

# Michael F Toney

## List of Publications by Year in descending order

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555  
papers

60,774  
citations

640

123  
h-index

1185

228  
g-index

570  
all docs

570  
docs citations

570  
times ranked

47161  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lattice-strain control of the activity in dealloyed core-shell fuel cell catalysts. <i>Nature Chemistry</i> , 2010, 2, 454-460.	6.6	2,489
2	Pathways for practical high-energy long-cycling lithium metal batteries. <i>Nature Energy</i> , 2019, 4, 180-186.	19.8	2,101
3	Liquid-crystalline semiconducting polymers with high charge-carrier mobility. <i>Nature Materials</i> , 2006, 5, 328-333.	13.3	2,001
4	A general relationship between disorder, aggregation and charge transport in conjugated polymers. <i>Nature Materials</i> , 2013, 12, 1038-1044.	13.3	1,742
5	Ultra-high mobility transparent organic thin film transistors grown by an off-centre spin-coating method. <i>Nature Communications</i> , 2014, 5, 3005.	5.8	1,155
6	Quantitative Determination of Organic Semiconductor Microstructure from the Molecular to Device Scale. <i>Chemical Reviews</i> , 2012, 112, 5488-5519.	23.0	1,133
7	Dependence of Regioregular Poly(3-hexylthiophene) Film Morphology and Field-Effect Mobility on Molecular Weight. <i>Macromolecules</i> , 2005, 38, 3312-3319.	2.2	1,003
8	Metal Oxide Surfaces and Their Interactions with Aqueous Solutions and Microbial Organisms. <i>Chemical Reviews</i> , 1999, 99, 77-174.	23.0	981
9	Tuning charge transport in solution-sheared organic semiconductors using lattice strain. <i>Nature</i> , 2011, 480, 504-508.	13.7	981
10	A highly stretchable, transparent, and conductive polymer. <i>Science Advances</i> , 2017, 3, e1602076.	4.7	962
11	Highly oriented crystals at the buried interface in polythiophene thin-film transistors. <i>Nature Materials</i> , 2006, 5, 222-228.	13.3	737
12	Siloxane-Terminated Solubilizing Side Chains: Bringing Conjugated Polymer Backbones Closer and Boosting Hole Mobilities in Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2011, 133, 20130-20133.	6.6	628
13	High-Capacity Micrometer-Sized $\text{Li}_2\text{S}$ Particles as Cathode Materials for Advanced Rechargeable Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2012, 134, 15387-15394.	6.6	624
14	Interdiffusion of PCBM and P3HT Reveals Miscibility in a Photovoltaically Active Blend. <i>Advanced Energy Materials</i> , 2011, 1, 82-89.	10.2	572
15	Band Gap Tuning via Lattice Contraction and Octahedral Tilting in Perovskite Materials for Photovoltaics. <i>Journal of the American Chemical Society</i> , 2017, 139, 11117-11124.	6.6	570
16	Voltage-dependent ordering of water molecules at an electrode-electrolyte interface. <i>Nature</i> , 1994, 368, 444-446.	13.7	566
17	Crystalline Ultrasoother Self-Assembled Monolayers of Alkylsilanes for Organic Field-Effect Transistors. <i>Journal of the American Chemical Society</i> , 2009, 131, 9396-9404.	6.6	562
18	Effects of Thermal Annealing Upon the Morphology of Polymer-Fullerene Blends. <i>Advanced Functional Materials</i> , 2010, 20, 3519-3529.	7.8	539

