Jianguo Mei

List of Publications by Year
in descending order

108 papers	14,541 citations	36203 51 h-index	29081 104 g-index
114 all docs	114 docs citations	114 times ranked	17762 citing authors

#	Article	IF	Citations
1	Flexible polymer transistors with high pressure sensitivity for application in electronic skin and health monitoring. Nature Communications, 2013, 4, 1859.	5.8	1,713
2	Integrated Materials Design of Organic Semiconductors for Field-Effect Transistors. Journal of the American Chemical Society, 2013, 135, 6724-6746.	6.6	1,280
3	Semiconducting polymer nanoparticles as photoacoustic molecular imaging probes in living mice. Nature Nanotechnology, 2014, 9, 233-239.	15.6	1,057
4	Side Chain Engineering in Solution-Processable Conjugated Polymers. Chemistry of Materials, 2014, 26, 604-615.	3.2	932
5	Modified (NHC)Pd(allyl)Cl (NHC =N-Heterocyclic Carbene) Complexes for Room-Temperature Suzukiâ^'Miyaura and Buchwaldâ^'Hartwig Reactions. Journal of the American Chemical Society, 2006, 128, 4101-4111.	6.6	844
6	A chameleon-inspired stretchable electronic skin with interactive colour changing controlled by tactile sensing. Nature Communications, 2015, 6, 8011.	5.8	749
7	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, 20130-20133.	6.6	628
8	Synthesis of Isoindigo-Based Oligothiophenes for Molecular Bulk Heterojunction Solar Cells. Organic Letters, 2010, 12, 660-663.	2.4	431
9	Hierarchical N-Doped Carbon as CO₂ Adsorbent with High CO₂ Selectivity from Rationally Designed Polypyrrole Precursor. Journal of the American Chemical Society, 2016, 138, 1001-1009.	6.6	405
10	Highly stable organic polymer field-effect transistor sensor for selective detection in the marine environment. Nature Communications, 2014, 5, 2954.	5.8	362
11	High Performance Allâ€Polymer Solar Cell via Polymer Sideâ€Chain Engineering. Advanced Materials, 2014, 26, 3767-3772.	11.1	320
12	Isoindigo, a Versatile Electron-Deficient Unit For High-Performance Organic Electronics. Chemistry of Materials, 2014, 26, 664-678.	3.2	319
13	Rapid Room Temperature Buchwaldâ€"Hartwig and Suzukiâ€"Miyaura Couplings of Heteroaromatic Compounds Employing Low Catalyst Loadings. Chemistry - A European Journal, 2006, 12, 5142-5148.	1.7	314
14	Diketopyrrolopyrroleâ€Based Semiconducting Polymer Nanoparticles for In Vivo Photoacoustic Imaging. Advanced Materials, 2015, 27, 5184-5190.	11.1	305
15	Isoindigo-Based Donorâ^'Acceptor Conjugated Polymers. Macromolecules, 2010, 43, 8348-8352.	2.2	193
16	Donorâ€"Acceptorâ€"Donor-based Ï€-Conjugated Oligomers for Nonlinear Optics and Near-IR Emission. Chemistry of Materials, 2011, 23, 3805-3817.	3.2	189
17	Broadly Absorbing Black to Transmissive Switching Electrochromic Polymers. Advanced Materials, 2010, 22, 4949-4953.	11.1	158
18	n-Type Conjugated Polyisoindigos. Macromolecules, 2011, 44, 6303-6310.	2.2	156

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19	Toward mechanically robust and intrinsically stretchable organic solar cells: Evolution of photovoltaic properties with tensile strain. Solar Energy Materials and Solar Cells, 2012, 107, 355-365.	3.0	154
20	Improved Performance of Molecular Bulkâ€Heterojunction Photovoltaic Cells through Predictable Selection of Solvent Additives. Advanced Functional Materials, 2012, 22, 4801-4813.	7.8	149
21	Semiconducting polymer blends that exhibit stable charge transport at high temperatures. Science, 2018, 362, 1131-1134.	6.0	147
