Ming Wang

List of Publications by Year
in descending order

77 papers	6,389 citations	87888 38 h-index	79698 73 g-index
78 all docs	78 docs citations	78 times ranked	7209 citing authors

#	Article	IF	Citations
1	Low Voltageâ€Loss Organic Solar Cells Light the Way for Efficient Semitransparent Photovoltaics. Solar Rrl, 2022, 6, .	5.8	3
2	Cavity-Enhanced Near-Infrared Organic Photodetectors Based on a Conjugated Polymer Containing [1,2,5]Selenadiazolo[3,4-<i>c</i>]Pyridine. Chemistry of Materials, 2021, 33, 5147-5155.	6.7	29
3	Design and synthesis of two conjugated semiconductors containing quinoidal cyclopentadithiophene core. Dyes and Pigments, 2021, 190, 109336.	3.7	5
4	Improving the field-effect transistor performance of (E)-1,2-di(thiophen-2-yl)ethenyl-co-naphthalenyl-based polymers by introducing alkoxy sidechains. Synthetic Metals, 2021, 278, 116801.	3.9	1
5	Multiwavelength Photodetectors Based on an Azobenzene Polymeric Ionic Liquid. ACS Applied Polymer Materials, 2021, 3, 5125-5133.	4.4	2
6	Improving the fill factor of N2200-based all polymer solar cells by introducing EPPDI as a solid additive. Organic Electronics, 2021, 99, 106319.	2.6	6
7	Improving the all-polymer solar cell performance by adding a narrow bandgap polymer as the second donor. RSC Advances, 2020, 10, 38344-38350.	3.6	7
8	Robust Unipolar Electron Conduction Using an Ambipolar Polymer Semiconductor with Solution-Processable Blends. Chemistry of Materials, 2020, 32, 6831-6837.	6.7	2
9	Doping Highâ€Mobility Donorâ€"Acceptor Copolymer Semiconductors with an Organic Salt for Highâ€Performance Thermoelectric Materials. Advanced Electronic Materials, 2020, 6, 1900945.	5.1	30
10	Simultaneously Improved Efficiency and Stability in All-Polymer Solar Cells by a Pâ€"iâ€"N Architecture. ACS Energy Letters, 2019, 4, 2277-2286.	17.4	127
11	Towards understanding the doping mechanism of organic semiconductors by Lewis acids. Nature Materials, 2019, 18, 1327-1334.	27.5	144
12	Quantifying and Understanding Voltage Losses Due to Nonradiative Recombination in Bulk Heterojunction Organic Solar Cells with Low Energetic Offsets. Advanced Energy Materials, 2019, 9, 1901077.	19.5	69
13	Rational Design of a Narrow-Bandgap Conjugated Polymer Using the Quinoidal Thieno[3,2-<i>b</i>]thiophene-Based Building Block for Organic Field-Effect Transistor Applications. Macromolecules, 2019, 52, 4749-4756.	4.8	41
14	High-k Fluoropolymer Gate Dielectric in Electrically Stable Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2019, 11, 15821-15828.	8.0	23
15	Understanding the Selection Mechanism of the Polymer Wrapping Technique toward Semiconducting Carbon Nanotubes. Small Methods, 2018, 2, 1700335.	8.6	17
16	Electrical Doubleâ€Slope Nonideality in Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2018, 28, 1707221.	14.9	54
17	Doping Polymer Semiconductors by Organic Salts: Toward High-Performance Solution-Processed Organic Field-Effect Transistors. ACS Nano, 2018, 12, 3938-3946.	14.6	52
18	Toward High Efficiency Polymer Solar Cells: Rearranging the Backbone Units into a Readily Accessible Random Tetrapolymer. Advanced Energy Materials, 2018, 8, 1701668.	19.5	32

