Michael F Toney

List of Publications by Citations

541 papers	49,812 citations	114 h-index	208 g-index
570 ext. papers	55,039 ext. citations	11 avg, IF	7.6 L-index

#	Paper	IF	Citations
541	Lattice-strain control of the activity in dealloyed core-shell fuel cell catalysts. *Nature Chemistry*, **2010**, 2, 454-60	17.6	2116
540	Liquid-crystalline semiconducting polymers with high charge-carrier mobility. *Nature Materials*, **2006**, 5, 328-33	27	1836
539	A general relationship between disorder, aggregation and charge transport in conjugated polymers. *Nature Materials*, **2013**, 12, 1038-44	27	1435
538	Pathways for practical high-energy long-cycling lithium metal batteries. *Nature Energy*, **2019**, 4, 180-186	62.3	1202
537	Ultra-high mobility transparent organic thin film transistors grown by an off-centre spin-coating method. *Nature Communications*, **2014**, 5, 3005	17.4	975
536	Quantitative determination of organic semiconductor microstructure from the molecular to device scale. *Chemical Reviews*, **2012**, 112, 5488-519	68.1	922
535	Dependence of Regioregular Poly(3-hexylthiophene) Film Morphology and Field-Effect Mobility on Molecular Weight. *Macromolecules*, **2005**, 38, 3312-3319	5.5	922
534	Metal Oxide Surfaces and Their Interactions with Aqueous Solutions and Microbial Organisms. *Chemical Reviews*, **1999**, 99, 77-174	68.1	882
533	Tuning charge transport in solution-sheared organic semiconductors using lattice strain. *Nature*, **2011**, 480, 504-8	50.4	855
532	Highly oriented crystals at the buried interface in polythiophene thin-film transistors. *Nature Materials*, **2006**, 5, 222-228	27	701
531	A highly stretchable, transparent, and conductive polymer. *Science Advances*, **2017**, 3, e1602076	14.3	674
530	Siloxane-terminated solubilizing side chains: bringing conjugated polymer backbones closer and boosting hole mobilities in thin-film transistors. *Journal of the American Chemical Society*, **2011**, 133, 20130-3	16.4	582
529	Interdiffusion of PCBM and P3HT Reveals Miscibility in a Photovoltaically Active Blend. *Advanced Energy Materials*, **2011**, 1, 82-89	21.8	546
528	High-capacity micrometer-sized Li2S particles as cathode materials for advanced rechargeable lithium-ion batteries. *Journal of the American Chemical Society*, **2012**, 134, 15387-94	16.4	524
527	Crystalline ultrasmooth self-assembled monolayers of alkylsilanes for organic field-effect transistors. *Journal of the American Chemical Society*, **2009**, 131, 9396-404	16.4	493
526	Effects of Thermal Annealing Upon the Morphology of Polymer–Fullerene Blends. *Advanced Functional Materials*, **2010**, 20, 3519-3529	15.6	493
525	Voltage-dependent ordering of water molecules at an electrode–electrolyte interface. *Nature*, **1994**, 368, 444-446	50.4	491

524	Side-chain tunability of furan-containing low-band-gap polymers provides control of structural order in efficient solar cells. *Journal of the American Chemical Society*, **2012**, 134, 2180-5	16.4	437
523	In Operando X-ray diffraction and transmission X-ray microscopy of lithium sulfur batteries. *Journal of the American Chemical Society*, **2012**, 134, 6337-43	16.4	428
522	Direct observation of the alignment of ferromagnetic spins by antiferromagnetic spins. *Nature*, **2000**, 405, 767-9	50.4	407
521	Structural characterization of a pentacene monolayer on an amorphous SiO2 substrate with grazing incidence x-ray diffraction. *Journal of the American Chemical Society*, **2004**, 126, 4084-5	16.4	392
520	The Importance of Fullerene Percolation in the Mixed Regions of Polymer–Fullerene Bulk Heterojunction Solar Cells. *Advanced Energy Materials*, **2013**, 3, 364-374	21.8	386
519	The influence of poly(3-hexylthiophene) regioregularity on fullerene-composite solar cell performance. *Journal of the American Chemical Society*, **2008**, 130, 16324-9	16.4	378
