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	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	11.7	66
2	Cubic Crystal Structure Formation and Optical Properties within the Agâ€“B^{II}â€“M^{IV}â€“X (B^{II} = Sr, Pb; M^{IV} = Si, Ge, Sn; X = S, Se) Family of Semiconductors. Inorganic Chemistry, 2022, 61, 2929-2944.	1.9	3
3	Impact of Structural Distortions on the Optoelectronic and Spin-Related Properties of Two-Dimensional Hybrid Perovskites. , 2022, , 1-61.		1
4	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	10.2	93
5	Reversible Crystalâ€“Glass Transition in a Metal Halide Perovskite. Advanced Materials, 2021, 33, e2005868.	11.1	54
6	Optoelectronic and material properties of solution-processed Earth-abundant Cu2BaSn(S, Se)4 films for solar cell applications. Nano Energy, 2021, 80, 105556.	8.2	23
7	Porous Cu₂BaSn(S,Se)₄ Film as a Photocathode Using Non-Toxic Solvent and a Ball-Milling Approach. ACS Applied Energy Materials, 2021, 4, 81-87.	2.5	7
8	p-Type molecular doping by charge transfer in halide perovskite. Materials Advances, 2021, 2, 2956-2965.	2.6	17
9	Mechanism of Additive-Assisted Room-Temperature Processing of Metal Halide Perovskite Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 13212-13225.	4.0	27
10	Electrical doping in halide perovskites. Nature Reviews Materials, 2021, 6, 531-549.	23.3	189
11	Remarkably Weak Anisotropy in Thermal Conductivity of Two-Dimensional Hybrid Perovskite Butylammonium Lead Iodide Crystals. Nano Letters, 2021, 21, 3708-3714.	4.5	26
12	Structural, Optical, and Electronic Properties of Two Quaternary Chalcogenide Semiconductors: Ag₂SrSiS₄ and Ag₂SrGeS₄. Inorganic Chemistry, 2021, 60, 12206-12217.	1.9	8
13	Structural descriptor for enhanced spin-splitting in 2D hybrid perovskites. Nature Communications, 2021, 12, 4982.	5.8	78
14	Optoelectronic property comparison for isostructural Cu₂BaGeSe₄ and Cu₂BaSnS₄ solar absorbers. Journal of Materials Chemistry A, 2021, 9, 23619-23630.	5.2	10
15	Alkylâ€“Aryl Cation Mixing in Chiral 2D Perovskites. Journal of the American Chemical Society, 2021, 143, 18114-18120.	6.6	57
16	Growth and Photovoltaic Device Application of Cu₂BaGe_{1â€“x}Sn_xSe₄ Films Prepared by Selenization of Sequentially Deposited Precursors. ACS Applied Energy Materials, 2021, 4, 11528-11536.	2.5	5
17	Photoluminescence study of solution-deposited Cu2BaSnS4 thin films. APL Materials, 2021, 9, .	2.2	5
18	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	10.2	66

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19	Solution-based synthesis of kesterite thin film semiconductors. JPhys Energy, 2020, 2, 012003.	2.3	38
20	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
21	Bifacial Perovskite Solar Cells via a Rapid Lamination Process. ACS Applied Energy Materials, 2020, 3, 9493-9497.	2.5	12
22	Electronic structure and photophysics of a supermolecular iron complex having a long MLCT-state lifetime and panchromatic absorption. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20430-20437.	3.3	23
23	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
24	High-Quality MAPbBr₃ Cuboid Film with Promising Optoelectronic Properties Prepared by a Hot Methylamine Precursor Approach. ACS Applied Materials & Interfaces, 2020, 12, 24498-24504.	4.0	14
25	High-temperature decomposition of Cu₂BaSnS₄ with Sn loss reveals newly identified compound Cu₂Ba₃Sn₂S₈. Journal of Materials Chemistry A, 2020, 8, 11346-11353.	5.2	8
26	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
27	Structural Tolerance Factor Approach to Defect-Resistant I₂-II-IV-X₄ Semiconductor Design. Chemistry of Materials, 2020, 32, 1636-1649.	3.2	25
28	Is Cs₂TiBr₆ a promising Pb-free perovskite for solar energy applications?. Journal of Materials Chemistry A, 2020, 8, 4049-4054.	5.2	62
29	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
30	Carrier-resolved photo-Hall effect. Nature, 2019, 575, 151-155.	13.7	66
