

David S Ginley

List of Publications by Year in descending order

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259
papers

15,456
citations

20797

60
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17580

121
g-index

273
all docs

273
docs citations

273
times ranked

18256
citing authors

#	ARTICLE	IF	CITATIONS
1	Transparent Conducting Oxides. MRS Bulletin, 2000, 25, 15-18.	1.7	1,312
2	Transparent Conducting Oxides for Photovoltaics. MRS Bulletin, 2007, 32, 242-247.	1.7	788
3	Identifying defect-tolerant semiconductors with high minority-carrier lifetimes: beyond hybrid lead halide perovskites. MRS Communications, 2015, 5, 265-275.	0.8	662
4	Organic-Based Photovoltaics: Toward Low-Cost Power Generation. MRS Bulletin, 2005, 30, 10-19.	1.7	500
5	Hybrid photovoltaic devices of polymer and ZnO nanofiber composites. Thin Solid Films, 2006, 496, 26-29.	0.8	494
6	Strontium titanate photoelectrodes. Efficient photoassisted electrolysis of water at zero applied potential. Journal of the American Chemical Society, 1976, 98, 2774-2779.	6.6	475
7	Low-Cost Inorganic Solar Cells: From Ink To Printed Device. Chemical Reviews, 2010, 110, 6571-6594.	23.0	412
8	Photovoltaic Devices with a Low Band Gap Polymer and CdSe Nanostructures Exceeding 3% Efficiency. Nano Letters, 2010, 10, 239-242.	4.5	400
9	Hybrid Organic-Inorganic Perovskites (HOIPs): Opportunities and Challenges. Advanced Materials, 2015, 27, 5102-5112.	11.1	372
10	Evidence for near-Surface NiOOH Species in Solution-Processed NiO Selective Interlayer Materials: Impact on Energetics and the Performance of Polymer Bulk Heterojunction Photovoltaics. Chemistry of Materials, 2011, 23, 4988-5000.	3.2	343
11	Solution processing of transparent conductors: from flask to film. Chemical Society Reviews, 2011, 40, 5406.	18.7	335
12	Solar Energy Conversion Toward 1 Terawatt. MRS Bulletin, 2008, 33, 355-364.	1.7	305
13	Defect Tolerant Semiconductors for Solar Energy Conversion. Journal of Physical Chemistry Letters, 2014, 5, 1117-1125.	2.1	304
14	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiO Interlayers. Advanced Energy Materials, 2011, 1, 813-820.	10.2	299
15	Solution deposited NiO thin-films as hole transport layers in organic photovoltaics. Organic Electronics, 2010, 11, 1414-1418.	1.4	282
16	Photoinduced Degradation of Polymer and Polymer-Fullerene Active Layers: Experiment and Theory. Advanced Functional Materials, 2010, 20, 3476-3483.	7.8	248
17	Effect of Polymer Processing on the Performance of Poly(3-hexylthiophene)/ZnO Nanorod Photovoltaic Devices. Journal of Physical Chemistry C, 2007, 111, 16640-16645.	1.5	235
18	Assessing capability of semiconductors to split water using ionization potentials and electron affinities only. Physical Chemistry Chemical Physics, 2014, 16, 3706.	1.3	226