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19	Charge Generation and Recombination in an Organic Solar Cell with Low Energetic Offsets. Advanced Energy Materials, 2018, 8, 1701073.	19.5	60
20	Solutionâ€Processed Ionâ€Free Organic Ratchets with Asymmetric Contacts. Advanced Materials, 2018, 30, 1804794.	21.0	8
21	Acceptor Percolation Determines How Electron-Accepting Additives Modify Transport of Ambipolar Polymer Organic Field-Effect Transistors. ACS Nano, 2018, 12, 7134-7140.	14.6	8
22	Measuring the competition between bimolecular charge recombination and charge transport in organic solar cells under operating conditions. Energy and Environmental Science, 2018, 11, 3019-3032.	30.8	59
23	Ultraflexible Nearâ€Infrared Organic Photodetectors for Conformal Photoplethysmogram Sensors. Advanced Materials, 2018, 30, e1802359.	21.0	171
24	Carrierâ€Selective Traps: A New Approach for Fabricating Circuit Elements with Ambipolar Organic Semiconductors. Advanced Electronic Materials, 2017, 3, 1600537.	5.1	13
25	Understanding the Device Physics in Polymerâ€Based Ionicâ€"Organic Ratchets. Advanced Materials, 2017, 29, 1606464.	21.0	12
26	Organic Semiconductors: Carrierâ€Selective Traps: A New Approach for Fabricating Circuit Elements with Ambipolar Organic Semiconductors (Adv. Electron. Mater. 3/2017). Advanced Electronic Materials, 2017, 3, .	5.1	0
27	Solution-based electrical doping of semiconducting polymer films over a limited depth. Nature Materials, 2017, 16, 474-480.	27.5	121
28	Topological Transformation of Ï€â€Conjugated Molecules Reduces Resistance to Crystallization. Angewandte Chemie, 2017, 129, 9446-9449.	2.0	6
29	Topological Transformation of Ï€â€Conjugated Molecules Reduces Resistance to Crystallization. Angewandte Chemie - International Edition, 2017, 56, 9318-9321.	13.8	10
30	A Membraneâ€Intercalating Conjugated Oligoelectrolyte with Highâ€Efficiency Photodynamic Antimicrobial Activity. Angewandte Chemie - International Edition, 2017, 56, 5031-5034.	13.8	147
31	A Membraneâ€Intercalating Conjugated Oligoelectrolyte with Highâ€Efficiency Photodynamic Antimicrobial Activity. Angewandte Chemie, 2017, 129, 5113-5116.	2.0	27
32	Hole Mobility and Electron Injection Properties of Dâ€A Conjugated Copolymers with Fluorinated Phenylene Acceptor Units. Advanced Materials, 2017, 29, 1603830.	21.0	45
33	Plastic Deformation of Polymer Blends as a Means to Achieve Stretchable Organic Transistors. Advanced Electronic Materials, 2017, 3, 1600388.	5.1	39
34	Antibacterial Narrowâ€Bandâ€Gap Conjugated Oligoelectrolytes with High Photothermal Conversion Efficiency. Angewandte Chemie - International Edition, 2017, 56, 16063-16066.	13.8	92
35	Antibacterial Narrowâ€Bandâ€Gap Conjugated Oligoelectrolytes with High Photothermal Conversion Efficiency. Angewandte Chemie, 2017, 129, 16279-16282.	2.0	9
36	Structural variations to a donor polymer with low energy losses. Journal of Materials Chemistry A, 2017, 5, 18618-18626.	10.3	12