31	Mg Doped CuCrO2 as Efficient Hole Transport Layers for Organic and Perovskite Solar Cells. Nanomaterials, 2019, 9, 1311.	1.9	24
32	Resolving Rotational Stacking Disorder and Electronic Level Alignment in a 2D Oligothiophene-Based Lead Iodide Perovskite. Chemistry of Materials, 2019, 31, 8523-8532.	3.2	26
33	Melting temperature suppression of layered hybrid lead halide perovskites via organic ammonium cation branching. Chemical Science, 2019, 10, 1168-1175.	3.7	55
34	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
35	Interfacial Effects during Rapid Lamination within MAPbI₃ Thin Films and Solar Cells. ACS Applied Energy Materials, 2019, 2, 5083-5093.	2.5	41
36	Phase-Pure Hybrid Layered Lead Iodide Perovskite Films Based on a Two-Step Melt-Processing Approach. Chemistry of Materials, 2019, 31, 4267-4274.	3.2	37

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37	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
38	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
39	Introduction: Perovskites. Chemical Reviews, 2019, 119, 3033-3035.	23.0	76
40	Stereochemically active lead chloride enantiomers mediated by homochiral organic cation. Polyhedron, 2019, 158, 445-448.	1.0	15
41	Fully Air-Bladed High-Efficiency Perovskite Photovoltaics. Joule, 2019, 3, 402-416.	11.7	119
42	Synthetic Approaches for Halide Perovskite Thin Films. Chemical Reviews, 2019, 119, 3193-3295.	23.0	454
43	Phase and film formation pathway for vacuum-deposited Cu2BaSn(S,Se)4 absorber layers. Physical Review Materials, 2019, 3, .	0.9	10
44	MAPbI₃ Solar Cells with Absorber Deposited by Resonant Infrared Matrix-Assisted Pulsed Laser Evaporation. ACS Energy Letters, 2018, 3, 270-275.	8.8	32
45	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
46	A Versatile Thin-Film Deposition Method for Multidimensional Semiconducting Bismuth Halides. Chemistry of Materials, 2018, 30, 3538-3544.	3.2	52
47	Deposition of Methylammonium Lead Triiodide by Resonant Infrared Matrix-Assisted Pulsed Laser Evaporation. Journal of Electronic Materials, 2018, 47, 917-926.	1.0	19
48	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
49	Photovoltaic Effect in Indium(I) Iodide Thin Films. Chemistry of Materials, 2018, 30, 8226-8232.	3.2	13
50	Tunable Semiconductors: Control over Carrier States and Excitations in Layered Hybrid Organic-Inorganic Perovskites. Physical Review Letters, 2018, 121, 146401.	2.9	103
51	Grain-Resolved Ultrafast Photophysics in Cu₂BaSnS_{4â€“x}Se_x Semiconductors Using Pumpâ€“Probe Diffuse Reflectance Spectroscopy and Microscopy. ACS Applied Materials & Interfaces, 2018, 10, 39615-39623.	4.0	13
52	Carrier Dynamics Engineering for High-Performance Electron-Transport-Layer-free Perovskite Photovoltaics. CheM, 2018, 4, 2405-2417.	5.8	57
53	Band Gap Tailoring and Structure-Composition Relationship within the Alloyed Semiconductor Cu₂BaGe_{1â€“x}Sn_xSe₄. Chemistry of Materials, 2018, 30, 6566-6574.	3.2	25
54	Phase Stability and Electronic Structure of Prospective Sb-Based Mixed Sulfide and Iodide 3D Perovskite (CH₃NH₃)SbSI₂. Journal of Physical Chemistry Letters, 2018, 9, 3829-3833.	2.1	24

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55	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
56	Resonant Infrared Matrix-Assisted Pulsed Laser Evaporation of Hybrid Perovskites. , 2018, , .		0
57	Defect Engineering in Multinary Earthâ€Abundant Chalcogenide Photovoltaic Materials. Advanced Energy Materials, 2017, 7, 1602366.	10.2	250
58	The Steady Rise of Kesterite Solar Cells. ACS Energy Letters, 2017, 2, 776-779.	8.8	189
59	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
60	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
61	Bandgap Engineering of Leadâ€Free Double Perovskite Cs₂AgBiBr₆ through Trivalent Metal Alloying. Angewandte Chemie - International Edition, 2017, 56, 8158-8162.	7.2	425