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19	General mobility and carrier concentration relationship in transparent amorphous indium zinc oxide films. <i>Physical Review B</i> , 2008, 77, .	1.1	208
20	The Effect of Atmosphere and ZnO Morphology on the Performance of Hybrid Poly(3-hexylthiophene)/ZnO Nanofiber Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2007, 111, 16670-16678.	1.5	204
21	Optimal negative electrodes for poly(3-hexylthiophene): [6,6]-phenyl C61-butyric acid methyl ester bulk heterojunction photovoltaic devices. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	172
22	Impact of contact evolution on the shelf life of organic solar cells. <i>Journal of Materials Chemistry</i> , 2009, 19, 7638.	6.7	165
23	Photochemistry of metal-metal bonded complexes. II. Photochemistry of rhenium and manganese carbonyl complexes containing a metal-metal bond. <i>Journal of the American Chemical Society</i> , 1975, 97, 2065-2072.	6.6	161
24	The Remarkable Thermal Stability of Amorphous In ₂ Zn ₂ O Transparent Conductors. <i>Advanced Functional Materials</i> , 2008, 18, 3169-3178.	7.8	155
25	Improving PEM fuel cell catalyst activity and durability using nitrogen-doped carbon supports: observations from model Pt/HOPG systems. <i>Journal of Materials Chemistry</i> , 2009, 19, 7830.	6.7	149
26	Low-temperature, solution-processed molybdenum oxide hole-collection layer for organic photovoltaics. <i>Journal of Materials Chemistry</i> , 2012, 22, 3249.	6.7	147
27	The Effect of Nanoparticle Shape on the Photocarrier Dynamics and Photovoltaic Device Performance of Poly(3-hexylthiophene):CdSe Nanoparticle Bulk Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2010, 20, 2629-2635.	7.8	139
28	Control of Doping in Cu ₂ SnS ₃ through Defects and Alloying. <i>Chemistry of Materials</i> , 2014, 26, 4951-4959.	3.2	136
29	Improvement of Interfacial Contacts for New Small-Molecule Bulk-Heterojunction Organic Photovoltaics. <i>Advanced Materials</i> , 2012, 24, 5368-5373.	11.1	132
30	Bulk heterojunction organic photovoltaic devices based on phenyl-cored thiophene dendrimers. <i>Applied Physics Letters</i> , 2006, 89, 103524.	1.5	130
31	Investigating the Influence of Interfacial Contact Properties on Open Circuit Voltages in Organic Photovoltaic Performance: Work Function Versus Selectivity. <i>Advanced Energy Materials</i> , 2013, 3, 647-656.	10.2	122
32	Li ion diffusion measurements in V ₂ O ₅ and Li(Co _{1-x} Al _x)O ₂ thin-film battery cathodes. <i>Electrochimica Acta</i> , 1999, 45, 187-196.	2.6	118
33	Evaluation of photovoltaic materials within the Cu-Sn-S family. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	117
34	Thin film synthesis and properties of copper nitride, a metastable semiconductor. <i>Materials Horizons</i> , 2014, 1, 424-430.	6.4	116
35	Photoassisted electrolysis of water by ultraviolet irradiation of an antimony doped stannic oxide electrode. <i>Journal of the American Chemical Society</i> , 1976, 98, 44-48.	6.6	115
36	Photochemistry of metal-metal bonded complexes. III. Photoreactivity of hexacarbonylbis(eta-5-cyclopentadienyl)dimolybdenum(I) and -ditungsten(I). <i>Journal of the American Chemical Society</i> , 1975, 97, 4246-4251.	6.6	113