518	Large modulation of carrier transport by grain-boundary molecular packing and microstructure in organic thin films. *Nature Materials*, **2009**, 8, 952-8	27	376
517	Bimolecular Crystals of Fullerenes in Conjugated Polymers and the Implications of Molecular Mixing for Solar Cells. *Advanced Functional Materials*, **2009**, 19, 1173-1179	15.6	373
516	Full open-framework batteries for stationary energy storage. *Nature Communications*, **2014**, 5, 3007	17.4	367
515	Band Gap Tuning via Lattice Contraction and Octahedral Tilting in Perovskite Materials for Photovoltaics. *Journal of the American Chemical Society*, **2017**, 139, 11117-11124	16.4	353
514	Molecular packing of high-mobility diketo pyrrolo-pyrrole polymer semiconductors with branched alkyl side chains. *Journal of the American Chemical Society*, **2011**, 133, 15073-84	16.4	353
513	Near-surface alignment of polymers in rubbed films. *Nature*, **1995**, 374, 709-711	50.4	332
512	Hybrid Organic-Inorganic Perovskites (HOIPs): Opportunities and Challenges. *Advanced Materials*, **2015**, 27, 5102-12	24	325
511	Coupling between oxygen redox and cation migration explains unusual electrochemistry in lithium-rich layered oxides. *Nature Communications*, **2017**, 8, 2091	17.4	322
510	Unconventional face-on texture and exceptional in-plane order of a high mobility n-type polymer. *Advanced Materials*, **2010**, 22, 4359-63	24	317
509	X-ray scattering study of thin films of poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]thiophene). *Journal of the American Chemical Society*, **2007**, 129, 3226-37	16.4	317
508	Critical Role of Side-Chain Attachment Density on the Order and Device Performance of Polythiophenes. *Macromolecules*, **2007**, 40, 7960-7965	5.5	297
507	Charge-Transport Anisotropy Due to Grain Boundaries in Directionally Crystallized Thin Films of Regioregular Poly(3-hexylthiophene). *Advanced Materials*, **2009**, 21, 1568-1572	24	286

506	High-performance sodium–organic battery by realizing four-sodium storage in disodium rhodizonate. *Nature Energy*, **2017**, 2, 861-868	62.3	272
505	Quantification of thin film crystallographic orientation using X-ray diffraction with an area detector. *Langmuir*, **2010**, 26, 9146-51	4	262
504	Perpendicular magnetic anisotropy and magnetic domain structure in sputtered epitaxial FePt (001) L10 films. *Journal of Applied Physics*, **1998**, 84, 5686-5692	2.5	257
503	Anisotropic Structure and Charge Transport in Highly Strain-Aligned Regioregular Poly(3-hexylthiophene). *Advanced Functional Materials*, **2011**, 21, 3697-3705	15.6	253
502	Compositional and orientational control in metal halide perovskites of reduced dimensionality. *Nature Materials*, **2018**, 17, 900-907	27	252
501	Drastic Control of Texture in a High Performance n-Type Polymeric Semiconductor and Implications for Charge Transport. *Macromolecules*, **2011**, 44, 5246-5255	5.5	250
500	Control of the axis of chemical ordering and magnetic anisotropy in epitaxial FePt films. *Journal of Applied Physics*, **1996**, 79, 5967	2.5	245
499	Molecular order in high-efficiency polymer/fullerene bulk heterojunction solar cells. *ACS Nano*, **2011**, 5, 8248-57	16.7	243
498	Mechanism of Tin Oxidation and Stabilization by Lead Substitution in Tin Halide Perovskites. *ACS Energy Letters*, **2017**, 2, 2159-2165	20.1	242
497	Structural order in bulk heterojunction films prepared with solvent additives. *Advanced Materials*, **2011**, 23, 2284-8	24	241
496	Tuning the properties of polymer bulk heterojunction solar cells by adjusting fullerene size to control intercalation. *Nano Letters*, **2009**, 9, 4153-7	11.5	235
495	Chloride in Lead Chloride-Derived Organo-Metal Halides for Perovskite-Absorber Solar Cells. *Chemistry of Materials*, **2014**, 26, 7158-7165	9.6	230
494	Solvent Additives: Key Morphology-Directing Agents for Solution-Processed Organic Solar Cells. *Advanced Materials*, **2018**, 30, e1707114	24	228