22	Semiconducting Polymer Nanoparticles for Centimetersâ€Deep Photoacoustic Imaging in the Second Nearâ€Infrared Window. Advanced Materials, 2017, 29, 1703403.	11.1	136
23	Solution-processable electrochromic materials and devices: roadblocks and strategies towards large-scale applications. Journal of Materials Chemistry C, 2019, 7, 12761-12789.	2.7	136
24	Low-Band-Gap Platinum Acetylide Polymers as Active Materials for Organic Solar Cells. ACS Applied Materials & Interfaces, 2009, 1, 150-161.	4.0	135
25	Highly mobile charge-transfer excitons in two-dimensional WS ₂ /tetracene heterostructures. Science Advances, 2018, 4, eaao3104.	4.7	132
26	Solutionâ€Processed Nanoporous Organic Semiconductor Thin Films: Toward Health and Environmental Monitoring of Volatile Markers. Advanced Functional Materials, 2017, 27, 1701117.	7.8	127
27	Influence of dopant size and electron affinity on the electrical conductivity and thermoelectric properties of a series of conjugated polymers. Journal of Materials Chemistry A, 2018, 6, 16495-16505.	5.2	112
28	Polydimethylsiloxane as a Macromolecular Additive for Enhanced Performance of Molecular Bulk Heterojunction Organic Solar Cells. ACS Applied Materials & Interfaces, 2011, 3, 1210-1215.	4.0	108
29	Conjugation-Break Spacers in Semiconducting Polymers: Impact on Polymer Processability and Charge Transport Properties. Macromolecules, 2015, 48, 2048-2053.	2.2	106
30	Tuning conformation, assembly, and charge transport properties of conjugated polymers by printing flow. Science Advances, 2019, 5, eaaw7757.	4.7	105
31	A Rapid and Facile Soft Contact Lamination Method: Evaluation of Polymer Semiconductors for Stretchable Transistors. Chemistry of Materials, 2014, 26, 4544-4551.	3.2	101
32	Multifunctional Conjugated Ligand Engineering for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2021, 33, e2100791.	11.1	99
33	Thiolâ€“ene Cross-Linked Polymer Gate Dielectrics for Low-Voltage Organic Thin-Film Transistors. Chemistry of Materials, 2013, 25, 4806-4812.	3.2	89
34	Scalable and Selective Dispersion of Semiconducting Arc-Discharged Carbon Nanotubes by Dithiafulvalene/Thiophene Copolymers for Thin Film Transistors. ACS Nano, 2013, 7, 2659-2668.	7.3	88
35	Effect of Broken Conjugation on the Stretchability of Semiconducting Polymers. Macromolecular Rapid Communications, 2016, 37, 1623-1628.	2.0	87
36	Meltâ€Processing of Complementary Semiconducting Polymer Blends for High Performance Organic Transistors. Advanced Materials, 2017, 29, 1605056.	11.1	82

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37	Self-Assembled Amphiphilic Diketopyrrolopyrrole-Based Oligothiophenes for Field-Effect Transistors and Solar Cells. Chemistry of Materials, 2011, 23, 2285-2288.	3.2	80
38	Effect of Spacer Length of Siloxaneâ€Terminated Side Chains on Charge Transport in Isoindigoâ€Based Polymer Semiconductor Thin Films. Advanced Functional Materials, 2015, 25, 3455-3462.	7.8	79
39	Dynamic-template-directed multiscale assembly for large-area coating of highly-aligned conjugated polymer thin films. Nature Communications, 2017, 8, 16070.	5.8	78
40	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.	3.2	74
41	A Facile Approach to Defect-Free Vinylene-Linked Benzothiadiazoleâ^'Thiophene Low-Bandgap Conjugated Polymers for Organic Electronics. Macromolecules, 2009, 42, 1482-1487.	2.2	66
42	Significance of the double-layer capacitor effect in polar rubbery dielectrics and exceptionally stable low-voltage high transconductance organic transistors. Scientific Reports, 2015, 5, 17849.	1.6	66