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19	In Operando X-ray Diffraction and Transmission X-ray Microscopy of Lithium Sulfur Batteries. <i>Journal of the American Chemical Society</i> , 2012, 134, 6337-6343.	6.6	475
20	Coupling between oxygen redox and cation migration explains unusual electrochemistry in lithium-rich layered oxides. <i>Nature Communications</i> , 2017, 8, 2091.	5.8	469
21	Side-Chain Tunability of Furan-Containing Low-Band-Gap Polymers Provides Control of Structural Order in Efficient Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 2180-2185.	6.6	458
22	Direct observation of the alignment of ferromagnetic spins by antiferromagnetic spins. <i>Nature</i> , 2000, 405, 767-769.	13.7	441
23	Full open-framework batteries for stationary energy storage. <i>Nature Communications</i> , 2014, 5, 3007.	5.8	440
24	Large modulation of carrier transport by grain-boundary molecular packing and microstructure in organic thin films. <i>Nature Materials</i> , 2009, 8, 952-958.	13.3	416
25	Structural Characterization of a Pentacene Monolayer on an Amorphous SiO <sub>2</sub> Substrate with Grazing Incidence X-ray Diffraction. <i>Journal of the American Chemical Society</i> , 2004, 126, 4084-4085.	6.6	412
26	The Importance of Fullerene Percolation in the Mixed Regions of Polymer/Fullerene Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2013, 3, 364-374.	10.2	412
27	Dynamics of pore formation during laser powder bed fusion additive manufacturing. <i>Nature Communications</i> , 2019, 10, 1987.	5.8	408
28	The Influence of Poly(3-hexylthiophene) Regioregularity on Fullerene-Composite Solar Cell Performance. <i>Journal of the American Chemical Society</i> , 2008, 130, 16324-16329.	6.6	394
29	Bimolecular Crystals of Fullerenes in Conjugated Polymers and the Implications of Molecular Mixing for Solar Cells. <i>Advanced Functional Materials</i> , 2009, 19, 1173-1179.	7.8	392
30	Molecular Packing of High-Mobility Diketo Pyrrolo-Pyrrole Polymer Semiconductors with Branched Alkyl Side Chains. <i>Journal of the American Chemical Society</i> , 2011, 133, 15073-15084.	6.6	381
31	Near-surface alignment of polymers in rubbed films. <i>Nature</i> , 1995, 374, 709-711.	13.7	373
32	Hybrid Organic/Inorganic Perovskites (HOIPs): Opportunities and Challenges. <i>Advanced Materials</i> , 2015, 27, 5102-5112.	11.1	372
33	High-performance sodium/organic battery by realizing four-sodium storage in disodium rhodizonate. <i>Nature Energy</i> , 2017, 2, 861-868.	19.8	372
34	Direct Observation of Structural Evolution of Metal Chalcogenide in Electrocatalytic Water Oxidation. <i>ACS Nano</i> , 2018, 12, 12369-12379.	7.3	366
35	X-ray Scattering Study of Thin Films of Poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]thiophene). <i>Journal of the American Chemical Society</i> , 2007, 129, 3226-3237.	6.6	351
36	Mechanism of Tin Oxidation and Stabilization by Lead Substitution in Tin Halide Perovskites. <i>ACS Energy Letters</i> , 2017, 2, 2159-2165.	8.8	351