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37	Improving Electrical Stability and Ideality in Organic Fieldâ€Effect Transistors by the Addition of Fullerenes: Understanding the Working Mechanism. Advanced Functional Materials, 2017, 27, 1701358.	14.9	26
38	Linear Conjugated Polymer Backbones Improve Alignment in Nanogroove-Assisted Organic Field-Effect Transistors. Journal of the American Chemical Society, 2017, 139, 17624-17631.	13.7	72
39	Fabricating Lowâ€Cost Ionicâ€Organic Electronic Ratchets with Graphite Pencil and Adhesive Tape. Advanced Electronic Materials, 2016, 2, 1500344.	5.1	16
40	Harvesting the Full Potential of Photons with Organic Solar Cells. Advanced Materials, 2016, 28, 1482-1488.	21.0	190
41	Investigation into the Sensing Process of Highâ€Performance H₂S Sensors Based on Polymer Transistors. Chemistry - A European Journal, 2016, 22, 3654-3659.	3.3	37
42	Significantly Increasing the Ductility of High Performance Polymer Semiconductors through Polymer Blending. ACS Applied Materials & Interfaces, 2016, 8, 14037-14045.	8.0	68
43	Frontispiece: Investigation into the Sensing Process of High-Performance H2S Sensors Based on Polymer Transistors. Chemistry - A European Journal, 2016, 22, n/a-n/a.	3.3	0
44	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.	7.4	28
45	Influence of molecular structure on the performance of low V_{oc} loss polymer solar cells. Journal of Materials Chemistry A, 2016, 4, 15232-15239.	10.3	15
46	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.	10.3	17
47	Semiconductor Blends: Fullerene Additives Convert Ambipolar Transport to pâ€Type Transport while Improving the Operational Stability of Organic Thin Film Transistors (Adv. Funct. Mater. 25/2016). Advanced Functional Materials, 2016, 26, 4616-4616.	14.9	0
48	Limits for Recombination in a Low Energy Loss Organic Heterojunction. ACS Nano, 2016, 10, 10736-10744.	14.6	79
49	Fullerene Additives Convert Ambipolar Transport to pâ€Type Transport while Improving the Operational Stability of Organic Thin Film Transistors. Advanced Functional Materials, 2016, 26, 4472-4480.	14.9	38
50	Fluorine substitution influence on benzo[2,1,3]thiadiazole based polymers for field-effect transistor applications. Chemical Communications, 2016, 52, 3207-3210.	4.1	56
51	High Mobility Organic Field-Effect Transistors from Majority Insulator Blends. Chemistry of Materials, 2016, 28, 1256-1260.	6.7	75
52	Electronic structure and photovoltaic application of BiI3. Applied Physics Letters, 2015, 107, .	3.3	125
53	The Density of States and the Transport Effective Mass in a Highly Oriented Semiconducting Polymer: Electronic Delocalization in 1D. Advanced Materials, 2015, 27, 7759-7765.	21.0	52
54	Electrical Instability Induced by Electron Trapping in Lowâ€Bandgap Donorâ€"Acceptor Polymer Fieldâ€Effect Transistors. Advanced Materials, 2015, 27, 7004-7009.	21.0	78