43	n-type charge transport in heavily p-doped polymers. Nature Materials, 2021, 20, 518-524.	13.3	66
44	Impact of Backbone Rigidity on the Thermomechanical Properties of Semiconducting Polymers with Conjugation Break Spacers. Macromolecules, 2020, 53, 6032-6042.	2.2	63
45	Critical Role of Surface Energy in Guiding Crystallization of Solution-Coated Conjugated Polymer Thin Films. Langmuir, 2018, 34, 1109-1122.	1.6	62
46	Complementary Semiconducting Polymer Blends: The Influence of Conjugation-Break Spacer Length in Matrix Polymers. Macromolecules, 2016, 49, 2601-2608.	2.2	61
47	Catalytic Azoarene Synthesis from Aryl Azides Enabled by a Dinuclear Ni Complex. Journal of the American Chemical Society, 2018, 140, 4110-4118.	6.6	61
48	Symmetry Breaking in Side Chains Leading to Mixed Orientations and Improved Charge Transport in Isoindigo-alt-Bithiophene Based Polymer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 25426-25433.	4.0	58
49	Complementary Semiconducting Polymer Blends for Efficient Charge Transport. Chemistry of Materials, 2015, 27, 7164-7170.	3.2	57
50	Sequentially solution-processed, nanostructured polymer photovoltaics using selective solvents. Energy and Environmental Science, 2014, 7, 1103.	15.6	56
51	Heterocyclic Building Blocks for Organic Semiconductors. Advances in Heterocyclic Chemistry, 2017, 121, 133-171.	0.9	54
52	Combinatorial Study of Temperatureâ€Dependent Nanostructure and Electrical Conduction of Polymer Semiconductors: Even Bimodal Orientation Can Enhance 3D Charge Transport. Advanced Functional Materials, 2016, 26, 4627-4634.	7.8	51
53	Mechanical breathing in organic electrochromics. Nature Communications, 2020, 11, 211.	5.8	44
54	A simple droplet pinning method for polymer film deposition for measuring charge transport in a thin film transistor. Organic Electronics, 2012, 13, 2450-2460.	1.4	43

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55	An ultra-narrow bandgap derived from thienoisoindigo polymers: structural influence on reducing the bandgap and self-organization. Polymer Chemistry, 2016, 7, 1181-1190.	1.9	42
56	Understanding Interfacial Alignment in Solution Coated Conjugated Polymer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 27863-27874.	4.0	42
57	Low-Temperature Thermally Annealed Niobium Oxide Thin Films as a Minimally Color Changing Ion Storage Layer in Solution-Processed Polymer Electrochromic Devices. ACS Applied Materials & Interfaces, 2019, 11, 4169-4177.	4.0	42
58	Bioinspired Dynamic Camouflage from Colloidal Nanocrystals Embedded Electrochromics. Nano Letters, 2021, 21, 4500-4507.	4.5	40
59	Continuous Meltâ€Drawing of Highly Aligned Flexible and Stretchable Semiconducting Microfibers for Organic Electronics. Advanced Functional Materials, 2018, 28, 1705584.	7.8	39
60	Highly Transparent Crosslinkable Radical Copolymer Thin Film as the Ion Storage Layer in Organic Electrochromic Devices. ACS Applied Materials & Interfaces, 2018, 10, 18956-18963.	4.0	37
61	Designing Ï€-conjugated polymer blends with improved thermoelectric power factors. Journal of Materials Chemistry A, 2019, 7, 19774-19785.	5.2	34
62	Functionalized NIRâ€Ⅱ Semiconducting Polymer Nanoparticles for Singleâ€cell to Wholeâ€Organ Imaging of PSMAâ€Positive Prostate Cancer. Small, 2020, 16, e2001215.	5.2	34
63	Amineâ€“boranes bearing borane-incompatible functionalities: application to selective amine protection and surface functionalization. Chemical Communications, 2016, 52, 11885-11888.	2.2	32
