Constantinos C Stoumpos

List of Publications by Year
in descending order

187	40,810	4641 85	3476 182
papers	citations	h-index	g-index

198	198	198	21551
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Expanding the Cage of 2D Bromide Perovskites by Large A-Site Cations. Chemistry of Materials, 2022, 34, 1132-1142.	3.2	22
2	Tolerance Factor for Stabilizing 3D Hybrid Halide Perovskitoids Using Linear Diammonium Cations. Journal of the American Chemical Society, 2022, 144, 3902-3912.	6.6	36
3	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
4	Regulating off-centering distortion maximizes photoluminescence in halide perovskites. National Science Review, 2021, 8, nwaa288.	4.6	70
5	Demonstration of Energy-Resolved Î³-Ray Detection at Room Temperature by the CsPbCl₃ Perovskite Semiconductor. Journal of the American Chemical Society, 2021, 143, 2068-2077.	6.6	62
6	Metal cation s lone-pairs increase octahedral tilting instabilities in halide perovskites. Materials Advances, 2021, 2, 4610-4616.	2.6	20
7	Inorganic Halide Perovskitoid TlPbI₃ for Ionizing Radiation Detection. Advanced Functional Materials, 2021, 31, 2006635.	7.8	16
8	25th Anniversary of Moleculesâ€"Recent Advances in Inorganic Chemistry. Molecules, 2021, 26, 2589.	1.7	0
9	Transparent All-Oxide Hybrid NiO:N/TiO2 Heterostructure for Optoelectronic Applications. Electronics (Switzerland), 2021, 10, 988.	1.8	3
10	Bismuth/Silver-Based Two-Dimensional Iodide Double and One-Dimensional Bi Perovskites: Interplay between Structural and Electronic Dimensions. Chemistry of Materials, 2021, 33, 6206-6216.	3.2	27
11	Hybrid Organicâ€"Inorganic Halide Postâ€Perovskite 3â€€yanopyridinium Lead Tribromide for Optoelectronic Applications. Advanced Functional Materials, 2021, 31, 2102338.	7.8	18
12	Ultralow Thermal Conductivity, Multiband Electronic Structure and High Thermoelectric Figure of Merit in TlCuSe. Advanced Materials, 2021, 33, e2104908.	11.1	29
13	Di-2-pyridyl ketone-based ligands as evergreen â€œtreesâ€•in the â€œforestâ€•of manganese chemistry: Mononuclear Mn(III) complexes from the use of MnF3. Polyhedron, 2021, 207, 115350.	1.0	1
14	Ir₆In₃₂S₂₁, a polar, metal-rich semiconducting subchalcogenide. Chemical Science, 2020, 11, 870-878.	3.7	7
15	Semiconductor physics of organicâ€"inorganic 2D halide perovskites. Nature Nanotechnology, 2020, 15, 969-985.	15.6	268
16	Negative Pressure Engineering with Large Cage Cations in 2D Halide Perovskites Causes Lattice Softening. Journal of the American Chemical Society, 2020, 142, 11486-11496.	6.6	84
17	Three-Dimensional Lead Iodide Perovskitoid Hybrids with High X-ray Photoresponse. Journal of the American Chemical Society, 2020, 142, 6625-6637.	6.6	82
18	Fundamental Insights from a Singleâ€Crystal Sodium Iridate Battery. Advanced Energy Materials, 2020, 10, 1903128.	10.2	9

#	Article	IF	Citations
19	Direct Observation of Bandgap Oscillations Induced by Optical Phonons in Hybrid Lead Iodide Perovskites. Advanced Functional Materials, 2020, 30, 1907982.	7.8	15
20	Organic Cation Alloying on Intralayer A and Interlayer Aâ€™ sites in 2D Hybrid Dionâ€“Jacobson Lead Bromide Perovskites (Aâ€™)(A)Pb₂Br₇. Journal of the American Chemical Society, 2020, 142, 8342-8351.	6.6	64
21	From Bowls to Capsules: Assembly of Hexanuclear Ni II Rings Tailored by Alkali Cations. Chemistry - A European Journal, 2020, 26, 11158-11169.	1.7	0
