David B Mitzi

List of Publications by Year
in descending order

256 papers	40,388 citations	3325 91 h-index	2375 198 g-index
272 all docs	272 docs citations	272 times ranked	22726 citing authors

#	Article	IF	Citations
1	Device Characteristics of CZTSSe Thinâ€Film Solar Cells with 12.6% Efficiency. Advanced Energy Materials, 2014, 4, 1301465.	10.2	2,651
2	Organicâ€“Inorganic Perovskites: Structural Versatility for Functional Materials Design. Chemical Reviews, 2016, 116, 4558-4596.	23.0	2,147
3	Organic-Inorganic Hybrid Materials as Semiconducting Channels in Thin-Film Field-Effect Transistors. Science, 1999, 286, 945-947.	6.0	1,839
4	The path towards a high-performance solution-processed kesterite solar cell. Solar Energy Materials and Solar Cells, 2011, 95, 1421-1436.	3.0	1,118
5	Highâ€Efficiency Solar Cell with Earthâ€Abundant Liquidâ€Processed Absorber. Advanced Materials, 2010, 22, E156-9.	11.1	1,035
6	Materials interface engineering for solution-processed photovoltaics. Nature, 2012, 488, 304-312.	13.7	1,000
7	Conducting tin halides with a layered organic-based perovskite structure. Nature, 1994, 369, 467-469.	13.7	933
8	Beyond 11% Efficiency: Characteristics of Stateâ€ofâ€theâ€Art Cu₂ZnSn(S,Se)₄ Solar Cells. Advanced Energy Materials, 2013, 3, 34-38.	10.2	922
9	Templating and structural engineering in organicâ€“inorganic perovskites. Dalton Transactions RSC, 2001, , 1-12.	2.3	794
10	Device characteristics of a 10.1% hydrazineâ€processed Cu₂ZnSn(Se,S)₄ solar cell. Progress in Photovoltaics: Research and Applications, 2012, 20, 6-11.	4.4	720
11	Conducting Layered Organic-inorganic Halides Containing <110>-Oriented Perovskite Sheets. Science, 1995, 267, 1473-1476.	6.0	718
12	Thin-Film Preparation and Characterization of Cs₃Sb₂I₉: A Lead-Free Layered Perovskite Semiconductor. Chemistry of Materials, 2015, 27, 5622-5632.	3.2	653
13	Organic-inorganic electronics. IBM Journal of Research and Development, 2001, 45, 29-45.	3.2	614
14	Band tailing and efficiency limitation in kesterite solar cells. Applied Physics Letters, 2013, 103, .	1.5	576
15	Synthesis, Structure, and Properties of Organic-Inorganic Perovskites and Related Materials. Progress in Inorganic Chemistry, 2007, , 1-121.	3.0	566
16	Searching for promising new perovskite-based photovoltaic absorbers: the importance of electronic dimensionality. Materials Horizons, 2017, 4, 206-216.	6.4	553
17	Synthesis and Characterization of Organicâ"Inorganic Perovskite Thin Films Prepared Using a Versatile Two-Step Dipping Technique. Chemistry of Materials, 1998, 10, 403-411.	3.2	548
18	Synthesis, Crystal Structure, and Optical and Thermal Properties of (C4H9NH3)2MI4(M = Ge, Sn, Pb). Chemistry of Materials, 1996, 8, 791-800.	3.2	504

#	Article	IF	Citations
19	Employing Lead Thiocyanate Additive to Reduce the Hysteresis and Boost the Fill Factor of Planar Perovskite Solar Cells. Advanced Materials, 2016, 28, 5214-5221.	11.1	487
20	High-mobility ultrathin semiconducting films prepared by spin coating. Nature, 2004, 428, 299-303.	13.7	485
21	Synthetic Approaches for Halide Perovskite Thin Films. Chemical Reviews, 2019, 119, 3193-3295.	23.0	454
22	Tuning the Band Gap in Hybrid Tin Iodide Perovskite Semiconductors Using Structural Templating. Inorganic Chemistry, 2005, 44, 4699-4705.	1.9	452
23	Parity-Forbidden Transitions and Their Impact on the Optical Absorption Properties of Lead-Free Metal Halide Perovskites and Double Perovskites. Journal of Physical Chemistry Letters, 2017, 8, 2999-3007.	2.1	441
