂ Bil ₅ : Structural Investigations and Properties. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 1452-1458.	1.0	5
161	Dual-Stimuli-Responsive Photoluminescence of Enantiomeric Two-Dimensional Lead Halide Perovskites. <i>Advanced Optical Materials</i> , 2021, 9, 2100003.	3.6	38
162	Spacer Engineering Using Aromatic Formamidinium in 2D/3D Hybrid Perovskites for Highly Efficient Solar Cells. <i>ACS Nano</i> , 2021, 15, 7811-7820.	7.3	99

#	ARTICLE	IF	CITATIONS
163	Organic Spacers in 2D Perovskites: General Trends and Structure–Property Relationships from Computational Studies. <i>Helvetica Chimica Acta</i> , 2021, 104, e2000232.	1.0	6
164	Theoretical Study on the Carrier Mobility and Optical Properties of CsPb ₃ by DFT. <i>ACS Omega</i> , 2021, 6, 11545-11555.	1.6	41
165	Fluorinated Aromatic Formamidinium Spacers Boost Efficiency of Layered Ruddlesden–Popper Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2021, 6, 2072-2080.	8.8	66
166	Strongly Anharmonic Octahedral Tilting in Two-Dimensional Hybrid Halide Perovskites. <i>ACS Nano</i> , 2021, 15, 10153-10162.	7.3	59
167	Optical bandgap control in Al ₂ O ₃ /TiO ₂ heterostructures by plasma enhanced atomic layer deposition: Toward quantizing structures and tailored binary oxides. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 252, 119508.	2.0	9
168	Simulations of Trions and Biexcitons in Layered Hybrid Organic-Inorganic Lead Halide Perovskites. <i>Physical Review Letters</i> , 2021, 126, 216402.	2.9	9
169	Large Cation Engineering in Two-Dimensional Silver–Bismuth Bromide Double Perovskites. <i>Chemistry of Materials</i> , 2021, 33, 4688-4700.	3.2	25
170	The Role of Dimensionality on the Optoelectronic Properties of Oxide and Halide Perovskites, and their Halide Derivatives. <i>Advanced Energy Materials</i> , 2022, 12, 2100499.	10.2	66
171	Facile synthesis of perovskite phosphors and nanocrystals using laundry detergent by ultra-rapid freezing for light-emitting diodes application. <i>Journal of Luminescence</i> , 2021, 233, 117902.	1.5	5
172	Two-Dimensional Guanidine-Based Hybrid Perovskites with Strong Dichroism for Multiwavelength Polarization-Sensitive Detection. <i>Chemistry - A European Journal</i> , 2021, 27, 9267-9271.	1.7	7
173	An Overview for Zero-Dimensional Broadband Emissive Metal–Halide Single Crystals. <i>Advanced Optical Materials</i> , 2021, 9, 2100544.	3.6	114
174	Layered Perovskites in Solar Cells: Structure, Optoelectronic Properties, and Device Design. <i>Advanced Energy Materials</i> , 2021, 11, 2003877.	10.2	49
175	2D Lead Iodide Perovskite with Mercaptan-Containing Amine and Its Exceptional Water Stability. <i>Inorganic Chemistry</i> , 2021, 60, 9132-9140.	1.9	11
176	Shedding Light on the Stability and Structure–Property Relationships of Two-Dimensional Hybrid Lead Bromide Perovskites. <i>Chemistry of Materials</i> , 2021, 33, 5085-5107.	3.2	29
177	Study on the Dynamics of Phase Formation and Degradation of 2D Layered Hybrid Perovskites and Low-Dimensional Hybrids Containing Mono-functionalized Oligothiophene Cations. <i>ChemNanoMat</i> , 2021, 7, 1013-1019.	1.5	4
178	Advances of Nonlinear Photonics in Low-Dimensional Halide Perovskites. <i>Small</i> , 2021, 17, e2100809.	5.2	39
179	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021, 15, 10775-10981.	7.3	705
180	Recent progress in stabilizing perovskite solar cells through two-dimensional modification. <i>APL Materials</i> , 2021, 9, .	2.2	12

#	ARTICLE	IF	CITATIONS
181	Morphological Engineering of Inorganic Semiconductor VIS-Light-Driven Nanocatalysts: Experimental and Theoretical Understandings. <i>Journal of Physical Chemistry C</i> , 2021, 125, 15125-15133.	1.5	8
182	Single-crystal halide perovskites: Opportunities and challenges. <i>Matter</i> , 2021, 4, 2266-2308.	5.0	35
183	Bismuth/Silver-Based Two-Dimensional Iodide Double and One-Dimensional Bi Perovskites: Interplay between Structural and Electronic Dimensions. <i>Chemistry of Materials</i> , 2021, 33, 6206-6216.	3.2	27
184	Oriented Halide Perovskite Nanostructures and Thin Films for Optoelectronics. <i>Chemical Reviews</i> , 2021, 121, 12112-12180.	23.0	70
185	Ligand size effects in two-dimensional hybrid copper halide perovskites crystals. <i>Communications Materials</i> , 2021, 2, .	2.9	12
186	ELECTRONIC AND OPTICAL MODIFICATION OF ORGANIC-HYBRID PEROVSKITES. <i>Surface Review and Letters</i> , 2021, 28, 2140010.	0.5	1
187	Tuning Hybrid excitonâ€“Photon Fano Resonances in Two-Dimensional Organicâ€“Inorganic Perovskite Thin Films. <i>Nano Letters</i> , 2021, 21, 6124-6131.	4.5	11
188	Layered metal halide perovskite solar cells: A review from structureâ€“properties perspective towards maximization of their performance and stability. <i>EcoMat</i> , 2021, 3, e12124.	6.8	27
189	Rational alloying of secondary and aromatic ammonium cations in a metal-halide perovskite toward crystal-array photodetection. <i>Science China Materials</i> , 2022, 65, 179-185.	3.5	11
190	Tight-binding description of inorganic lead halide perovskites in cubic phase. <i>Computational Materials Science</i> , 2021, 196, 110535.	1.4	5
191	New Variants of (110)â€“Oriented Layered Lead Bromide Perovskites, Templated by Formamidinium or Pyrazolium. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 3404-3411.	1.0	7
192	Structural and Optoelectronic Properties of Two-Dimensional Ruddlesdenâ€“Popper Hybrid Perovskite CsSnBr3. <i>Nanomaterials</i> , 2021, 11, 2119.	1.9	7
