Changyeon Lee

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7684682/publications.pdf

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40	4,123	218677	345221
papers	citations	26 h-index	36 g-index

42	42	42	3526
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flexible, highly efficient all-polymer solar cells. Nature Communications, 2015, 6, 8547.	12.8	740
2	Recent Advances, Design Guidelines, and Prospects of All-Polymer Solar Cells. Chemical Reviews, 2019, 119, 8028-8086.	47.7	566
3	From Fullereneâ€“Polymer to All-Polymer Solar Cells: The Importance of Molecular Packing, Orientation, and Morphology Control. Accounts of Chemical Research, 2016, 49, 2424-2434.	15.6	407
4	Determining the Role of Polymer Molecular Weight for High-Performance All-Polymer Solar Cells: Its Effect on Polymer Aggregation and Phase Separation. Journal of the American Chemical Society, 2015, 137, 2359-2365.	13.7	347
5	Highâ€Performance Allâ€Polymer Solar Cells Via Sideâ€Chain Engineering of the Polymer Acceptor: The Importance of the Polymer Packing Structure and the Nanoscale Blend Morphology. Advanced Materials, 2015, 27, 2466-2471.	21.0	279
6	Side Chain Optimization of Naphthalenediimideâ€“Bithiopheneâ€Based Polymers to Enhance the Electron Mobility and the Performance in Allâ€Polymer Solar Cells. Advanced Functional Materials, 2016, 26, 1543-1553.	14.9	155
7	Controlling Molecular Orientation of Naphthalenediimideâ€Based Polymer Acceptors for High Performance Allâ€Polymer Solar Cells. Advanced Energy Materials, 2016, 6, 1600504.	19.5	152
8	Eco-Friendly Polymer Solar Cells: Advances in Green-Solvent Processing and Material Design. ACS Nano, 2020, 14, 14493-14527.	14.6	150
9	Importance of Electron Transport Ability in Naphthalene Diimide-Based Polymer Acceptors for High-Performance, Additive-Free, All-Polymer Solar Cells. Chemistry of Materials, 2015, 27, 5230-5237.	6.7	131
10	Sideâ€Chain Fluorination: An Effective Approach to Achieving Highâ€Performance Allâ€Polymer Solar Cells with Efficiency Exceeding 7%. Advanced Materials, 2016, 28, 10016-10023.	21.0	108
11	High-Performance All-Polymer Solar Cells Based on Face-On Stacked Polymer Blends with Low Interfacial Tension. ACS Macro Letters, 2014, 3, 1009-1014.	4.8	106
12	Correlation between Phase-Separated Domain Sizes of Active Layer and Photovoltaic Performances in All-Polymer Solar Cells. Macromolecules, 2016, 49, 5051-5058.	4.8	93
13	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.	6.7	79
14	Shift of the Branching Point of the Sideâ€Chain in Naphthalenediimide (NDI)â€Based Polymer for Enhanced Electron Mobility and Allâ€Polymer Solar Cell Performance. Advanced Functional Materials, 2018, 28, 1803613.	14.9	74
15	Facile Photoâ€Crosslinking of Azideâ€Containing Holeâ€Transporting Polymers for Highly Efficient, Solutionâ€Processed, Multilayer Organic Light Emitting Devices. Advanced Functional Materials, 2014, 24, 7588-7596.	14.9	68
16	Importance of 2D Conjugated Side Chains of Benzodithiophene-Based Polymers in Controlling Polymer Packing, Interfacial Ordering, and Composition Variations of All-Polymer Solar Cells. Chemistry of Materials, 2017, 29, 9407-9415.	6.7	67
17	Ethanol-Processable, Highly Crystalline Conjugated Polymers for Eco-Friendly Fabrication of Organic Transistors and Solar Cells. Macromolecules, 2017, 50, 4415-4424.	4.8	63
18	The Impact of Sequential Fluorination of Ï€â€Conjugated Polymers on Charge Generation in Allâ€Polymer Solar Cells. Advanced Functional Materials, 2017, 27, 1701256.	14.9	55

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19	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
20	Efficient and Airâ€Stable Aqueousâ€Processed Organic Solar Cells and Transistors: Impact of Water Addition on Processability and Thinâ€Film Morphologies of Electroactive Materials. Advanced Energy Materials, 2018, 8, 1802674.	19.5	52
21	Elucidating Roles of Polymer Donor Aggregation in All-Polymer and Non-Fullerene Small-Moleculeâ€“Polymer Solar Cells. Chemistry of Materials, 2020, 32, 3585-3596.	6.7	38
22	Rationally Designed Donorâ€“Acceptor Random Copolymers with Optimized Complementary Light Absorption for Highly Efficient Allâ€Polymer Solar Cells. Advanced Functional Materials, 2017, 27, 1703070.	14.9	37
23	Improved Internal Quantum Efficiency and Light-Extraction Efficiency of Organic Light-Emitting Diodes via Synergistic Doping with Au and Ag Nanoparticles. ACS Applied Materials & Interfaces, 2016, 8, 27911-27919.	8.0	34
24	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
25	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
26	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
27	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
28	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
29	Charge Generation Dynamics in Efficient All-Polymer Solar Cells: Influence of Polymer Packing and Morphology. ACS Applied Materials & Interfaces, 2015, 7, 27586-27591.	8.0	22
30	A High Dielectric Nâ€Type Small Molecular Acceptor Containing Oligoethyleneglycol Sideâ€Chains for Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 199-205.	4.9	22
31	Regioisomeric wide-band-gap polymers with different fluorine topologies for non-fullerene organic solar cells. Polymer Chemistry, 2019, 10, 395-402.	3.9	22
32	Simultaneously Enhancing Light Extraction and Device Stability of Organic Lightâ€Emitting Diodes using a Corrugated Polymer Nanosphere Templated PEDOT:PSS Layer. Advanced Energy Materials, 2014, 4, 1301345.	19.5	19
33	Synergistic Effects of Terpolymer Regioregularity on the Performance of All-Polymer Solar Cells. Macromolecules, 2019, 52, 738-746.	4.8	17
34	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.	10.3	13
35	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
36	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

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37	Organic Electronics: Facile Photoâ€Crosslinking of Azideâ€Containing Holeâ€Transporting Polymers for Highly Efficient, Solutionâ€Processed, Multilayer Organic Light Emitting Devices (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Over	18.9	0
38	Lightâ€Emitting Diodes: Simultaneously Enhancing Light Extraction and Device Stability of Organic Lightâ€Emitting Diodes using a Corrugated Polymer Nanosphere Templated PEDOT:PSS Layer (Adv. Energy) Tj ETQq1 1 0.784314 rgBT /Overlock	19.5	0
39	Solar Cells: Rationally Designed Donorâ€“Acceptor Random Copolymers with Optimized Complementary Light Absorption for Highly Efficient Allâ€Polymer Solar Cells (Adv. Funct. Mater. 38/2017). Advanced Functional Materials, 2017, 27, .	14.9	0
40	Effect of the acceptor types on the fracture behavior of polymer solar cells. , 2018, , .		0