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37	Effect of ZnO Processing on the Photovoltage of ZnO/Poly(3-hexylthiophene) Solar Cells. Journal of Physical Chemistry C, 2008, 112, 9544-9547.	1.5	111
38	Theoretical Prediction and Experimental Realization of New Stable Inorganic Materials Using the Inverse Design Approach. Journal of the American Chemical Society, 2013, 135, 10048-10054.	6.6	111
39	Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. Advanced Functional Materials, 2014, 24, 610-618.	7.8	109
40	Charging Capacity and Cycling Stability of VO_x Films Prepared by Pulsed Laser Deposition. Journal of the Electrochemical Society, 1997, 144, 1630-1634.	1.3	104
41	rf magnetron sputter deposition of transparent conducting Nb-doped TiO_2 films on SrTiO_3 . Journal of Applied Physics, 2007, 101, 033125.	1.1	104
42	Dopant-Induced Electronic Structure Modification of HOPG Surfaces: Implications for High Activity Fuel Cell Catalysts. Journal of Physical Chemistry C, 2010, 114, 506-515.	1.5	100
43	Dependence of Band Offset and Open-Circuit Voltage on the Interfacial Interaction between TiO_2 and Carboxylated Polythiophenes. Journal of Physical Chemistry B, 2006, 110, 3257-3261.	1.2	99
44	Ultrasonically sprayed and inkjet printed thin film electrodes for organic solar cells. Thin Solid Films, 2009, 517, 2781-2786.	0.8	99
45	Understanding crystallization pathways leading to manganese oxide polymorph formation. Nature Communications, 2018, 9, 2553.	5.8	98
46	The synthesis and properties of solution processable phenyl cored thiophene dendrimers. Journal of Materials Chemistry, 2005, 15, 4518.	6.7	84
47	Cu-In-Ga-Se nanoparticle colloids as spray deposition precursors for $\text{Cu}(\text{In}, \text{Ga})\text{Se}_2$ solar cell materials. Journal of Electronic Materials, 1998, 27, 433-437.	1.0	82
48	Formation of Nanooctahedra in Molybdenum Disulfide and Molybdenum Diselenide Using Pulsed Laser Vaporization. Journal of Physical Chemistry B, 2004, 108, 6197-6207.	1.2	82
49	Computational Approach for Epitaxial Polymorph Stabilization through Substrate Selection. ACS Applied Materials & Interfaces, 2016, 8, 13086-13093.	4.0	78
50	The existence and impact of persistent ferroelectric domains in MAPbI_3 . Science Advances, 2019, 5, eaas9311.	4.7	77
51	Tuning Carbon-Based Fuel Cell Catalyst Support Structures via Nitrogen Functionalization. I. Investigation of Structural and Compositional Modification of Highly Oriented Pyrolytic Graphite Model Catalyst Supports as a Function of Nitrogen Implantation Dose. Journal of Physical Chemistry C, 2011, 115, 13667-13675.	1.5	76
52	Chemically Controlled Reversible and Irreversible Extraction Barriers Via Stable Interface Modification of Zinc Oxide Electron Collection Layer in Polycarbazole-based Organic Solar Cells. Advanced Functional Materials, 2014, 24, 4671-4680.	7.8	76
53	Conducting polymer and hydrogenated amorphous silicon hybrid solar cells. Applied Physics Letters, 2005, 87, 223504.	1.5	72
54	Photoinduced Carrier Generation and Decay Dynamics in Intercalated and Non-intercalated Polymer:Fullerene Bulk Heterojunctions. ACS Nano, 2011, 5, 5635-5646.	7.3	67

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55	Fabrication and Characterization of MIM Diodes Based on Nb/Nb ₂ O ₅ Via a Rapid Screening Technique. <i>Advanced Materials</i> , 2011, 23, 3080-3085.	11.1	66
56	Pulsed laser deposited Nb doped TiO ₂ as a transparent conducting oxide. <i>Thin Solid Films</i> , 2008, 516, 4133-4138.	0.8	65
57	A new approach to thin film crystal silicon on glass: Biaxially-textured silicon on foreign template layers. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 984-988.	1.5	64
58	5,10-Dihydroindolo[3,2-b]indole-Based Copolymers with Alternating Donor and Acceptor Moieties for Organic Photovoltaics. <i>Macromolecules</i> , 2013, 46, 1350-1360.	2.2	63
59	Electronic spectra of dinuclear cobalt carbonyl complexes. <i>Inorganic Chemistry</i> , 1977, 16, 1554-1556.	1.9	61
60	Direct Synthesis of CdSe Nanoparticles in Poly(3-hexylthiophene). <i>Journal of the American Chemical Society</i> , 2009, 131, 17726-17727.	6.6	61
61	Benzodithiophene and Imide-Based Copolymers for Photovoltaic Applications. <i>Chemistry of Materials</i> , 2012, 24, 1346-1356.	3.2	58
62	Metal-Insulator-Metal Diodes: Role of the Insulator Layer on the Rectification Performance. <i>Advanced Materials</i> , 2013, 25, 1301-1308.	11.1	58
63	Performance modeling and techno-economic analysis of a modular concentrated solar power tower with latent heat storage. <i>Applied Energy</i> , 2018, 217, 143-152.	5.1	58
64	Practical challenges in the development of photoelectrochemical solar fuels production. <i>Sustainable Energy and Fuels</i> , 2020, 4, 985-995.	2.5	58
65	Li-Doped Cr ₂ MnO ₄ : A New p-Type Transparent Conducting Oxide by Computational Materials Design. <i>Advanced Functional Materials</i> , 2013, 23, 5267-5276.	7.8	57
66	Ethynylene-Linked Donor-Acceptor Alternating Copolymers. <i>Macromolecules</i> , 2013, 46, 3367-3375.	2.2	57
67	High-fraction brookite films from amorphous precursors. <i>Scientific Reports</i> , 2017, 7, 15232.	1.6	56
68	Non-vacuum and PLD growth of next generation TCO materials. <i>Thin Solid Films</i> , 2003, 445, 193-198.	0.8	55
69	Self-Assembly of Photoactive TiO ₂ ~Cyclodextrin Wires. <i>Journal of the American Chemical Society</i> , 2005, 127, 14968-14969.	6.6	55
70	Non-equilibrium deposition of phase pure Cu ₂ O thin films at reduced growth temperature. <i>APL Materials</i> , 2014, 2, .	2.2	55
71	Experimental Synthesis and Properties of Metastable CuNbN ₂ and Theoretical Extension to Other Ternary Copper Nitrides. <i>Chemistry of Materials</i> , 2014, 26, 4970-4977.	3.2	55
72	Tuning Carbon-Based Fuel Cell Catalyst Support Structures via Nitrogen Functionalization. II. Investigation of Durability of Pt-Ru Nanoparticles Supported on Highly Oriented Pyrolytic Graphite Model Catalyst Supports As a Function of Nitrogen Implantation Dose. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13676-13684.	1.5	54