193	A Covalent Organicâ€“Inorganic Hybrid Superlattice Covered with Organic Functional Groups for Highly Sensitive and Selective Gas Sensing. <i>Angewandte Chemie</i> , 2021, 133, 19862-19866.	1.6	7
194	Photophysics of Twoâ€“Dimensional Perovskitesâ€“Learning from Metal Halide Substitution. <i>Advanced Functional Materials</i> , 2021, 31, 2103778.	7.8	41
195	A Covalent Organicâ€“Inorganic Hybrid Superlattice Covered with Organic Functional Groups for Highly Sensitive and Selective Gas Sensing. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19710-19714.	7.2	32
196	First-principles calculations to investigate structural, elastic, electronic and optical properties of lead-free perovskite derivatives Cs2SeX6 (X=Cl, Br, I). <i>Optical Materials</i> , 2021, 119, 111316.	1.7	29
197	Mechanics-coupled stability of metal-halide perovskites. <i>Matter</i> , 2021, 4, 2765-2809.	5.0	43
198	Two-Dimensional Materials for Advanced Solar Cells. , 0, , .		0

#	ARTICLE	IF	CITATIONS
199	Deciphering the Orientation of the Aromatic Spacer Cation in Bilayer Perovskite Solar Cells through Spectroscopic Techniques. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 48219-48227.	4.0	6
200	Circularly Polarized Photodetectors Based on Chiral Materials: A Review. <i>Frontiers in Chemistry</i> , 2021, 9, 711488.	1.8	42
201	Relationships between Distortions of Inorganic Framework and Band Gap of Layered Hybrid Halide Perovskites. <i>Chemistry of Materials</i> , 2021, 33, 7518-7526.	3.2	22
202	Theoretical study of physical properties of Ba ₃ B(Nb,Ta)2O ₉ (B = Mg, Ca, Sr, Cd, Hg, Zn, Fe, Mn, Ni, Co) perovskites. <i>Computational Condensed Matter</i> , 2021, 29, e00595.	0.9	31
203	Tuning crystal orientation and charge transport of quasi-2D perovskites via halogen-substituted benzylammonium for efficient solar cells. <i>Journal of Energy Chemistry</i> , 2022, 66, 205-209.	7.1	10
204	Ion-exchange-induced MAPbI ₃ thin-film 3D \leftrightarrow 2D and 3D \leftrightarrow 1D conversions: unveiling structural transformations in films via synergistic and competitive approaches. <i>New Journal of Chemistry</i> , 2021, 45, 7103-7108.	1.4	0
205	Growth of two-dimensional formamidine lead halide perovskite single-crystalline sheets and their optoelectronic properties. <i>Chemical Communications</i> , 2021, 57, 1939-1942.	2.2	3
206	Interfaces in metal halide perovskites probed by solid-state NMR spectroscopy. <i>Journal of Materials Chemistry A</i> , 2021, 9, 19206-19244.	5.2	28
207	Spacer Cation Alloying of a Homoconformational Carboxylate <i>trans</i> Isomer to Boost in-Plane Ferroelectricity in a 2D Hybrid Perovskite. <i>Journal of the American Chemical Society</i> , 2021, 143, 2130-2137.	6.6	106
208	Large-area and efficient perovskite light-emitting diodes via low-temperature blade-coating. <i>Nature Communications</i> , 2021, 12, 147.	5.8	100
209	Luminescence enhancement of lead halide perovskite light-emitting diodes with plasmonic metal nanostructures. <i>Nanoscale</i> , 2021, 13, 16427-16447.	2.8	6
210	Lead-free Halide Perovskites for Light Emission: Recent Advances and Perspectives. <i>Advanced Science</i> , 2021, 8, 2003334.	5.6	155
211	Monofluorine substitution achieved high- <i>T_c</i> dielectric transition in a one-dimensional lead bromide hybrid photoluminescent perovskite semiconductor. <i>Materials Chemistry Frontiers</i> , 2021, 5, 2842-2848.	3.2	12
212	A Multiaxial Layered Halide Double Perovskite Ferroelectric with Multiple Ferroic Orders. <i>Chemistry of Materials</i> , 2020, 32, 8965-8970.	3.2	44
213	Physical properties of bulk, defective, 2D and 0D metal halide perovskite semiconductors from a symmetry perspective. <i>JPhys Materials</i> , 2020, 3, 042001.	1.8	29
214	High optical nonlinearity in low-dimensional halide perovskite polycrystalline films. <i>Optics Express</i> , 2020, 28, 24919.	1.7	20
215	Giant room temperature electrocaloric effect in a layered hybrid perovskite ferroelectric: [(CH ₃) ₂ CHCH ₂ NH ₃] ₂ PbCl ₄ . <i>Nature Communications</i> , 2021, 12, 5502.	5.8	44
216	Tin Halide Perovskites: From Fundamental Properties to Solar Cells. <i>Advanced Materials</i> , 2022, 34, e2105844.	11.1	124

#	ARTICLE	IF	CITATIONS
217	Highly Efficient and Stable Dionâ€”Jacobson Perovskite Solar Cells Enabled by Extended Î€â€”Conjugation of Organic Spacer. <i>Advanced Materials</i> , 2021, 33, e2105083.	11.1	92
218	0D Perovskites: Unique Properties, Synthesis, and Their Applications. <i>Advanced Science</i> , 2021, 8, e2102689.	5.6	142
219	Manipulating Color Emission in 2D Hybrid Perovskites by Fine Tuning Halide Segregation: A Transparent Green Emitter. <i>Advanced Materials</i> , 2022, 34, e2105942.	11.1	24
220	Structureâ€”Property Relationships and Idiosyncrasies of Bulk, 2D Hybrid Lead Bromide Perovskites. <i>Israel Journal of Chemistry</i> , 0, , .	1.0	9
221	Photodegradation Process of Organic Dyes in the Presence of a Manganese-Doped Zinc Sulfide Nanowire Photocatalyst. <i>Materials</i> , 2021, 14, 5840.	1.3	3
222	Third Harmonic Upconversion and Self-Trapped Excitonic Emission in 1D Pyridinium Lead Iodide. <i>Journal of Physical Chemistry C</i> , 2021, 125, 22674-22683.	1.5	10
223	Quasi-Two-Dimensional Perovskite Nanosheets Based on the Triplet Energy Acceptor Molecule with Pure Green Emission Light. <i>Journal of Physical Chemistry C</i> , 2021, 125, 23889-23894.	1.5	5