22	Self-Passivation of 2D Ruddlesdenâ€“Popper Perovskite by Polytypic Surface PbI2 Encapsulation. Nano Letters, 2019, 19, 6109-6117.	4.5	31
23	Detection of Rashba spin splitting in 2D organic-inorganic perovskite via precessional carrier spin relaxation. APL Materials, 2019, 7, 081116.	2.2	46
24	Two-Dimensional Dionâ€“Jacobson Hybrid Lead Iodide Perovskites with Aromatic Diammonium Cations. Journal of the American Chemical Society, 2019, 141, 12880-12890.	6.6	241
25	Perovskites with a Twist: Strong In¹⁺ Off-Centering in the Mixed-Valent CsInX₃ (X = Cl, Br). Chemistry of Materials, 2019, 31, 9554-9566.	3.2	22
26	Halide Perovskites: Low Dimensions for Devices. ACS Energy Letters, 2019, 4, 2902-2904.	8.8	0
27	Chemical and Structural Diversity of Hybrid Layered Double Perovskite Halides. Journal of the American Chemical Society, 2019, 141, 19099-19109.	6.6	144
28	Seven-Layered 2D Hybrid Lead Iodide Perovskites. CheM, 2019, 5, 2593-2604.	5.8	79
29	Compositional and Solvent Engineering in Dionâ€“Jacobson 2D Perovskites Boosts Solar Cell Efficiency and Stability. Advanced Energy Materials, 2019, 9, 1803384.	10.2	219
30	Infrared-pump electronic-probe of methylammonium lead iodide reveals electronically decoupled organic and inorganic sublattices. Nature Communications, 2019, 10, 482.	5.8	25
31	Origin of Intrinsically Low Thermal Conductivity in Talnakhite Cu_{17.6}Fe_{17.6}S₃₂ Thermoelectric Material: Correlations between Lattice Dynamics and Thermal Transport. Journal of the American Chemical Society, 2019, 141, 10905-10914.	6.6	50
32	Transient Sub-Band-Gap States at Grain Boundaries of CH₃NH₃PbI₃ Perovskite Act as Fast Temperature Relaxation Centers. ACS Energy Letters, 2019, 4, 1741-1747.	8.8	33
33	From 2D to 1D Electronic Dimensionality in Halide Perovskites with Stepped and Flat Layers Using Propylammonium as a Spacer. Journal of the American Chemical Society, 2019, 141, 10661-10676.	6.6	66
34	Purification and Improved Nuclear Radiation Detection of Tl₆SI₄ Semiconductor. Crystal Growth and Design, 2019, 19, 4738-4744.	1.4	4
35	Small Cyclic Diammonium Cation Templated (110)-Oriented 2D Halide (X = I, Br, Cl) Perovskites with White-Light Emission. Chemistry of Materials, 2019, 31, 3582-3590.	3.2	101
36	Uniaxial Expansion of the 2D Ruddlesdenâ€“Popper Perovskite Family for Improved Environmental Stability. Journal of the American Chemical Society, 2019, 141, 5518-5534.	6.6	193

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37	From 0D Cs₃Bi₂I₉ to 2D Cs₃Bi₂I₆Cl₃: Dimensional Expansion Induces a Direct Band Gap but Enhances Electronâ€“Phonon Coupling. Chemistry of Materials, 2019, 31, 2644-2650.	3.2	111
38	A Natural 2D Heterostructure [Pb_{3.1}Sb_{0.9}S₄][Au_xTe_{2â€“x}] with Large Transverse Nonsaturating Negative Magnetoresistance and High Electron Mobility. Journal of the American Chemical Society, 2019, 141, 7544-7553.	6.6	8
39	Structural and thermodynamic limits of layer thickness in 2D halide perovskites. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 58-66.	3.3	236
40	Zero-Dimensional Cs₂TeI₆ Perovskite: Solution-Processed Thick Films with High X-ray Sensitivity. ACS Photonics, 2019, 6, 196-203.	3.2	70
41	High Thermoelectric Performance in the Wide Bandâ€Gap AgGa_{1â€‹}_xTe₂ Compounds: Directional Negative Thermal Expansion and Intrinsically Low Thermal Conductivity. Advanced Functional Materials, 2019, 29, 1806534.	7.8	65