493	Dynamics of pore formation during laser powder bed fusion additive manufacturing. *Nature Communications*, **2019**, 10, 1987	17.4	223
492	Device-scale perpendicular alignment of colloidal nanorods. *Nano Letters*, **2010**, 10, 195-201	11.5	223
491	Direct Observation of Structural Evolution of Metal Chalcogenide in Electrocatalytic Water Oxidation. *ACS Nano*, **2018**, 12, 12369-12379	16.7	220
490	The chemical and structural origin of efficient p-type doping in P3HT. *Organic Electronics*, **2013**, 14, 1330-1336	3.5	219
489	Temperature dependent magnetic properties of highly chemically ordered Fe55−xNixPt45L10 films. *Journal of Applied Physics*, **2002**, 91, 6595	2.5	219

488	The meniscus-guided deposition of semiconducting polymers. *Nature Communications*, **2018**, 9, 534	17.4	214
487	Quantitative analysis of lattice disorder and crystallite size in organic semiconductor thin films. *Physical Review B*, **2011**, 84,	3.3	210
486	The Role of OTS Density on Pentacene and C60 Nucleation, Thin Film Growth, and Transistor Performance. *Advanced Functional Materials*, **2009**, 19, 1962-1970	15.6	209
485	Defect-Induced Band-Edge Reconstruction of a Bismuth-Halide Double Perovskite for Visible-Light Absorption. *Journal of the American Chemical Society*, **2017**, 139, 5015-5018	16.4	206
484	Observation of transient structural-transformation dynamics in a Cu2S nanorod. *Science*, **2011**, 333, 206-9	33.3	202
483	The Structure of the Passive Film That Forms on Iron in Aqueous Environments. *Journal of the Electrochemical Society*, **2000**, 147, 2162	3.9	200
482	Relationships between Lead Halide Perovskite Thin-Film Fabrication, Morphology, and Performance in Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 463-70	16.4	192
481	p-Channel organic semiconductors based on hybrid acene-thiophene molecules for thin-film transistor applications. *Journal of the American Chemical Society*, **2005**, 127, 3997-4009	16.4	192
480	Flow-enhanced solution printing of all-polymer solar cells. *Nature Communications*, **2015**, 6, 7955	17.4	191
479	Low-Dielectric, Nanoporous Organosilicate Films Prepared via Inorganic/Organic Polymer Hybrid Templates. *Chemistry of Materials*, **1999**, 11, 3080-3085	9.6	191
478	Molecular characterization of organic electronic films. *Advanced Materials*, **2011**, 23, 319-37	24	190
477	Ultrafast growth of highly branched palladium nanostructures for catalysis. *ACS Nano*, **2010**, 4, 396-402	16.7	183
476	Controlling Solution-Phase Polymer Aggregation with Molecular Weight and Solvent Additives to Optimize Polymer-Fullerene Bulk Heterojunction Solar Cells. *Advanced Energy Materials*, **2014**, 4, 1301733	21.8	182
475	Roll-to-Roll Printed Large-Area All-Polymer Solar Cells with 5% Efficiency Based on a Low Crystallinity Conjugated Polymer Blend. *Advanced Energy Materials*, **2017**, 7, 1602742	21.8	179
474	Ultrahigh electrical conductivity in solution-sheared polymeric transparent films. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14138-43	11.5	179
473	Metal-oxygen decoordination stabilizes anion redox in Li-rich oxides. *Nature Materials*, **2019**, 18, 256-265	27	178
472	Interfacial Segregation in Polymer/Fullerene Blend Films for Photovoltaic Devices. *Macromolecules*, **2010**, 43, 3828-3836	5.5	177
471	Electrochemical deposition of copper on a gold electrode in sulfuric acid: resolution of the interfacial structure. *Physical Review Letters*, **1995**, 75, 4472-4475	7.4	177

470	Morphology-Dependent Trap Formation in High Performance Polymer Bulk Heterojunction Solar Cells. *Advanced Energy Materials*, **2011**, 1, 954-962	21.8	176
469	Structure-Activity-Stability Relationships of Pt□o Alloy Electrocatalysts in Gas-Diffusion Electrode Layers. *Journal of Physical Chemistry C*, **2007**, 111, 3744-3752	3.8	175
468	Magneto-optical Kerr spectroscopy of a new chemically ordered alloy: Co3Pt. *Physical Review Letters*, **1993**, 71, 2493-2496	7.4	175