224	Controlling Quantum-Well Width Distribution and Crystal Orientation in Two-Dimensional Tin Halide Perovskites via a Strong Interlayer Electrostatic Interaction. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 49907-49915.	4.0	13
225	Narrow and broadband light emission in layered organic lead halide perovskites: interplay between weak electron-lattice interactions and defect-related effects. , 2020, , .		1
226	Interlayer Triplet-Sensitized Luminescence in Layered Two-Dimensional Hybrid Metal-Halide Perovskites. <i>ACS Energy Letters</i> , 2021, 6, 4079-4096.	8.8	22
227	From Zero- to One-Dimensional, Opportunities and Caveats of Hybrid Iodobismuthates for Optoelectronic Applications. <i>Inorganic Chemistry</i> , 2021, 60, 17123-17131.	1.9	13
228	Efficient and stable mesoscopic perovskite solar cell in high humidity by localized Dion-Jacobson 2Dâ€”3D heterostructures. <i>Nano Energy</i> , 2022, 91, 106666.	8.2	42
229	Spacer Engineering of Diammoniumâ€”Based 2D Perovskites toward Efficient and Stable 2D/3D Heterostructure Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, 2102973.	10.2	63
230	Photoluminescence studies of the resilience of 2D hybrid organic inorganic perovskite to micro-fabrication solvents. , 2020, , .		0
231	Twoâ€”Dimensional Halide Perovskites: Approaches to Improve Optoelectronic Properties. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	15
232	First-principle calculations to investigate structural, electronic, optical, thermodynamic, and thermoelectric properties of ABO ₃ (A=Cs, Rb and B= Ta, Nb) compounds. <i>Emergent Materials</i> , 2022, 5, 1831-1847.	3.2	12
233	Rigid Conjugated Diamine Templates for Stable Dionâ€”Jacobson-Type Two-Dimensional Perovskites. <i>Journal of the American Chemical Society</i> , 2021, 143, 19901-19908.	6.6	39
234	Brightening of dark excitons in 2D perovskites. <i>Science Advances</i> , 2021, 7, eabk0904.	4.7	34

#	ARTICLE	IF	CITATIONS
235	Organic Spacer Cation Assisted Modulation of the Structure and Properties of Bismuth Halide Perovskites. <i>Accounts of Chemical Research</i> , 2022, 55, 275-285.	7.6	19
236	Size and Quality Enhancement of 2D Semiconducting Metal-Organic Chalcogenolates by Amine Addition. <i>Journal of the American Chemical Society</i> , 2021, 143, 20256-20263.	6.6	20
237	Nonadiabatic molecular dynamics analysis of hybrid Dion-Jacobson 2D lead iodide perovskites. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	9
238	Light-activated interlayer contraction in two-dimensional perovskites for high-efficiency solar cells. <i>Nature Nanotechnology</i> , 2022, 17, 45-52.	15.6	52
239	Efficient Bulk Defect Suppression Strategy in FASn_3 Perovskite for Photovoltaic Performance Enhancement. <i>Advanced Functional Materials</i> , 2022, 32, 2107710.	7.8	40
240	Cage-incorporation of secondary amine in Ruddlesden-Popper 2D hybrid perovskite with strong photoconductivity and polarization response. <i>Journal of Materials Chemistry C</i> , 2021, 9, 17349-17356.	2.7	12
241	Optical characteristics of self-trapped excitons in 2D (iso-BA) $_2$ Pb $_4$ perovskite crystals. <i>Photonics Research</i> , 2022, 10, 594.	3.4	6
242	Tailoring Phase Purity in the 2D/3D Perovskite Heterostructures Using Lattice Mismatch. <i>ACS Energy Letters</i> , 2022, 7, 550-559.	8.8	23
243	A bilayered two-dimensional hybrid perovskite with a cage-templated secondary cation for high efficiency photodetection. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 637-644.	3.0	9
244	Exploring the structural, electronic and optical properties of vacancy-ordered double perovskites $\text{Cs}_2\text{TlAsX}_6$ (X = I, Br, Cl) based on first-principles. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 427, 127917.	0.9	18
245	The magnetic and thermoelectric properties of Co- and Mn-doped CsPbI_3 . <i>Emergent Materials</i> , 2022, 5, 1859-1869.	3.2	5
246	Dynamic Exciton Polaron in Two-Dimensional Lead Halide Perovskites and Implications for Optoelectronic Applications. <i>Accounts of Chemical Research</i> , 2022, 55, 345-353.	7.6	36
247	Two-Dimensional Dion-Jacobson Perovskite ($\text{NH}_3\text{C}_4\text{H}_8\text{NH}_3$) CsPb_2Br_7 with High X-ray Sensitivity and Peak Discrimination of \pm -Particles. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 1187-1193.	2.1	13
248	Carrier dynamics in two-dimensional perovskites: Dion-Jacobson vs. Ruddlesden-Popper thin films. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3069-3076.	5.2	30
249	Peculiar anharmonicity of Ruddlesden Popper metal halides: temperature-dependent phonon dephasing. <i>Materials Horizons</i> , 2022, 9, 492-499.	6.4	5
250	Tailoring Interlayered Spacers of Two-Dimensional Cesium-Based Perovskite Ferroelectrics toward Exceptional Ferro-Pyro-Phototronic Effects. <i>Small</i> , 2022, 18, e2106888.	5.2	32
251	Spatial Heterogeneity of n-Phases Leads to Different Photophysical Properties in Quasi-Two-Dimensional Methylammonium Lead Bromide Perovskite. <i>Journal of Physical Chemistry C</i> , 2022, 126, 478-486.	1.5	4
252	Tunable engineering of photo- and electro-induced carrier dynamics in perovskite photoelectronic devices. <i>Science China Materials</i> , 2022, 65, 855-875.	3.5	9

#	ARTICLE	IF	CITATIONS
253	Ferroelectric perovskite A-type films with robust in-plane polarization toward efficient room-temperature chemiresistive sensing. <i>Fundamental Research</i> , 2023, 3, 362-368.	1.6	9
