# Jianguo Mei

List of Publications by Year
in descending order



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|---|---|---|---|
| 108 papers | 14,541 citations | 36303 51 h-index | 29157 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. | 12.8 | 1,713 |
| 2 | Integrated Materials Design of Organic Semiconductors for Field-Effect Transistors. Journal of the American Chemical Society, 2013, 135, 6724-6746. | 13.7 | 1,280 |
| 3 | Semiconducting polymer nanoparticles as photoacoustic molecular imaging probes in living mice. Nature Nanotechnology, 2014, 9, 233-239. | 31.5 | 1,057 |
| 4 | Side Chain Engineering in Solution-Processable Conjugated Polymers. Chemistry of Materials, 2014, 26, 604-615. | 6.7 | 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. | 13.7 | 844 |
| 6 | A chameleon-inspired stretchable electronic skin with interactive colour changing controlled by tactile sensing. Nature Communications, 2015, 6, 8011. | 12.8 | 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. | 13.7 | 628 |
| 8 | Synthesis of Isoindigo-Based Oligothiophenes for Molecular Bulk Heterojunction Solar Cells. Organic Letters, 2010, 12, 660-663. | 4.6 | 431 |
| 9 | Hierarchical N-Doped Carbon as CO<sub>2</sub> Adsorbent with High CO<sub>2</sub> Selectivity from Rationally Designed Polypyrrole Precursor. Journal of the American Chemical Society, 2016, 138, 1001-1009. | 13.7 | 405 |
| 10 | Highly stable organic polymer field-effect transistor sensor for selective detection in the marine environment. Nature Communications, 2014, 5, 2954. | 12.8 | 362 |
| 11 | High Performance Allâ€Polymer Solar Cell via Polymer Sideâ€Chain Engineering. Advanced Materials, 2014, 26, 3767-3772. | 21.0 | 320 |
| 12 | Isoindigo, a Versatile Electron-Deficient Unit For High-Performance Organic Electronics. Chemistry of Materials, 2014, 26, 664-678. | 6.7 | 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. | 3.3 | 314 |
| 14 | Diketopyrrolopyrroleâ€Based Semiconducting Polymer Nanoparticles for In Vivo Photoacoustic Imaging. Advanced Materials, 2015, 27, 5184-5190. | 21.0 | 305 |
| 15 | Isoindigo-Based Donorâ^'Acceptor Conjugated Polymers. Macromolecules, 2010, 43, 8348-8352. | 4.8 | 193 |
| 16 | Donorâ€"Acceptorâ€"Donor-based Ï€-Conjugated Oligomers for Nonlinear Optics and Near-IR Emission. Chemistry of Materials, 2011, 23, 3805-3817. | 6.7 | 189 |
| 17 | Broadly Absorbing Black to Transmissive Switching Electrochromic Polymers. Advanced Materials, 2010, 22, 4949-4953. | 21.0 | 158 |
| 18 | n-Type Conjugated Polyisoindigos. Macromolecules, 2011, 44, 6303-6310. | 4.8 | 156 |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 6.2 | 154 |
| 20 | Improved Performance of Molecular Bulkâ€Heterojunction Photovoltaic Cells through Predictable Selection of Solvent Additives. Advanced Functional Materials, 2012, 22, 4801-4813. | 14.9 | 149 |
| 21 | Semiconducting polymer blends that exhibit stable charge transport at high temperatures. Science, 2018, 362, 1131-1134. | 12.6 | 147 |
| 22 | Semiconducting Polymer Nanoparticles for Centimetersâ€Deep Photoacoustic Imaging in the Second Nearâ€Infrared Window. Advanced Materials, 2017, 29, 1703403. | 21.0 | 136 |
| 23 | Solution-processable electrochromic materials and devices: roadblocks and strategies towards large-scale applications. Journal of Materials Chemistry C, 2019, 7, 12761-12789. | 5.5 | 136 |
| 24 | Low-Band-Gap Platinum Acetylide Polymers as Active Materials for Organic Solar Cells. ACS Applied Materials & Interfaces, 2009, 1, 150-161. | 8.0 | 135 |
