Jeromy Rech

List of Publications by Year
in descending order

40 papers	1,525 citations	304602 22 h-index	315616 38 g-index
40 all docs	40 docs citations	40 times ranked	1708 citing authors

#	Article	IF	Citations
1	Resolving the Molecular Origin of Mechanical Relaxations in Donorâ€“Acceptor Polymer Semiconductors. Advanced Functional Materials, 2022, 32, 2105597.	7.8	15
2	Ultraâ€High Alignment of Polymer Semiconductor Blends Enabling Photodetectors with Exceptional Polarization Sensitivity. Advanced Functional Materials, 2022, 32, 2105820.	7.8	7
3	Semi-paracrystallinity in semi-conducting polymers. Materials Horizons, 2022, 9, 1196-1206.	6.4	18
4	Effect of osmotic ballast properties on the performance of a concentration gradient battery. Water Research, 2022, 212, 118076.	5.3	3
5	Functionalization of Benzotriazole-Based Conjugated Polymers for Solar Cells: Heteroatom vs Substituents. ACS Applied Polymer Materials, 2021, 3, 30-41.	2.0	14
6	A molecular interactionâ€“diffusion framework for predicting organic solar cell stability. Nature Materials, 2021, 20, 525-532.	13.3	212
7	Mantis shrimpâ€“inspired organic photodetector for simultaneous hyperspectral and polarimetric imaging. Science Advances, 2021, 7, .	4.7	51
8	Designing Simple Conjugated Polymers for Scalable and Efficient Organic Solar Cells. ChemSusChem, 2021, 14, 3561-3568.	3.6	36
9	Aggregation Controlled Charge Generation in Fullerene Based Bulk Heterojunction Polymer Solar Cells: Effect of Additive. Polymers, 2021, 13, 115.	2.0	6
10	Organic Solar Cells with Large Insensitivity to Donor Polymer Molar Mass across All Acceptor Classes. ACS Applied Polymer Materials, 2020, 2, 5300-5308.	2.0	7
11	Effects of Fluorination Position on Fusedâ€Ring Electron Acceptors. Small Structures, 2020, 1, 2000006.	6.9	8
12	Ternary Blending Driven Molecular Reorientation of Non-Fullerene Acceptor IDIC with Backbone Order. ACS Applied Energy Materials, 2020, 3, 10814-10822.	2.5	15
13	The Role of Demixing and Crystallization Kinetics on the Stability of Nonâ€Fullerene Organic Solar Cells. Advanced Materials, 2020, 32, e2005348.	11.1	74
14	Highâ€Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer. Advanced Energy Materials, 2020, 10, 2000823.	10.2	23
15	Effects of linking units on fused-ring electron acceptor dimers. Journal of Materials Chemistry A, 2020, 8, 13735-13741.	5.2	8
16	Role of Secondary Thermal Relaxations in Conjugated Polymer Film Toughness. Chemistry of Materials, 2020, 32, 6540-6549.	3.2	27
17	Organic Solar Cells: Highâ€Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer (Adv. Energy Mater. 25/2020). Advanced Energy Materials, 2020, 10, 2070109.	10.2	0
18	Utilizing Difluorinated Thiophene Units To Improve the Performance of Polymer Solar Cells. Macromolecules, 2019, 52, 6523-6532.	2.2	14

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19	The Importance of Entanglements in Optimizing the Mechanical and Electrical Performance of All-Polymer Solar Cells. Chemistry of Materials, 2019, 31, 5124-5132.	3.2	88
20	Effect of Cyano Substitution on Conjugated Polymers for Bulk Heterojunction Solar Cells. ACS Applied Polymer Materials, 2019, 1, 3313-3322.	2.0	17
21	Pairing 1D/2D-conjugation donors/acceptors towards high-performance organic solar cells. Materials Chemistry Frontiers, 2019, 3, 276-283.	3.2	9
22	Recombination between Photogenerated and Electrode-Induced Charges Dominates the Fill Factor Losses in Optimized Organic Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 3473-3480.	2.1	26
23	The crucial role of end group planarity for fused-ring electron acceptors in organic solar cells. Materials Chemistry Frontiers, 2019, 3, 1642-1652.	3.2	12
24	Delineation of Thermodynamic and Kinetic Factors that Control Stability in Non-fullerene Organic Solar Cells. Joule, 2019, 3, 1328-1348.	11.7	143
25	The impact of fluorination on both donor polymer and non-fullerene acceptor: The more fluorine, the merrier. Nano Research, 2019, 12, 2400-2405.	5.8	28
26	Green-Solvent-Processed Conjugated Polymers for Organic Solar Cells: The Impact of Oligoethylene Glycol Side Chains. ACS Applied Polymer Materials, 2019, 1, 804-814.	2.0	39
27	Highly Efficient, Stable, and Ductile Ternary Nonfullerene Organic Solar Cells from a Twoâ€Donor Polymer Blend. Advanced Materials, 2019, 31, e1808279.	11.1	79
28	Revealing the Impact of F4â€TCNQ as Additive on Morphology and Performance of Highâ€Efficiency Nonfullerene Organic Solar Cells. Advanced Functional Materials, 2019, 29, 1806262.	7.8	55
29	Panchromatic Allâ€Polymer Photodetector with Tunable Polarization Sensitivity. Advanced Optical Materials, 2019, 7, 1801346.	3.6	26
30	Competition between Exceptionally Longâ€Range Alkyl Sidechain Ordering and Backbone Ordering in Semiconducting Polymers and Its Impact on Electronic and Optoelectronic Properties. Advanced Functional Materials, 2019, 29, 1806977.	7.8	31
31	Effects of Terminal Groups in Third Components on Performance of Organic Solar Cells. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2019, 35, 275-283.	2.2	3
32	A carbonâ€“oxygen-bridged hexacyclic ladder-type building block for low-bandgap nonfullerene acceptors. Materials Chemistry Frontiers, 2018, 2, 700-703.	3.2	41
33	Enhancing the performance of the electron acceptor ITIC-Th via tailoring its end groups. Materials Chemistry Frontiers, 2018, 2, 537-543.	3.2	46
34	Enhancing the performance of a fused-ring electron acceptor via extending benzene to naphthalene. Journal of Materials Chemistry C, 2018, 6, 66-71.	2.7	38
35	End-cap Group Engineering of a Small Molecule Non-Fullerene Acceptor: The Influence of Benzothiophene Dioxide. ACS Applied Energy Materials, 2018, 1, 7146-7152.	2.5	12
36	A Fused Ring Electron Acceptor with Decacyclic Core Enables over 13.5% Efficiency for Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1802050.	10.2	97

#	Article	IF	Citations
37	Measuring Temperature-Dependent Miscibility for Polymer Solar Cell Blends: An Easily Accessible Optical Method Reveals Complex Behavior. Chemistry of Materials, 2018, 30, 3943-3951.	3.2	38
38	Effect of Core Size on Performance of Fused-Ring Electron Acceptors. Chemistry of Materials, 2018, 30, 5390-5396.	3.2	102
39	Competition between exceptionally long-range alkyl sidechain ordering and backbone ordering in semiconducting polymers and its impact on electronic and optoelectronic properties. Advanced Functional Materials, 2018, 29, .	7.8	0
40	Fluorinated Thiophene Units Improve Photovoltaic Device Performance of Donorâ€“Acceptor Copolymers. Chemistry of Materials, 2017, 29, 5990-6002.	3.2	57