42	Two-Dimensional Hybrid Halide Perovskites: Principles and Promises. Journal of the American Chemical Society, 2019, 141, 1171-1190.	6.6	999
43	â€œUnleadedâ€•Perovskites: Status Quo and Future Prospects of Tinâ€Based Perovskite Solar Cells. Advanced Materials, 2019, 31, e1803230.	11.1	345
44	Hybrid Dionâ€“Jacobson 2D Lead Iodide Perovskites. Journal of the American Chemical Society, 2018, 140, 3775-3783.	6.6	686
45	Composite Nature of Layered Hybrid Perovskites: Assessment on Quantum and Dielectric Confinements and Band Alignment. ACS Nano, 2018, 12, 3321-3332.	7.3	146
46	High spectral resolution of gamma-rays at room temperature by perovskite CsPbBr3 single crystals. Nature Communications, 2018, 9, 1609.	5.8	381
47	An Effective Purification Process for the Nuclear Radiation Detector Tl₆SeI₄. Crystal Growth and Design, 2018, 18, 3484-3493.	1.4	9
48	Unraveling the Chemical Nature of the 3D â€œHollowâ€•Hybrid Halide Perovskites. Journal of the American Chemical Society, 2018, 140, 5728-5742.	6.6	132
49	Light-induced lattice expansion leads to high-efficiency perovskite solar cells. Science, 2018, 360, 67-70.	6.0	554
50	Transient Sub-bandgap States in Halide Perovskite Thin Films. Nano Letters, 2018, 18, 827-831.	4.5	24
51	Quaternary Pavonites A_{1+x}Sn_{2â€“x}Bi_{5+x}S₁₀ (A⁺ = Li⁺, Na⁺): Site Occupancy Disorder Defines Electronic Structure. Inorganic Chemistry, 2018, 57, 2260-2268.	1.9	12
52	Rhombohedral to Cubic Conversion of GeTe via MnTe Alloying Leads to Ultralow Thermal Conductivity, Electronic Band Convergence, and High Thermoelectric Performance. Journal of the American Chemical Society, 2018, 140, 2673-2686.	6.6	307
53	Crystal Structure Evolution and Notable Thermal Expansion in Hybrid Perovskites Formamidinium Tin Iodide and Formamidinium Lead Bromide. Inorganic Chemistry, 2018, 57, 695-701.	1.9	128
54	Cu₂I₂Se₆: A Metalâ€“Inorganic Framework Wide-Bandgap Semiconductor for Photon Detection at Room Temperature. Journal of the American Chemical Society, 2018, 140, 1894-1899.	6.6	19

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55	Ultrafast Imaging of Carrier Cooling in Metal Halide Perovskite Thin Films. Nano Letters, 2018, 18, 1044-1048.	4.5	33
56	Stable Lightâ€Emitting Diodes Using Phaseâ€Pure Ruddlesdenâ€“Popper Layered Perovskites. Advanced Materials, 2018, 30, 1704217.	11.1	258
57	Anharmonicity and Disorder in the Black Phases of Cesium Lead Iodide Used for Stable Inorganic Perovskite Solar Cells. ACS Nano, 2018, 12, 3477-3486.	7.3	546
58	Understanding Film Formation Morphology and Orientation in High Member 2D Ruddlesdenâ€“Popper Perovskites for Highâ€Efficiency Solar Cells. Advanced Energy Materials, 2018, 8, 1700979.	10.2	286
59	Critical Role of Interface and Crystallinity on the Performance and Photostability of Perovskite Solar Cell on Nickel Oxide. Advanced Materials, 2018, 30, 1703879.	11.1	198
60	Dopant-Free Tetrakis-Triphenylamine Hole Transporting Material for Efficient Tin-Based Perovskite Solar Cells. Journal of the American Chemical Society, 2018, 140, 388-393.	6.6	163
61	Dynamic Disorder, Band Gap Widening, and Persistent Near-IR Photoluminescence up to At Least 523 K in ASnI₃ Perovskites (A = Cs⁺, CH₃NH₃⁺) Tj ETQq1 1 0.784314 rgBT / 26353-26361.	1.5	26
62	Thiazole-Induced Surface Passivation and Recrystallization of CH₃NH₃PbI₃ Films for Perovskite Solar Cells with Ultrahigh Fill Factors. ACS Applied Materials & Interfaces, 2018, 10, 42436-42443.	4.0	49