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73	Non-equilibrium origin of high electrical conductivity in gallium zinc oxide thin films. Applied Physics Letters, 2013, 103, .	1.5	51
74	Excited state decay of tetrahalomanganese(ii) complexes. Chemical Physics, 1974, 4, 295-299.	0.9	50
75	A simple method for the preparation of transparent p-type Ca-doped CuInO ₂ films: Pulsed-laser deposition from air-sintered Ca-doped Cu ₂ In ₂ O ₅ targets. Applied Physics Letters, 2004, 85, 3789-3791.	1.5	49
76	Sputtered Nb- and Ta-doped TiO ₂ transparent conducting oxide films on glass. Journal of Materials Research, 2007, 22, 2832-2837.	1.2	49
77	Enhanced Electron Mobility Due to Dopant-Defect Pairing in Conductive ZnMgO. Advanced Functional Materials, 2014, 24, 2875-2882.	7.8	49
78	Semiconducting properties of spinel tin nitride and other IV ₃ N ₄ polymorphs. Journal of Materials Chemistry C, 2015, 3, 1389-1396.	2.7	49
79	Low-bandgap thiophene dendrimers for improved light harvesting. Journal of Materials Chemistry, 2009, 19, 5311.	6.7	46
80	Defect-Driven Interfacial Electronic Structures at an Organic/Metal-Oxide Semiconductor Heterojunction. Advanced Materials, 2014, 26, 4711-4716.	11.1	46
81	Novel phase diagram behavior and materials design in heterostructural semiconductor alloys. Science Advances, 2017, 3, e1700270.	4.7	46
82	Synthesis and x-ray crystallographic structural determination of the acetylene complex (I-5-C ₅ H ₅) ₂ W ₂ (CO) ₄ (C ₂ H ₂). Journal of Organometallic Chemistry, 1978, 157, 41-50.	0.8	45
83	Charge Transport Simulations in Conjugated Dendrimers. Journal of Physical Chemistry A, 2010, 114, 4388-4393.	1.1	43
84	Solid-state and electrochemical properties of polyselenophene. Journal of Applied Physics, 1987, 62, 190-194.	1.1	42
85	Nanoparticle precursor route to low-temperature spray deposition of CdTe thin films. Applied Physics Letters, 1995, 67, 2176-2178.	1.5	42
86	Strong optical absorption in CuTaN ₂ nitride delafossite. Energy and Environmental Science, 2013, 6, 2994.	15.6	42
87	Reversible addition of carbon monoxide to tetracarbonylbis(eta-5-pentamethylcyclopentadienyl)dimolybdenum(I). Journal of the American Chemical Society, 1975, 97, 3533-3535.	6.6	40
88	Sputtered nickel oxide thin film for efficient hole transport layer in polymer-fullerene bulk-heterojunction organic solar cell. Thin Solid Films, 2012, 520, 3813-3818.	0.8	40
89	The origin of electrical property deterioration with increasing Mg concentration in ZnMgO:Ga. Thin Solid Films, 2012, 520, 3697-3702.	0.8	38
90	Highly-Tunable Nickel Cobalt Oxide as a Low-Temperature P-Type Contact in Organic Photovoltaic Devices. Advanced Energy Materials, 2013, 3, 524-531.	10.2	38

