Seungjin Lee

List of Publications by Year
in descending order

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37 papers	1,760 citations	361296 20 h-index	345118 36 g-index
38 all docs	38 docs citations	38 times ranked	1456 citing authors

#	Article	IF	Citations
1	Recent Advances, Design Guidelines, and Prospects of All-Polymer Solar Cells. Chemical Reviews, 2019, 119, 8028-8086.	23.0	566
2	Eco-Friendly Polymer Solar Cells: Advances in Green-Solvent Processing and Material Design. ACS Nano, 2020, 14, 14493-14527.	7.3	150
3	Comparative Study of the Mechanical Properties of All-Polymer and Fullereneâ€“Polymer Solar Cells: The Importance of Polymer Acceptors for High Fracture Resistance. Chemistry of Materials, 2018, 30, 2102-2111.	3.2	79
4	Impact of the photo-induced degradation of electron acceptors on the photophysics, charge transport and device performance of all-polymer and fullereneâ€“polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 22170-22179.	5.2	71
5	Origin of the High Donorâ€“Acceptor Composition Tolerance in Device Performance and Mechanical Robustness of All-Polymer Solar Cells. Chemistry of Materials, 2020, 32, 582-594.	3.2	68
6	Material Design and Device Fabrication Strategies for Stretchable Organic Solar Cells. Advanced Materials, 2022, 34, .	11.1	67
7	Naphthalene Diimide-Based Terpolymers with Controlled Crystalline Properties for Producing High Electron Mobility and Optimal Blend Morphology in All-Polymer Solar Cells. Chemistry of Materials, 2020, 32, 2572-2582.	3.2	64
8	Importance of Optimal Crystallinity and Hole Mobility of BDTâ€Based Polymer Donor for Simultaneous Enhancements of <i>V</i>_{oc}, <i>J</i>_{sc}, and FF in Efficient Nonfullerene Organic Solar Cells. Advanced Functional Materials, 2020, 30, 2005787.	7.8	55
9	Synergistic Engineering of Side Chains and Backbone Regioregularity of Polymer Acceptors for Highâ€Performance Allâ€Polymer Solar Cells with 15.1% Efficiency. Advanced Energy Materials, 2022, 12, 2103239.	10.2	46
10	Highâ€Performance <i>n</i>â€Type Organic Electrochemical Transistors Enabled by Aqueous Solution Processing of Amphiphilicityâ€Driven Polymer Assembly. Advanced Functional Materials, 2022, 32, 2111950.	7.8	46
11	Aqueous-Soluble Naphthalene Diimide-Based Polymer Acceptors for Efficient and Air-Stable All-Polymer Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 45038-45047.	4.0	42
12	Volatilizable and cost-effective quinone-based solid additives for improving photovoltaic performance and morphological stability in non-fullerene polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 13049-13058.	5.2	41
13	Importance of Highâ€Electron Mobility in Polymer Acceptors for Efficient Allâ€Polymer Solar Cells: Combined Engineering of Backbone Building Unit and Regioregularity. Advanced Functional Materials, 2022, 32, 2108508.	7.8	41
14	Elucidating Roles of Polymer Donor Aggregation in All-Polymer and Non-Fullerene Small-Moleculeâ€“Polymer Solar Cells. Chemistry of Materials, 2020, 32, 3585-3596.	3.2	38
15	Green solvent-processed, high-performance organic solar cells achieved by outer side-chain selection of selenophene-incorporated Y-series acceptors. Journal of Materials Chemistry A, 2021, 9, 24622-24630.	5.2	34
16	Polymer Donors with Temperature-Insensitive, Strong Aggregation Properties Enabling Additive-Free, Processing Temperature-Tolerant High-Performance All-Polymer Solar Cells. Macromolecules, 2021, 54, 53-63.	2.2	32
17	Lowâ€Temperature Processable Highâ€Performance Dâ€“Aâ€Type Random Copolymers for Nonfullerene Polymer Solar Cells and Application to Flexible Devices. Advanced Energy Materials, 2018, 8, 1801601.	10.2	31
18	Impact of Chlorination Patterns of Naphthalenediimide-Based Polymers on Aggregated Structure, Crystallinity, and Device Performance of All-Polymer Solar Cells and Organic Transistors. ACS Applied Materials & Interfaces, 2020, 12, 56240-56250.	4.0	29