63	Myths and reality of HPbI3 in halide perovskite solar cells. Nature Communications, 2018, 9, 4785.	5.8	238
64	Tin Perovskite Solar Cells Are Back in the Game. Joule, 2018, 2, 2517-2518.	11.7	6
65	Anharmonicity and Disorder in the Black Phases of CsPbI3 used for Stable Inorganic Perovskite Solar Cells. , 2018, , .		1
66	Defect Perovskites under Pressure: Structural Evolution of Cs₂SnX₆ (X = Cl,) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.5	42
67	Stretching and Breaking of Ultrathin 2D Hybrid Organicâ€“Inorganic Perovskites. ACS Nano, 2018, 12, 10347-10354.	7.3	60
68	Resolving the Energy of Î³-Ray Photons with MAPbI₃ Single Crystals. ACS Photonics, 2018, 5, 4132-4138.	3.2	100
69	Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. Physical Review Letters, 2018, 121, 127401.	2.9	51
70	Structural Diversity in White-Light-Emitting Hybrid Lead Bromide Perovskites. Journal of the American Chemical Society, 2018, 140, 13078-13088.	6.6	351
71	Two-Dimensional Halide Perovskites Incorporating Straight Chain Symmetric Diammonium Ions, (NH₃C_mH_{2m}NH₃)(CH₃NH₃₆<sub>n (m = 4â€“9; n = 1â€“4). Journal of the American Chemical Society, 2018, 140, 12226-12238.	6.6	184
72	Directional Negative Thermal Expansion and Large Poisson Ratio in CH₃NH₃PbI₃ Perovskite Revealed by Strong Coherent Shear Phonon Generation. Journal of Physical Chemistry Letters, 2018, 9, 3161-3166.	2.1	16

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73	Cross-plane coherent acoustic phonons in two-dimensional organic-inorganic hybrid perovskites. Nature Communications, 2018, 9, 2019.	5.8	71
74	Diammonium Cations in the FASnI₃ Perovskite Structure Lead to Lower Dark Currents and More Efficient Solar Cells. ACS Energy Letters, 2018, 3, 1470-1476.	8.8	114
75	Design principles for electronic charge transport in solution-processed vertically stacked 2D perovskite quantum wells. Nature Communications, 2018, 9, 2130.	5.8	153
76	Cs₂PbI₂Cl₂, All-Inorganic Two-Dimensional Ruddlesdenâ€“Popper Mixed Halide Perovskite with Optoelectronic Response. Journal of the American Chemical Society, 2018, 140, 11085-11090.	6.6	167
77	Concept of Lattice Mismatch and Emergence of Surface States in Two-dimensional Hybrid Perovskite Quantum Wells. Nano Letters, 2018, 18, 5603-5609.	4.5	103
78	Isothermal pressure-derived metastable states in 2D hybrid perovskites showing enduring bandgap narrowing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8076-8081.	3.3	137
79	Slow thermal equilibration in methylammonium lead iodide revealed by transient mid-infrared spectroscopy. Nature Communications, 2018, 9, 2792.	5.8	25
80	Dynamic Surface Reconstruction of 2D Ruddlesden-Popper Halide Perovskite under e-Beam Irradiation. Microscopy and Microanalysis, 2018, 24, 1490-1491.	0.2	0
81	Î±-Particle Detection and Charge Transport Characteristics in the A₃M₂I₉ Defect Perovskites (A = Cs, Rb; M = Bi, Sb). ACS Photonics, 2018, 5, 3748-3762.	3.2	88
82	Scaling law for excitons in 2D perovskite quantum wells. Nature Communications, 2018, 9, 2254.	5.8	559
83	Superconductivity and Structural Conversion with Na and K Doping of the Narrow-Gap Semiconductor CsBi₄Te₆. Chemistry of Materials, 2018, 30, 5293-5304.	3.2	8
84	Air-Stable Direct Bandgap Perovskite Semiconductors: All-Inorganic Tin-Based Heteroleptic Halides A_xSnCl_yI_z (A = Cs, Rb). Chemistry of Materials, 2018, 30, 4847-4856.	3.2	65