24	Bandgap Engineering of Leadâ€Free Double Perovskite Cs₂AgBiBr₆ through Trivalent Metal Alloying. Angewandte Chemie - International Edition, 2017, 56, 8158-8162.	7.2	425
25	Electroluminescence from an Organicâ^'Inorganic Perovskite Incorporating a Quaterthiophene Dye within Lead Halide Perovskite Layers. Chemistry of Materials, 1999, 11, 3028-3030.	3.2	424
26	High Efficiency Cu₂ZnSn(S,Se)₄ Solar Cells by Applying a Double In₂S₃/CdS Emitter. Advanced Materials, 2014, 26, 7427-7431.	11.1	400
27	Two-Dimensional Lead(II) Halide-Based Hybrid Perovskites Templated by Acene Alkylamines: Crystal Structures, Optical Properties, and Piezoelectricity. Inorganic Chemistry, 2017, 56, 9291-9302.	1.9	397
28	Hybrid Organicâ€"Inorganic Perovskites (HOIPs): Opportunities and Challenges. Advanced Materials, 2015, 27, 5102-5112.	11.1	372
29	Thin-Film Deposition of Organicâ^'Inorganic Hybrid Materials. Chemistry of Materials, 2001, 13, 3283-3298.	3.2	363
30	A Highâ€Efficiency Solutionâ€Deposited Thinâ€Film Photovoltaic Device. Advanced Materials, 2008, 20, 3657-3662.	11.1	343
31	Solutionâ€processed Cu(In,Ga)(S,Se)₂ absorber yielding a 15.2% efficient solar cell. Progress in Photovoltaics: Research and Applications, 2013, 21, 82-87.	4.4	343
32	Loss mechanisms in hydrazine-processed Cu2ZnSn(Se,S)4 solar cells. Applied Physics Letters, 2010, 97, .	1.5	341
33	Thin-Film Deposition and Characterization of a Sn-Deficient Perovskite Derivative Cs₂SnI₆. Chemistry of Materials, 2016, 28, 2315-2322.	3.2	329
34	Structurally Tailored Organicâ^'Inorganic Perovskites:Â Optical Properties and Solution-Processed Channel Materials for Thin-Film Transistors. Chemistry of Materials, 2001, 13, 3728-3740.	3.2	326
35	Solution-processed inorganic semiconductors. Journal of Materials Chemistry, 2004, 14, 2355.	6.7	320
36	The current status and future prospects of kesterite solar cells: a brief review. Progress in Photovoltaics: Research and Applications, 2016, 24, 879-898.	4.4	316

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37	Design, Structure, and Optical Properties of Organicâ^'Inorganic Perovskites Containing an Oligothiophene Chromophore. Inorganic Chemistry, 1999, 38, 6246-6256.	1.9	314
38	Low band gap liquid-processed CZTSe solar cell with 10.1% efficiency. Energy and Environmental Science, 2012, 5, 7060.	15.6	303
39	Nonâ€vacuum methods for formation of Cu(In, Ga)(Se, S)₂ thin film photovoltaic absorbers. Progress in Photovoltaics: Research and Applications, 2010, 18, 434-452.	4.4	297
40	The state and future prospects of kesterite photovoltaics. Energy and Environmental Science, 2013, 6, 3171.	15.6	294
41	Growth and properties of oxygen- and ion-dopedBi2Sr2CaCu2O8+Î´single crystals. Physical Review B, 1990, 41, 6564-6574.	1.1	280
42	Synthesis and Characterization of [NH2C(I):NH2]3MI5 (M = Sn, Pb): Stereochemical Activity in Divalent Tin and Lead Halides Containing Single .ltbbrac.110.rtbbrac. Perovskite Sheets. Journal of the American Chemical Society, 1995, 117, 5297-5302.	6.6	275
43	Band alignment at the Cu2ZnSn(SxSe1â^'x)4/CdS interface. Applied Physics Letters, 2011, 98, .	1.5	256
44	Intrinsic Instability of Cs₂In(I)M(III)X₆ (M = Bi, Sb; X = Halogen) Double Perovskites: A Combined Density Functional Theory and Experimental Study. Journal of the American Chemical Society, 2017, 139, 6054-6057.	6.6	253