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37	Compositional and orientational control in metal halide perovskites of reduced dimensionality. <i>Nature Materials</i> , 2018, 17, 900-907.	13.3	351
38	Solvent Additives: Key Morphology-Directing Agents for Solution-Processed Organic Solar Cells. <i>Advanced Materials</i> , 2018, 30, e1707114.	11.1	346
39	Unconventional Face-On Texture and Exceptional In-Plane Order of a High Mobility n-Type Polymer. <i>Advanced Materials</i> , 2010, 22, 4359-4363.	11.1	344
40	The meniscus-guided deposition of semiconducting polymers. <i>Nature Communications</i> , 2018, 9, 534.	5.8	324
41	Critical Role of Side-Chain Attachment Density on the Order and Device Performance of Polythiophenes. <i>Macromolecules</i> , 2007, 40, 7960-7965.	2.2	321
42	Quantification of Thin Film Crystallographic Orientation Using X-ray Diffraction with an Area Detector. <i>Langmuir</i> , 2010, 26, 9146-9151.	1.6	315
43	Charge-Transport Anisotropy Due to Grain Boundaries in Directionally Crystallized Thin Films of Regioregular Poly(3-hexylthiophene). <i>Advanced Materials</i> , 2009, 21, 1568-1572.	11.1	305
44	Anisotropic Structure and Charge Transport in Highly Strain-Aligned Regioregular Poly(3-hexylthiophene). <i>Advanced Functional Materials</i> , 2011, 21, 3697-3705.	7.8	288
45	Defect-Induced Band-Edge Reconstruction of a Bismuth-Halide Double Perovskite for Visible-Light Absorption. <i>Journal of the American Chemical Society</i> , 2017, 139, 5015-5018.	6.6	288
46	Metal-oxygen decoordination stabilizes anion redox in Li-rich oxides. <i>Nature Materials</i> , 2019, 18, 256-265.	13.3	280
47	Drastic Control of Texture in a High Performance n-Type Polymeric Semiconductor and Implications for Charge Transport. <i>Macromolecules</i> , 2011, 44, 5246-5255.	2.2	278
48	Perpendicular magnetic anisotropy and magnetic domain structure in sputtered epitaxial FePt (001) L10 films. <i>Journal of Applied Physics</i> , 1998, 84, 5686-5692.	1.1	275
49	A map of the inorganic ternary metal nitrides. <i>Nature Materials</i> , 2019, 18, 732-739.	13.3	274
50	Control of the axis of chemical ordering and magnetic anisotropy in epitaxial FePt films. <i>Journal of Applied Physics</i> , 1996, 79, 5967.	1.1	272
51	Engineering Stress in Perovskite Solar Cells to Improve Stability. <i>Advanced Energy Materials</i> , 2018, 8, 1802139.	10.2	271
52	Quantitative analysis of lattice disorder and crystallite size in organic semiconductor thin films. <i>Physical Review B</i> , 2011, 84, .	1.1	262
53	Molecular Order in High-Efficiency Polymer/Fullerene Bulk Heterojunction Solar Cells. <i>ACS Nano</i> , 2011, 5, 8248-8257.	7.3	260
54	The chemical and structural origin of efficient p-type doping in P3HT. <i>Organic Electronics</i> , 2013, 14, 1330-1336.	1.4	256

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55	Chloride in Lead Chloride-Derived Organo-Metal Halides for Perovskite-Absorber Solar Cells. <i>Chemistry of Materials</i> , 2014, 26, 7158-7165.	3.2	256
56	Temperature dependent magnetic properties of highly chemically ordered Fe <sub>55-x</sub> Ni <sub>x</sub> Pt <sub>45</sub> L <sub>1</sub> films. <i>Journal of Applied Physics</i> , 2002, 91, 6595.	1.1	253
57	Structural Order in Bulk Heterojunction Films Prepared with Solvent Additives. <i>Advanced Materials</i> , 2011, 23, 2284-2288.	11.1	248
58	Ultrahigh electrical conductivity in solution-sheared polymeric transparent films. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14138-14143.	3.3	248
59	Tuning the Properties of Polymer Bulk Heterojunction Solar Cells by Adjusting Fullerene Size to Control Intercalation. <i>Nano Letters</i> , 2009, 9, 4153-4157.	4.5	243
60	Device-Scale Perpendicular Alignment of Colloidal Nanorods. <i>Nano Letters</i> , 2010, 10, 195-201.	4.5	241
61	The Structure of the Passive Film That Forms on Iron in Aqueous Environments. <i>Journal of the Electrochemical Society</i> , 2000, 147, 2162.	1.3	232
62	The Role of OTS Density on Pentacene and C <sub>60</sub> Nucleation, Thin Film Growth, and Transistor Performance. <i>Advanced Functional Materials</i> , 2009, 19, 1962-1970.	7.8	227
63	Surface regulation enables high stability of single-crystal lithium-ion cathodes at high voltage. <i>Nature Communications</i> , 2020, 11, 3050.	5.8	225
64	Flow-enhanced solution printing of all-polymer solar cells. <i>Nature Communications</i> , 2015, 6, 7955.	5.8	221
65	Relationships between Lead Halide Perovskite Thin-Film Fabrication, Morphology, and Performance in Solar Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 463-470.	6.6	221
66	Observation of Transient Structural-Transformation Dynamics in a Cu <sub>2</sub> S Nanorod. <i>Science</i> , 2011, 333, 206-209.	6.0	220
67	Molecular Characterization of Organic Electronic Films. <i>Advanced Materials</i> , 2011, 23, 319-337.	11.1	215
68	Low-Dielectric, Nanoporous Organosilicate Films Prepared via Inorganic/Organic Polymer Hybrid Templates. <i>Chemistry of Materials</i> , 1999, 11, 3080-3085.	3.2	214
69	Roll-to-Roll Printed Large-Area All-Polymer Solar Cells with 5% Efficiency Based on a Low Crystallinity Conjugated Polymer Blend. <i>Advanced Energy Materials</i> , 2017, 7, 1602742.	10.2	214
70	Electrochemical Deposition of Copper on a Gold Electrode in Sulfuric Acid: Resolution of the Interfacial Structure. <i>Physical Review Letters</i> , 1995, 75, 4472-4475.	2.9	213
71	p-Channel Organic Semiconductors Based on Hybrid Acene~Thiophene Molecules for Thin-Film Transistor Applications. <i>Journal of the American Chemical Society</i> , 2005, 127, 3997-4009.	6.6	204
72	Size-Dependent Lattice Structure and Confinement Properties in CsPbI <sub>3</sub> Perovskite Nanocrystals: Negative Surface Energy for Stabilization. <i>ACS Energy Letters</i> , 2020, 5, 238-247.	8.8	201