62	Bandgap Engineering of Leadâ€Free Double Perovskite Cs 2 AgBiBr 6 through Trivalent Metal Alloying. Angewandte Chemie, 2017, 129, 8270-8274.	1.6	40
63	Photovoltaic Materials: Defect Engineering in Multinary Earthâ€Abundant Chalcogenide Photovoltaic Materials (Adv. Energy Mater. 11/2017). Advanced Energy Materials, 2017, 7, .	10.2	2
64	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
65	Efficient Generation of Longâ€Lived Triplet Excitons in 2D Hybrid Perovskite. Advanced Materials, 2017, 29, 1604278.	11.1	81
66	Searching for promising new perovskite-based photovoltaic absorbers: the importance of electronic dimensionality. Materials Horizons, 2017, 4, 206-216.	6.4	553
67	Heterovalent B-Site Co-Alloying Approach for Halide Perovskite Bandgap Engineering. ACS Energy Letters, 2017, 2, 2486-2490.	8.8	44
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	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
70	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
71	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
72	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

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73	Candidate photoferroic absorber materials for thin-film solar cells from naturally occurring minerals: enargite, stephanite, and bournonite. Sustainable Energy and Fuels, 2017, 1, 1339-1350.	2.5	32
74	Melt Processing of Hybrid Organicâ€“Inorganic Lead Iodide Layered Perovskites. Chemistry of Materials, 2017, 29, 6200-6204.	3.2	67
75	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
76	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
77	Density-functional theory computer simulations of CZTS0.25Se0.75 alloy phase diagrams. Journal of Chemical Physics, 2016, 145, .	1.2	12
78	Organicâ€“Inorganic Perovskites: Structural Versatility for Functional Materials Design. Chemical Reviews, 2016, 116, 4558-4596.	23.0	2,147
79	Crystal Structure of AgBi₂I₇ Thin Films. Journal of Physical Chemistry Letters, 2016, 7, 3903-3907.	2.1	64
80	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
81	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
82	BaCu₂Sn(S,Se)₄: Earth-Abundant Chalcogenides for Thin-Film Photovoltaics. Chemistry of Materials, 2016, 28, 4771-4780.	3.2	131
83	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
84	Alloying and Defect Control within Chalcogenide Perovskites for Optimized Photovoltaic Application. Chemistry of Materials, 2016, 28, 821-829.	3.2	175
85	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
86	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
87	Thin-Film Deposition and Characterization of a Sn-Deficient Perovskite Derivative Cs₂SnI₆. Chemistry of Materials, 2016, 28, 2315-2322.	3.2	329
88	Hybrid Organicâ€“Inorganic Perovskites (HOIPs): Opportunities and Challenges. Advanced Materials, 2015, 27, 5102-5112.	11.1	372
89	High intensity and integrated Suns-Voc characterization of high performance kesterite solar cells. , 2015, , .		1
90	Impact of Nanoscale Elemental Distribution in Highâ€Performance Kesterite Solar Cells. Advanced Energy Materials, 2015, 5, 1402180.	10.2	120

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91	Thin-Film Preparation and Characterization of Cs₃Sb₂I₉: A Lead-Free Layered Perovskite Semiconductor. Chemistry of Materials, 2015, 27, 5622-5632.	3.2	653
92	Preface of E-MRS 2014 symposium A. Thin Solid Films, 2015, 582, 1.	0.8	0
93	Fabrication and Electronic Properties of CZTSe Single Crystals. IEEE Journal of Photovoltaics, 2015, 5, 390-394.	1.5	22
94	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
95	Atomic layer deposition of Al-incorporated Zn(O,S) thin films with tunable electrical properties. Applied Physics Letters, 2014, 105, .	1.5	18
96	Perovskites in the spotlight. MRS Bulletin, 2014, 39, 768-769.	1.7	8
97	Device Characteristics of CZTSSe Thinâ€Film Solar Cells with 12.6% Efficiency. Advanced Energy Materials, 2014, 4, 1301465.	10.2	2,651