| 25 | Highly mobile charge-transfer excitons in two-dimensional WS <sub>2</sub> /tetracene heterostructures. Science Advances, 2018, 4, eaao3104. | 10.3 | 132 |
| 26 | Solutionâ€Processed Nanoporous Organic Semiconductor Thin Films: Toward Health and Environmental Monitoring of Volatile Markers. Advanced Functional Materials, 2017, 27, 1701117. | 14.9 | 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. | 10.3 | 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. | 8.0 | 108 |
| 29 | Conjugation-Break Spacers in Semiconducting Polymers: Impact on Polymer Processability and Charge Transport Properties. Macromolecules, 2015, 48, 2048-2053. | 4.8 | 106 |
| 30 | Tuning conformation, assembly, and charge transport properties of conjugated polymers by printing flow. Science Advances, 2019, 5, eaaw7757. | 10.3 | 105 |
| 31 | A Rapid and Facile Soft Contact Lamination Method: Evaluation of Polymer Semiconductors for Stretchable Transistors. Chemistry of Materials, 2014, 26, 4544-4551. | 6.7 | 101 |
| 32 | Multifunctional Conjugated Ligand Engineering for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2021, 33, e2100791. | 21.0 | 99 |
| 33 | Thiolâ€“ene Cross-Linked Polymer Gate Dielectrics for Low-Voltage Organic Thin-Film Transistors. Chemistry of Materials, 2013, 25, 4806-4812. | 6.7 | 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. | 14.6 | 88 |
| 35 | Effect of Broken Conjugation on the Stretchability of Semiconducting Polymers. Macromolecular Rapid Communications, 2016, 37, 1623-1628. | 3.9 | 87 |
| 36 | Meltâ€Processing of Complementary Semiconducting Polymer Blends for High Performance Organic Transistors. Advanced Materials, 2017, 29, 1605056. | 21.0 | 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. | 6.7 | 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. | 14.9 | 79 |
| 39 | Dynamic-template-directed multiscale assembly for large-area coating of highly-aligned conjugated polymer thin films. Nature Communications, 2017, 8, 16070. | 12.8 | 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. | 6.7 | 74 |
| 41 | A Facile Approach to Defect-Free Vinylene-Linked Benzothiadiazoleâ^'Thiophene Low-Bandgap Conjugated Polymers for Organic Electronics. Macromolecules, 2009, 42, 1482-1487. | 4.8 | 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. | 3.3 | 66 |
| 43 | n-type charge transport in heavily p-doped polymers. Nature Materials, 2021, 20, 518-524. | 27.5 | 66 |
| 44 | Impact of Backbone Rigidity on the Thermomechanical Properties of Semiconducting Polymers with Conjugation Break Spacers. Macromolecules, 2020, 53, 6032-6042. | 4.8 | 63 |
| 45 | Critical Role of Surface Energy in Guiding Crystallization of Solution-Coated Conjugated Polymer Thin Films. Langmuir, 2018, 34, 1109-1122. | 3.5 | 62 |
| 46 | Complementary Semiconducting Polymer Blends: The Influence of Conjugation-Break Spacer Length in Matrix Polymers. Macromolecules, 2016, 49, 2601-2608. | 4.8 | 61 |
| 47 | Catalytic Azoarene Synthesis from Aryl Azides Enabled by a Dinuclear Ni Complex. Journal of the American Chemical Society, 2018, 140, 4110-4118. | 13.7 | 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. | 8.0 | 58 |
| 49 | Complementary Semiconducting Polymer Blends for Efficient Charge Transport. Chemistry of Materials, 2015, 27, 7164-7170. | 6.7 | 57 |
| 50 | Sequentially solution-processed, nanostructured polymer photovoltaics using selective solvents. Energy and Environmental Science, 2014, 7, 1103. | 30.8 | 56 |