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73	Impact of interfacial molecular orientation on radiative recombination and charge generation efficiency. <i>Nature Communications</i> , 2017, 8, 79.	5.8	198
74	Ultrafast Growth of Highly Branched Palladium Nanostructures for Catalysis. <i>ACS Nano</i> , 2010, 4, 396-402.	7.3	194
75	Enhanced Solid-State Order and Field-Effect Hole Mobility through Control of Nanoscale Polymer Aggregation. <i>Journal of the American Chemical Society</i> , 2013, 135, 19229-19236.	6.6	194
76	Controlling Solution-Phase Polymer Aggregation with Molecular Weight and Solvent Additives to Optimize Polymer-Fullerene Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1301733.	10.2	194
77	Magneto-optical Kerr spectroscopy of a new chemically ordered alloy:Co <sub>3</sub> Pt. <i>Physical Review Letters</i> , 1993, 71, 2493-2496.	2.9	193
78	On the relationship of magnetocrystalline anisotropy and stoichiometry in epitaxial L10 CoPt (001) and FePt (001) thin films. <i>Journal of Applied Physics</i> , 2005, 98, 033904.	1.1	190
79	Atomic Structure of the Passive Oxide Film Formed on Iron. <i>Physical Review Letters</i> , 1997, 79, 4282-4285.	2.9	189
80	Structure-Activity-Stability Relationships of Pt-Co Alloy Electrocatalysts in Gas-Diffusion Electrode Layers. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3744-3752.	1.5	188
81	Designing a Quinone-Based Redox Mediator to Facilitate Li <sub>2</sub> S Oxidation in Li-S Batteries. <i>Joule</i> , 2019, 3, 872-884.	11.7	188
82	Reversible Multivalent (Monovalent, Divalent, Trivalent) Ion Insertion in Open Framework Materials. <i>Advanced Energy Materials</i> , 2015, 5, 1401869.	10.2	185
83	Effect of Al <sub>2</sub> O <sub>3</sub> Coating on Stabilizing LiNi <sub>0.4</sub> Mn <sub>0.4</sub> Co <sub>0.2</sub> O <sub>2</sub> Cathodes. <i>Chemistry of Materials</i> , 2015, 27, 6146-6154.	3.2	185
84	Solid Electrolyte Interphase on Native Oxide-Terminated Silicon Anodes for Li-Ion Batteries. <i>Joule</i> , 2019, 3, 762-781.	11.7	185
85	Impact of Surfaces on Photoinduced Halide Segregation in Mixed-Halide Perovskites. <i>ACS Energy Letters</i> , 2018, 3, 2694-2700.	8.8	184
86	Precise Structure of Pentacene Monolayers on Amorphous Silicon Oxide and Relation to Charge Transport. <i>Advanced Materials</i> , 2009, 21, 2294-2298.	11.1	183
87	Morphology-Dependent Trap Formation in High Performance Polymer Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2011, 1, 954-962.	10.2	183
88	Interfacial Segregation in Polymer/Fullerene Blend Films for Photovoltaic Devices. <i>Macromolecules</i> , 2010, 43, 3828-3836.	2.2	182
89	Structural origin of gap states in semicrystalline polymers and the implications for charge transport. <i>Physical Review B</i> , 2011, 83, .	1.1	180
90	Manganese-cobalt hexacyanoferrate cathodes for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4211-4223.	5.2	180