64	Neural Stimulation InÂVitro and InÂVivo by Photoacoustic Nanotransducers. Matter, 2021, 4, 654-674.	5.0	32
65	Stabilizing Hybrid Electrochromic Devices through Pairing Electrochromic Polymers with Minimally Color-Changing Ion-Storage Materials Having Closely Matched Electroactive Voltage Windows. ACS Applied Materials & Interfaces, 2021, 13, 5312-5318.	4.0	28
66	Polyimide-Based High-Temperature Plastic Electronics. , 2019, 1, 154-157.		27
67	Challenge and Solution of Characterizing Glass Transition Temperature for Conjugated Polymers by Differential Scanning Calorimetry. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1635-1644.	2.4	27
68	Self-Bleaching Behaviors in Black-to-Transmissive Electrochromic Polymer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 34122-34130.	4.0	25
69	Designing Donorâ€“Acceptor Copolymers for Stable and High-Performance Organic Electrochemical Transistors. ACS Macro Letters, 2021, 10, 1061-1067.	2.3	24
70	Complementary Semiconducting Polymer Blends: Influence of Side Chains of Matrix Polymers. Macromolecules, 2017, 50, 6202-6209.	2.2	23
71	Conjugated electrochromic polymers with amide-containing side chains enabling aqueous electrolyte compatibility. Polymer Chemistry, 2020, 11, 508-516.	1.9	23
72	Catalytic Synthesis of Conjugated Azopolymers from Aromatic Diazides. Journal of the American Chemical Society, 2021, 143, 3975-3982.	6.6	23

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73	Attaining Melt Processing of Complementary Semiconducting Polymer Blends at 130 Â°C via Side-Chain Engineering. ACS Applied Materials & Interfaces, 2018, 10, 4904-4909.	4.0	22
74	Impact of the Crystallite Orientation Distribution on Exciton Transport in Donorâ€“Acceptor Conjugated Polymers. ACS Applied Materials & Interfaces, 2015, 7, 28035-28041.	4.0	20
75	Tunable green electrochromic polymers via direct arylation polymerization. Polymer Chemistry, 2018, 9, 5262-5267.	1.9	20
76	Effects of Side Chain on High Temperature Operation Stability of Conjugated Polymers. ACS Applied Polymer Materials, 2020, 2, 91-97.	2.0	19
77	Ambient Oxygen-Doped Conjugated Polymer for pH-Activatable Aggregation-Enhanced Photoacoustic Imaging in the Second Near-Infrared Window. Analytical Chemistry, 2021, 93, 3189-3195.	3.2	18
78	Printing dynamic color palettes and layered textures through modeling-guided stacking of electrochromic polymers. Materials Horizons, 2022, 9, 425-432.	6.4	18
79	Polymer Electrochromism Driven by Metabolic Activity Facilitates Rapid and Facile Bacterial Detection and Susceptibility Evaluation. Advanced Functional Materials, 2020, 30, 2005192.	7.8	17
80	5,11-Conjugation-extended low-bandgap anthradithiophene-containing polymer exhibiting enhanced thin-film order and field-effect mobility. Chemical Communications, 2012, 48, 7286.	2.2	16
81	Electrochromic Properties of Perovskite NdNiO₃ Thin Films for Smart Windows. ACS Applied Electronic Materials, 2021, 3, 1719-1731.	2.0	16
82	Device Engineering in Organic Electrochemical Transistors toward Multifunctional Applications. ACS Applied Electronic Materials, 2021, 3, 2434-2448.	2.0	16
83	Side-Chain Sequence Enabled Regioisomeric Acceptors for Conjugated Polymers. Macromolecules, 2018, 51, 8486-8492.	2.2	15
84	Bisâ€isoindigos: New Electronâ€Deficient Building Blocks for Constructing Conjugated Polymers with Extended Electron Delocalization. Asian Journal of Organic Chemistry, 2018, 7, 2248-2253.	1.3	15
