

Changyeon Lee

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

4,123
citations

218677

26
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345221

36
g-index

42
all docs

42
docs citations

42
times ranked

3526
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Eco-Friendly Polymer Solar Cells: Advances in Green-Solvent Processing and Material Design. ACS Nano, 2020, 14, 14493-14527. | 14.6 | 150 |
| 2 | Importance of device structure and interlayer design in storage stability of naphthalene diimide-based all-polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 3735-3745. | 10.3 | 12 |
| 3 | Elucidating Roles of Polymer Donor Aggregation in All-Polymer and Non-Fullerene Small-Molecule Polymer Solar Cells. Chemistry of Materials, 2020, 32, 3585-3596. | 6.7 | 38 |
| 4 | Influence of backbone modification of difluoroquinoxaline-based copolymers on the interchain packing, blend morphology and photovoltaic properties of nonfullerene organic solar cells. Journal of Materials Chemistry C, 2019, 7, 1681-1689. | 5.5 | 25 |
| 5 | Recent Advances, Design Guidelines, and Prospects of All-Polymer Solar Cells. Chemical Reviews, 2019, 119, 8028-8086. | 47.7 | 566 |
| 6 | Synergistic Effects of Terpolymer Regioregularity on the Performance of All-Polymer Solar Cells. Macromolecules, 2019, 52, 738-746. | 4.8 | 17 |
| 7 | Regioisomeric wide-band-gap polymers with different fluorine topologies for non-fullerene organic solar cells. Polymer Chemistry, 2019, 10, 395-402. | 3.9 | 22 |
| 8 | Comparative Study of the Mechanical Properties of All-Polymer and Fullerene Polymer Solar Cells: The Importance of Polymer Acceptors for High Fracture Resistance. Chemistry of Materials, 2018, 30, 2102-2111. | 6.7 | 79 |
| 9 | Mechanically robust and high-performance ternary solar cells combining the merits of all-polymer and fullerene blends. Journal of Materials Chemistry A, 2018, 6, 4494-4503. | 10.3 | 54 |
| 10 | Efficient Approach for Improving the Performance of Nonhalogenated Green Solvent-Processed Polymer Solar Cells via Ternary-Blend Strategy. ACS Applied Materials & Interfaces, 2018, 10, 13748-13756. | 8.0 | 23 |
| 11 | A High Dielectric N-type Small Molecular Acceptor Containing Oligoethyleneglycol Side Chains for Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 199-205. | 4.9 | 22 |
| 12 | Effect of the acceptor types on the fracture behavior of polymer solar cells. , 2018, , . | | 0 |
| 13 | Organic Electronics: Efficient and Air-Stable Aqueous-Processed Organic Solar Cells and Transistors: Impact of Water Addition on Processability and Thin-Film Morphologies of Electroactive Materials (Adv. Energy Mater. 34/2018). Advanced Energy Materials, 2018, 8, 1870149. | 19.5 | 1 |
| 14 | Efficient and Air-Stable Aqueous-Processed Organic Solar Cells and Transistors: Impact of Water Addition on Processability and Thin-Film Morphologies of Electroactive Materials. Advanced Energy Materials, 2018, 8, 1802674. | 19.5 | 52 |
| 15 | Shift of the Branching Point of the Side Chain in Naphthalenediimide (NDI)-Based Polymer for Enhanced Electron Mobility and All-Polymer Solar Cell Performance. Advanced Functional Materials, 2018, 28, 1803613. | 14.9 | 74 |
| 16 | Aqueous Soluble Fullerene Acceptors for Efficient Eco-Friendly Polymer Solar Cells Processed from Benign Ethanol/Water Mixtures. Chemistry of Materials, 2018, 30, 5663-5672. | 6.7 | 34 |
| 17 | Synthesis and side-chain engineering of phenylnaphthalenediimide (PNDI)-based n-type polymers for efficient all-polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 5449-5459. | 10.3 | 29 |
| 18 | Self-Organization of Polymer Additive, Poly(2-vinylpyridine) via One-Step Solution Processing to Enhance the Efficiency and Stability of Polymer Solar Cells. Advanced Energy Materials, 2017, 7, 1602812. | 19.5 | 29 |

