# Ziqi Liang

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 65 papers | 3,546 citations | 31 h-index | 59 g-index |
| 70 ext. papers | 4,057 ext. citations | 12.2 avg, IF | 5.87 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 65 | Implementing an intermittent spin-coating strategy to enable bottom-up crystallization in layered halide perovskites. *Nature Communications*, **2021**, 12, 6603 | 17.4 | 9 |
| 64 | Achieving Efficient p-Type Organic Thermoelectrics by Modulation of Acceptor Unit in Photovoltaic Conjugated Copolymers. *Advanced Science*, **2021**, e2103646 | 13.6 | 4 |
| 63 | Developing Halogen-Free Polymer Donors for Efficient Nonfullerene Organic Solar Cells by Addition of Highly Electron-Deficient Diketopyrrolopyrrole Unit. *Solar Rrl*, **2021**, 5, 2100142 | 7.1 | 3 |
| 62 | Asymmetric Spacer in Dion Jacobson Halide Perovskites Induces Staggered Alignment to Direct Out-of-Plane Carrier Transport and Enhances Ambient Stability Simultaneously. *Advanced Functional Materials*, **2021**, 31, 2104342 | 15.6 | 4 |
| 61 | Advancing Tin Halide Perovskites: Strategies toward the ASnX3 Paradigm for Efficient and Durable Optoelectronics. *ACS Energy Letters*, **2020**, 5, 2052-2086 | 20.1 | 27 |
| 60 | Mechanistic Investigation into Dynamic Function of Third Component Incorporated in Ternary Near-Infrared Nonfullerene Organic Solar Cells. *Advanced Functional Materials*, **2020**, 30, 2001564 | 15.6 | 15 |
| 59 | Semiconducting polymer contributes favorably to the Seebeck coefficient in multi-component, high-performance n-type thermoelectric nanocomposites. *Journal of Materials Chemistry A*, **2020**, 8, 9797-9805 | 13 | 11 |
| 58 | Solvent-Mediated n-Type Doping of SWCNTs to Achieve Superior Thermoelectric Power Factor. *Advanced Materials Technologies*, **2020**, 5, 2000288 | 6.8 | 8 |
| 57 | Extraction Current Transients for Selective Charge-Carrier Mobility Determination in Non-Fullerene and Ternary Bulk Heterojunction Organic Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 9190-9197 | 6.1 | 5 |
| 56 | Enabling room-temperature processed highly efficient and stable 2D Ruddlesden Popper perovskite solar cells with eliminated hysteresis by synergistic exploitation of additives and solvents. *Journal of Materials Chemistry A*, **2019**, 7, 2015-2021 | 13 | 39 |
| 55 | Benefiting from Spontaneously Generated 2D/3D Bulk-Heterojunctions in Ruddlesden-Popper Perovskite by Incorporation of S-Bearing Spacer Cation. *Advanced Science*, **2019**, 6, 1900548 | 13.6 | 38 |
| 54 | Recent Advances in n-Type Thermoelectric Nanocomposites. *Advanced Electronic Materials*, **2019**, 5, 1800943 | 6.4 | 32 |
| 53 | Nonconfinement Structure Revealed in Dion-Jacobson Type Quasi-2D Perovskite Expedites Interlayer Charge Transport. *Small*, **2019**, 15, e1905081 | 11 | 28 |
| 52 | Unveiling Excitonic Dynamics in High-Efficiency Nonfullerene Organic Solar Cells to Direct Morphological Optimization for Suppressing Charge Recombination. *Advanced Science*, **2019**, 6, 1802103 | 13.6 | 24 |
| 51 | Dimensional crossover of heat conduction in amorphous polyimide nanofibers. *National Science Review*, **2018**, 5, 500-506 | 10.8 | 25 |
| 50 | Phase Engineering in Quasi-2D Ruddlesden-Popper Perovskites. *Journal of Physical Chemistry Letters*, **2018**, 9, 2627-2631 | 6.4 | 64 |
| 49 | Inter-phase charge and energy transfer in Ruddlesden Popper 2D perovskites: critical role of the spacing cations. *Journal of Materials Chemistry A*, **2018**, 6, 6244-6250 | 13 | 70 |