85	Improving Electrochemical Cycling Stability of Conjugated Yellow-to-Transmissive Electrochromic Polymers by Regulating Effective Overpotentials. , 2022, 4, 336-342.		15
86	Direct arylation polymerization of asymmetric pushâ€“pull aryl halides. Polymer Chemistry, 2017, 8, 2438-2441.	1.9	14
87	Regioregular Electroactive Polyolefins with Precisely Sequenced Ï€-Conjugated Chromophores. Macromolecules, 2010, 43, 5909-5913.	2.2	13
88	Isoindigo-Based Binary Polymer Blends for Solution-Processing of Semiconducting Nanofiber Networks. ACS Applied Polymer Materials, 2019, 1, 1778-1786.	2.0	13
89	In Situ Measurement of Breathing Strain and Mechanical Degradation in Organic Electrochromic Polymers. ACS Applied Materials & Interfaces, 2020, 12, 50889-50895.	4.0	12
90	Preparative Mass Spectrometry Using a Rotatingâ€Wall Mass Analyzer. Angewandte Chemie - International Edition, 2020, 59, 7711-7716.	7.2	11

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91	Evolution of Chain Dynamics and Oxidation States with Increasing Chain Length for a Donorâ€“Acceptor-Conjugated Oligomer Series. Macromolecules, 2021, 54, 8207-8219.	2.2	11
92	Radical Polymer-Based Organic Electrochemical Transistors. ACS Macro Letters, 2022, 11, 243-250.	2.3	11
93	Zoneâ€Annealingâ€Assisted Solventâ€Free Processing of Complementary Semiconducting Polymer Blends for Organic Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1700414.	2.6	9
94	N-Type Complementary Semiconducting Polymer Blends. ACS Applied Polymer Materials, 2020, 2, 2644-2650.	2.0	9
95	Thermally Stable and Solvent-Resistant Conductive Polymer Composites with Cross-Linked Siloxane Network. ACS Applied Polymer Materials, 2021, 3, 1537-1543.	2.0	9
96	n-Type Organic Field-Effect Transistors Based on Bisthienoisatin Derivatives. ACS Applied Electronic Materials, 2019, 1, 764-771.	2.0	8
97	Organic Cation Engineering for Vertical Charge Transport in Leadâ€Free Perovskite Quantum Wells. Small Science, 2021, 1, 2000024.	5.8	8
98	Oxidation Pathways Involving a Sulfide-Endcapped Donorâ€“Acceptorâ€“Donor Ï€-Conjugated Molecule and Antimony(V) Chloride. Journal of Physical Chemistry B, 2019, 123, 3866-3874.	1.2	7
99	Backbone flexibility on conjugated polymer's crystallization behavior and thin film mechanical stability. Journal of Polymer Science, 2022, 60, 548-558.	2.0	7
100	OFETs: BASIC CONCEPTS AND MATERIAL DESIGNS. Materials and Energy, 2016, , 19-83.	2.5	5
101	What's next for semiconducting polymers. Journal of Polymer Science, 2022, 60, 287-289.	2.0	5
102	Tetracyanocyclopentadienide-Based Stable Poly(aromatic) Anions. ACS Macro Letters, 2022, 11, 72-77.	2.3	5
103	Contact Effect in High-Temperature Conjugated Polymer Transistors. ACS Applied Electronic Materials, 2020, 2, 2454-2460.	2.0	4
104	Impact of openâ€shell loading on mass transport and doping in conjugated radical polymers. Journal of Polymer Science, 0, , .	2.0	4
105	High Temperature Organic Electronics. MRS Advances, 2020, 5, 505-513.	0.5	3
106	Doping kinetics in organic mixed ionicâ€“electronic conductors: Moving front experiments and the stress effect. Extreme Mechanics Letters, 2022, 54, 101739.	2.0	3
107	Preparative Mass Spectrometry Using a Rotatingâ€Wall Mass Analyzer. Angewandte Chemie, 2020, 132, 7785-7790.	1.6	1
108	Thin Films: Solutionâ€Processed Nanoporous Organic Semiconductor Thin Films: Toward Health and Environmental Monitoring of Volatile Markers (Adv. Funct. Mater. 23/2017). Advanced Functional Materials, 2017, 27, .	7.8	0