254	Design of two-dimensional halide perovskite composites for optoelectronic applications and beyond. <i>Materials Advances</i> , 2022, 3, 756-778.	2.6	14
255	Understanding the role of spacer cation in 2D layered halide perovskites to achieve stable perovskite solar cells. <i>Materials Advances</i> , 2022, 3, 2464-2474.	2.6	7
256	Mechanochromic Luminescence of Composites Based on (CH ₃ NH ₃)PbBr ₃ and Layered HPs: Influence of 2D Components and Interface Multilayered Phases. <i>European Journal of Inorganic Chemistry</i> , 0, .	1.0	0
257	Multifunctional Chiral 2D Lead Halide Perovskites with Circularly Polarized Photoluminescence and Piezoelectric Energy Harvesting Properties. <i>ACS Nano</i> , 2022, 16, 3221-3230.	7.3	52
258	Photophysics of Two-Dimensional Semiconducting Organic-Inorganic Metal-Halide Perovskites. <i>Annual Review of Physical Chemistry</i> , 2022, 73, 403-428.	4.8	18
259	Long carrier diffusion length in two-dimensional lead halide perovskite single crystals. <i>CheM</i> , 2022, 8, 1107-1120.	5.8	29
260	Two-dimensional material-based printed photonics: a review. <i>2D Materials</i> , 2022, 9, 042003.	2.0	5
261	A Theoretical Framework for Microscopic Surface and Interface Dipoles, Work Functions, and Valence Band Alignments in 2D and 3D Halide Perovskite Heterostructures. <i>ACS Energy Letters</i> , 2022, 7, 349-357.	8.8	17
262	Polarization-sensitive photodetection in a two-dimensional interlayer-multiple-cation hybrid perovskite bulk single crystal. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5882-5886.	2.7	8
263	High-Performance Blue Quasi-2D Perovskite Light-Emitting Diodes via Balanced Carrier Confinement and Transfer. <i>Nano-Micro Letters</i> , 2022, 14, 66.	14.4	34
264	Tolerance Factor for Stabilizing 3D Hybrid Halide Perovskitoids Using Linear Diammonium Cations. <i>Journal of the American Chemical Society</i> , 2022, 144, 3902-3912.	6.6	36
265	Charge-charge interaction in three-layer systems: Classical approach. <i>Physical Review B</i> , 2022, 105, .	1.1	0
266	Homogeneous Optical Line Widths in Hybrid Ruddlesden-Popper Metal Halides Can Only Be Measured Using Nonlinear Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5378-5387.	1.5	7
267	Recent Progress in Perovskite Materials Using Diammonium Organic Cations Toward Stable and Efficient Solar Cell Devices: Dion-Jacobson. <i>Energy Technology</i> , 2022, 10, .	1.8	9
268	Crystal Growth Regulation of 2D/3D Perovskite Films for Solar Cells with Both High Efficiency and Stability. <i>Advanced Materials</i> , 2022, 34, e2200705.	11.1	91
269	Thick-Layer Lead Iodide Perovskites with Bifunctional Organic Spacers Allylammonium and Iodopropylammonium Exhibiting Trap-State Emission. <i>Journal of the American Chemical Society</i> , 2022, 144, 6390-6409.	6.6	13
270	Crystal structure and optical properties of in situ synthesized organic-inorganic hybrid metal halides. <i>Inorganic Chemistry Communication</i> , 2022, 139, 109339.	1.8	4

#	ARTICLE	IF	CITATIONS
271	Revealing structural, elastic, electronic and optical properties of potential perovskites K_2CuBiX_6 (X=Br, Cl) based on first-principles. <i>Journal of Solid State Chemistry</i> , 2022, 310, 123046.	1.4	9
272	Femtosecond Exciton and Carrier Relaxation Dynamics of Two-Dimensional (2D) and Quasi-2D Tin Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 12292-12299.	2.1	15
273	Iodine-Iodine Interactions Suppressing Phase Transitions of 2D Layered Hybrid $(I(CH_2)_2)_nNH_3$ - PbI_4 Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 12292-12299.	2.1	15
274	Design Principles and Insights into the Liquid-Phase Exfoliation of Alpha- MoO_3 for the Production of Colloidal 2D Nano-inks in Green Solvents. <i>Journal of Physical Chemistry C</i> , 2022, 126, 404-415.	1.5	2
275	Revealing Weak Dimensional Confinement Effects in Excitonic Silver/Bismuth Double Perovskites. <i>JACS</i> , 2022, 144, 136-149.	3.6	12
276	$CsPd_{0.875}Cr_{0.125}I_3$ Promising Candidate for Thermoelectric Applications. <i>Ukrainian Journal of Physics</i> , 2021, 66, 1063.	0.1	4
277	A 3D Lead Iodide Hybrid Based on a 2D Perovskite Subnetwork. <i>Crystals</i> , 2021, 11, 1570.	1.0	2
278	Unveiling the brittleness of hybrid organic-inorganic 0-D ammonium zinc chlorometallate by nanoindentation. <i>Applied Physics Letters</i> , 2021, 119, 241903.	1.5	2
279	Exciton-Phonon Coupling and Low Energy Emission in 2D and Quasi-2D $BA_2MA_{1-x}Pb_xI_{3-x+1}$ Thin Films with Improved Phase Purity. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 12336-12344.	2.1	8
280	The first principle study of structural, mechanical, electronic and optical properties of double halide perovskite $K_2Bi_6(B_{1-x}Ti_x)_4$ (B=Ti, Zr and Hf). <i>Molecular Physics</i> , 2021, 247, 107603.	0.8	3
281	Optimizing Optical Properties of Hybrid Core/Shell Perovskite Nanocrystals. <i>Inorganic Chemistry Frontiers</i> , 2021, 10, 1000000.	3.0	4
282	A Multifunctional Ionic Liquid Additive Enabling Stable and Efficient Perovskite Light-Emitting Diodes. <i>Small</i> , 2022, 18, e2200498.	5.2	24
283	Toward Eco-Friendly Lead-Free Low-Dimensional Perovskites. <i>Small Structures</i> , 2022, 3, 2200000.	6.9	9