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| 48 | 2D Ruddlesden-Popper Perovskites for Optoelectronics. *Advanced Materials*, **2018**, 30, 1703487 | 24 | 423 |
| 47 | Long-term stable silver nanowire transparent composite as bottom electrode for perovskite solar cells. *Nano Research*, **2018**, 11, 1998-2011 | 10 | 48 |
| 46 | Flexible Thermoelectric Generators with Ultrahigh Output Power Enabled by Magnetic Field□Aligned Metallic Nanowires. *Advanced Electronic Materials*, **2018**, 4, 1800200 | 6.4 | 35 |
| 45 | Topological Design of Inorganic□Organic Thermoelectric Nanocomposites Based on Electron□Percolation Phonon□Insulator□Concept. *ACS Applied Energy Materials*, **2018**, 1, 2927-2933 | 6.1 | 6 |
| 44 | Composition Engineering in Two-Dimensional Pb-Sn-Alloyed Perovskites for Efficient and Stable Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 21343-21348 | 9.5 | 16 |
| 43 | Air-Stable and Self-Driven Perovskite Photodiodes with High On/Off Ratio and Swift Photoresponse. *Small*, **2018**, 14, e1802764 | 11 | 22 |
| 42 | Ternary Blend Strategy for Achieving High-Efficiency Organic Solar Cells with Nonfullerene Acceptors Involved. *Advanced Functional Materials*, **2018**, 28, 1802004 | 15.6 | 77 |
| 41 | Tailoring Organic Cation of 2D Air-Stable Organometal Halide Perovskites for Highly Efficient Planar Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1700162 | 21.8 | 257 |
| 40 | Efficient and Stable Ternary Organic Solar Cells Based on Two Planar Nonfullerene Acceptors with Tunable Crystallinity and Phase Miscibility. *ACS Applied Materials & Interfaces*, **2017**, 9, 20704-20710 | 9.5 | 40 |
| 39 | Nanomaterials in Electrochemiluminescence Sensors. *ChemElectroChem*, **2017**, 4, 1651-1662 | 4.3 | 33 |
| 38 | Triple-cation mixed-halide perovskites: towards efficient, annealing-free and air-stable solar cells enabled by Pb(SCN) additive. *Scientific Reports*, **2017**, 7, 46193 | 4.9 | 92 |
| 37 | 2D/1A Strategy to Regulate Film Morphology for Efficient and Stable Nonfullerene Organic Solar Cells. *Macromolecules*, **2017**, 50, 6954-6960 | 5.5 | 17 |
| 36 | Thick Film Polymer Solar Cells Based on Naphtho[1,2-c:5,6-c]bis[1,2,5]thiadiazole Conjugated Polymers with Efficiency over 11%. *Advanced Energy Materials*, **2017**, 7, 1700944 | 21.8 | 115 |
| 35 | Ultra-high electrical conductivity and superior bendability simultaneously enabled in Ag nanowire based nanocomposites. *RSC Advances*, **2017**, 7, 44254-44258 | 3.7 | 7 |
| 34 | Insights into charge carrier dynamics in organo-metal halide perovskites: from neat films to solar cells. *Chemical Society Reviews*, **2017**, 46, 5714-5729 | 58.5 | 147 |
| 33 | Bendable n-Type Metallic Nanocomposites with Large Thermoelectric Power Factor. *Advanced Materials*, **2017**, 29, 1604752 | 24 | 87 |
| 32 | Synergetic Solvent Engineering of Film Nanomorphology to Enhance Planar Perylene Diimide-Based Organic Photovoltaics. *ACS Applied Materials & Interfaces*, **2016**, 8, 22418-24 | 9.5 | 15 |
| 31 | Perovskites: Structure and Growth Control of Organic□Inorganic Halide Perovskites for Optoelectronics: From Polycrystalline Films to Single Crystals (Adv. Sci. 4/2016). *Advanced Science*, **2016**, 3, | 13.6 | 1 |