45	Defect Engineering in Multinary Earthâ€Abundant Chalcogenide Photovoltaic Materials. Advanced Energy Materials, 2017, 7, 1602366.	10.2	250
46	Anomalous spectral weight transfer at the superconducting transition ofBi2Sr2CaCu2O8+Î´. Physical Review Letters, 1991, 66, 2160-2163.	2.9	248
47	Observation of a commensurate array of flux chains in tilted flux lattices in Bi-Sr-Ca-Cu-O single crystals. Physical Review Letters, 1991, 66, 112-115.	2.9	223
48	Organicâ^'Inorganic Perovskites Containing Trivalent Metal Halide Layers:Â The Templating Influence of the Organic Cation Layer. Inorganic Chemistry, 2000, 39, 6107-6113.	1.9	221
49	Direct Liquid Coating of Chalcopyrite Lightâ€Absorbing Layers for Photovoltaic Devices. European Journal of Inorganic Chemistry, 2010, 2010, 17-28.	1.0	216
50	Solution Processing of Chalcogenide Semiconductors via Dimensional Reduction. Advanced Materials, 2009, 21, 3141-3158.	11.1	208
51	Optical designs that improve the efficiency of Cu₂ZnSn(S,Se)₄solar cells. Energy and Environmental Science, 2014, 7, 1029-1036.	15.6	200
52	Organic-to-inorganic structural chirality transfer in a 2D hybrid perovskite and impact on Rashba-Dresselhaus spin-orbit coupling. Nature Communications, 2020, 11, 4699.	5.8	200
53	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
54	Electronic properties of the Cu2ZnSn(Se,S)4 absorber layer in solar cells as revealed by admittance spectroscopy and related methods. Applied Physics Letters, 2012, 100, .	1.5	194

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55	12% Efficiency CuIn(Se,S)₂ Photovoltaic Device Prepared Using a Hydrazine Solution Process. Chemistry of Materials, 2010, 22, 1010-1014.	3.2	189
56	The Steady Rise of Kesterite Solar Cells. ACS Energy Letters, 2017, 2, 776-779.	8.8	189
57	Electrical doping in halide perovskites. Nature Reviews Materials, 2021, 6, 531-549.	23.3	189
58	The Role of Sodium as a Surfactant and Suppressor of Nonâ€Radiative Recombination at Internal Surfaces in Cu₂ZnSnS₄. Advanced Energy Materials, 2015, 5, 1400849.	10.2	186
59	Thin Film Deposition of Organicâ^'Inorganic Hybrid Materials Using a Single Source Thermal Ablation Technique. Chemistry of Materials, 1999, 11, 542-544.	3.2	185
60	Cd-free buffer layer materials on Cu2ZnSn(SxSe1â^'x)4: Band alignments with ZnO, ZnS, and In2S3. Applied Physics Letters, 2012, 100, .	1.5	178
61	SQUID picovoltometry of single crystalBi2Sr2CaCu2O8+Î´: Observation of the crossover from high-temperature Arrhenius to low-temperature vortex-glass behavior. Physical Review Letters, 1992, 68, 2672-2675.	2.9	176
62	Alloying and Defect Control within Chalcogenide Perovskites for Optimized Photovoltaic Application. Chemistry of Materials, 2016, 28, 821-829.	3.2	175
63	Structure and Optical Properties of Several Organicâ^'Inorganic Hybrids Containing Corner-Sharing Chains of Bismuth Iodide Octahedra. Inorganic Chemistry, 2001, 40, 2096-2104.	1.9	174
64	Prospects and performance limitations for Cuâ€"Znâ€"Snâ€"Sâ€"Se photovoltaic technology. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20110432.	1.6	166
65	Hydrazine-Processed Ge-Substituted CZTSe Solar Cells. Chemistry of Materials, 2012, 24, 4588-4593.	3.2	165
66	The Origin of the Superstructure in Bi2Sr2CaCu2O8+dgr as Revealed by Scanning Tunneling Microscopy. Science, 1988, 242, 1673-1675.	6.0	164
67	Structural and elemental characterization of high efficiency Cu2ZnSnS4 solar cells. Applied Physics Letters, 2011, 98, .	1.5	158