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|----|---|------|-----------|
| 19 | Ethanol-Processable, Highly Crystalline Conjugated Polymers for Eco-Friendly Fabrication of Organic Transistors and Solar Cells. <i>Macromolecules</i> , 2017, 50, 4415-4424. | 4.8 | 63 |
| 20 | The Impact of Sequential Fluorination of π -Conjugated Polymers on Charge Generation in All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2017, 27, 1701256. | 14.9 | 55 |
| 21 | Solar Cells: Rationally Designed Donor-Acceptor Random Copolymers with Optimized Complementary Light Absorption for Highly Efficient All-Polymer Solar Cells (<i>Adv. Funct. Mater.</i> 38/2017). <i>Advanced Functional Materials</i> , 2017, 27, . | 14.9 | 0 |
| 22 | Importance of 2D Conjugated Side Chains of Benzodithiophene-Based Polymers in Controlling Polymer Packing, Interfacial Ordering, and Composition Variations of All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2017, 29, 9407-9415. | 6.7 | 67 |
| 23 | Impact of highly crystalline, isoindigo-based small-molecular additives for enhancing the performance of all-polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21291-21299. | 10.3 | 13 |
| 24 | Rationally Designed Donor-Acceptor Random Copolymers with Optimized Complementary Light Absorption for Highly Efficient All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2017, 27, 1703070. | 14.9 | 37 |
| 25 | Controlling Molecular Orientation of Naphthalenediimide-Based Polymer Acceptors for High Performance All-Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1600504. | 19.5 | 152 |
| 26 | Correlation between Phase-Separated Domain Sizes of Active Layer and Photovoltaic Performances in All-Polymer Solar Cells. <i>Macromolecules</i> , 2016, 49, 5051-5058. | 4.8 | 93 |
| 27 | Side-Chain Fluorination: An Effective Approach to Achieving High-Performance All-Polymer Solar Cells with Efficiency Exceeding 7%. <i>Advanced Materials</i> , 2016, 28, 10016-10023. | 21.0 | 108 |
| 28 | Improved Internal Quantum Efficiency and Light-Extraction Efficiency of Organic Light-Emitting Diodes via Synergistic Doping with Au and Ag Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 27911-27919. | 8.0 | 34 |
| 29 | Side Chain Optimization of Naphthalenediimide-Bithiophene-Based Polymers to Enhance the Electron Mobility and the Performance in All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2016, 26, 1543-1553. | 14.9 | 155 |
| 30 | From Fullerene-Polymer to All-Polymer Solar Cells: The Importance of Molecular Packing, Orientation, and Morphology Control. <i>Accounts of Chemical Research</i> , 2016, 49, 2424-2434. | 15.6 | 407 |
| 31 | Charge Generation Dynamics in Efficient All-Polymer Solar Cells: Influence of Polymer Packing and Morphology. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 27586-27591. | 8.0 | 22 |
| 32 | Determining the Role of Polymer Molecular Weight for High-Performance All-Polymer Solar Cells: Its Effect on Polymer Aggregation and Phase Separation. <i>Journal of the American Chemical Society</i> , 2015, 137, 2359-2365. | 13.7 | 347 |
| 33 | High-Performance All-Polymer Solar Cells Via Side-Chain Engineering of the Polymer Acceptor: The Importance of the Polymer Packing Structure and the Nanoscale Blend Morphology. <i>Advanced Materials</i> , 2015, 27, 2466-2471. | 21.0 | 279 |
| 34 | Importance of Electron Transport Ability in Naphthalene Diimide-Based Polymer Acceptors for High-Performance, Additive-Free, All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2015, 27, 5230-5237. | 6.7 | 131 |
| 35 | Flexible, highly efficient all-polymer solar cells. <i>Nature Communications</i> , 2015, 6, 8547. | 12.8 | 740 |
| 36 | Organic Electronics: Facile Photo-Crosslinking of Azide-Containing Hole-Transporting Polymers for Highly Efficient, Solution-Processed, Multilayer Organic Light Emitting Devices (<i>Adv. Funct. Mater.</i>) <i>Tj ETQq0 0 0 ngBT /Overclock 10 Tf</i> | | |

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|----|--|------|-----------|
| 37 | Facile Photo-crosslinking of Azide-Containing Hole-Transporting Polymers for Highly Efficient, Solution-Processed, Multilayer Organic Light Emitting Devices. <i>Advanced Functional Materials</i> , 2014, 24, 7588-7596. | 14.9 | 68 |
| 38 | Simultaneously Enhancing Light Extraction and Device Stability of Organic Light-Emitting Diodes using a Corrugated Polymer Nanosphere Templated PEDOT:PSS Layer. <i>Advanced Energy Materials</i> , 2014, 4, 1301345. | 19.5 | 19 |
| 39 | High-Performance All-Polymer Solar Cells Based on Face-On Stacked Polymer Blends with Low Interfacial Tension. <i>ACS Macro Letters</i> , 2014, 3, 1009-1014. | 4.8 | 106 |
| 40 | Light-Emitting Diodes: Simultaneously Enhancing Light Extraction and Device Stability of Organic Light-Emitting Diodes using a Corrugated Polymer Nanosphere Templated PEDOT:PSS Layer (<i>Adv. Energy</i>) Tj ETQ 40.0 0 rgBT /Overlock | 19.5 | 19 |