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|---|---|---|---|
| 30 | FAPbCl3 Perovskite as Alternative Interfacial Layer for Highly Efficient and Stable Polymer Solar Cells. *Advanced Electronic Materials*, **2016**, 2, 1600329 | 6.4 | 21 |
| 29 | Light and Thermally Induced Evolutional Charge Transport in CH3NH3PbI3 Perovskite Solar Cells. *ACS Energy Letters*, **2016**, 1, 1000-1006 | 20.1 | 20 |
| 28 | Conjugated Polymers-Based Chemical and Biological Sensors **2016**, 175-203 | | |
| 27 | Thermoelectric Enhancement of Ternary Copper Chalcogenide Nanocrystals by Magnetic Nickel Doping. *Advanced Electronic Materials*, **2016**, 2, 1500473 | 6.4 | 18 |
| 26 | Swift Electrofluorochromism of Donor-Acceptor Conjugated Polytriphenylamines. *ACS Applied Materials & Interfaces*, **2016**, 8, 18301-8 | 9.5 | 54 |
| 25 | Transient Extraction of Holes and Electrons Separately Unveils the Transport Dynamics in Organic Photovoltaics. *Advanced Electronic Materials*, **2016**, 2, 1500333 | 6.4 | 17 |
| 24 | Structure and Growth Control of Organic-Inorganic Halide Perovskites for Optoelectronics: From Polycrystalline Films to Single Crystals. *Advanced Science*, **2016**, 3, 1500392 | 13.6 | 152 |
| 23 | Fine Control of Side Chains in Random □Conjugated Terpolymers for Organic Photovoltaics. *Macromolecular Chemistry and Physics*, **2016**, 217, 1513-1520 | 2.6 | 6 |
| 22 | Electroluminochromic Materials and Devices. *Advanced Functional Materials*, **2016**, 26, 2783-2799 | 15.6 | 69 |
| 21 | Efficient and balanced charge transport revealed in planar perovskite solar cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 4471-5 | 9.5 | 105 |
| 20 | Non-Thermal Annealing Fabrication of Efficient Planar Perovskite Solar Cells with Inclusion of NH4Cl. *Chemistry of Materials*, **2015**, 27, 1448-1451 | 9.6 | 114 |
| 19 | Nonvolatile chlorinated additives adversely influence CH3NH3PbI3 based planar solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 9137-9140 | 13 | 32 |
| 18 | Ultrasensitive Photodetectors Based on Island-Structured CH3NH3PbI3 Thin Films. *ACS Applied Materials & Interfaces*, **2015**, 7, 21634-8 | 9.5 | 96 |
| 17 | Interfacial engineering by using self-assembled monolayer in mesoporous perovskite solar cell. *RSC Advances*, **2015**, 5, 94290-94295 | 3.7 | 57 |
| 16 | Hot-Injection Synthesis of Cu-Doped Cu□nSnSe□Nanocrystals to Reach Thermoelectric zT of 0.70 at 450□C. *ACS Applied Materials & Interfaces*, **2015**, 7, 24403-8 | 9.5 | 45 |
| 15 | Solution processed organic thermoelectrics: towards flexible thermoelectric modules. *Energy and Environmental Science*, **2015**, 8, 401-422 | 35.4 | 311 |
| 14 | 3D Printing: 3D Printing Fabrication of Amorphous Thermoelectric Materials with Ultralow Thermal Conductivity (Small 44/2015). *Small*, **2015**, 11, 5888-5888 | 11 | 1 |
| 13 | 3D Printing Fabrication of Amorphous Thermoelectric Materials with Ultralow Thermal Conductivity. *Small*, **2015**, 11, 5889-94 | 11 | 70 |

# List of Publications

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|---|---|---|---|
| 12 | Lead Replacement in CH3NH3PbI3 Perovskites. *Advanced Electronic Materials*, **2015**, 1, 1500089 | 6.4 | 56 |
| 11 | Correlating Molecular Structures with Transport Dynamics in High-Efficiency Small-Molecule Organic Photovoltaics. *ACS Applied Materials & Interfaces*, **2015**, 7, 13137-41 | 9.5 | 14 |
| 10 | One-Step Hydrothermal Synthesis of 2D Hexagonal Nanoplates of Fe2O3/Graphene Composites with Enhanced Photocatalytic Activity. *Advanced Functional Materials*, **2014**, 24, 5719-5727 | 15.6 | 289 |
| 9 | Activation Energy Spectra: Insights into Transport Limitations of Organic Semiconductors and Photovoltaic Cells. *Advanced Functional Materials*, **2012**, 22, 1087-1091 | 15.6 | 6 |
| 8 | Compensating poly(3-hexylthiophene) reveals its doping density and its strong exciton quenching by free carriers. *Advanced Materials*, **2012**, 24, 3258-62 | 24 | 46 |
| 7 | Chemically treating poly(3-hexylthiophene) defects to improve bulk heterojunction photovoltaics. *ACS Applied Materials & Interfaces*, **2011**, 3, 2042-50 | 9.5 | 22 |
| 6 | Solution Processable n-Type Perylene Diimide Copolymers for Organic Photovoltaics. *Materials Research Society Symposia Proceedings*, **2011**, 1286, 58 | | |
| 5 | Non-Conjugated Polymers for Organic Photovoltaics: Physical and Optoelectronic Properties of Poly(perylene diimides). *Journal of Physical Chemistry C*, **2010**, 114, 6784-6790 | 3.8 | 15 |
| 4 | Defect Engineering in Conjugated Polymers. *Chemistry of Materials*, **2009**, 21, 4914-4919 | 9.6 | 53 |
| 3 | Enhancing charge separation in conjugated microporous polymers for efficient photocatalytic hydrogen evolution. *Materials Advances*, | 3.3 | |
| 2 | Efficient p-Type Doping of Tin Halide Perovskite via Sequential Diffusion for Thermoelectrics. *Small Science*,2200004 | | 2 |
| 1 | Developing Y-Branched Polymer Acceptor with 3D Architecture to Reconcile Between Crystallinity and Miscibility Yielding >15% Efficient All-Polymer Solar Cells. *Advanced Science*,2200864 | 13.6 | 2 |