98	High-Efficiency Devices With Pure Solution-Processed Cu$_{f 2}$ ZnSn(S,Se)$_{f 4}$ Absorbers. IEEE Journal of Photovoltaics, 2014, 4, 483-485.	1.5	29
99	Electronic and elemental properties of the Cu2ZnSn(S,Se)4 surface and grain boundaries. Applied Physics Letters, 2014, 104, .	1.5	79
100	Optical designs that improve the efficiency of Cu₂ZnSn(S,Se)₄solar cells. Energy and Environmental Science, 2014, 7, 1029-1036.	15.6	200
101	Suns-VOC characteristics of high performance kesterite solar cells. Journal of Applied Physics, 2014, 116, .	1.1	90
102	Semi-empirical device model for Cu2ZnSn(S,Se)4 solar cells. Applied Physics Letters, 2014, 105, .	1.5	81
103	High Efficiency Cu₂ZnSn(S,Se)₄ Solar Cells by Applying a Double In₂S₃/CdS Emitter. Advanced Materials, 2014, 26, 7427-7431.	11.1	400
104	CdS and Cd-Free Buffer Layers on Solution Phase Grown Cu2ZnSn(SxSe1- x)4 :Band Alignments and Electronic Structure Determined with Femtosecond Ultraviolet Photoelectron Spectroscopy. Materials Research Society Symposia Proceedings, 2014, 1638, 1.	0.1	3
105	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
106	The state and future prospects of kesterite photovoltaics. Energy and Environmental Science, 2013, 6, 3171.	15.6	294
107	Minority carrier diffusion length extraction in Cu₂ZnSn(Se,S)₄ solar cells. Journal of Applied Physics, 2013, 114, 114511.	1.1	91
108	Band tailing and efficiency limitation in kesterite solar cells. Applied Physics Letters, 2013, 103, .	1.5	576

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109	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
110	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
111	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
112	Materials interface engineering for solution-processed photovoltaics. Nature, 2012, 488, 304-312.	13.7	1,000
113	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
114	Hydrazine-Processed Ge-Substituted CZTSe Solar Cells. Chemistry of Materials, 2012, 24, 4588-4593.	3.2	165
115	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
116	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
117	Low band gap liquid-processed CZTSe solar cell with 10.1% efficiency. Energy and Environmental Science, 2012, 5, 7060.	15.6	303
118	Structural and elemental characterization of high efficiency Cu2ZnSnS4 solar cells. Applied Physics Letters, 2011, 98, .	1.5	158
119	Structure and Electronic Properties of Grain Boundaries in Earth-Abundant Photovoltaic Absorber Cu₂ZnSnSe₄. ACS Nano, 2011, 5, 8613-8619.	7.3	83
120	Progress towards marketable earth-abundant chalcogenide solar cells. Thin Solid Films, 2011, 519, 7378-7381.	0.8	137
121	Band alignment at the Cu2ZnSn(SxSe1â^'x)4/CdS interface. Applied Physics Letters, 2011, 98, .	1.5	256
122	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
123	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
124	High efficiency Cu<inf>2</inf>ZnSn(S<inf>x</inf>Se<inf>1−x</inf>)<inf>4</inf> thin film solar cells by thermal co-evaporation. , 2011, , .		2
125	Direct Liquid Coating of Chalcopyrite Lightâ€Absorbing Layers for Photovoltaic Devices. European Journal of Inorganic Chemistry, 2010, 2010, 17-28.	1.0	216
126	Highâ€Efficiency Solar Cell with Earthâ€Abundant Liquidâ€Processed Absorber. Advanced Materials, 2010, 22, E156-9.	11.1	1,035

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127	Photovoltaic Devices: Highâ€Efficiency Solar Cell with Earthâ€Abundant Liquidâ€Processed Absorber (Adv.) Tj ETQq1 1 0.784314 rgB	11.1	120
128	Antimony assisted low-temperature processing of CuIn1â^'xGaxSe2â^'ySy solar cells. Thin Solid Films, 2010, 519, 852-856.	0.8	74
129	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
130	12% Efficiency CuIn(Se,S)₂ Photovoltaic Device Prepared Using a Hydrazine Solution Process. Chemistry of Materials, 2010, 22, 1010-1014.	3.2	189
131	Optimization of CIGS-Based PV Device through Antimony Doping. Chemistry of Materials, 2010, 22, 285-287.	3.2	139