85	Extremely efficient internal exciton dissociation through edge states in layered 2D perovskites. Science, 2017, 355, 1288-1292.	6.0	830
87	Electronâ€“acoustic phonon coupling in single crystal CH3NH3PbI3 perovskites revealed by coherent acoustic phonons. Nature Communications, 2017, 8, 14398.	5.8	99
88	Defect Antiperovskite Compounds Hg₃Q₂I₂ (Q = S, Se, and Te) for Room-Temperature Hard Radiation Detection. Journal of the American Chemical Society, 2017, 139, 7939-7951.	6.6	45
89	Trimethylsulfonium Lead Triiodide: An Air-Stable Hybrid Halide Perovskite. Inorganic Chemistry, 2017, 56, 6302-6309.	1.9	52
90	The Two-Dimensional A_xCd_xBi_{4â€“x}Q₆ (A = K, Rb, Cs; Q =) Tj ETQq0 0 0 rgBT /Overl Society, 2017, 139, 6978-6987.	6.6	18

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91	Strong Electronâ€“Phonon Coupling and Self-Trapped Excitons in the Defect Halide Perovskites A₃M₂I₉ (A = Cs, Rb; M = Bi, Sb). Chemistry of Materials, 2017, 29, 4129-4145.	3.2	509
92	Structural Stability, Vibrational Properties, and Photoluminescence in CsSnI₃ Perovskite upon the Addition of SnF₂. Inorganic Chemistry, 2017, 56, 84-91.	1.9	105
93	The Origin of Lower Hole Carrier Concentration in Methylammonium Tin Halide Films Grown by a Vapor-Assisted Solution Process. ACS Energy Letters, 2017, 2, 22-28.	8.8	102
94	Chemical tuning of dynamic cation off-centering in the cubic phases of hybrid tin and lead halide perovskites. Chemical Science, 2017, 8, 5628-5635.	3.7	93
95	Subtle Roles of Sb and S in Regulating the Thermoelectric Properties of Nâ€Type PbTe to High Performance. Advanced Energy Materials, 2017, 7, 1700099.	10.2	118
96	TlSn₂I₅, a Robust Halide Antiperovskite Semiconductor for Î³-Ray Detection at Room Temperature. ACS Photonics, 2017, 4, 1805-1813.	3.2	33
97	Local Polar Fluctuations in Lead Halide Perovskite Crystals. Physical Review Letters, 2017, 118, 136001.	2.9	489
98	Spatially segregated free-carrier and exciton populations in individual lead halide perovskite grains. Nature Photonics, 2017, 11, 285-288.	15.6	83
99	Thin Films and Solar Cells Based on Semiconducting Two-Dimensional Ruddlesdenâ€“Popper (CH₃(CH₂)₃NH₃)₂(CH₃NH₃)_nn Perovskites. ACS Energy Letters, 2017, 2, 982-990.	8.8	335
100	High Members of the 2D Ruddlesden-Popper Halide Perovskites: Synthesis, Optical Properties, and Solar Cells of (CH3(CH2)3NH3)2(CH3NH3)4Pb5I16. CheM, 2017, 2, 427-440.	5.8	354
101	White-Light Emission and Structural Distortion in New Corrugated Two-Dimensional Lead Bromide Perovskites. Journal of the American Chemical Society, 2017, 139, 5210-5215.	6.6	536
102	Structureâ€“Band Gap Relationships in Hexagonal Polytypes and Low-Dimensional Structures of Hybrid Tin Iodide Perovskites. Inorganic Chemistry, 2017, 56, 56-73.	1.9	220
103	Importance of Reducing Vapor Atmosphere in the Fabrication of Tin-Based Perovskite Solar Cells. Journal of the American Chemical Society, 2017, 139, 836-842.	6.6	470
104	Selective enhancement of optical nonlinearity in two-dimensional organic-inorganic lead iodide perovskites. Nature Communications, 2017, 8, 742.	5.8	134
105	TlSbS₂: a Semiconductor for Hard Radiation Detection. ACS Photonics, 2017, 4, 2891-2898.	3.2	11
106	Two Regimes of Bandgap Red Shift and Partial Ambient Retention in Pressure-Treated Two-Dimensional Perovskites. ACS Energy Letters, 2017, 2, 2518-2524.	8.8	89