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91	Photochemistry of metal-metal bonded complexes. IV. Generation of d5 and d7 mononuclear fragments via homolytic cleavage in heterodinuclear metal carbonyls. <i>Journal of the American Chemical Society</i> , 1975, 97, 4908-4911.	6.6	37
92	Effect of deposition distance and temperature on electrical, optical and structural properties of radio-frequency magnetron-sputtered gallium-doped zinc oxide. <i>Thin Solid Films</i> , 2010, 519, 190-196.	0.8	36
93	Self-Doping and Electrical Conductivity in Spinel Oxides: Experimental Validation of Doping Rules. <i>Chemistry of Materials</i> , 2014, 26, 1867-1873.	3.2	35
94	Surface Treatment of NiO Hole Transport Layers for Organic Solar Cells. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1649-1655.	1.9	34
95	Development and application of an instrument for spatially resolved Seebeck coefficient measurements. <i>Review of Scientific Instruments</i> , 2013, 84, 053905.	0.6	34
96	Design of Semiconducting Tetrahedral MnO Alloys and Their Application to Solar Water Splitting. <i>Physical Review X</i> , 2015, 5, .	2.8	34
97	Pt-Ru Alloyed Fuel Cell Catalysts Sputtered from a Single Alloyed Target. <i>ACS Catalysis</i> , 2011, 1, 1307-1315.	5.5	32
98	Experimental demonstration of a dispatchable latent heat storage system with aluminum-silicon as a phase change material. <i>Applied Energy</i> , 2018, 230, 1218-1229.	5.1	32
99	Formation of interfacial traps upon surface protonation in small molecule solution processed bulk heterojunctions probed by photoelectron spectroscopy. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6223.	2.7	31
100	CdTe Thin Films from Nanoparticle Precursors by Spray Deposition. <i>Chemistry of Materials</i> , 1997, 9, 889-900.	3.2	30
101	Combinatorial synthesis of solid state electronic materials for renewable energy applications. <i>Applied Surface Science</i> , 2002, 189, 271-276.	3.1	30
102	Synthesis of a mixed-valent tin nitride and considerations of its possible crystal structures. <i>Journal of Chemical Physics</i> , 2016, 144, 144201.	1.2	29
103	Impact of Hole Transport Layer Surface Properties on the Morphology of a Polymer-Fullerene Bulk Heterojunction. <i>Advanced Energy Materials</i> , 2014, 4, 1301879.	10.2	28
104	Structure-Dependent Photophysics of First-Generation Phenyl-Cored Thiophene Dendrimers. <i>Chemistry of Materials</i> , 2009, 21, 287-297.	3.2	27
105	Conjugated Thiophene Dendrimer with an Electron-Withdrawing Core and Electron-Rich Dendrons: How the Molecular Structure Affects the Morphology and Performance of Dendrimer:Fullerene Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22269-22276.	1.5	27
106	Surface composition, work function, and electrochemical characteristics of gallium-doped zinc oxide. <i>Thin Solid Films</i> , 2012, 520, 5652-5663.	0.8	27
107	Semi-random vs Well-Defined Alternating Donor-Acceptor Copolymers. <i>ACS Macro Letters</i> , 2014, 3, 622-627.	2.3	27
108	Control and elimination of biaxial strain in laser-ablated epitaxial $\text{BaSr}_{1-x}\text{TiO}_3$ films. <i>Applied Physics Letters</i> , 2000, 77, 3278-3280.	1.5	26