467	On the relationship of magnetocrystalline anisotropy and stoichiometry in epitaxial L10 CoPt (001) and FePt (001) thin films. *Journal of Applied Physics*, **2005**, 98, 033904	2.5	174
466	Precise Structure of Pentacene Monolayers on Amorphous Silicon Oxide and Relation to Charge Transport. *Advanced Materials*, **2009**, 21, 2294-2298	24	173
465	Enhanced solid-state order and field-effect hole mobility through control of nanoscale polymer aggregation. *Journal of the American Chemical Society*, **2013**, 135, 19229-36	16.4	170
464	A modular molecular framework for utility in small-molecule solution-processed organic photovoltaic devices. *Journal of Materials Chemistry*, **2011**, 21, 12700		169
463	Structural origin of gap states in semicrystalline polymers and the implications for charge transport. *Physical Review B*, **2011**, 83,	3.3	166
462	Structure of Dealloyed PtCu3 Thin Films and Catalytic Activity for Oxygen Reduction. *Chemistry of Materials*, **2010**, 22, 4712-4720	9.6	166
461	Atomic Structure of the Passive Oxide Film Formed on Iron. *Physical Review Letters*, **1997**, 79, 4282-4285	7.4	166
460	Impact of interfacial molecular orientation on radiative recombination and charge generation efficiency. *Nature Communications*, **2017**, 8, 79	17.4	160
459	Manipulating the Morphology of P3HT□PCBM Bulk Heterojunction Blends with Solvent Vapor Annealing. *Chemistry of Materials*, **2012**, 24, 3923-3931	9.6	151
458	In situ and ex situ studies of platinum nanocrystals: growth and evolution in solution. *Journal of the American Chemical Society*, **2009**, 131, 14590-5	16.4	151
457	Effect of Al2O3 Coating on Stabilizing LiNi0.4Mn0.4Co0.2O2 Cathodes. *Chemistry of Materials*, **2015**, 27, 6146-6154	9.6	149
456	Activity□tability relationships of ordered and disordered alloy phases of Pt3Co electrocatalysts for the oxygen reduction reaction (ORR). *Electrochimica Acta*, **2007**, 52, 2765-2774	6.7	149
455	Distribution of water molecules at Ag(111)/electrolyte interface as studied with surface X-ray scattering. *Surface Science*, **1995**, 335, 326-332	1.8	149
454	A map of the inorganic ternary metal nitrides. *Nature Materials*, **2019**, 18, 732-739	27	148
453	Engineering Stress in Perovskite Solar Cells to Improve Stability. *Advanced Energy Materials*, **2018**, 8, 1802139	21.8	148

452	Controlling the orientation of terraced nanoscale "ribbons" of a poly(thiophene) semiconductor. *ACS Nano*, **2009**, 3, 780-7	16.7	145
451	Reversible Multivalent (Monovalent, Divalent, Trivalent) Ion Insertion in Open Framework Materials. *Advanced Energy Materials*, **2015**, 5, 1401869	21.8	142
450	Grazing incidence x-ray diffraction of lead monolayers at a silver (111) and gold (111) electrode/electrolyte interface. *The Journal of Physical Chemistry*, **1988**, 92, 220-225		142
449	Surface and grain-boundary scattering in nanometric Cu films. *Physical Review B*, **2010**, 81,	3.3	141
448	Molecular Interactions and Ordering in Electrically Doped Polymers: Blends of PBTTT and F4TCNQ. *Macromolecules*, **2014**, 47, 6836-6846	5.5	138
447	How Nanoparticles Coalesce: An in Situ Study of Au Nanoparticle Aggregation and Grain Growth. *Chemistry of Materials*, **2011**, 23, 3312-3317	9.6	138
446	Simple synthesis and functionalization of iron nanoparticles for magnetic resonance imaging. *Angewandte Chemie - International Edition*, **2011**, 50, 4206-9	16.4	138
445	In situ X-ray diffraction studies of (de)lithiation mechanism in silicon nanowire anodes. *ACS Nano*, **2012**, 6, 5465-73	16.7	137
444	Effect of chemical pressure on the charge density wave transition in rare-earth tritellurides RTe3. *Physical Review B*, **2008**, 77,	3.3	137
443	A mechanistic understanding of processing additive-induced efficiency enhancement in bulk heterojunction organic solar cells. *Advanced Materials*, **2014**, 26, 300-5	24	133