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55	NEXAFS Spectroscopy Reveals the Molecular Orientation in Blade-Coated Pyridal[2,1,3]thiadiazole-Containing Conjugated Polymer Thin Films. Macromolecules, 2015, 48, 6606-6616.	4.8	56
56	Highâ€Mobility Fieldâ€Effect Transistors Fabricated with Macroscopic Aligned Semiconducting Polymers. Advanced Materials, 2014, 26, 2993-2998.	21.0	524
57	Effect of Molecular Order on the Performance of Naphthobisthiadiazoleâ€Based Polymer Solar Cells. Advanced Energy Materials, 2014, 4, 1301601.	19.5	22
58	High Open Circuit Voltage in Regioregular Narrow Band Gap Polymer Solar Cells. Journal of the American Chemical Society, 2014, 136, 12576-12579.	13.7	216
59	Donorâ€"Acceptorâ€Type Copolymers Based on a Naphtho[1,2â€c:5,6â€c]bis(1,2,5â€thiadiazole) Scaffold for Highâ€Efficiency Polymer Solar Cells. Chemistry - an Asian Journal, 2014, 9, 2104-2112.	3.3	13
60	General Strategy for Self-Assembly of Highly Oriented Nanocrystalline Semiconducting Polymers with High Mobility. Nano Letters, 2014, 14, 2764-2771.	9.1	416
61	Highâ€Performance Inverted Organic Photovoltaics with Over 1â€Î¼m Thick Active Layers. Advanced Energy Materials, 2014, 4, 1400378.	19.5	83
62	[1,2,5]Thiadiazolo[3,4-f]benzotriazole based narrow band gap conjugated polymers with photocurrent response up to 1.1Î¼m. Organic Electronics, 2013, 14, 2459-2467.	2.6	34
63	23% enhanced efficiency of polymer solar cells processed with 1-chloronaphthalene as the solvent additive. Synthetic Metals, 2013, 164, 1-5.	3.9	31
64	Domain Purity, Miscibility, and Molecular Orientation at Donor/Acceptor Interfaces in High Performance Organic Solar Cells: Paths to Further Improvement. Advanced Energy Materials, 2013, 3, 864-872.	19.5	283
65	Design and Synthesis of Copolymers of Indacenodithiophene and Naphtho[1,2-<i>c</i>:5,6-<i>c</i>]bis(1,2,5-thiadiazole) for Polymer Solar Cells. Macromolecules, 2013, 46, 3950-3958.	4.8	69
66	Polymer Photovoltaic Cells Based on Polymethacrylate Bearing Semiconducting Side Chains. Macromolecular Rapid Communications, 2012, 33, 2097-2102.	3.9	5
67	Inverted polymer solar cells with 8.4% efficiency by conjugated polyelectrolyte. Energy and Environmental Science, 2012, 5, 8208.	30.8	616
68	Polymer Solar Cells with a Lowâ€Temperatureâ€Annealed Solâ€"Gelâ€Derived MoO_x Film as a Hole Extraction Layer. Advanced Energy Materials, 2012, 2, 523-527.	19.5	97
69	Synthesis of 2-R1-2-(4-(2-fluoroethoxy)benzamido)acetate as potential PET imaging agents. Medicinal Chemistry Research, 2012, 21, 944-951.	2.4	1
70	Solvent Effect Leading to High Performance of Bulk Heterojunction Polymer Solar Cells by Novel Polysilafluorene Derivatives. Journal of Physical Chemistry C, 2011, 115, 2314-2319.	3.1	18
71	Donorâ€"Acceptor Conjugated Polymer Based on Naphtho[1,2-<i>c</i>:5,6-<i>c</i>]bis[1,2,5]thiadiazole for High-Performance Polymer Solar Cells. Journal of the American Chemical Society, 2011, 133, 9638-9641.	13.7	598
72	Synthesis of Quinoxaline-Based Donorâˆ'Acceptor Narrow-Band-Gap Polymers and Their Cyclized Derivatives for Bulk-Heterojunction Polymer Solar Cell Applications. Macromolecules, 2011, 44, 894-901.	4.8	127

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73	(S)-2-((S)-2-(4-(3-[18F]fluoropropyl)benzamido)-3-phenylpropanamido)pentanedioic acid labeled with 18F. Journal of Radioanalytical and Nuclear Chemistry, 2010, 286, 135-140.	1.5	0
74	Novel Silafluorene-Based Conjugated Polymers with Pendant Acceptor Groups for High Performance Solar Cells. Macromolecules, 2010, 43, 5262-5268.	4.8	134
75	Donor Polymers Containing Benzothiadiazole and Four Thiophene Rings in Their Repeating Units with Improved Photovoltaic Performance. Macromolecules, 2009, 42, 4410-4415.	4.8	150
76	An Unexpected Role of a Trace Amount of Water in Catalyzing Proton Transfer in Phosphine-Catalyzed (3 + 2) Cycloaddition of Allenoates and Alkenes. Journal of the American Chemical Society, 2007, 129, 3470-3471.	13.7	427
77	A New Nanoâ€Structured Flameâ€Retardant Poly(ethylene terephthalate). Journal of Macromolecular Science - Pure and Applied Chemistry, 2006, 43, 1867-1875.	2.2	10