# Fei Jiao

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 70 papers | 9,855 citations | 61984 43 h-index | 82547 72 g-index |
| 75 all docs | 75 docs citations | 75 times ranked | 8711 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A Biomimetic Evolvable Organic Electrochemical Transistor. Advanced Electronic Materials, 2021, 7, 2001126. | 5.1 | 26 |
| 2 | The More, the Betterâ€“Recent Advances in Construction of 2D Multiâ€Heterostructures. Advanced Functional Materials, 2021, 31, 2102049. | 14.9 | 27 |
| 3 | Unconventional Thermoelectric Materials for Energy Harvesting and Sensing Applications. Chemical Reviews, 2021, 121, 12465-12547. | 47.7 | 186 |
| 4 | Wearable Thermoelectric Materials and Devices for Selfâ€Powered Electronic Systems. Advanced Materials, 2021, 33, e2102990. | 21.0 | 221 |
| 5 | Ionic thermoelectric materials and devices. Journal of Energy Chemistry, 2021, 61, 88-103. | 12.9 | 61 |
| 6 | Insulating polymers for flexible thermoelectric composites: A multi-perspective review. Composites Communications, 2021, 28, 100914. | 6.3 | 20 |
| 7 | When graphene meets white graphene â€“ recent advances in the construction of graphene and h-BN heterostructures. Nanoscale, 2021, 13, 13174-13194. | 5.6 | 9 |
| 8 | Polymer-Assisted Space-Confined Strategy for the Foot-Scale Synthesis of Flexible Metalâ€“Organic Framework-Based Composite Films. Journal of the American Chemical Society, 2021, 143, 17526-17534. | 13.7 | 17 |
| 9 | Continuous orientated growth of scaled single-crystal 2D monolayer films. Nanoscale Advances, 2021, 3, 6545-6567. | 4.6 | 3 |
| 10 | Solar Heatâ€Enhanced Energy Conversion in Devices Based on Photosynthetic Membranes and PEDOT:PSSâ€Nanocellulose Electrodes. Advanced Sustainable Systems, 2020, 4, 1900100. | 5.3 | 11 |
| 11 | Two-dimensional porphyrin sheet as an electric and optical sensor material for pH detection: A DFT study. Computational Materials Science, 2020, 174, 109485. | 3.0 | 17 |
| 12 | Ionâ€Selective Electrocatalysis on Conducting Polymer Electrodes: Improving the Performance of Redox Flow Batteries. Advanced Functional Materials, 2020, 30, 2007009. | 14.9 | 21 |
| 13 | Effect of Sulfonation Level on Lignin/Carbon Composite Electrodes for Large-Scale Organic Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 17933-17944. | 6.7 | 15 |
| 14 | Unraveling vertical inhomogeneity in vapour phase polymerized PEDOT:Tos films. Journal of Materials Chemistry A, 2020, 8, 18726-18734. | 10.3 | 22 |
| 15 | High Thermoelectric Performance in nâ€Type Perylene Bisimide Induced by the Soret Effect. Advanced Materials, 2020, 32, e2002752. | 21.0 | 53 |
| 16 | Organicâ€“Inorganic Hybrid Nanomaterials for Electrocatalytic CO<sub>2</sub> Reduction. Small, 2020, 16, e2001847. | 10.0 | 79 |
| 17 | Elastic conducting polymer composites in thermoelectric modules. Nature Communications, 2020, 11, 1424. | 12.8 | 134 |
| 18 | Celluloseâ€Conducting Polymer Aerogels for Efficient Solar Steam Generation. Advanced Sustainable Systems, 2020, 4, 2000004. | 5.3 | 74 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Molecular Oxygen Activation at a Conducting Polymer: Electrochemical Oxygen Reduction Reaction at PEDOT Revisited, a Theoretical Study. Journal of Physical Chemistry C, 2020, 124, 13263-13272. | 3.1 | 32 |
| 20 | Interfaces in organic electronics. Nature Reviews Materials, 2019, 4, 627-650. | 48.7 | 237 |
| 21 | Asymmetric Aqueous Supercapacitor Based on p- and n-Type Conducting Polymers. ACS Applied Energy Materials, 2019, 2, 5350-5355. | 5.1 | 44 |
| 22 | Twinning Lignosulfonate with a Conducting Polymer via Counterâ€Ion Exchange for Largeâ€Scale Electrical Storage. Advanced Sustainable Systems, 2019, 3, 1900039. | 5.3 | 17 |
| 23 | Conductingâ€Polymer Bolometers for Lowâ€Cost IRâ€Detection Systems. Advanced Electronic Materials, 2019, 5, 1800975. | 5.1 | 16 |