442	Growth temperature dependence of long-range alloy order and magnetic properties of epitaxial FexPt1 (x?0.5) films. *Applied Physics Letters*, **1996**, 69, 1166-1168	3.4	133
441	Molecular packing and solar cell performance in blends of polymers with a bisadduct fullerene. *Nano Letters*, **2012**, 12, 1566-70	11.5	132
440	Synthesis, alignment, and magnetic properties of monodisperse nickel nanocubes. *Journal of the American Chemical Society*, **2012**, 134, 855-8	16.4	130
439	Controlling Nucleation and Crystallization in Solution-Processed Organic Semiconductors for Thin-Film Transistors. *Advanced Materials*, **2009**, 21, 3605-3609	24	129
438	Electrochemical trapping of metastable Mn ions for activation of MnO oxygen evolution catalysts. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E5261-E5268	11.5	129
437	Tin ead halide perovskites with improved thermal and air stability for efficient all-perovskite tandem solar cells. *Sustainable Energy and Fuels*, **2018**, 2, 2450-2459	5.8	127
436	Significant dependence of morphology and charge carrier mobility on substrate surface chemistry in high performance polythiophene semiconductor films. *Applied Physics Letters*, **2007**, 90, 062117	3.4	125
435	Enhanced Vertical Charge Transport in a Semiconducting P3HT Thin Film on Single Layer Graphene. *Advanced Functional Materials*, **2015**, 25, 664-670	15.6	124

434	P2-NaxCoyMn1-yO2 (y = 0, 0.1) as Cathode Materials in Sodium-Ion Batteries-Effects of Doping and Morphology To Enhance Cycling Stability. *Chemistry of Materials*, **2016**, 28, 2041-2051	9.6	124
433	Narrow-band-gap conjugated chromophores with extended molecular lengths. *Journal of the American Chemical Society*, **2012**, 134, 20609-12	16.4	123
432	Orientational Ordering of Nitrogen Molecular Axes for a Commensurate Monolayer Physisorbed on Graphite. *Physical Review Letters*, **1982**, 48, 177-180	7.4	122
431	Manganese-cobalt hexacyanoferrate cathodes for sodium-ion batteries. *Journal of Materials Chemistry A*, **2016**, 4, 4211-4223	13	117
430	Time-resolved structural evolution of additive-processed bulk heterojunction solar cells. *Journal of the American Chemical Society*, **2012**, 134, 2884-7	16.4	117
429	Grazing incidence x-ray scattering studies of thin films of an aromatic polyimide. *Macromolecules*, **1993**, 26, 2847-2859	5.5	117
428	Impact of Surfaces on Photoinduced Halide Segregation in Mixed-Halide Perovskites. *ACS Energy Letters*, **2018**, 3, 2694-2700	20.1	117
427	Designing a Quinone-Based Redox Mediator to Facilitate Li2S Oxidation in Li-S Batteries. *Joule*, **2019**, 3, 872-884	27.8	114
426	Use of X-ray diffraction, molecular simulations, and spectroscopy to determine the molecular packing in a polymer-fullerene bimolecular crystal. *Advanced Materials*, **2012**, 24, 6071-9	24	113
425	Thermal engineering of FAPbI perovskite material via radiative thermal annealing and in situ XRD. *Nature Communications*, **2017**, 8, 14075	17.4	110
424	In situ nanotomography and operando transmission X-ray microscopy of micron-sized Ge particles. *Energy and Environmental Science*, **2014**, 7, 2771-2777	35.4	110
423	Solid Electrolyte Interphase on Native Oxide-Terminated Silicon Anodes for Li-Ion Batteries. *Joule*, **2019**, 3, 762-781	27.8	109
422	Controlling Thin-Film Stress and Wrinkling during Perovskite Film Formation. *ACS Energy Letters*, **2018**, 3, 1225-1232	20.1	108
421	Size Dependence of a Temperature-Induced Solid-Solid Phase Transition in Copper(I) Sulfide. *Journal of Physical Chemistry Letters*, **2011**, 2, 2402-2406	6.4	102
420	Correlating the scattered intensities of P3HT and PCBM to the current densities of polymer solar cells. *Chemical Communications*, **2011**, 47, 436-8	5.8	100
419	Understanding Phase Transformation in Crystalline Ge Anodes for Li-Ion Batteries. *Chemistry of Materials*, **2014**, 26, 3739-3746	9.6	98
418	Fine-Tuning Semiconducting Polymer Self-Aggregation and Crystallinity Enables Optimal Morphology and High-Performance Printed All-Polymer Solar Cells. *Journal of the American Chemical Society*, **2020**, 142, 392-406	16.4	98