68	Additive engineering for high-performance room-temperature-processed perovskite absorbers with micron-size grains and microsecond-range carrier lifetimes. Energy and Environmental Science, 2017, 10, 2365-2371.	15.6	157
69	Observation of a hexatic vortex glass in flux lattices of the high-TcsuperconductorBi2.1Sr1.9Ca0.9Cu2O8+Î´. Physical Review Letters, 1990, 64, 2312-2315.	2.9	152
70	Direct-Bandgap 2D Silverâ€"Bismuth Iodide Double Perovskite: The Structure-Directing Influence of an Oligothiophene Spacer Cation. Journal of the American Chemical Society, 2019, 141, 7955-7964.	6.6	151
71	Angle-resolved-photoemission study ofBi2Sr2CaCu2O8+Î´: Metallicity of the Bi-O plane. Physical Review Letters, 1990, 65, 3056-3059.	2.9	141
72	Intercalated Organicâ^'Inorganic Perovskites Stabilized by Fluoroarylâ^'Aryl Interactions. Inorganic Chemistry, 2002, 41, 2134-2145.	1.9	139

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73	Optimization of CIGS-Based PV Device through Antimony Doping. Chemistry of Materials, 2010, 22, 285-287.	3.2	139
74	Progress towards marketable earth-abundant chalcogenide solar cells. Thin Solid Films, 2011, 519, 7378-7381.	0.8	137
75	Hydrazine-based deposition route for device-quality CIGS films. Thin Solid Films, 2009, 517, 2158-2162.	0.8	135
76	Photovoltaic Properties of Two-Dimensional (CH₃NH₃)₂Pb(SCN)₂I₂ Perovskite: A Combined Experimental and Density Functional Theory Study. Journal of Physical Chemistry Letters, 2016, 7, 1213-1218.	2.1	135
77	Defects in Cu(In,Ga)Se₂ Chalcopyrite Semiconductors: A Comparative Study of Material Properties, Defect States, and Photovoltaic Performance. Advanced Energy Materials, 2011, 1, 845-853.	10.2	134
78	BaCu₂Sn(S,Se)₄: Earth-Abundant Chalcogenides for Thin-Film Photovoltaics. Chemistry of Materials, 2016, 28, 4771-4780.	3.2	131
79	Distribution of flux-pinning energies inYBa2Cu3O7âˆ’Î´andBi2Sr2CaCu2O8+Î´from flux noise. Physical Review Letters, 1990, 64, 72-75.	2.9	126
80	Photovoltaic Devices: Highâ€Efficiency Solar Cell with Earthâ€Abundant Liquidâ€Processed Absorber (Adv.) Tj ETQq0 0 0 rgBT /Overlock	11.1	120
81	Impact of Nanoscale Elemental Distribution in Highâ€Performance Kesterite Solar Cells. Advanced Energy Materials, 2015, 5, 1402180.	10.2	120
82	Fully Air-Bladed High-Efficiency Perovskite Photovoltaics. Joule, 2019, 3, 402-416.	11.7	119
83	Low-Voltage Transistor Employing a High-Mobility Spin-Coated Chalcogenide Semiconductor. Advanced Materials, 2005, 17, 1285-1289.	11.1	117
84	Translational and bond-orientational order in the vortex lattice of the high-TcsuperconductorBi2.1Sr1.9Ca0.9Cu2O8+Î´. Physical Review Letters, 1991, 66, 2270-2273.	2.9	115
85	Superconductivity and magnetism in the high-Tcsuperconductor YBaCuO. Physical Review Letters, 1987, 58, 1574-1576.	2.9	113
86	Earthâ€Abundant Chalcogenide Photovoltaic Devices with over 5% Efficiency Based on a Cu₂BaSn(S,Se)₄ Absorber. Advanced Materials, 2017, 29, 1606945.	11.1	112
87	Magnetic penetration depth in the organic superconductor Îº-[BEDT-TTF]2Cu[NCS]2. Physical Review Letters, 1990, 64, 1293-1296.	2.9	107
88	Semiconducting Perovskites (2-XC6H4C2H4NH3)2SnI4(X = F, Cl, Br):Â Steric Interaction between the Organic and Inorganic Layers. Inorganic Chemistry, 2003, 42, 2031-2039.	1.9	104
89	Tunable Semiconductors: Control over Carrier States and Excitations in Layered Hybrid Organic-Inorganic Perovskites. Physical Review Letters, 2018, 121, 146401.	2.9	103