| 24 | Poly(3,4â€ethylenedioxythiophene): Chemical Synthesis, Transport Properties, and Thermoelectric Devices. Advanced Electronic Materials, 2019, 5, 1800918. | 5.1 | 93 |
| 25 | Polymer gels with tunable ionic Seebeck coefficient for ultra-sensitive printed thermopiles. Nature Communications, 2019, 10, 1093. | 12.8 | 174 |
| 26 | A Multiparameter Pressureâ€“Temperatureâ€“Humidity Sensor Based on Mixed Ionicâ€“Electronic Cellulose Aerogels. Advanced Science, 2019, 6, 1802128. | 11.2 | 114 |
| 27 | Polarons, Bipolarons, And Absorption Spectroscopy of PEDOT. ACS Applied Polymer Materials, 2019, 1, 83-94. | 4.4 | 217 |
| 28 | Ion Electronâ€“Coupled Functionality in Materials and Devices Based on Conjugated Polymers. Advanced Materials, 2019, 31, e1805813. | 21.0 | 118 |
| 29 | Nanofibrillated Celluloseâ€Based Electrolyte and Electrode for Paperâ€Based Supercapacitors. Advanced Sustainable Systems, 2018, 2, 1700121. | 5.3 | 38 |
| 30 | A Freeâ€Standing Highâ€Output Power Density Thermoelectric Device Based on Structureâ€Ordered PEDOT:PSS. Advanced Electronic Materials, 2018, 4, 1700496. | 5.1 | 73 |
| 31 | Understanding the Impact of Film Disorder and Local Surface Potential in Ultraviolet Photoelectron Spectroscopy of PEDOT. Macromolecular Rapid Communications, 2018, 39, 1700533. | 3.9 | 22 |
| 32 | Correlating the Seebeck coefficient of thermoelectric polymer thin films to their charge transport mechanism. Organic Electronics, 2018, 52, 335-341. | 2.6 | 73 |
| 33 | Bulk electronic transport impacts on electron transfer at conducting polymer electrodeâ€“electrolyte interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11899-11904. | 7.1 | 61 |
| 34 | Thermoelectric materials and applications for energy harvesting power generation. Science and Technology of Advanced Materials, 2018, 19, 836-862. | 6.1 | 413 |
| 35 | Conducting Polymer Electrocatalysts for Protonâ€Coupled Electron Transfer Reactions: Toward Organic Fuel Cells with Forest Fuels. Advanced Sustainable Systems, 2018, 2, 1800021. | 5.3 | 18 |
| 36 | Ionic thermoelectric gating organic transistors. Nature Communications, 2017, 8, 14214. | 12.8 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Room temperature synthesis of transition metal silicide-conducting polymer micro-composites for thermoelectric applications. Synthetic Metals, 2017, 225, 55-63. | 3.9 | 9 |
| 38 | Ionic Thermoelectric Figure of Merit for Charging of Supercapacitors. Advanced Electronic Materials, 2017, 3, 1700013. | 5.1 | 146 |
| 39 | Effect of (3â€glycidyloxypropyl)trimethoxysilane (GOPS) on the electrical properties of PEDOT:PSS films. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 814-820. | 2.1 | 190 |
| 40 | Understanding the Capacitance of PEDOT:PSS. Advanced Functional Materials, 2017, 27, 1700329. | 14.9 | 275 |
| 41 | Thermoelectric Polymer Aerogels for Pressureâ€“Temperature Sensing Applications. Advanced Functional Materials, 2017, 27, 1703549. | 14.9 | 133 |
| 42 | Poly(3,4-ethylenedioxythiophene)-tosylate (PEDOT-Tos) electrodes in thermogalvanic cells. Journal of Materials Chemistry A, 2017, 5, 19619-19625. | 10.3 | 44 |
| 43 | Ionic thermoelectric paper. Journal of Materials Chemistry A, 2017, 5, 16883-16888. | 10.3 | 79 |
| 44 | Ground-state charge transfer for NIR absorption with donor/acceptor molecules: interactions mediated via energetics and orbital symmetries. Journal of Materials Chemistry C, 2017, 5, 275-281. | 5.5 | 20 |
| 45 | Thermoelectric Polymers and their Elastic Aerogels. Advanced Materials, 2016, 28, 4556-4562. | 21.0 | 157 |
| 46 | An Organic Mixed Ionâ€“Electron Conductor for Power Electronics. Advanced Science, 2016, 3, 1500305. | 11.2 | 188 |
| 47 | Thermoelectric Properties of Polymeric Mixed Conductors. Advanced Functional Materials, 2016, 26, 6288-6296. | 14.9 | 96 |