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91	A modular molecular framework for utility in small-molecule solution-processed organic photovoltaic devices. <i>Journal of Materials Chemistry</i> , 2011, 21, 12700.	6.7	175
92	How Nanoparticles Coalesce: An in Situ Study of Au Nanoparticle Aggregation and Grain Growth. <i>Chemistry of Materials</i> , 2011, 23, 3312-3317.	3.2	174
93	Structure of Dealloyed PtCu <sub>3</sub> Thin Films and Catalytic Activity for Oxygen Reduction. <i>Chemistry of Materials</i> , 2010, 22, 4712-4720.	3.2	173
94	Electrochemical trapping of metastable Mn <sup>3+</sup> ions for activation of MnO <sub>2</sub> oxygen evolution catalysts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E5261-E5268.	3.3	173
95	Surface and grain-boundary scattering in nanometric Cu films. <i>Physical Review B</i> , 2010, 81, .	1.1	172
96	Manipulating the Morphology of P3HT/PCBM Bulk Heterojunction Blends with Solvent Vapor Annealing. <i>Chemistry of Materials</i> , 2012, 24, 3923-3931.	3.2	171
97	Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering. <i>Surface Science</i> , 1995, 335, 326-332.	0.8	167
98	Tin/lead halide perovskites with improved thermal and air stability for efficient all-perovskite tandem solar cells. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2450-2459.	2.5	167
99	Crystallization in one-step solution deposition of perovskite films: Upward or downward?. <i>Science Advances</i> , 2021, 7, .	4.7	165
100	Molecular Interactions and Ordering in Electrically Doped Polymers: Blends of PBTTT and F <sub>4</sub> TCNQ. <i>Macromolecules</i> , 2014, 47, 6836-6846.	2.2	164
101	Effect of chemical pressure on the charge density wave transition in rare-earth tritellurides $\text{Te}_{1-x}\text{Se}_x$ . <i>Physical Review B</i> , 2008, 77, .	1.1	163
102	Controlling the Orientation of Terraced Nanoscale Ribbons of a Poly(thiophene) Semiconductor. <i>ACS Nano</i> , 2009, 3, 780-787.	7.3	160
103	Activity-stability relationships of ordered and disordered alloy phases of Pt <sub>3</sub> Co electrocatalysts for the oxygen reduction reaction (ORR). <i>Electrochimica Acta</i> , 2007, 52, 2765-2774.	2.6	159
104	Grazing incidence x-ray diffraction of lead monolayers at a silver (111) and gold (111) electrode/electrolyte interface. <i>The Journal of Physical Chemistry</i> , 1988, 92, 220-225.	2.9	158
105	In Situ and Ex Situ Studies of Platinum Nanocrystals: Growth and Evolution in Solution. <i>Journal of the American Chemical Society</i> , 2009, 131, 14590-14595.	6.6	157
106	In Situ X-ray Diffraction Studies of (De)lithiation Mechanism in Silicon Nanowire Anodes. <i>ACS Nano</i> , 2012, 6, 5465-5473.	7.3	156
107	P <sub>2</sub> Na <sub>x</sub> Co <sub>y</sub> Mn <sub>1-x-y</sub> O <sub>2</sub> (x + y = 0). <i>Chemistry of Materials</i> , 2016, 28, 2041-2051.	3.2	154
108	Thermal engineering of FAPbI <sub>3</sub> perovskite material via radiative thermal annealing and in situ XRD. <i>Nature Communications</i> , 2017, 8, 14075.	5.8	149