285	Anisotropy in a 2D Perovskite Ferroelectric Drives Self-Powered Polarization-Sensitive Photoresponse for Ultraviolet Solar-Blind Polarized-Light Detection. <i>Angewandte Chemie - International Edition</i> , 2022, 61, 191191.	7.2	31
286	Quasi-2D halide perovskite crystals and their optoelectronic applications. <i>Journal of Materials Chemistry A</i> , 2022, 10, 19169-19183.	5.2	16
287	Stoichiometric Ratio Controlled Dimension Transition and Supramolecular Chirality Enhancement in a Two-Component Assembly System. <i>Gels</i> , 2022, 8, 269.	2.1	1
288	Sub-angstrom noninvasive imaging of atomic arrangement in 2D hybrid perovskites. <i>Science Advances</i> , 2022, 8, eabj0395.	4.7	5
289	Anisotropy in a 2D Perovskite Ferroelectric Drives Self-Powered Polarization-Sensitive Photoresponse for Ultraviolet Solar-Blind Polarized-Light Detection. <i>Angewandte Chemie</i> , 2022, 134, 191191.	1.6	7

#	ARTICLE	IF	CITATIONS
290	Highly Emissive Quasi-2D Perovskites Enabled by a Multifunctional Molecule for Bright Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2022, 14, 21636-21644.	4.0	13
291	Single crystal, a lead-free hybrid organic-inorganic perovskite material: $\{[(C_6H_5)NH_3]^+ \cdot 4I \cdot [BiI_6]^{3-} \cdot H_2O\}$ with optical and third-order nonlinear properties. Journal of Solid State Chemistry, 2022, , 123181.	1.4	1
292	Structure, optical and magnetic properties of the pyridinium cobaltate $(C_6H_9N_2)_2[CoCl_4]$. Inorganica Chimica Acta, 2022, 539, 121003.	1.2	2
293	Insights on structural, elastic, electronic and optical properties of double-perovskite halides Rb_2CuBiX_6 (X=Br, Cl). Journal of Physics and Chemistry of Solids, 2022, 167, 110791.	1.9	14
294	Origin and physical effects of edge states in two-dimensional Ruddlesden-Popper perovskites. IScience, 2022, 25, 104420.	1.9	8
295	Crystallization regulation of solution-processed two-dimensional perovskite solar cells. Journal of Materials Chemistry A, 2022, 10, 13625-13650.	5.2	11
296	Two-dimensional Dion-Jacobson halide perovskites as new-generation light absorbers for perovskite solar cells. Renewable and Sustainable Energy Reviews, 2022, 166, 112614.	8.2	39
297	Modulated luminescence of zero-dimensional bimetallic all-inorganic halide clusters. Inorganic Chemistry Frontiers, 2022, 9, 3728-3736.	3.0	3
298	Spin-polarized excitons and charge carriers in chiral metal halide semiconductors. Journal of Materials Chemistry A, 2022, 10, 19367-19386.	5.2	10
299	Morphology and temperature dependence of a dual excitonic emissive 2D bromoplumbate hybrid perovskite: the key role of crystal edges. Journal of Materials Chemistry C, 2022, 10, 10284-10291.	2.7	2
300	Engineering van der Waals Materials for Advanced Metaphotonics. Chemical Reviews, 2022, 122, 15204-15355.	23.0	33
301	Metal Halide Perovskites for Red-Emission Light-Emitting Diodes. Small Structures, 2022, 3, .	6.9	15
302	Universal Bifacial Stamping Approach Enabling Reverse-Graded Ruddlesden-Popper 2D Perovskite Solar Cells. Small, 2022, 18, .	5.2	6
303	Luminescence and nonlinear optical properties of stable $MAPbBr_3$ quantum dots in SiO_2 mesopores. Journal of Nonlinear Optical Physics and Materials, 0, , .	1.1	0
304	Band Edge Engineering of 2D Perovskite Structures through Spacer Cation Engineering for Solar Cell Applications. Journal of Physical Chemistry C, 2022, 126, 9937-9947.	1.5	6
305	Revealing the Transient Formation Dynamics and Optoelectronic Properties of 2D Ruddlesden-Popper Phases on 3D Perovskites. Advanced Energy Materials, 2023, 13, .	10.2	14
306	Synthesis and Characterization of $(FA)_3(HEA)_2Pb_3I_{11}$: A Rare Example of 110 -Oriented Multilayered Halide Perovskites. Chemistry of Materials, 2022, 34, 5780-5790.	3.2	2
307	Ordered Mixed-Spacer 2D Bromide Perovskites and the Dual Role of 1,2,4-Triazolium Cation. Chemistry of Materials, 2022, 34, 6541-6552.	3.2	5

#	ARTICLE	IF	CITATIONS
308	Structural Asymmetry and Chiroptical Activity of Chiral Antimony Halide Hybrids. <i>European Journal of Inorganic Chemistry</i> , 0, , .	1.0	10
309	Ruddlesden-Popper Perovskites with Narrow Phase Distribution for Air-Stable Solar Cells. <i>Solar Rrl</i> , 2022, 6, .	3.1	4
310	Acetamidinium-Methylammonium-Based Layered Hybrid Halide Perovskite [CH ₃ C(NH ₂) ₂][CH ₃ NH ₃]PbI ₄ : Synthesis, Structure, and Optical Properties. <i>Russian Journal of Inorganic Chemistry</i> , 2022, 67, 997-1003.	0.3	5
311	Highest EQE of NIR PeLEDs With p-i-n Architecture Achieved via Surface Passivation and Lithium Fluoride Ultrathin Interfacial Layer. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
312	High-Efficiency Blue Perovskite Light-Emitting Diodes with Improved Photoluminescence Quantum Yield via Reducing Trap-Induced Recombination and Exciton-Exciton Annihilation. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	16
313	Layered Hybrid Lead Iodide Perovskites with Short Interlayer Distances. <i>ACS Energy Letters</i> , 2022, 7, 2801-2806.	8.8	8
314	Bright and tunable emissive monodisperse CsPbI ₃ @Cs ₄ PbI ₆ nanocomposites via a precise and controllable dissolution-recrystallization method. <i>Nano Research</i> , 2023, 16, 1586-1594.	5.8	5
315	The Unprecedented Highest-Layer-Number Ferroelectric Semiconductor of 2D Homologous Single-Phase Perovskites Tailored by Regulating Thickness of Inorganic Frameworks. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	22
316	Regulation of Quantum Wells Width Distribution in 2D Perovskite Films for Photovoltaic Application. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	29