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19	Effect of the Selective Halogenation of Small Molecule Acceptors on the Blend Morphology and Voltage Loss of Highâ€Performance Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	27
20	Ester-functionalized, wide-bandgap derivatives of PM7 for simultaneous enhancement of photovoltaic performance and mechanical robustness of all-polymer solar cells. Journal of Materials Chemistry A, 2021, 9, 2775-2783.	5.2	23
21	Influence of Drying Conditions on Device Performances of Antisolvent-Assisted Roll-to-Roll Slot Die-Coated Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 7611-7621.	2.5	22
22	Sequentially Fluorinated Polythiophene Donors for Highâ€Performance Organic Solar Cells with 16.4% Efficiency. Advanced Energy Materials, 2022, 12, .	10.2	22
23	Cyanoâ€Functionalized Quinoxalineâ€Based Polymer Acceptors for Allâ€Polymer Solar Cells and Organic Transistors. ChemSusChem, 2021, 14, 3520-3527.	3.6	20
24	Electron Transport Layers Based on Oligo(ethylene glycol)-Incorporated Polymers Enabling Reproducible Fabrication of High-Performance Organic Solar Cells. Macromolecules, 2021, 54, 7102-7112.	2.2	20
25	Disintegrable nâ€Type Electroactive Terpolymers for Highâ€Performance, Transient Organic Electronics. Advanced Functional Materials, 2022, 32, 2106977.	7.8	19
26	Triad-type, multi-functional compatibilizers for enhancing efficiency, stability and mechanical robustness of polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 13522-13531.	5.2	16
27	Impact of highly crystalline, isoindigo-based small-molecular additives for enhancing the performance of all-polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 21291-21299.	5.2	13
28	Solid-State Organic Electrolyte-Gated Transistors Based on Doping-Controlled Polymer Composites with a Confined Two-Dimensional Channel in Dry Conditions. ACS Applied Materials & Interfaces, 2021, 13, 1065-1075.	4.0	13
29	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.	5.2	12
30	Revisiting carbazole-based polymer donors for efficient and thermally stable polymer solar cells: structural utility of coplanar Ï€-bridged spacers. Journal of Materials Chemistry A, 2022, 10, 9408-9418.	5.2	12
31	C₇₀-based aqueous-soluble fullerene for the water composition-tolerant performance of eco-friendly polymer solar cells. Journal of Materials Chemistry C, 2020, 8, 15224-15233.	2.7	11
32	Effects of the Selective Alkoxy Side Chain Position in Quinoxaline-Based Polymer Acceptors on the Performance of All-Polymer Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 47817-47825.	4.0	11
33	Aniline-based hole transporting materials for high-performance organic solar cells with enhanced ambient stability. Journal of Materials Chemistry A, 2021, 9, 15787-15797.	5.2	9
34	Aqueous-processable, naphthalene diimide-based polymers for eco-friendly fabrication of high-performance, n-type organic electrolyte-gated transistors. Science China Chemistry, 2022, 65, 973-978.	4.2	4
35	A Novel Energy-Conscious Access Point (<i>e</i>AP) System With Cross-Layer Design in Wi-Fi Networks for Reliable IoT Services. IEEE Access, 2022, 10, 61228-61248.	2.6	4
36	Polymer Solar Cells: Low-Temperature Processable High-Performance D-A-Type Random Copolymers for Nonfullerene Polymer Solar Cells and Application to Flexible Devices (Adv. Energy Mater. 30/2018). Advanced Energy Materials, 2018, 8, 1870132.	10.2	2

#	Article	IF	Citations
37	Effect of the acceptor types on the fracture behavior of polymer solar cells. , 2018, , .		0