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109	Simple Synthesis and Functionalization of Iron Nanoparticles for Magnetic Resonance Imaging. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4206-4209.	7.2	148
110	Controlling Thin-Film Stress and Wrinkling during Perovskite Film Formation. <i>ACS Energy Letters</i> , 2018, 3, 1225-1232.	8.8	148
111	A Mechanistic Understanding of Processing Additive-Induced Efficiency Enhancement in Bulk Heterojunction Organic Solar Cells. <i>Advanced Materials</i> , 2014, 26, 300-305.	11.1	145
112	Growth temperature dependence of long-range alloy order and magnetic properties of epitaxial FePt <sub>1-x</sub> (x%,0.5) films. <i>Applied Physics Letters</i> , 1996, 69, 1166-1168.	1.5	143
113	Fine-Tuning Semiconducting Polymer Self-Aggregation and Crystallinity Enables Optimal Morphology and High-Performance Printed All-Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2020, 142, 392-406.	6.6	143
114	Controlling Nucleation and Crystallization in Solution-Processed Organic Semiconductors for Thin-Film Transistors. <i>Advanced Materials</i> , 2009, 21, 3605-3609.	11.1	141
115	Synthesis, Alignment, and Magnetic Properties of Monodisperse Nickel Nanocubes. <i>Journal of the American Chemical Society</i> , 2012, 134, 855-858.	6.6	141
116	Molecular Packing and Solar Cell Performance in Blends of Polymers with a Bisadduct Fullerene. <i>Nano Letters</i> , 2012, 12, 1566-1570.	4.5	140
117	Enhanced Vertical Charge Transport in a Semiconducting P3HT Thin Film on Single Layer Graphene. <i>Advanced Functional Materials</i> , 2015, 25, 664-670.	7.8	138
118	Significant dependence of morphology and charge carrier mobility on substrate surface chemistry in high performance polythiophene semiconductor films. <i>Applied Physics Letters</i> , 2007, 90, 062117.	1.5	136
119	Grazing incidence x-ray scattering studies of thin films of an aromatic polyimide. <i>Macromolecules</i> , 1993, 26, 2847-2859.	2.2	131
120	Orientational Ordering of Nitrogen Molecular Axes for a Commensurate Monolayer Physisorbed on Graphite. <i>Physical Review Letters</i> , 1982, 48, 177-180.	2.9	130
121	Narrow-Band-Gap Conjugated Chromophores with Extended Molecular Lengths. <i>Journal of the American Chemical Society</i> , 2012, 134, 20609-20612.	6.6	128
122	Structural Origins of Light-Induced Phase Segregation in Organic-Inorganic Halide Perovskite Photovoltaic Materials. <i>Matter</i> , 2020, 2, 207-219.	5.0	128
123	Use of X-Ray Diffraction, Molecular Simulations, and Spectroscopy to Determine the Molecular Packing in a Polymer-Fullerene Bimolecular Crystal. <i>Advanced Materials</i> , 2012, 24, 6071-6079.	11.1	126
124	Time-Resolved Structural Evolution of Additive-Processed Bulk Heterojunction Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 2884-2887.	6.6	125
125	An instrument for <i>in situ</i> time-resolved X-ray imaging and diffraction of laser powder bed fusion additive manufacturing processes. <i>Review of Scientific Instruments</i> , 2018, 89, 055101.	0.6	123
126	In situ nanotomography and operando transmission X-ray microscopy of micron-sized Ge particles. <i>Energy and Environmental Science</i> , 2014, 7, 2771-2777.	15.6	117