317	Self-Trapped exciton states in metal halide perovskites van der Waals heterostructures. <i>Physica Status Solidi - Rapid Research Letters</i> , 0, , .	1.2	0
318	Exploring the Steric Hindrance of Alkylammonium Cations in the Structural Reconfiguration of Quasi-2D Perovskite Materials Using a High-throughput Experimental Platform. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	12
319	Expanding the absorption and photoresponse of 1D lead halide perovskites via ultrafast charge transfer. <i>Journal of Chemical Physics</i> , 2022, 157, .	1.2	6
320	Blue-Light-Excited Lead-Free Double Perovskite Cs ₂ Ag _{0.6} Na _{0.4} In _{0.8} Bi _{0.2} Cl ₆ /xBr(KI) 9 at Room Temperature and Photovoltaic Applications. <i>Advanced Optical Materials</i> , 2022, 10, .	1.2	9
321	Tunable photostriction of halide perovskites through energy dependent photoexcitation. <i>Physical Review Materials</i> , 2022, 6, .	0.9	5
322	Low-dimensional Sn-based perovskites: Evolution and future prospects of solar cells. <i>CheM</i> , 2022, 8, 2939-2960.	5.8	20
323	Photocatalytic activity of a hydrothermally synthesized ¹³ Fe ₂ O ₃ @Au/MoS ₂ heterostructure for organic dye degradation under green light. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2022, 433, 114186.	2.0	5
324	Constructing 2D passivation layer on perovskites based on 3-chlorobenzylamine enables efficient and stable perovskite solar cells. <i>Journal of Alloys and Compounds</i> , 2022, 926, 166891.	2.8	10
325	The chemistry and physics of organic-inorganic hybrid perovskite quantum wells. <i>Science China Chemistry</i> , 2022, 65, 2058-2076.	4.2	5

#	ARTICLE	IF	CITATIONS
326	Hydrostatic pressure-tuning of photoelectric properties of perovskite Cs ₂ SeI ₆ through first-principles investigation. <i>Materials Today Communications</i> , 2022, 33, 104435.	0.9	1
327	Study on the structural, electronic and optical properties of double-perovskite halides Cs ₂ AgSbX ₆ (X=I, Br, Cl) based on first-principles. <i>Materials Science in Semiconductor Processing</i> , 2022, 152, 107077.	1.9	16
328	A comparative study of the mechanical stability, electronic, optical and photocatalytic properties of CsPbX ₃ (X = Cl, Br, I) by DFT calculations for optoelectronic applications. <i>RSC Advances</i> , 2022, 12, 23704-23717.	1.7	12
329	Exciton-Phonon Coupling in Alanine-based Hybrid Lead Bromide. <i>Materials Advances</i> , 0, , .	2.6	0
330	Achieving circularly polarized luminescence and large piezoelectric response in hybrid rare-earth double perovskite by a chirality induction strategy. <i>Materials Horizons</i> , 2022, 9, 2450-2459.	6.4	20
331	[PbX ₆] ⁴⁻ modulation and organic spacer construction for stable perovskite solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 4470-4510.	15.6	16
332	Recent progress of single-halide perovskite nanocrystals for advanced displays. <i>Nanoscale</i> , 2022, 14, 13990-14007.	2.8	5
333	Spacer Engineering for 2D Ruddlesden-Popper Perovskites with an Ultralong Carrier Lifetime of Over 18 ns Enable Efficient Solar Cells. <i>ACS Energy Letters</i> , 2022, 7, 3656-3665.	8.8	17
334	Liquid-Phase van der Waals Epitaxy of a Few-Layer and Unit-Cell Thick Ruddlesden-Popper Halide Perovskite. <i>Journal of the American Chemical Society</i> , 2022, 144, 17588-17596.	6.6	3
335	Centimeter-size single crystal of a lead-free double perovskite for broad-spectrum polarization-sensitive detection. <i>Journal of Materials Chemistry C</i> , 2022, 10, 18063-18068.	2.7	4
336	Structure-related bandgap of hybrid lead halide perovskites and close-packed APbX ₃ family of phases. <i>Journal of Materials Chemistry C</i> , 2022, 10, 16838-16846.	2.7	4
337	A room-temperature antiferroelectric in hybrid perovskite enables highly efficient energy storage at low electric fields. <i>Chemical Science</i> , 2022, 13, 13499-13506.	3.7	16
338	Application of perovskites in bioimaging: the state-of-the-art and future developments. <i>Expert Review of Molecular Diagnostics</i> , 2022, 22, 867-880.	1.5	6
339	Tailoring the Quantum Well Structure and Distribution of Reduced-Dimensional Perovskites for Charge Dynamics Optimization. <i>ACS Energy Letters</i> , 2022, 7, 3917-3926.	8.8	2
340	Ultrafast Excitonic Response in Two-Dimensional Hybrid Perovskites Driven by Intense Midinfrared Pulses. <i>Physical Review Letters</i> , 2022, 129, .	2.9	5
341	Machine Learning-Assisted Microfluidic Synthesis of Perovskite Quantum Dots. <i>Advanced Photonics Research</i> , 2023, 4, .	1.7	5
342	Oriented Low- κ Ruddlesden-Popper Formamidinium-Based Perovskite for Efficient and Air Stable Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	25
343	Using the Diamagnetic Coefficients to Estimate the Reduced Effective Mass in 2D Layered Perovskites: New Insight from High Magnetic Field Spectroscopy. <i>International Journal of Molecular Sciences</i> , 2022, 23, 12531.	1.8	0

#	ARTICLE	IF	CITATIONS
344	Structural Dimensionality Dependence of the Band Gap in $A_{1-x}B_xX_3$ Ruddlesden-Popper Perovskites: A Global Picture. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 9632-9641.	2.1	2
345	Quasi-2D Ruddlesden-Popper Lead Halide Perovskites: How Edge Matters. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 9875-9882.	2.1	2
