Philip C Y Chow

List of Publications by Year
in descending order

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42 papers	5,423 citations	186209 28 h-index	276775 41 g-index
43 all docs	43 docs citations	43 times ranked	5530 citing authors

#	Article	IF	Citations
1	Nonfullerene Acceptor Molecules for Bulk Heterojunction Organic Solar Cells. Chemical Reviews, 2018, 118, 3447-3507.	23.0	1,371
2	The role of spin in the kinetic control of recombination in organic photovoltaics. Nature, 2013, 500, 435-439.	13.7	460
3	Delocalization of exciton and electron wavefunction in non-fullerene acceptor molecules enables efficient organic solar cells. Nature Communications, 2020, 11, 3943.	5.8	458
4	Organic Photodetectors for Nextâ€Generation Wearable Electronics. Advanced Materials, 2020, 32, e1902045.	11.1	401
5	A Wide-Bandgap Donor Polymer for Highly Efficient Non-fullerene Organic Solar Cells with a Small Voltage Loss. Journal of the American Chemical Society, 2017, 139, 6298-6301.	6.6	327
6	Ring-Fusion of Perylene Diimide Acceptor Enabling Efficient Nonfullerene Organic Solar Cells with a Small Voltage Loss. Journal of the American Chemical Society, 2017, 139, 16092-16095.	6.6	304
7	Design of Donor Polymers with Strong Temperature-Dependent Aggregation Property for Efficient Organic Photovoltaics. Accounts of Chemical Research, 2017, 50, 2519-2528.	7.6	222
8	High-Efficiency Indoor Organic Photovoltaics with a Band-Aligned Interlayer. Joule, 2020, 4, 1486-1500.	11.7	169
9	Efficient Nonfullerene Organic Solar Cells with Small Driving Forces for Both Hole and Electron Transfer. Advanced Materials, 2018, 30, e1804215.	11.1	161
10	Asymmetric Alkoxy and Alkyl Substitution on Nonfullerene Acceptors Enabling Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2003141.	10.2	144
11	Allâ€Inkjetâ€Printed, Allâ€Airâ€Processed Solar Cells. Advanced Energy Materials, 2014, 4, 1400432.	10.2	135
12	Charge-Transfer State Dynamics Following Hole and Electron Transfer in Organic Photovoltaic Devices. Journal of Physical Chemistry Letters, 2013, 4, 209-215.	2.1	120
13	Selective Hole and Electron Transport in Efficient Quaternary Blend Organic Solar Cells. Joule, 2020, 4, 1790-1805.	11.7	110
14	Quantitative Bimolecular Recombination in Organic Photovoltaics through Triplet Exciton Formation. Journal of the American Chemical Society, 2014, 136, 3424-3429.	6.6	93
15	Enhanced hindrance from phenyl outer side chains on nonfullerene acceptor enables unprecedented simultaneous enhancement in organic solar cell performances with 16.7% efficiency. Nano Energy, 2020, 76, 105087.	8.2	85
16	Inverted planar perovskite solar cells based on CsI-doped PEDOT:PSS with efficiency beyond 20% and small energy loss. Journal of Materials Chemistry A, 2019, 7, 21662-21667.	5.2	77
17	Dual-gate organic phototransistor with high-gain and linear photoresponse. Nature Communications, 2018, 9, 4546.	5.8	76
18	Long-lived and disorder-free charge transfer states enable endothermic charge separation in efficient non-fullerene organic solar cells. Nature Communications, 2020, 11, 5617.	5.8	73