417	Surface regulation enables high stability of single-crystal lithium-ion cathodes at high voltage. *Nature Communications*, **2020**, 11, 3050	17.4	97

416	Vertically Segregated Structure and Properties of Small Molecule–Polymer Blend Semiconductors for Organic Thin-Film Transistors. *Advanced Functional Materials*, **2013**, 23, 366-376	15.6	97
415	Molecular Basis of Mesophase Ordering in a Thiophene-Based Copolymer. *Macromolecules*, **2008**, 41, 5709-5715	5.5	97
414	Thickness and growth temperature dependence of structure and magnetism in FePt thin films. *Journal of Applied Physics*, **2003**, 93, 9902-9907	2.5	96
413	Size-Dependent Lattice Structure and Confinement Properties in CsPbI3 Perovskite Nanocrystals: Negative Surface Energy for Stabilization. *ACS Energy Letters*, **2020**, 5, 238-247	20.1	95
412	Surface-induced ordering of an aromatic polyimide. *Physical Review Letters*, **1991**, 66, 1181-1184	7.4	94
411	Poly(3-hexylthiophene) and [6,6]-Phenyl-C61-butyric Acid Methyl Ester Mixing in Organic Solar Cells. *Macromolecules*, **2012**, 45, 6587-6599	5.5	93
410	Three-dimensional packing structure and electronic properties of biaxially oriented poly(2,5-bis(3-alkylthiophene-2-yl)thieno[3,2-b]thiophene) films. *Journal of the American Chemical Society*, **2012**, 134, 6177-90	16.4	93
409	Real-Time Observation of Poly(3-alkylthiophene) Crystallization and Correlation with Transient Optoelectronic Properties. *Macromolecules*, **2011**, 44, 6653-6658	5.5	92
408	In-situ grazing incidence X-ray diffraction study of electrochemically deposited Pb monolayers on Ag(111). *Surface Science*, **1988**, 193, L29-L36	1.8	92
407	An instrument for in situ time-resolved X-ray imaging and diffraction of laser powder bed fusion additive manufacturing processes. *Review of Scientific Instruments*, **2018**, 89, 055101	1.7	91
406	Factors Governing Intercalation of Fullerenes and Other Small Molecules Between the Side Chains of Semiconducting Polymers Used in Solar Cells. *Advanced Energy Materials*, **2012**, 2, 1208-1217	21.8	90
405	Role of confinement and aggregation in charge transport in semicrystalline polythiophene thin films. *Physical Review B*, **2012**, 86,	3.3	90
404	X-ray depth profiling of iron oxide thin films. *Journal of Materials Research*, **1988**, 3, 351-356	2.5	90
403	Perovskite-Inspired Photovoltaic Materials: Toward Best Practices in Materials Characterization and Calculations. *Chemistry of Materials*, **2017**, 29, 1964-1988	9.6	87
402	Synthesis, properties, and electronic applications of size-controlled poly(3-hexylthiophene) nanoparticles. *Langmuir*, **2010**, 26, 13056-61	4	87
401	Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. *Advanced Functional Materials*, **2014**, 24, 610-618	15.6	86
400	Structure and Mechanism of Strength Enhancement in Interpenetrating Polymer Network Hydrogels. *Macromolecules*, **2011**, 44, 5776-5787	5.5	84
399	Dominant role of grain boundary scattering in the resistivity of nanometric Cu films. *Physical Review B*, **2009**, 79,	3.3	84

398	Effect of Solution Shearing Method on Packing and Disorder of Organic Semiconductor Polymers. *Chemistry of Materials*, **2015**, 27, 2350-2359	9.6	81
397	Ordering effects in benzo[1,2-b:4,5-b']difuran-thieno[3,4-c]pyrrole-4,6-dione polymers with >7% solar cell efficiency. *Advanced Materials*, **2014**, 26, 4357-62	24	80
396	Scalable and selective dispersion of semiconducting arc-discharged carbon nanotubes by dithiafulvalene/thiophene copolymers for thin film transistors. *ACS Nano*, **2013**, 7, 2659-68	16.7	79
395	Chlorine in PbCl2-Derived Hybrid-Perovskite Solar Absorbers. *Chemistry of Materials*, **2015**, 27, 7240-7243	9.6	78
394	Charge Transport in Highly Face-On Poly(3-hexylthiophene) Films. *Journal of Physical Chemistry C*, **2013**, 117, 17421-17428	3.8	78