132	Loss mechanisms in hydrazine-processed Cu2ZnSn(Se,S)4 solar cells. Applied Physics Letters, 2010, 97, .	1.5	341
133	Torwards marketable efficiency solution-processed kesterite and chalcopyrite photovoltaic devices. , 2010, , .		13
134	Characterization of indium tin oxide and al-doped Zinc oxide thin films deposited by confocal RF magnetron sputter deposition. , 2009, , .		2
135	Solution Processing of Chalcogenide Semiconductors via Dimensional Reduction. Advanced Materials, 2009, 21, 3141-3158.	11.1	208
136	Hydrazine-based deposition route for device-quality CIGS films. Thin Solid Films, 2009, 517, 2158-2162.	0.8	135
137	Solvent properties of hydrazine in the preparation of metal chalcogenide bulk materials and films. Dalton Transactions, 2009, , 6078.	1.6	73
138	A Highâ€Efficiency Solutionâ€Deposited Thinâ€Film Photovoltaic Device. Advanced Materials, 2008, 20, 3657-3662.	11.1	343
139	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
140	Novel Strategy for Diameter-Selective Separation and Functionalization of Single-Wall Carbon Nanotubes. Nano Letters, 2008, 8, 469-472.	4.5	60
141	Solution processing of CIGS absorber layers using a hydrazine-based approach. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	6
142	CuIn(Se,S)₂ Absorbers Processed using a Hydrazine-Based Solution Approach. Materials Research Society Symposia Proceedings, 2008, 1123, 3.	0.1	0
143	CuIn(Se,S)2 Absorbers Processed using a Hydrazine-Based Solution Approach. , 2008, , .		1
144	Dielsâ^'Alder Adduct of Pentacene and Maleimide:â€‰ Crystal Growth and the Influence of Solvent Molecules on Structure and Hydrogen Bonding. Crystal Growth and Design, 2007, 7, 691-697.	1.4	9

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145	Synthesis, Structure, and Properties of Organic-Inorganic Perovskites and Related Materials. Progress in Inorganic Chemistry, 2007, , 1-121.	3.0	566
146	N4H9Cu7S4:â€‰ A Hydrazinium-Based Salt with a Layered Cu7S4- Framework. Inorganic Chemistry, 2007, 46, 926-931.	1.9	58
147	Novel inorganic materials for solution-processed electronics. , 2006, , .		0
148	Solution-Based Processing of the Phase-Change Material KSb5S8. Chemistry of Materials, 2006, 18, 6278-6282.	3.2	34
149	Solution-Processed Metal Chalcogenide Films for p-Type Transistors. Chemistry of Materials, 2006, 18, 587-590.	3.2	102
150	Low-Voltage Transistor Employing a High-Mobility Spin-Coated Chalcogenide Semiconductor. Advanced Materials, 2005, 17, 1285-1289.	11.1	117
151	Synthesis, Structure, and Thermal Properties of Soluble Hydrazinium Germanium(IV) and Tin(IV) Selenide Salts.. ChemInform, 2005, 36, no.	0.1	0
152	Polymorphic One-Dimensional (N2H4)2ZnTe: Soluble Precursors for the Formation of Hexagonal or Cubic Zinc Telluride.. ChemInform, 2005, 36, no.	0.1	0
153	Standing up to be counted. III-Vs Review, 2005, 18, 38-39.	0.1	0
154	Hybrid Organic-Inorganic Electronics. , 2005, , 347-386.		10
155	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
156	Synthesis, Structure, and Thermal Properties of Soluble Hydrazinium Germanium(IV) and Tin(IV) Selenide Salts. Inorganic Chemistry, 2005, 44, 3755-3761.	1.9	87
157	Tuning the Band Gap in Hybrid Tin Iodide Perovskite Semiconductors Using Structural Templating. Inorganic Chemistry, 2005, 44, 4699-4705.	1.9	452
158	High-mobility ultrathin semiconducting films prepared by spin coating. Nature, 2004, 428, 299-303.	13.7	485
159	High-Mobility Ultrathin Semiconducting Films Prepared by Spin Coating.. ChemInform, 2004, 35, no.	0.1	1
160	Solution-processed inorganic semiconductors. Journal of Materials Chemistry, 2004, 14, 2355.	6.7	320
161	Tetrakis[(9-oxo-10-thiaxanthen-2-yloxyethyl)ammonium] decaiodotriplumbate(II). Acta Crystallographica Section E: Structure Reports Online, 2003, 59, m364-m366.	0.2	3
162	[(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