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19	Nanosecond Intersystem Crossing Times in Fullerene Acceptors: Implications for Organic Photovoltaic Diodes. Advanced Materials, 2014, 26, 4851-4854.	11.1	63
20	A Facile Method to Fineâ€Tune Polymer Aggregation Properties and Blend Morphology of Polymer Solar Cells Using Donor Polymers with Randomly Distributed Alkyl Chains. Advanced Energy Materials, 2018, 8, 1701895.	10.2	62
21	Influence of Donor Polymer on the Molecular Ordering of Small Molecular Acceptors in Nonfullerene Polymer Solar Cells. Advanced Energy Materials, 2018, 8, 1701674.	10.2	60
22	Allâ€Polymer Solar Cells with over 12% Efficiency and a Small Voltage Loss Enabled by a Polymer Acceptor Based on an Extended Fused Ring Core. Advanced Energy Materials, 2020, 10, 2001408.	10.2	55
23	Temperatureâ€Dependent Aggregation Donor Polymers Enable Highly Efficient Sequentially Processed Organic Photovoltaics Without the Need of Orthogonal Solvents. Advanced Functional Materials, 2019, 29, 1902478.	7.8	50
24	Donor Polymer Can Assist Electron Transport in Bulk Heterojunction Blends with Small Energetic Offsets. Advanced Materials, 2019, 31, e1903998.	11.1	49
25	A 16.4% efficiency organic photovoltaic cell enabled using two donor polymers with their side-chains oriented differently by a ternary strategy. Journal of Materials Chemistry A, 2020, 8, 3676-3685.	5.2	48
26	Quasiâ€2D Bilayer Surface Passivation for High Efficiency Narrow Bandgap Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	7.2	40
27	Alkyl Chain Regiochemistry of Benzotriazoleâ€Based Donor Polymers Influencing Morphology and Performances of Nonâ€Fullerene Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1702427.	10.2	36
28	Dye Aggregation and Complex Formation Effects in 7-(Diethylamino)-coumarin-3-carboxylic Acid. Journal of Physical Chemistry C, 2014, 118, 13042-13051.	1.5	29
29	Recombination pathways in polymer:fullerene photovoltaics observed through spin polarization measurements. Applied Physics Letters, 2014, 104, .	1.5	26
30	Role of PbSe Structural Stabilization in Photovoltaic Cells. Advanced Functional Materials, 2015, 25, 928-935.	7.8	21
31	Van der Waals organic/inorganic heterostructures in the two-dimensional limit. CheM, 2021, 7, 2989-3026.	5.8	19
32	Quantification of Temperatureâ€Dependent Charge Separation and Recombination Dynamics in Nonâ€Fullerene Organic Photovoltaics. Advanced Functional Materials, 2021, 31, 2107157.	7.8	13
33	High-Efficiency Indoor Organic Photovoltaics with a Band-Aligned Interlayer. Joule, 2020, 4, 1607-1611.	11.7	12
34	A wide bandgap conjugated polymer based on a vertically connected benzodithiophene unit enabling efficient non-fullerene polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 15017-15020.	5.2	11
35	Unraveling the Temperature Dependence of Exciton Dissociation and Free Charge Generation in Nonfullerene Organic Solar Cells. Solar Rrl, 2021, 5, 2000789.	3.1	10
36	In Situ Optical Measurement of Charge Transport Dynamics in Organic Photovoltaics. Nano Letters, 2015, 15, 931-935.	4.5	8

#	Article	IF	Citations
37	Factors That Prevent Spin-Triplet Recombination in Non-fullerene Organic Photovoltaics. Journal of Physical Chemistry Letters, 2021, 12, 5045-5051.	2.1	7
38	Photocurrent Amplification in Bulk Heterojunction Organic Phototransistors with Different Donorâ€“Acceptor Ratio. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700400.	1.2	6
39	Optically Probing Field-Dependent Charge Dynamics in Non-Fullerene Organic Photovoltaics with Small Interfacial Energy Offsets. Journal of Physical Chemistry C, 2021, 125, 1714-1722.	1.5	5
40	Quasiâ€2D Bilayer Surface Passivation for High Efficiency Narrow Bandgap Perovskite Solar Cells. Angewandte Chemie, 2022, 134, .	1.6	5
41	All-Inkjet-Printed, All-Air-Processed Solar Cells. , 2014, 4, 1400432.		1
42	Slow hole transfer kinetics lead to high blend photoluminescence of unfused Aâ€Dâ€Aâ€²â€Dâ€A type acceptors with unfavorable HOMO offset. Solar Rrl, 0, , .	3.1	0