Michael J Ford

List of Publications by Year in Descending Order

50 papers	1,615 citations	24 h-index	39 g-index
53 ext. papers	1,968 ext. citations	11.3 avg, IF	5.21 L-index

#	Paper	IF	Citations
50	Pulse-shape discrimination in water-based scintillators. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2022**, 166854	1.2	0
49	4D-Printable Liquid Metal-Liquid Crystal Elastomer Composites. *ACS Applied Materials & Interfaces*, **2021**, 13, 12805-12813	9.5	42
48	An electrically conductive silver–polyacrylamide–alginate hydrogel composite for soft electronics. *Nature Electronics*, **2021**, 4, 185-192	28.4	80
47	Robust Unipolar Electron Conduction Using an Ambipolar Polymer Semiconductor with Solution-Processable Blends. *Chemistry of Materials*, **2020**, 32, 6831-6837	9.6	2
46	Size of liquid metal particles influences actuation properties of a liquid crystal elastomer composite. *Soft Matter*, **2020**, 16, 5878-5885	3.6	21
45	Soft actuators using liquid crystal elastomers with encapsulated liquid metal joule heaters. *Multifunctional Materials*, **2020**, 3, 025003	5.2	32
44	Soft Magnetic Tactile Skin for Continuous Force and Location Estimation Using Neural Networks. *IEEE Robotics and Automation Letters*, **2020**, 5, 3892-3898	4.2	21
43	Design of narrow bandgap non-fullerene acceptors for photovoltaic applications and investigation of non-geminate recombination dynamics. *Journal of Materials Chemistry C*, **2020**, 8, 15175-15182	7.1	19
42	Shape memory materials for electrically-powered soft machines. *Journal of Materials Chemistry B*, **2020**, 8, 4539-4551	7.3	24
41	Ultrastretchable, Wearable Triboelectric Nanogenerator Based on Sedimented Liquid Metal Elastomer Composite. *Advanced Materials Technologies*, **2020**, 5, 2000754	6.8	27
40	Controlled Assembly of Liquid Metal Inclusions as a General Approach for Multifunctional Composites. *Advanced Materials*, **2020**, 32, e2002929	24	40
39	Network topologies dictate electromechanical coupling in liquid metal-elastomer composites. *Soft Matter*, **2020**, 16, 8818-8825	3.6	21
38	Silver-Coated Poly(dimethylsiloxane) Beads for Soft, Stretchable, and Thermally Stable Conductive Elastomer Composites. *ACS Applied Materials & Interfaces*, **2019**, 11, 42561-42570	9.5	13
37	A multifunctional shape-morphing elastomer with liquid metal inclusions. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 21438-21444	11.5	120
36	Electrical Double-Slope Nonideality in Organic Field-Effect Transistors. *Advanced Functional Materials*, **2018**, 28, 1707221	15.6	45
35	Doping Polymer Semiconductors by Organic Salts: Toward High-Performance Solution-Processed Organic Field-Effect Transistors. *ACS Nano*, **2018**, 12, 3938-3946	16.7	40
34	Improved Tandem All-Polymer Solar Cells Performance by Using Spectrally Matched Subcells. *Advanced Energy Materials*, **2018**, 8, 1703291	21.8	49