346	Orbital Interactions between the Organic Semiconductor Spacer and the Inorganic Layer in Dion-Jacobson Perovskites Enable Efficient Solar Cells. <i>Advanced Materials</i> , 2023, 35, .	11.1	25
347	Ferroelectric hybrid organic-inorganic perovskites and their structural and functional diversity. <i>National Science Review</i> , 2023, 10, .	4.6	47
348	Photo-dynamics in 2D materials: Processes, tunability and device applications. <i>Physics Reports</i> , 2022, 993, 1-70.	10.3	4
349	Hot-carrier tunable abnormal nonlinear absorption conversion in quasi-2D perovskite. <i>Nature Communications</i> , 2022, 13, .	5.8	10
350	Ground-state structures, electronic structure, transport properties and optical properties of Ca-based anti-Ruddlesden-Popper phase oxide perovskites. <i>Physical Review Materials</i> , 2022, 6, .	0.9	3
351	Multilayered Alternating Cations Intercalation Chiral Hybrid Perovskites with High Circular Polarization Sensitivity. <i>Small</i> , 2022, 18, .	5.2	12
352	Halide Chemistry in Tin Perovskite Optoelectronics: Bottlenecks and Opportunities. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	12
353	Halide Chemistry in Tin Perovskite Optoelectronics: Bottlenecks and Opportunities. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	1
354	Onset of vacancy-mediated high activation energy leads to large ionic conductivity in two-dimensional layered $Cs_{2-x}Ruddlesden-Popper$ halide perovskite. <i>Physical Review Materials</i> , 2022, 6, .	0.9	7
355	Asymmetric Diammonium Directed In-Plane Charge Transport Enhancement in Two-Dimensional Lead Bromide Perovskite for Weak-Light Detection. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 53065-53073.	4.0	5
356	Review on the promising roles of alkali metals toward highly efficient perovskite light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2023, 11, 2011-2025.	2.7	3
357	Connecting the dots for fundamental understanding of structure-property relationships of COFs, MOFs, and perovskites using a Multiparticle Holstein Formalism. <i>Chemical Science</i> , 2023, 14, 1040-1064.	3.7	2
358	Circularly Polarized Photoluminescence of Chiral 2D Halide Perovskites at Room Temperature. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 54090-54100.	4.0	1
359	Acquiring a Newly Tailored 2D Dion-Jacobson Hybrid Perovskite with Large Structural Distortion for Efficient Crystal Array Photodetector. <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	9
360	Boosting Charge Transport in a 2D/3D Perovskite Heterostructure by Selecting an Ordered 2D Perovskite as the Passivator. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	5
361	Improving the efficiency of near-IR perovskite LEDs via surface passivation and ultrathin interfacial layers. <i>Cell Reports Physical Science</i> , 2022, 3, 101170.	2.8	5

#	ARTICLE	IF	CITATIONS
362	Boosting Charge Transport in a 2D/3D Perovskite Heterostructure by Selecting an Ordered 2D Perovskite as the Passivator. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	6
363	Effect of $\tilde{\text{Fluorophenylammonium}}^{\text{TM}}$ and $\tilde{\text{Fluorophenethylammonium}}^{\text{TM}}$ as Spacer on the Photo(electro)chemical and Photocatalytic Behaviour of Mixed Halide Based Layered Perovskites. <i>ChemistrySelect</i> , 2022, 7, .	0.7	1
364	Large Exciton Polaron Formation in 2D Hybrid Perovskites via Time-Resolved Photoluminescence. <i>ACS Nano</i> , 2022, 16, 21259-21265.	7.3	5
365	Recent progress in perovskite solar cells: material science. <i>Science China Chemistry</i> , 2023, 66, 10-64.	4.2	53
366	Crystallization Pathways of FABr-PbBr ₂ -DMF and FABr-PbBr ₂ -DMSO Systems: The Comprehensive Picture of Formamidinium-Based Low-Dimensional Perovskite-Related Phases and Intermediate Solvates. <i>International Journal of Molecular Sciences</i> , 2022, 23, 15344.	1.8	2
367	Silicon surface lattice resonances and halide perovskite semiconductors for exciton-polaritons at room temperature. <i>Optical Materials Express</i> , 2023, 13, 179.	1.6	0
368	Influence of interaction between organic cation and inorganic unit in bi-based hybrid perovskites for photoelectronic properties. <i>Heliyon</i> , 2022, 8, e12528.	1.4	0
369	Addressing the Role of 2D Domains in High-Dimensionality Ruddlesden-Popper Perovskite for Solar Cells. <i>Solar Rrl</i> , 0, , 2200860.	3.1	0
370	Hybrid perovskites under pressure: Present and future directions. <i>Journal of Applied Physics</i> , 2022, 132, .	1.1	4
371	Metal Halide Perovskite Alloy: Fundamental, Optoelectronic Properties and Applications. <i>Advanced Photonics Research</i> , 2023, 4, .	1.7	4
372	Linear optical afterglow and nonlinear optical harmonic generation from chiral tin halides: the role of lattice distortions. <i>Materials Horizons</i> , 2023, 10, 1005-1011.	6.4	9
373	Structural investigation of titanium oxide nanowires with unconventional optoelectronic behaviour. <i>Physical Chemistry Chemical Physics</i> , 2023, 25, 5648-5655.	1.3	1
374	Impact of two diammonium cations on the structure and photophysics of layered Sn-based perovskites. <i>Journal of Materials Chemistry C</i> , 2023, 11, 8154-8160.	2.7	1
375	Intermolecular Interactions of A-Site Cations Modulate Stability of 2D Metal Halide Perovskites. <i>ACS Energy Letters</i> , 2023, 8, 748-752.	8.8	10
376	Recent progress in layered metal halide perovskites for solar cells, photodetectors, and field-effect transistors. <i>Nanoscale</i> , 2023, 15, 4219-4235.	2.8	8