107	Universal Dynamics of Molecular Reorientation in Hybrid Lead Iodide Perovskites. Journal of the American Chemical Society, 2017, 139, 16875-16884.	6.6	129
108	Improved Crystal Growth of Tl₆SeI₄ for Î³-Ray Detection Material by Oxide Impurity Removal. Crystal Growth and Design, 2017, 17, 6096-6104.	1.4	6

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109	Multiphoton Absorption Order of CsPbBr₃ As Determined by Wavelength-Dependent Nonlinear Optical Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 4912-4917.	2.1	47
110	Efficient Lead-Free Solar Cells Based on Hollow {en}MASnI₃ Perovskites. Journal of the American Chemical Society, 2017, 139, 14800-14806.	6.6	230
111	Polar Fluctuations in Metal Halide Perovskites Uncovered by Acoustic Phonon Anomalies. ACS Energy Letters, 2017, 2, 2463-2469.	8.8	47
112	Enhanced photovoltaic performance and stability with a new type of hollow 3D perovskite {en}FASnI ₃. Science Advances, 2017, 3, e1701293.	4.7	325
113	Optical Properties and Modeling of 2D Perovskite Solar Cells. Solar Rrl, 2017, 1, 1700062.	3.1	48
114	Enhanced stability and thermoelectric figure-of-merit in copper selenide by lithium doping. Materials Today Physics, 2017, 1, 7-13.	2.9	93
115	Tunable White-Light Emission in Single-Cation-Templated Three-Layered 2D Perovskites (CH₃CH₂NH₃)₄Pb₃Br_{10â€“x}Cl_x Journal of the American Chemical Society, 2017, 139, 11956-11963.	6.6	349
116	Homologous Series of 2D Chalcogenides Csâ€“Agâ€“Biâ€“Q (Q = S, Se) with Ion-Exchange Properties. Journal of the American Chemical Society, 2017, 139, 12601-12609.	6.6	22
117	Semiconducting Ba₃Sn₃Sb₄ and Metallic Ba_{7â€“x}Sn₁₁Sb_{15â€“y} (x = 0.4, y = 0.6) Zintl Phases. Inorganic Chemistry, 2017, 56, 14251-14259.	1.9	3
118	New Type of 2D Perovskites with Alternating Cations in the Interlayer Space, (C(NH₂)₃)(CH₃NH₃)_nPb_nI_{3n} Structure, Properties, and Photovoltaic Performance. Journal of the American Chemical Society, 2017, 139, 16297-16309.	6.6	374
119	Interconversion between Free Charges and Bound Excitons in 2D Hybrid Lead Halide Perovskites. Journal of Physical Chemistry C, 2017, 121, 26566-26574.	1.5	123
120	Panoramic Synthesis as an Effective Materials Discovery Tool: The System Cs/Sn/P/Se as a Test Case. Journal of the American Chemical Society, 2017, 139, 10814-10821.	6.6	29
121	Changes in charge density vs changes in formal oxidation states: The case of Sn halide perovskites and their ordered vacancy analogues. Physical Review Materials, 2017, 1, .	0.9	43
122	High-efficiency two-dimensional Ruddlesdenâ€“Popper perovskite solar cells. Nature, 2016, 536, 312-316.	13.7	2,767
123	Optical-Vibrational Properties of the Cs₂SnX₆ (X = Cl, Br, I) Defect Perovskites and Hole-Transport Efficiency in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 11777-11785.	1.5	222
124	Ruddlesdenâ€“Popper Hybrid Lead Iodide Perovskite 2D Homologous Semiconductors. Chemistry of Materials, 2016, 28, 2852-2867.	3.2	1,607
125	Role of Organic Counterion in Lead- and Tin-Based Two-Dimensional Semiconducting Iodide Perovskites and Application in Planar Solar Cells. Chemistry of Materials, 2016, 28, 7781-7792.	3.2	228
126	Enhanced Structural Stability and Photo Responsiveness of CH₃NH₃SnI₃ Perovskite via Pressureâ€Induced Amorphization and Recrystallization. Advanced Materials, 2016, 28, 8663-8668.	11.1	176