#	Article	IF	Citations
163	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
164	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
165	[CH3(CH2)11NH3]SnI3:Â A Hybrid Semiconductor with MoO3-type Tin(II) Iodide Layers. Inorganic Chemistry, 2003, 42, 6589-6591.	1.9	72
166	Pressure-induced phase transitions and templating effect in three-dimensional organic-inorganic hybrid perovskites. Physical Review B, 2003, 68, .	1.1	80
167	Organic-Inorganic Hybrid Thin-Film Transistors. , 2003, , .		1
168	Intercalated Organicâ^'Inorganic Perovskites Stabilized by Fluoroarylâ^'Aryl Interactions. Inorganic Chemistry, 2002, 41, 2134-2145.	1.9	139
169	Low-Temperature Melt Processing of Organicâ^'Inorganic Hybrid Films. Chemistry of Materials, 2002, 14, 2839-2841.	3.2	49
170	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
171	Templating and structural engineering in organicâ€“inorganic perovskites. Dalton Transactions RSC, 2001, , 1-12.	2.3	794
172	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
173	Organic-inorganic electronics. IBM Journal of Research and Development, 2001, 45, 29-45.	3.2	614
174	Thin-Film Deposition of Organicâ^'Inorganic Hybrid Materials. Chemistry of Materials, 2001, 13, 3283-3298.	3.2	363
175	Crystal Structure and Properties of Dye-Containing Organic-Inorganic Perovskites. Molecular Crystals and Liquid Crystals, 2001, 356, 549-558.	0.3	2
176	The use of ionic salt dyes as amorphous, thermally stable emitting layers in organic light-emitting diodes. Applied Physics Letters, 2000, 76, 58-60.	1.5	13
177	Effect of Thermal Annealing on the Optical and Morphological Properties of (AETH)PbX4(X = Br, I) Perovskite Films Prepared Using Single Source Thermal Ablation. Chemistry of Materials, 2000, 12, 169-175.	3.2	32
178	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
179	Design, Structure, and Optical Properties of Organicâ^'Inorganic Perovskites Containing an Oligothiophene Chromophore. Inorganic Chemistry, 1999, 38, 6246-6256.	1.9	314
180	Organic-Inorganic Hybrid Materials as Semiconducting Channels in Thin-Film Field-Effect Transistors. Science, 1999, 286, 945-947.	6.0	1,839

#	Article	IF	Citations
181	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
182	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
183	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
184	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
185	Transparency of theabPlanes ofBi2Sr2CaCu2O8+Î´to Magnetic Fields. Physical Review Letters, 1998, 80, 592-595.	2.9	4
186	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
187	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
188	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
189	Synthesis and Crystal Structure of the Alkylbismuth Diiodides:Â A Family of Extended One-Dimensional Organometallic Compounds. Inorganic Chemistry, 1996, 35, 7614-7619.	1.9	26
190	Synthesis and Structure of A New Perovskite, SrCuO2.5. Journal of Solid State Chemistry, 1996, 121, 498-501.	1.4	10
191	Conducting Layered Organic-inorganic Halides Containing <110>-Oriented Perovskite Sheets. Science, 1995, 267, 1473-1476.	6.0	718
192	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
193	NMR Studies of Spin Excitations in SuperconductingBi2Sr2CaCu2O8+Î´Single Crystals. Physical Review Letters, 1994, 73, 1287-1290.	2.9	53
194	NMR studies of spin dynamics in cuprates. Journal of Low Temperature Physics, 1994, 95, 89-93.	0.6	3
195	Conducting tin halides with a layered organic-based perovskite structure. Nature, 1994, 369, 467-469.	13.7	933
196	Thermal diffusivity of Bi2Sr2CaCu2O8 single crystals. Physica C: Superconductivity and Its Applications, 1993, 218, 417-423.	0.6	9
197	Surface phonons onBi2Sr2CaCu2O8+Î´. Physical Review B, 1993, 48, 12936-12940.	1.1	9
198	Longitudinal disordering of vortex lattices in anisotropic superconductors. Physical Review B, 1993, 47, 2905-2908.	1.1	36