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109	Fabrication of nanoporous titania on glass and transparent conducting oxide substrates by anodization of titanium films. <i>Journal of Materials Research</i> , 2007, 22, 681-687.	1.2	25
110	Improved fill factors in solution-processed ZnO/Cu ₂ O photovoltaics. <i>Thin Solid Films</i> , 2013, 536, 280-285.	0.8	24
111	Improved aqueous etchant for high T _c superconductor materials. <i>Applied Physics Letters</i> , 1992, 60, 2147-2149.	1.5	23
112	Improved Performance in Bulk Heterojunction Organic Solar Cells with a Sol-Gel MgZnO Electron-Collecting Layer. <i>Advanced Energy Materials</i> , 2014, 4, 1400073.	10.2	22
113	Pulsed laser deposition of oriented V ₂ O ₅ thin films. <i>Journal of Materials Research</i> , 2000, 15, 2249-2265.	1.2	21
114	Photoelectrochemistry and Electroreflectance of As-Grown and Reduced Poly(3-Methylthiophene (P3MT) in an Aqueous Electrolyte. <i>Journal of the Electrochemical Society</i> , 1987, 134, 1384-1388.	1.3	19
115	Highly efficient blue organic light emitting device using indium-free transparent anode Ga:ZnO with scalability for large area coating. <i>Journal of Applied Physics</i> , 2010, 107, 043103.	1.1	19
116	Performance and reliability of In ² -Ga ₂ O ₃ Schottky barrier diodes at high temperature. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021, 39, .	0.9	19
117	Impedance and Electroreflectance of Reduced Poly(3-Methyl Thiophene) P3MT in an Aqueous Electrolyte: Direct Observation of a Polaron Transition. <i>Journal of the Electrochemical Society</i> , 1987, 134, 886-891.	1.3	18
118	Modification of grain boundaries in polycrystalline silicon with fluorine and oxygen. <i>Applied Physics Letters</i> , 1981, 39, 624-626.	1.5	17
119	Surface Chemistry of Copper Nanoparticles and Direct Spray Printing of Hybrid Particle/Metalorganic Inks. <i>Electrochemical and Solid-State Letters</i> , 2001, 4, C58.	2.2	17
120	Combinatorial Growth and Analysis of the Transparent Conducting Oxide ZnO/In(IZO). <i>Macromolecular Rapid Communications</i> , 2004, 25, 344-347.	2.0	17
121	Time tuning of ferroelectric film varactors under pulse voltages. <i>Applied Physics Letters</i> , 2007, 91, 022905.	1.5	17
122	Non-equilibrium synthesis, structure, and opto-electronic properties of Cu ₂ x Zn x O alloys. <i>Journal of Materials Science</i> , 2015, 50, 1350-1357.	1.7	17
123	Structure property relationships in gallium oxide thin films grown by pulsed laser deposition. <i>MRS Communications</i> , 2016, 6, 348-353.	0.8	17
124	Thick-axis textured (Tl,Pb)(Ba,Sr) ₂ Ca ₂ Cu ₃ O ₉ /Ag _{0.37} superconducting tapes by an ink spray pyrolysis method using a Tl-free precursor. <i>Applied Physics Letters</i> , 1994, 65, 2472-2474.	1.5	16
125	Shift of Phase Transition Temperature in Strontium Titanate Thin Films. <i>Integrated Ferroelectrics</i> , 2003, 58, 1371-1379.	0.3	16
126	Enhanced Fuel Cell Catalyst Durability with Nitrogen Modified Carbon Supports. <i>Journal of the Electrochemical Society</i> , 2013, 160, F389-F394.	1.3	16