90	Solution-Processed Metal Chalcogenide Films for p-Type Transistors. Chemistry of Materials, 2006, 18, 587-590.	3.2	102

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91	Electron tunneling and the energy gap inBi2Sr2CaCu2Ox. Physical Review B, 1989, 39, 801-803.	1.1	98
92	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	10.2	93
93	Nuclear relaxation behavior of the superconducting cuprates:Bi2Sr2CaCu2O8. Physical Review B, 1991, 44, 7760-7763.	1.1	92
94	Minority carrier diffusion length extraction in Cu₂ZnSn(Se,S)₄ solar cells. Journal of Applied Physics, 2013, 114, 114511.	1.1	91
95	Room-temperature fabrication of a delafossite CuCrO₂hole transport layer for perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 469-477.	5.2	91
96	Suns-VOC characteristics of high performance kesterite solar cells. Journal of Applied Physics, 2014, 116, .	1.1	90
97	Effects of Cd Diffusion and Doping in High-Performance Perovskite Solar Cells Using CdS as Electron Transport Layer. Journal of Physical Chemistry C, 2016, 120, 16437-16445.	1.5	89
98	Chemical Origin of the Stability Difference between Copper(I)â€•and Silver(I)â€Based Halide Double Perovskites. Angewandte Chemie - International Edition, 2017, 56, 12107-12111.	7.2	89
99	Synthesis, Structure, and Thermal Properties of Soluble Hydrazinium Germanium(IV) and Tin(IV) Selenide Salts. Inorganic Chemistry, 2005, 44, 3755-3761.	1.9	87
100	I₂â€“IIâ€“IVâ€“VI₄ (I = Cu, Ag; II = Sr, Ba; IV = Ge, Sn; VI = S, Se): Chalcogenides for Thin-Film Photovoltaics. Chemistry of Materials, 2017, 29, 7868-7879.	3.2	87
101	Fill Factor Losses in Cu₂ZnSn(S_xSe_{1â^'x})₄ Solar Cells: Insights from Physical and Electrical Characterization of Devices and Exfoliated Films. Advanced Energy Materials, 2016, 6, 1501609.	10.2	84
102	Structure and Electronic Properties of Grain Boundaries in Earth-Abundant Photovoltaic Absorber Cu₂ZnSnSe₄. ACS Nano, 2011, 5, 8613-8619.	7.3	83
103	Semi-empirical device model for Cu2ZnSn(S,Se)4 solar cells. Applied Physics Letters, 2014, 105, .	1.5	81
104	Efficient Generation of Longâ€Lived Triplet Excitons in 2D Hybrid Perovskite. Advanced Materials, 2017, 29, 1604278.	11.1	81
105	Pressure-induced phase transitions and templating effect in three-dimensional organic-inorganic hybrid perovskites. Physical Review B, 2003, 68, .	1.1	80
106	Electronic and elemental properties of the Cu2ZnSn(S,Se)4 surface and grain boundaries. Applied Physics Letters, 2014, 104, .	1.5	79
107	Chemical Origin of the Stability Difference between Copper(I)â€•and Silver(I)â€Based Halide Double Perovskites. Angewandte Chemie, 2017, 129, 12275-12279.	1.6	79
108	Point-contact electron tunneling into the high-Tcsuperconductor Y-Ba-Cu-O. Physical Review B, 1987, 35, 8850-8852.	1.1	78

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109	Structural descriptor for enhanced spin-splitting in 2D hybrid perovskites. Nature Communications, 2021, 12, 4982.	5.8	78
110	Introduction: Perovskites. Chemical Reviews, 2019, 119, 3033-3035.	23.0	76
111	SnI42--Based Hybrid Perovskites Templated by Multiple Organic Cations:Â Combining Organic Functionalities through Noncovalent Interactions. Chemistry of Materials, 2003, 15, 3632-3637.	3.2	75
112	Efficient and Stable Pt/TiO₂/CdS/Cu₂BaSn(S,Se)₄ Photocathode for Water Electrolysis Applications. ACS Energy Letters, 2018, 3, 177-183.	8.8	75