| 51 | Heterocyclic Building Blocks for Organic Semiconductors. Advances in Heterocyclic Chemistry, 2017, 121, 133-171. | 1.7 | 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. | 14.9 | 51 |
| 53 | Mechanical breathing in organic electrochromics. Nature Communications, 2020, 11, 211. | 12.8 | 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. | 2.6 | 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. | 3.9 | 42 |
| 56 | Understanding Interfacial Alignment in Solution Coated Conjugated Polymer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 27863-27874. | 8.0 | 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. | 8.0 | 42 |
| 58 | Bioinspired Dynamic Camouflage from Colloidal Nanocrystals Embedded Electrochromics. Nano Letters, 2021, 21, 4500-4507. | 9.1 | 40 |
| 59 | Continuous Meltâ€Drawing of Highly Aligned Flexible and Stretchable Semiconducting Microfibers for Organic Electronics. Advanced Functional Materials, 2018, 28, 1705584. | 14.9 | 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. | 8.0 | 37 |
| 61 | Designing Ï€-conjugated polymer blends with improved thermoelectric power factors. Journal of Materials Chemistry A, 2019, 7, 19774-19785. | 10.3 | 34 |
| 62 | Functionalized NIRâ€Ⅱ Semiconducting Polymer Nanoparticles for Singleâ€cell to Wholeâ€Organ Imaging of PSMAâ€Positive Prostate Cancer. Small, 2020, 16, e2001215. | 10.0 | 34 |
| 63 | Amineâ€“boranes bearing borane-incompatible functionalities: application to selective amine protection and surface functionalization. Chemical Communications, 2016, 52, 11885-11888. | 4.1 | 32 |
| 64 | Neural Stimulation InÂVitro and InÂVivo by Photoacoustic Nanotransducers. Matter, 2021, 4, 654-674. | 10.0 | 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. | 8.0 | 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. | 2.1 | 27 |
| 68 | Self-Bleaching Behaviors in Black-to-Transmissive Electrochromic Polymer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 34122-34130. | 8.0 | 25 |
| 69 | Designing Donorâ€“Acceptor Copolymers for Stable and High-Performance Organic Electrochemical Transistors. ACS Macro Letters, 2021, 10, 1061-1067. | 4.8 | 24 |
| 70 | Complementary Semiconducting Polymer Blends: Influence of Side Chains of Matrix Polymers. Macromolecules, 2017, 50, 6202-6209. | 4.8 | 23 |
| 71 | Conjugated electrochromic polymers with amide-containing side chains enabling aqueous electrolyte compatibility. Polymer Chemistry, 2020, 11, 508-516. | 3.9 | 23 |
| 72 | Catalytic Synthesis of Conjugated Azopolymers from Aromatic Diazides. Journal of the American Chemical Society, 2021, 143, 3975-3982. | 13.7 | 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. | 8.0 | 22 |
| 74 | Impact of the Crystallite Orientation Distribution on Exciton Transport in Donorâ€“Acceptor Conjugated Polymers. ACS Applied Materials & Interfaces, 2015, 7, 28035-28041. | 8.0 | 20 |
| 75 | Tunable green electrochromic polymers via direct arylation polymerization. Polymer Chemistry, 2018, 9, 5262-5267. | 3.9 | 20 |
| 76 | Effects of Side Chain on High Temperature Operation Stability of Conjugated Polymers. ACS Applied Polymer Materials, 2020, 2, 91-97. | 4.4 | 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. | 6.5 | 18 |
| 78 | Printing dynamic color palettes and layered textures through modeling-guided stacking of electrochromic polymers. Materials Horizons, 2022, 9, 425-432. | 12.2 | 18 |
| 79 | Polymer Electrochromism Driven by Metabolic Activity Facilitates Rapid and Facile Bacterial Detection and Susceptibility Evaluation. Advanced Functional Materials, 2020, 30, 2005192. | 14.9 | 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. | 4.1 | 16 |