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127	Perovskite-Inspired Photovoltaic Materials: Toward Best Practices in Materials Characterization and Calculations. <i>Chemistry of Materials</i> , 2017, 29, 1964-1988.	3.2	116
128	Molecular Basis of Mesophase Ordering in a Thiophene-Based Copolymer. <i>Macromolecules</i> , 2008, 41, 5709-5715.	2.2	114
129	A Review of Existing and Emerging Methods for Lithium Detection and Characterization in Li-Ion and Li-Metal Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2100372.	10.2	114
130	Surface-induced ordering of an aromatic polyimide. <i>Physical Review Letters</i> , 1991, 66, 1181-1184.	2.9	112
131	Understanding Phase Transformation in Crystalline Ge Anodes for Li-Ion Batteries. <i>Chemistry of Materials</i> , 2014, 26, 3739-3746.	3.2	112
132	Size Dependence of a Temperature-Induced Solid-Solid Phase Transition in Copper(I) Sulfide. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 2402-2406.	2.1	111
133	Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. <i>Advanced Functional Materials</i> , 2014, 24, 610-618.	7.8	109
134	Three-Dimensional Packing Structure and Electronic Properties of Biaxially Oriented Poly(2,5-bis(3-alkylthiophene-2-yl)thieno[3,2-b]thiophene) Films. <i>Journal of the American Chemical Society</i> , 2012, 134, 6177-6190.	6.6	108
135	Vertically Segregated Structure and Properties of Small Molecule-Polymer Blend Semiconductors for Organic Thin-Film Transistors. <i>Advanced Functional Materials</i> , 2013, 23, 366-376.	7.8	106
136	The formation mechanism for printed silver-contacts for silicon solar cells. <i>Nature Communications</i> , 2016, 7, 11143.	5.8	106
137	Persistent and partially mobile oxygen vacancies in Li-rich layered oxides. <i>Nature Energy</i> , 2021, 6, 642-652.	19.8	106
138	The use of poly-cation oxides to lower the temperature of two-step thermochemical water splitting. <i>Energy and Environmental Science</i> , 2018, 11, 2172-2178.	15.6	105
139	Correlating the scattered intensities of P3HT and PCBM to the current densities of polymer solar cells. <i>Chemical Communications</i> , 2011, 47, 436-438.	2.2	103
140	Poly(3-hexylthiophene) and [6,6]-Phenyl-C <sub>61</sub> -butyric Acid Methyl Ester Mixing in Organic Solar Cells. <i>Macromolecules</i> , 2012, 45, 6587-6599.	2.2	103
141	In-situ grazing incidence X-ray diffraction study of electrochemically deposited Pb monolayers on Ag(111). <i>Surface Science</i> , 1988, 193, L29-L36.	0.8	102
142	Versatile Interpenetrating Polymer Network Approach to Robust Stretchable Electronic Devices. <i>Chemistry of Materials</i> , 2017, 29, 7645-7652.	3.2	101
143	Fictitious phase separation in Li layered oxides driven by electro-autocatalysis. <i>Nature Materials</i> , 2021, 20, 991-999.	13.3	101
144	Thickness and growth temperature dependence of structure and magnetism in FePt thin films. <i>Journal of Applied Physics</i> , 2003, 93, 9902-9907.	1.1	100

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145	Structure and Mechanism of Strength Enhancement in Interpenetrating Polymer Network Hydrogels. <i>Macromolecules</i> , 2011, 44, 5776-5787.	2.2	100
146	Role of confinement and aggregation in charge transport in semicrystalline polythiophene thin films. <i>Physical Review B</i> , 2012, 86, .	1.1	100
147	Real-Time Observation of Poly(3-alkylthiophene) Crystallization and Correlation with Transient Optoelectronic Properties. <i>Macromolecules</i> , 2011, 44, 6653-6658.	2.2	99
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