113	Flux-lattice melting, anisotropy, and the role of interlayer coupling in Bi-Sr-Ca-Cu-O single crystals. Physical Review B, 1991, 44, 7737-7740.	1.1	74
114	Antimony assisted low-temperature processing of CuIn1â^'xGaxSe2â^'ySy solar cells. Thin Solid Films, 2010, 519, 852-856.	0.8	74
115	Preparation and Properties of (C4H9NH3)2EuI4:Â A Luminescent Organicâ^'Inorganic Perovskite with a Divalent Rare-Earth Metal Halide Framework. Chemistry of Materials, 1997, 9, 2990-2995.	3.2	73
116	Solvent properties of hydrazine in the preparation of metal chalcogenide bulk materials and films. Dalton Transactions, 2009, , 6078.	1.6	73
117	Evidence fork-dependent, in-plane anisotropy of the superconducting gap inBi2Sr2CaCu2O8+Î´. Physical Review B, 1992, 46, 11830-11834.	1.1	72
118	[CH3(CH2)11NH3]SnI3:Â A Hybrid Semiconductor with MoO3-type Tin(II) Iodide Layers. Inorganic Chemistry, 2003, 42, 6589-6591.	1.9	72
119	Viability of Lead-Free Perovskites with Mixed Chalcogen and Halogen Anions for Photovoltaic Applications. Journal of Physical Chemistry C, 2016, 120, 6435-6441.	1.5	72
120	Electron-tunneling studies of thin films of high-Tcsuperconducting La-Sr-Cu-O. Physical Review B, 1987, 35, 7228-7231.	1.1	68
121	[(CH3)3NCH2CH2NH3]SnI4:Â A Layered Perovskite with Quaternary/Primary Ammonium Dications and Short Interlayer Iodineâ^'Iodine Contacts. Inorganic Chemistry, 2003, 42, 1400-1402.	1.9	67
122	Melt Processing of Hybrid Organicâ€"Inorganic Lead Iodide Layered Perovskites. Chemistry of Materials, 2017, 29, 6200-6204.	3.2	67
123	Carrier-resolved photo-Hall effect. Nature, 2019, 575, 151-155.	13.7	66
124	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	10.2	66
125	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	11.7	66
126	Magnetic penetration depth and flux dynamics in single-crystalBi2Sr2CaCu2O8+Î´. Physical Review Letters, 1991, 67, 3152-3155.	2.9	65

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127	Synthesis and Characterization of [NH2C(I)NH2]2ASnI5 with A = Iodoformamidinium or Formamidinium:â€‰The Chemistry of Cyanamide and Tin(II) Iodide in Concentrated Aqueous Hydriodic Acid Solutions. Inorganic Chemistry, 1998, 37, 321-327.	1.9	65
128	Crystal Structure of AgBi₂I₇ Thin Films. Journal of Physical Chemistry Letters, 2016, 7, 3903-3907.	2.1	64
129	Dual-source evaporation of silver bismuth iodide films for planar junction solar cells. Journal of Materials Chemistry A, 2019, 7, 2095-2105.	5.2	63
130	Is Cs₂TiBr₆ a promising Pb-free perovskite for solar energy applications?. Journal of Materials Chemistry A, 2020, 8, 4049-4054.	5.2	62
131	Novel Strategy for Diameter-Selective Separation and Functionalization of Single-Wall Carbon Nanotubes. Nano Letters, 2008, 8, 469-472.	4.5	60
132	Reaction of Rb and oxygen overlayers with single-crystallineBi2Sr2CaCu2O8+Î´superconductors. Physical Review B, 1989, 39, 2890-2893.	1.1	58
133	N4H9Cu7S4:â€‰ A Hydrazinium-Based Salt with a Layered Cu7S4- Framework. Inorganic Chemistry, 2007, 46, 926-931.	1.9	58
134	Report from the third workshop on future directions of solid-state chemistry: The status of solid-state chemistry and its impact in the physical sciences. Progress in Solid State Chemistry, 2008, 36, 1-133.	3.9	58
135	Surface structure of Bi2Sr2CaCu2O8+Î´highâ€temperature superconductors studied using lowâ€energy electron diffraction. Applied Physics Letters, 1988, 53, 2563-2565.	1.5	57
136	O 1score levels inBi2Sr2CaCu2O8+Î´single crystals. Physical Review B, 1991, 43, 3085-3090.	1.1	57