393	Vertical confinement and interface effects on the microstructure and charge transport of P3HT thin films. *Journal of Polymer Science, Part B: Polymer Physics*, **2013**, 51, 611-620	2.6	77
392	Emerging In Situ and Operando Nanoscale X-Ray Imaging Techniques for Energy Storage Materials. *Advanced Functional Materials*, **2015**, 25, 1622-1637	15.6	77
391	In situ measurement of power conversion efficiency and molecular ordering during thermal annealing in P3HT:PCBM bulk heterojunction solar cells. *Journal of Materials Chemistry*, **2011**, 21, 15224		77
390	Interplay between Energetic and Kinetic Factors on the Ambient Stability of n-Channel Organic Transistors Based on Perylene Diimide Derivatives. *Chemistry of Materials*, **2009**, 21, 5508-5518	9.6	77
389	Structural Origins of Light-Induced Phase Segregation in Organic-Inorganic Halide Perovskite Photovoltaic Materials. *Matter*, **2020**, 2, 207-219	12.7	77
388	A supramolecular complex in small-molecule solar cells based on contorted aromatic molecules. *Angewandte Chemie - International Edition*, **2012**, 51, 8594-7	16.4	76
387	Thiophene-rich fused-aromatic thienopyrazine acceptor for donor–acceptor low band-gap polymers for OTFT and polymer solar cell applications. *Journal of Materials Chemistry*, **2010**, 20, 5823		76
386	Giant magnetoresistance and Co-cluster structure in phase-separated Co-Cu granular alloys. *Physical Review B*, **1993**, 48, 16810-16813	3.3	76
385	Inverse design approach to hole doping in ternary oxides: Enhancing p-type conductivity in cobalt oxide spinels. *Physical Review B*, **2011**, 84,	3.3	74
384	Morphology of Photopolymerized End-linked Poly(ethylene glycol) Hydrogels by Small Angle X-ray Scattering. *Macromolecules*, **2010**, 43, 6861-6870	5.5	74
383	Comparison of the Morphology Development of Polymer–Fullerene and Polymer–Polymer Solar Cells during Solution-Shearing Blade Coating. *Advanced Energy Materials*, **2016**, 6, 1601225	21.8	73
382	The formation mechanism for printed silver-contacts for silicon solar cells. *Nature Communications*, **2016**, 7, 11143	17.4	73
381	Effect of Non-Chlorinated Mixed Solvents on Charge Transport and Morphology of Solution-Processed Polymer Field-Effect Transistors. *Advanced Functional Materials*, **2014**, 24, 3524-3534	15.6	73

380	Effects of odd-even side chain length of alkyl-substituted diphenylbithiophenes on first monolayer thin film packing structure. *Journal of the American Chemical Society*, **2013**, 135, 11006-14	16.4	71
379	Comparison of the Photovoltaic Characteristics and Nanostructure of Fullerenes Blended with Conjugated Polymers with Siloxane-Terminated and Branched Aliphatic Side Chains. *Chemistry of Materials*, **2013**, 25, 431-440	9.6	71
378	Direct Uniaxial Alignment of a Donor-Acceptor Semiconducting Polymer Using Single-Step Solution Shearing. *ACS Applied Materials & Interfaces*, **2016**, 8, 9285-96	9.5	71
377	The phase behavior of a polymer-fullerene bulk heterojunction system that contains bimolecular crystals. *Journal of Polymer Science, Part B: Polymer Physics*, **2011**, 49, 499-503	2.6	70
376	10 Gbit/in.2 longitudinal media on a glass substrate (invited). *Journal of Applied Physics*, **1999**, 85, 4286-4291	2.5	70
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374	Evolution of Iodoplumbate Complexes in Methylammonium Lead Iodide Perovskite Precursor Solutions. *Chemistry of Materials*, **2017**, 29, 1315-1320	9.6	69
373	Origin of low-friction behavior in graphite investigated by surface x-ray diffraction. *Applied Physics Letters*, **2004**, 84, 4702-4704	3.4	69
372	Measurements of carbon thin films using x-ray reflectivity. *Journal of Applied Physics*, **1989**, 66, 1861-1863	2.5	69
371	Two-dimensional compressibility of electrochemically adsorbed lead on silver (111). *Physical Review B*, **1988**, 38, 10962-10965	3.3	69
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