377	Excitons and Their Fine Structure in Lead Halide Perovskite Nanocrystals from Atomistic GW/BSE Calculations. <i>Journal of Physical Chemistry C</i> , 2023, 127, 1891-1898.	1.5	7
378	Anisotropic Exciton-Polaritons in 2D Single-Crystalline PEA ₂ PbBr ₄ Perovskites at Room Temperature. <i>Journal Physics D: Applied Physics</i> , 0, , .	1.3	0
379	Broadband yellow and white emission from large octahedral tilting in (110)-oriented layered perovskites: imidazolium-methylhydrazinium lead halides. <i>Journal of Materials Chemistry C</i> , 2023, 11, 4907-4915.	2.7	5

#	ARTICLE	IF	CITATIONS
380	Exploration of new chiral hybrid semiconducting palladium halide complexes: [(R)/(S)-2-Methylpiperazinedium]PdCl ₄ . <i>Materials Research Bulletin</i> , 2023, 164, 112251.	2.7	3
381	Navigating the Site-Distinct Energy Conversion Properties of Perovskite Quantum Wells. <i>ACS Energy Letters</i> , 2023, 8, 1236-1265.	8.8	7
382	Eco-friendly inorganic molecular novel antiperovskites for light-emitting application. <i>Materials Horizons</i> , 0, , .	6.4	0
383	Achieving Efficient Light-Emitting Diodes by Controlling Phase Distribution of Quasi-2D Perovskites. <i>Advanced Electronic Materials</i> , 2023, 9, .	2.6	5
384	High-Efficiency Quasi-2D Perovskite Light-Emitting Diodes Using a Dual-Additive Strategy Guided by Preferential Additive-Precursor Interactions. <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	3
385	Synthesis of five-layered chiral perovskite nanowires and enacting chiroptical activity regulation. <i>Cell Reports Physical Science</i> , 2023, 4, 101299.	2.8	4
386	Electron Trapping Prolongs the Lifetime of Charge-Separated States in 2D Perovskite Nanoplatelet-Hole Acceptor Complexes. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 2241-2250.	2.1	0
387	Exciton Ground State Fine Structure and Excited States Landscape in Layered Halide Perovskites from Combined BSE Simulations and Symmetry Analysis. <i>Advanced Optical Materials</i> , 0, , .	3.6	7
388	Highly Enhanced Photoluminescence Quantum Yield of Phenethylammonium Halide-Passivated Inorganic Perovskite/Cellulose Nanocrystal Films. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 4580-4587.	3.2	0
389	Bilayered Dion-Jacobson Hybrid Perovskite Bulk Single Crystals Constructed with Aromatic Diammonium for Ultraviolet-Visible-Near-Infrared Photodetection. <i>Chemistry of Materials</i> , 2023, 35, 2541-2548.	3.2	10
390	Reducing dielectric confinement effect in ionic covalent organic nanosheets to promote the visible-light-driven hydrogen evolution. <i>Journal of Energy Chemistry</i> , 2023, 82, 40-46.	7.1	3
391	Carrier-Phonon Interaction Induced Large Negative Thermal-Optic Coefficient at Near Band Edge of Quasi-2D (PEA) ₂ PbBr ₄ Perovskite. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	2
392	Less-ordered phase distribution of quasi-2D perovskites for deep-blue light-emitting diodes enabled by a deep eutectic solvent. <i>Organic Electronics</i> , 2023, 118, 106792.	1.4	0
393	Halide Containing Short Organic Monocations in $n = 1-4$ 2D Multilayered Halide Perovskite Thin Films and Crystals. <i>Chemistry of Materials</i> , 2023, 35, 2873-2883.	3.2	1
394	Energy level alignments between organic and inorganic layers in 2D layered perovskites: conjugation σ -substituent. <i>Nanoscale</i> , 0, , .	2.8	0
395	Regulation of Quantum Wells Width Distribution in Quasi-2D Perovskite Films for High-Performance Photodetectors. <i>Advanced Materials</i> , 2023, 35, .	11.1	7
396	Synthesis of Li ⁺ and Bi ³⁺ -codoped Cs ₂ AgInCl ₆ lead-free double perovskites. <i>Optical Materials</i> , 2023, 139, 113748.	1.7	1
397	Spin-Flip Raman Scattering on Electrons and Holes in Two-Dimensional (PEA) ₂ PbI ₄ Perovskites. <i>Small</i> , 2023, 19, .	5.2	6

#	ARTICLE	IF	CITATIONS
398	Comparing between steady-state excitonic transitions and ultrafast polaronic photoexcitations in layered perovskites: the role of electron-phonon interaction. <i>Nanophotonics</i> , 2023, 12, 1965-1977.	2.9	3
399	Centimeter-Sized Single Crystals of Dion-Jacobson Phase Lead-Free Double Perovskite for Efficient X-ray Detection. <i>Small</i> , 2023, 19, .	5.2	4
401	Minimal Molecular Building Blocks for Screening in Quasi-Two-Dimensional Organic-Inorganic Lead Halide Perovskites. <i>Nano Letters</i> , 2023, 23, 3796-3802.	4.5	6
420	Recent Progress of Layered Perovskite Solar Cells Incorporating Aromatic Spacers. <i>Nano-Micro Letters</i> , 2023, 15, .	14.4	5
421	Synergy of 3D and 2D Perovskites for Durable, Efficient Solar Cells and Beyond. <i>Chemical Reviews</i> , 2023, 123, 9565-9652.	23.0	21
430	Structure, composition, and stability of metal halide perovskites. , 2023, , 3-47.		0
431	Perovskite nonlinear optical properties and photonics. , 2023, , 323-370.		0
440	2D and quasi-2D hybrid perovskites containing organic cations with an extended conjugated system: opportunities and challenges. <i>Journal of Materials Chemistry C</i> , 2023, 11, 12877-12893.	2.7	1
443	Stable deep-blue FAPbBr ₃ quantum dots facilitated by amorphous metal halide matrices. <i>Chemical Communications</i> , 2023, 59, 11137-11140.	2.2	1
444	The rise of quasi-2D Dion-Jacobson perovskites for photovoltaics. <i>Nanoscale Horizons</i> , 2023, 8, 1628-1651.	4.1	1
473	Methylammonium-free wide-bandgap metal halide perovskites for tandem photovoltaics. <i>Nature Reviews Materials</i> , 2023, 8, 822-838.	23.3	2