137	Carrier Dynamics Engineering for High-Performance Electron-Transport-Layer-free Perovskite Photovoltaics. CheM, 2018, 4, 2405-2417.	5.8	57
138	Alkylâ€“Aryl Cation Mixing in Chiral 2D Perovskites. Journal of the American Chemical Society, 2021, 143, 18114-18120.	6.6	57
139	Melting temperature suppression of layered hybrid lead halide perovskites via organic ammonium cation branching. Chemical Science, 2019, 10, 1168-1175.	3.7	55
140	Origin of Broad-Band Emission and Impact of Structural Dimensionality in Tin-Alloyed Ruddlesdenâ€“Popper Hybrid Lead Iodide Perovskites. ACS Energy Letters, 2020, 5, 347-352.	8.8	55
141	Synthesis and Characterization of an Earth-Abundant Cu₂BaSn(S,Se)₄ Chalcogenide for Photoelectrochemical Cell Application. Journal of Physical Chemistry Letters, 2016, 7, 4554-4561.	2.1	54
142	Reversible Crystalâ€“Glass Transition in a Metal Halide Perovskite. Advanced Materials, 2021, 33, e2005868.	11.1	54
143	NMR Studies of Spin Excitations in SuperconductingBi2Sr2CaCu2O8+Î´Single Crystals. Physical Review Letters, 1994, 73, 1287-1290.	2.9	53
144	A Versatile Thin-Film Deposition Method for Multidimensional Semiconducting Bismuth Halides. Chemistry of Materials, 2018, 30, 3538-3544.	3.2	52

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145	Impact of PbI₂ Passivation and Grain Size Engineering in CH₃NH₃PbI₃ Solar Absorbers as Revealed by Carrierâ€Resolved Photoâ€Hall Technique. Advanced Energy Materials, 2019, 9, 1902706.	10.2	52
146	Raman scattering spectra of superconductingBi2Sr2CaCu2O8single crystals. Physical Review B, 1988, 38, 11955-11957.	1.1	50
147	Synthesis and Solid State Chemistry of CH3BiI2:Â A Structure with an Extended One-Dimensional Organometallic Framework. Journal of the American Chemical Society, 1997, 119, 724-732.	6.6	50
148	Polymorphic One-Dimensional (N2H4)2ZnTe:Â Soluble Precursors for the Formation of Hexagonal or Cubic Zinc Telluride. Inorganic Chemistry, 2005, 44, 7078-7086.	1.9	50
149	Low-Temperature Melt Processing of Organicâ"Inorganic Hybrid Films. Chemistry of Materials, 2002, 14, 2839-2841.	3.2	49
150	Electronically active defects in the Cu2ZnSn(Se,S)4 alloys as revealed by transient photocapacitance spectroscopy. Applied Physics Letters, 2012, 101, 142106.	1.5	48
151	Tunable internal quantum well alignment in rationally designed oligomer-based perovskite films deposited by resonant infrared matrix-assisted pulsed laser evaporation. Materials Horizons, 2019, 6, 1707-1716.	6.4	48
152	Symmetry of the oxygen hole states in Bi2Sr2CaCu2O8 investigated by XAS. Physica C: Superconductivity and Its Applications, 1989, 157, 260-262.	0.6	45
153	Heterovalent B-Site Co-Alloying Approach for Halide Perovskite Bandgap Engineering. ACS Energy Letters, 2017, 2, 2486-2490.	8.8	44
154	Low-temperature specific heat of single-crystalBi2CaSr2Cu2O8andTl2Ca2Ba2Cu3O10. Physical Review B, 1989, 39, 12391-12394.	1.1	43
155	Solution-Processed Earth-Abundant Cu₂BaSn(S,Se)₄ Solar Absorber Using a Low-Toxicity Solvent. Chemistry of Materials, 2018, 30, 6116-6123.	3.2	43
156	Defect dependence of the irreversibility line inBi2Sr2CaCu2O8single crystals. Physical Review B, 1992, 46, 5615-5620.	1.1	41
157	Interfacial Effects during Rapid Lamination within MAPbI₃ Thin Films and Solar Cells. ACS Applied Energy Materials, 2019, 2, 5083-5093.	2.5	41
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