| 81 | Electrochromic Properties of Perovskite NdNiO<sub>3</sub> Thin Films for Smart Windows. ACS Applied Electronic Materials, 2021, 3, 1719-1731. | 4.3 | 16 |
| 82 | Device Engineering in Organic Electrochemical Transistors toward Multifunctional Applications. ACS Applied Electronic Materials, 2021, 3, 2434-2448. | 4.3 | 16 |
| 83 | Side-Chain Sequence Enabled Regioisomeric Acceptors for Conjugated Polymers. Macromolecules, 2018, 51, 8486-8492. | 4.8 | 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. | 2.7 | 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. | 3.9 | 14 |
| 87 | Regioregular Electroactive Polyolefins with Precisely Sequenced Ï€-Conjugated Chromophores. Macromolecules, 2010, 43, 5909-5913. | 4.8 | 13 |
| 88 | Isoindigo-Based Binary Polymer Blends for Solution-Processing of Semiconducting Nanofiber Networks. ACS Applied Polymer Materials, 2019, 1, 1778-1786. | 4.4 | 13 |
| 89 | In Situ Measurement of Breathing Strain and Mechanical Degradation in Organic Electrochromic Polymers. ACS Applied Materials & Interfaces, 2020, 12, 50889-50895. | 8.0 | 12 |
| 90 | Preparative Mass Spectrometry Using a Rotatingâ€Wall Mass Analyzer. Angewandte Chemie - International Edition, 2020, 59, 7711-7716. | 13.8 | 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. | 4.8 | 11 |
| 92 | Radical Polymer-Based Organic Electrochemical Transistors. ACS Macro Letters, 2022, 11, 243-250. | 4.8 | 11 |
| 93 | Zoneâ€Annealingâ€Assisted Solventâ€Free Processing of Complementary Semiconducting Polymer Blends for Organic Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1700414. | 5.1 | 9 |
| 94 | N-Type Complementary Semiconducting Polymer Blends. ACS Applied Polymer Materials, 2020, 2, 2644-2650. | 4.4 | 9 |
| 95 | Thermally Stable and Solvent-Resistant Conductive Polymer Composites with Cross-Linked Siloxane Network. ACS Applied Polymer Materials, 2021, 3, 1537-1543. | 4.4 | 9 |
| 96 | n-Type Organic Field-Effect Transistors Based on Bisthienoisatin Derivatives. ACS Applied Electronic Materials, 2019, 1, 764-771. | 4.3 | 8 |
| 97 | Organic Cation Engineering for Vertical Charge Transport in Leadâ€Free Perovskite Quantum Wells. Small Science, 2021, 1, 2000024. | 9.9 | 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. | 2.6 | 7 |
| 99 | Backbone flexibility on conjugated polymer's crystallization behavior and thin film mechanical stability. Journal of Polymer Science, 2022, 60, 548-558. | 3.8 | 7 |
| 100 | OFETs: BASIC CONCEPTS AND MATERIAL DESIGNS. Materials and Energy, 2016, , 19-83. | 0.1 | 5 |
| 101 | What's next for semiconducting polymers. Journal of Polymer Science, 2022, 60, 287-289. | 3.8 | 5 |
| 102 | Tetracyanocyclopentadienide-Based Stable Poly(aromatic) Anions. ACS Macro Letters, 2022, 11, 72-77. | 4.8 | 5 |
| 103 | Contact Effect in High-Temperature Conjugated Polymer Transistors. ACS Applied Electronic Materials, 2020, 2, 2454-2460. | 4.3 | 4 |
| 104 | Impact of openâ€shell loading on mass transport and doping in conjugated radical polymers. Journal of Polymer Science, 0, , . | 3.8 | 4 |
| 105 | High Temperature Organic Electronics. MRS Advances, 2020, 5, 505-513. | 0.9 | 3 |
| 106 | Doping kinetics in organic mixed ionicâ€“electronic conductors: Moving front experiments and the stress effect. Extreme Mechanics Letters, 2022, 54, 101739. | 4.1 | 3 |
| 107 | Preparative Mass Spectrometry Using a Rotatingâ€Wall Mass Analyzer. Angewandte Chemie, 2020, 132, 7785-7790. | 2.0 | 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, . | 14.9 | 0 |