| 48 | Thermoelectric Properties of Solutionâ€Processed nâ€Doped Ladderâ€Type Conducting Polymers. Advanced Materials, 2016, 28, 10764-10771. | 21.0 | 245 |
| 49 | Thermoelectrics: Carbon nanotubes get high. Nature Energy, 2016, 1, . | 39.5 | 18 |
| 50 | Flexible nâ€Type Highâ€Performance Thermoelectric Thin Films of Poly(nickelâ€ethylenetetrathiolate) Prepared by an Electrochemical Method. Advanced Materials, 2016, 28, 3351-3358. | 21.0 | 206 |
| 51 | Significant Electronic Thermal Transport in the Conducting Polymer Poly(3,4â€ethylenedioxythiophene). Advanced Materials, 2015, 27, 2101-2106. | 21.0 | 176 |
| 52 | Interface-Located Photothermoelectric Effect of Organic Thermoelectric Materials in Enabling NIR Detection. ACS Applied Materials & Interfaces, 2015, 7, 8968-8973. | 8.0 | 45 |
| 53 | Ionic Seebeck Effect in Conducting Polymers. Advanced Energy Materials, 2015, 5, 1500044. | 19.5 | 178 |
| 54 | Acido-basic control of the thermoelectric properties of poly(3,4-ethylenedioxythiophene)tosylate (PEDOT-Tos) thin films. Journal of Materials Chemistry C, 2015, 3, 10616-10623. | 5.5 | 147 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Experimental evidence that short-range intermolecular aggregation is sufficient for efficient charge transport in conjugated polymers. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10599-10604. | 7.1 | 175 |
| 56 | Inkjet-printed flexible organic thin-film thermoelectric devices based on p- and n-type poly(metal) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7 Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130008. | 3.4 | 116 |
| 57 | A novel cuprous ethylenetetrathiolate coordination polymer: Structure characterization, thermoelectric property optimization and a bulk thermogenerator demonstration. Synthetic Metals, 2014, 193, 1-7. | 3.9 | 32 |
| 58 | Semi-metallic polymers. Nature Materials, 2014, 13, 190-194. | 27.5 | 722 |
| 59 | Optimization of the thermoelectric properties of poly[Cux(Cu-ethylenetetrathiolate)]. Synthetic Metals, 2014, 188, 111-115. | 3.9 | 18 |
| 60 | An easily accessible carbon material derived from carbonization of polyacrylonitrile ultrathin films: ambipolar transport properties and application in a CMOS-like inverter. Chemical Communications, 2014, 50, 2374. | 4.1 | 13 |
| 61 | Synthesis of Wurtzite Cu<sub>2</sub>ZnGeSe<sub>4</sub> Nanocrystals and their Thermoelectric Properties. Chemistry - an Asian Journal, 2013, 8, 2383-2387. | 3.3 | 21 |
| 62 | Effects of structural order in the pristine state on the thermoelectric power-factor of doped PBTTT films. Synthetic Metals, 2012, 162, 788-793. | 3.9 | 42 |
| 63 | Tuning the Thermoelectric Properties of Conducting Polymers in an Electrochemical Transistor. Journal of the American Chemical Society, 2012, 134, 16456-16459. | 13.7 | 269 |
| 64 | Towards polymer-based organic thermoelectric generators. Energy and Environmental Science, 2012, 5, 9345. | 30.8 | 684 |
| 65 | Organic Thermoelectric Materials and Devices Based on pâ€•and nâ€Type Poly(metal) Tj ETQq1 1 0.784314 rgBT /Overl | 21.0 | 448 |
| 66 | Optimization of the thermoelectric figure ofÂmeritÂin the conducting polymer poly(3,4-ethylenedioxythiophene). Nature Materials, 2011, 10, 429-433. | 27.5 | 1,518 |
| 67 | Controlling the Dimensionality of Charge Transport in an Organic Electrochemical Transistor by Capacitive Coupling. Advanced Materials, 2011, 23, 4764-4769. | 21.0 | 52 |
| 68 | Effect of the Ionic Conductivity on the Performance of Polyelectrolyteâ€Based Supercapacitors. Advanced Functional Materials, 2010, 20, 4344-4350. | 14.9 | 83 |
| 69 | A Waterâ€Gate Organic Fieldâ€Effect Transistor. Advanced Materials, 2010, 22, 2565-2569. | 21.0 | 265 |
| 70 | Insulator Polarization Mechanisms in Polyelectrolyteâ€Gated Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2009, 19, 3334-3341. | 14.9 | 181 |