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127	Rapid thermal processing chamber for <i>in-situ</i> x-ray diffraction. Review of Scientific Instruments, 2015, 86, 013902.	0.6	15
128	Influence of amorphous structure on polymorphism in vanadia. APL Materials, 2016, 4, .	2.2	15
129	Nonlinear properties of thin ferroelectric film-based capacitors at elevated microwave power. Applied Physics Letters, 2006, 89, 232901.	1.5	14
130	Prototype latent heat storage system with aluminum-silicon as a phase change material and a Stirling engine for electricity generation. Energy Conversion and Management, 2019, 199, 111992.	4.4	14
131	Structural effects of heating gold-based contacts to gallium phosphide. Solid-State Electronics, 1984, 27, 137-146.	0.8	13
132	Control of charge separation by electric field manipulation in polymer-oxide hybrid organic photovoltaic bilayer devices. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1257-1265.	0.8	13
133	Solution Synthesis and Characterization of Indium-Zinc Formate Precursors for Transparent Conducting Oxides. Inorganic Chemistry, 2010, 49, 5424-5431.	1.9	13
134	Radio-frequency superimposed direct current magnetron sputtered Ga:ZnO transparent conducting thin films. Journal of Applied Physics, 2012, 111, .	1.1	13
135	Selective brookite polymorph formation related to the amorphous precursor state in TiO ₂ thin films. Journal of Non-Crystalline Solids, 2019, 505, 109-114.	1.5	13
136	Next-Generation Transparent Conducting Oxides for Photovoltaic Cells: an Overview. Materials Research Society Symposia Proceedings, 2001, 668, 1.	0.1	12
137	Effect of Sb Ions on the Morphology of Chemical Bath-Deposited ZnO Films and Application to Nanoporous Solar Cells. Crystal Growth and Design, 2010, 10, 4442-4448.	1.4	12
138	Cyclopenta[c]thiophene-4,6-dione-Based Copolymers as Organic Photovoltaic Donor Materials. Advanced Energy Materials, 2014, 4, 1301821.	10.2	12
139	The Role of Nanoscale Seed Layers on the Enhanced Performance of Niobium doped TiO ₂ Thin Films on Glass. Scientific Reports, 2016, 6, 32830.	1.6	12
140	Design of a thermosyphon-based thermal valve for controlled high-temperature heat extraction. Applied Thermal Engineering, 2017, 126, 1141-1147.	3.0	12
141	Multi-Layer Inkjet Printed Contacts for Silicon Solar Cells. , 2006, , .		11
142	Tensile strain and water vapor transport testing of flexible, conductive and transparent indium-zinc-oxide/silver/indium-zinc-oxide thin films. Thin Solid Films, 2011, 519, 3177-3184.	0.8	11
143	Active Integrated Antenna Based on Planar Dielectric Resonator With Tuning Ferroelectric Varactor. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 2951-2956.	2.9	10
144	Direct write metallization for photovoltaic cells and scaling thereof. , 2010, , .		10

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145	Atmospheric pressure synthesis of In_2Se_3 , Cu_2Se , and CuInSe_2 without external selenization from solution precursors. <i>Journal of Materials Research</i> , 2009, 24, 1375-1387.	1.2	9
146	Inkjet printed metallizations for $\text{Cu}(\text{In}_{1-x}\text{Ga}_x)\text{Se}_2$ photovoltaic cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2011, 19, 973-976.	4.4	9
147	Utilizing TiO_2 amorphous precursors for polymorph selection: An in situ TEM study of phase formation and kinetics. <i>Journal of the American Ceramic Society</i> , 2020, 103, 2899-2907.	1.9	9
148	Phase formation of manganese oxide thin films using pulsed laser deposition. <i>Materials Advances</i> , 2021, 2, 303-309.	2.6	9
149	Confirmation of the Dominant Defect Mechanism in Amorphous InZnO Through the Application of <i>In Situ</i> Brouwer Analysis. <i>Journal of the American Ceramic Society</i> , 2015, 98, 2099-2103.	1.9	8
150	Spray deposition of high quality CuInSe_2 and CdTe films. <i>Conference Record of the IEEE Photovoltaic Specialists Conference</i> , 2008, , .	0.0	7
151	Reliability and heat transfer performance of a miniature high-temperature thermosyphon-based thermal valve. <i>International Journal of Heat and Mass Transfer</i> , 2018, 125, 1079-1086.	2.5	7
152	Rapid Identification of Synthetic Routes to Functional Metastable Phases Using X-ray Probed Laser Anneal Mapping (XPLAM) Time-Temperature Quench Maps. <i>Chemistry of Materials</i> , 2021, 33, 4328-4336.	3.2	7
153	Photoreflectance of reduced poly 3-methyl thiophene. <i>Journal of Applied Physics</i> , 1987, 62, 3932-3935.	1.1	6
154	Inkjet printed contacts for use in photovoltaics. , 2009, , .		6
155	Enhanced lifetime in unencapsulated organic photovoltaics with air stable electrodes. , 2010, , .		6
156	Carbon dioxide capture and sequestration. , 0, , 90-104.		6
157	Techno-economic analysis of a small scale solar power tower at varied locations. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	6
158	Theory-Guided Synthesis of a Metastable Lead-Free Piezoelectric Polymorph. <i>Advanced Materials</i> , 2018, 30, 1800559.	11.1	6
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