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127	Iron(III) complexes with 2-pyridyl oxime ligands: Synthesis, structural and spectroscopic characterization, and magnetic studies. ChemistrySelect, 2016, 1, 147-156.	0.7	6
128	Dynamic Stereochemical Activity of the Sn²⁺ Lone Pair in Perovskite CsSnBr₃. Journal of the American Chemical Society, 2016, 138, 11820-11832.	6.6	217
129	Room Temperature Phase Transition in Methylammonium Lead Iodide Perovskite Thin Films Induced by Hydrohalic Acid Additives. ChemSusChem, 2016, 9, 2656-2665.	3.6	47
130	Direct Gap Semiconductors Pb₂BiS₂I₃, Sn₂BiS₂I₃, and Sn₂BiSI₅. Chemistry of Materials, 2016, 28, 7332-7343.	3.2	33
131	Polarization-selective three-photon absorption and subsequent photoluminescence in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CsPbBr</mml:mi><mml:mn>3</mml:mn></mml:msub></ crystal at room temperature. Physical Review B, 2016, 93, .	1.1	62
132	Broad Wavelength Tunable Robust Lasing from Single-Crystal Nanowires of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). ACS Nano, 2016, 10, 7963-7972.	7.3	507
133	Effect of Cation Rotation on Charge Dynamics in Hybrid Lead Halide Perovskites. Journal of Physical Chemistry C, 2016, 120, 16577-16585.	1.5	54
134	Reentrant Structural and Optical Properties and Large Positive Thermal Expansion in Perovskite Formamidinium Lead Iodide. Angewandte Chemie - International Edition, 2016, 55, 15392-15396.	7.2	128
135	TiO₂â€“ZnS Cascade Electron Transport Layer for Efficient Formamidinium Tin Iodide Perovskite Solar Cells. Journal of the American Chemical Society, 2016, 138, 14998-15003.	6.6	220
136	Carrier Diffusion Lengths of over 500 nm in Lead-Free Perovskite CH₃NH₃SnI₃ Films. Journal of the American Chemical Society, 2016, 138, 14750-14755.	6.6	252
137	Reentrant Structural and Optical Properties and Large Positive Thermal Expansion in Perovskite Formamidinium Lead Iodide. Angewandte Chemie, 2016, 128, 15618-15622.	1.6	29
138	Synthesis, structure, and electronic structure calculation of a new centrosymmetric borate Pb2O[BO2(OH)] based on anion-centered OPb4 tetrahedra. Journal of Solid State Chemistry, 2016, 240, 61-66.	1.4	6
139	Halide Perovskites: Poor Man's Highâ€Performance Semiconductors. Advanced Materials, 2016, 28, 5778-5793.	11.1	339
140	Dielectric and Thermodynamic Signatures of Low-Temperature Glassy Dynamics in the Hybrid Perovskites CH₃NH₃PbI₃ and HC(NH₂)₂PbI₃. Journal of Physical Chemistry Letters, 2016, 7, 376-381.	2.1	102
141	An Unusual Crystal Growth Method of the Chalcohalide Semiconductor, Î²-Hg₃S₂Cl₂: A New Candidate for Hard Radiation Detection. Crystal Growth and Design, 2016, 16, 2678-2684.	1.4	16
142	Overcoming Short-Circuit in Lead-Free CH₃NH₃SnI₃ Perovskite Solar Cells via Kinetically Controlled Gasâ€“Solid Reaction Film Fabrication Process. Journal of Physical Chemistry Letters, 2016, 7, 776-782.	2.1	290
143	Excitonic emissions and above-band-gap luminescence in the single-crystal perovskite semiconductors<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>CsPbB</mml:mi><mml:msub><mml:mi mathvariant="normal">r</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>CsPbC</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physi	1.1	250

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145	New Insulating Antiferromagnetic Quaternary Iridates MLa10Ir4O24 (Mâ€‰=â€‰Sr, Ba). Scientific Reports, 2015, 5, 11705.	1.6	2
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