#	Article	IF	Citations
199	Loss of interplane correlation inBi2Sr2CaCu2O8single crystals. Physical Review B, 1993, 48, 7486-7491.	1.1	17
200	High-resolution scanning Hall probe microscopy. , 1993, , .		1
201	Superconducting interlayer decoupling and softening of the flux line structure in BSCCO single crystals. Superconductor Science and Technology, 1992, 5, S272-S275.	1.8	6
202	Two-step transition towards the reversibility region inBi2Sr2CaCu2O8â˜Î´single crystals. Physical Review B, 1992, 46, 9278-9281.	1.1	18
203	Nature of the high-binding-energy dip in the low-temperature photoemission spectra ofBi2Sr2CaCu2O8+Î´. Physical Review B, 1992, 45, 5095-5098.	1.1	32
204	Ca 3dunoccupied states inBi2Sr2CaCu2O8investigated by CaL2,3x-ray-absorption near-edge structure. Physical Review B, 1992, 46, 8487-8495.	1.1	14
205	Evidence fork-dependent, in-plane anisotropy of the superconducting gap inBi2Sr2CaCu2O8+Î´. Physical Review B, 1992, 46, 11830-11834.	1.1	72
206	Defect dependence of the irreversibility line inBi2Sr2CaCu2O8single crystals. Physical Review B, 1992, 46, 5615-5620.	1.1	41
207	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
208	O 1score levels inBi2Sr2CaCu2O8+Î´single crystals. Physical Review B, 1991, 43, 3085-3090.	1.1	57
209	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
210	Observation of an hexatic vortex glass in flux lattices of the high-Tc superconductor Bi2.1Sr1.9Ca0.9Cu2O8+Î´. Physica B: Condensed Matter, 1991, 169, 72-79.	1.3	9
211	Inter- and intraplane softening of the vortex structure in Bi2.1Sr1.9Ca0.9Cu2O8+Î´: a two-step transition. Physica C: Superconductivity and Its Applications, 1991, 184, 254-258.	0.6	38
212	Evidence of chemical-potential shift with hole doping inBi2Sr2CaCu2O8+Î´. Physical Review B, 1991, 44, 12098-12101.	1.1	29
213	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
214	Magnetic penetration depth and flux dynamics in single-crystalBi2Sr2CaCu2O8+Î´. Physical Review Letters, 1991, 67, 3152-3155.	2.9	65
215	In-plane dissipation maxima and vortex-line distortions in the resistive transitions of oxygen-doped Bi_{2}Sr_{2}CaCu_{2}O_{8+Î} single crystals. Physical Review Letters, 1991, 67, 2095-2098.	2.9	22
216	The gold/high temperature superconductor interface; metallicity of the near surface region and a search for the proximity effect. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 383-389.	0.9	2

#	Article	IF	Citations
217	Search for a proximity effect induced gap in gold/highTcjunctions. Applied Physics Letters, 1991, 58, 1332-1334.	1.5	8
218	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
219	Nuclear relaxation behavior of the superconducting cuprates:Bi2Sr2CaCu2O8. Physical Review B, 1991, 44, 7760-7763.	1.1	92
220	Anomalous spectral weight transfer at the superconducting transition ofBi2Sr2CaCu2O8+Î´. Physical Review Letters, 1991, 66, 2160-2163.	2.9	248
221	Pair momentum distribution inBi2Sr2CaCu2O8+Î´measured by positron annihilation: Existence and nature of the Fermi surface. Physical Review Letters, 1991, 67, 1350-1353.	2.9	35
222	Nature of the valence band states in Bi2(Ca,â€‰Sr,â€‰La)3Cu2O8. AIP Conference Proceedings, 1990, , .	0.3	0
223	Optical anisotropy ofBi2Sr2CaCu2O8. Physical Review B, 1990, 41, 7251-7253.	1.1	21
224	Angle-resolved-photoemission study ofBi2Sr2CaCu2O8+Î´: Metallicity of the Bi-O plane. Physical Review Letters, 1990, 65, 3056-3059.	2.9	141
225	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
226	Distribution of flux-pinning energies inYBa2Cu3O7â^'Î´andBi2Sr2CaCu2O8+Î´from flux noise. Physical Review Letters, 1990, 64, 72-75.	2.9	126
227	Ferrariet al. reply. Physical Review Letters, 1990, 65, 279-279.	2.9	1
228	Growth and properties of oxygen- and ion-dopedBi2Sr2CaCu2O8+Î´single crystals. Physical Review B, 1990, 41, 6564-6574.	1.1	280
229	Magnetic penetration depth in the organic superconductor Îº-[BEDT-TTF]2Cu[NCS]2. Physical Review Letters, 1990, 64, 1293-1296.	2.9	107