33	Thermally Stable All-Polymer Solar Cells with High Tolerance on Blend Ratios. *Advanced Energy Materials*, **2018**, 8, 1800029	21.8	134
32	Toward High Efficiency Polymer Solar Cells: Rearranging the Backbone Units into a Readily Accessible Random Tetrapolymer. *Advanced Energy Materials*, **2018**, 8, 1701668	21.8	18
31	Effects of Side Chain Branch Point on Self Assembly, Structure, and Electronic Properties of High Mobility Semiconducting Polymers. *Macromolecules*, **2018**, 51, 8597-8604	5.5	26
30	Balance Between Light Absorption and Recombination Losses in Solution-Processed Small Molecule Solar Cells with Normal or Inverted Structures. *Advanced Energy Materials*, **2018**, 8, 1801807	21.8	15
29	Acceptor Percolation Determines How Electron-Accepting Additives Modify Transport of Ambipolar Polymer Organic Field-Effect Transistors. *ACS Nano*, **2018**, 12, 7134-7140	16.7	7
28	Bandgap Narrowing in Non-Fullerene Acceptors: Single Atom Substitution Leads to High Optoelectronic Response Beyond 1000 nm. *Advanced Energy Materials*, **2018**, 8, 1801212	21.8	86
27	Toward Thermal Stable and High Photovoltaic Efficiency Ternary Conjugated Copolymers: Influence of Backbone Fluorination and Regioselectivity. *Chemistry of Materials*, **2017**, 29, 1758-1768	9.6	55
26	Carrier-Selective Traps: A New Approach for Fabricating Circuit Elements with Ambipolar Organic Semiconductors. *Advanced Electronic Materials*, **2017**, 3, 1600537	6.4	12
25	Electrical Performance of a Molecular Organic Semiconductor under Thermal Stress. *Advanced Materials*, **2017**, 29, 1605511	24	16
24	Film morphology of solution-processed regioregular ternary conjugated polymer solar cells under processing additive stress. *Journal of Materials Chemistry A*, **2017**, 5, 8903-8908	13	8
23	Molecular Considerations for Mesophase Interaction and Alignment of Lyotropic Liquid Crystalline Semiconducting Polymers. *ACS Macro Letters*, **2017**, 6, 619-624	6.6	21
22	Expert assessments of the state of U.S. advanced fission innovation. *Energy Policy*, **2017**, 108, 194-200	7.2	7
21	Comparing the device physics, dynamics and morphology of polymer solar cells employing conventional PCBM and non-fullerene polymer acceptor N2200. *Nano Energy*, **2017**, 35, 251-262	17.1	72
20	Hole Mobility and Electron Injection Properties of D-A Conjugated Copolymers with Fluorinated Phenylene Acceptor Units. *Advanced Materials*, **2017**, 29, 1603830	24	40
19	Structural variations to a donor polymer with low energy losses. *Journal of Materials Chemistry A*, **2017**, 5, 18618-18626	13	11
18	Improving Electrical Stability and Ideality in Organic Field-Effect Transistors by the Addition of Fullerenes: Understanding the Working Mechanism. *Advanced Functional Materials*, **2017**, 27, 1701358	15.6	20
17	Linear Conjugated Polymer Backbones Improve Alignment in Nanogroove-Assisted Organic Field-Effect Transistors. *Journal of the American Chemical Society*, **2017**, 139, 17624-17631	16.4	52
16	Evaluating the Cost, Safety, and Proliferation Risks of Small Floating Nuclear Reactors. *Risk Analysis* , **2017**, 37, 2191-2211	3.9	7

15	Semiconductor Blends: Fullerene Additives Convert Ambipolar Transport to p-Type Transport while Improving the Operational Stability of Organic Thin Film Transistors (Adv. Funct. Mater. 25/2016). *Advanced Functional Materials*, **2016**, 26, 4616-4616	15.6	
14	Fullerene Additives Convert Ambipolar Transport to p-Type Transport while Improving the Operational Stability of Organic Thin Film Transistors. *Advanced Functional Materials*, **2016**, 26, 4472-4480	15.6	31
13	Fluorine substitution influence on benzo[2,1,3]thiadiazole based polymers for field-effect transistor applications. *Chemical Communications*, **2016**, 52, 3207-10	5.8	48
12	High Mobility Organic Field-Effect Transistors from Majority Insulator Blends. *Chemistry of Materials*, **2016**, 28, 1256-1260	9.6	66
11	Dual structure modifications to realize efficient polymer solar cells with low fullerene content. *Organic Electronics*, **2016**, 32, 187-194	3.5	6
10	Improved All-Polymer Solar Cell Performance by Using Matched Polymer Acceptor. *Advanced Functional Materials*, **2016**, 26, 5669-5678	15.6	98
9	Effect of chiral 2-ethylhexyl side chains on chiroptical properties of the narrow bandgap conjugated polymers PCPDTBT and PCDTPT. *Chemical Science*, **2016**, 7, 5313-5321	9.4	24
8	Influence of molecular structure on the performance of low Voc loss polymer solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 15232-15239	13	12
7	Formation and Structure of Lyotropic Liquid Crystalline Mesophases in Donor–Acceptor Semiconducting Polymers. *Macromolecules*, **2016**, 49, 7220-7229	5.5	28
6	Narrow bandgap conjugated polymers based on a high-mobility polymer template for visibly transparent photovoltaic devices. *Journal of Materials Chemistry A*, **2016**, 4, 17333-17343	13	15
5	End-Group-Mediated Aggregation of Poly(3-hexylthiophene). *Macromolecules*, **2015**, 48, 6224-6232	5.5	14
4	Packing dependent electronic coupling in single poly(3-hexylthiophene) H- and J-aggregate nanofibers. *Journal of Physical Chemistry B*, **2013**, 117, 4478-87	3.4	67
3	3D Printing of Transparent Silicone Elastomers. *Advanced Materials Technologies*,2100974	6.8	0
2	Composites of functional polymers: Toward physical intelligence using flexible and soft materials. *Journal of Materials Research*,1	2.5	0
1	Plastic Scintillators via Rapid Photoinitiated Cationic Polymerization of Vinyltoluene. *ACS Applied Polymer Materials*,	4.3	