230	Interaction of overlayers of Al and Rb with singleâ€crystalline surfaces of Bi2Sr2CaCu2O8. Journal of Applied Physics, 1990, 67, 2667-2670.	1.1	7
231	Electronic structure of the gold/Bi2Sr2CaCu2O8and gold/EuBa2Cu3O7â^'Î´interfaces as studied by photoemission spectroscopy. Applied Physics Letters, 1990, 57, 307-309.	1.5	24
232	Aluminum and gold deposition on cleaved single crystals of Bi2CaSr2Cu2O8 superconductor. AIP Conference Proceedings, 1989, , .	0.3	5
233	Surface and electronic structure of Bi-Ca-Sr-Cu-O superconductors studied by LEED, UPS and XPS. AIP Conference Proceedings, 1989, , .	0.3	0
234	Photoemission study of absorption mechanisms inBi2.0Sr1.8Ca0.8La0.3Cu2.1O8+Î´,BaBiO3, andNd1.85Ce0.15CuO4. Physical Review B, 1989, 40, 8840-8843.	1.1	12

#	Article	IF	Citations
235	Photoelectron energy-loss study of theBi2CaSr2Cu2O8superconductor. Physical Review B, 1989, 39, 4295-4298.	1.1	11
236	Energy dispersions of single-crystallineBi2.0Sr1.8Ca0.8La0.3Cu2.1O8+Î´superconductors determined using angle-resolved photoelectron spectroscopy. Physical Review B, 1989, 40, 5169-5171.	1.1	8
237	Low-temperature specific heat of single-crystalBi2CaSr2Cu2O8andTl2Ca2Ba2Cu3O10. Physical Review B, 1989, 39, 12391-12394.	1.1	43
238	Valence-band states inBi2(Ca,Sr,La)3Cu2O8. Physical Review B, 1989, 40, 5259-5262.	1.1	24
239	Spectroscopic evidence of twoâ€dimensional character of the 90 K Bi2(Sr,La,Ca)3Cu2O8superconductors. Applied Physics Letters, 1989, 55, 1141-1143.	1.5	0
240	Electron tunneling and the energy gap inBi2Sr2CaCu2Ox. Physical Review B, 1989, 39, 801-803.	1.1	98
241	Reaction of Rb and oxygen overlayers with single-crystallineBi2Sr2CaCu2O8+Î´superconductors. Physical Review B, 1989, 39, 2890-2893.	1.1	58
242	Photothermal measurements of highTcsuperconductors. Applied Physics Letters, 1989, 55, 598-599.	1.5	33
243	Electronic structure of clean and Ag-covered single-crystallineBi2Sr2CuO6. Physical Review B, 1989, 40, 8769-8773.	1.1	10
244	Symmetry of the oxygen hole states in Bi2Sr2CaCu2O8 investigated by XAS. Physica C: Superconductivity and Its Applications, 1989, 157, 260-262.	0.6	45
245	Electronic structure of the La1 + xBa2 â^' xCu3O7 + Î´ system studied by photoelectron spectroscopy. Solid State Communications, 1989, 69, 27-31.	0.9	9
246	The electronic structure of Bi2.0Sr1.8La0.3Ca0.8Cu2.1O8+Î´ superconductors studied using ultraviolet and X-ray photoelectron spectroscopy. Physica C: Superconductivity and Its Applications, 1989, 159, 649-653.	0.6	5
247	Photoemission study of the electronic structure (Pr0.2La0.8)(Ba1.875La0.125)Cu3O7â^'gd. Solid State Communications, 1989, 72, 575-578.	0.9	4
248	The Origin of the Superstructure in Bi2Sr2CaCu2O8+dgr as Revealed by Scanning Tunneling Microscopy. Science, 1988, 242, 1673-1675.	6.0	164
249	Valence-band and core-level photoemission study of single-crystalBi2CaSr2Cu2O8superconductors. Physical Review B, 1988, 38, 11820-11823.	1.1	34
250	Raman scattering spectra of superconductingBi2Sr2CaCu2O8single crystals. Physical Review B, 1988, 38, 11955-11957.	1.1	50
251	Surface structure of Bi2Sr2CaCu2O8+Îhighâ€temperature superconductors studied using lowâ€energy electron diffraction. Applied Physics Letters, 1988, 53, 2563-2565.	1.5	57
252	Site-selective doping and superconductivity in(La1â^'yPry)(Ba2â^'xLax)Cu3O7â^'Î´. Physical Review B, 1988, 38, 6667-6676.	1.1	40

#	Article	IF	Citations
253	Electron-tunneling studies of thin films of high-Tcsuperconducting La-Sr-Cu-O. Physical Review B, 1987, 35, 7228-7231.	1.1	68
254	Point-contact electron tunneling into the high-Tcsuperconductor Y-Ba-Cu-O. Physical Review B, 1987, 35, 8850-8852.	1.1	78
255	Superconductivity and magnetism in the high-Tcsuperconductor YBaCuO. Physical Review Letters, 1987, 58, 1574-1576.	2.9	113
256	Transfer Printing Techniques and Inorganic Single-Crystalline Materials for Flexible and Stretchable Electronics. , 0, , 407-447.		1