

Joachim Vollbrecht

List of Publications by Year in descending order

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Version: 2024-02-01

28
papers

1,470
citations

394421

19
h-index

501196

28
g-index

29
all docs

29
docs citations

29
times ranked

1633
citing authors

#	ARTICLE	IF	CITATIONS
1	A High-Performance Solution-Processed Organic Photodetector for Near-Infrared Sensing. <i>Advanced Materials</i> , 2020, 32, e1906027.	21.0	270
2	Understanding the High Performance of over 15% Efficiency in Single-Junction Bulk Heterojunction Organic Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1903868.	21.0	211
3	Side-Chain Engineering of Nonfullerene Acceptors for Near-Infrared Organic Photodetectors and Photovoltaics. <i>ACS Energy Letters</i> , 2019, 4, 1401-1409.	17.4	182
4	The role of bulk and interfacial morphology in charge generation, recombination, and extraction in non-fullerene acceptor organic solar cells. <i>Energy and Environmental Science</i> , 2020, 13, 3679-3692.	30.8	126
5	Quantifying the Nongeminate Recombination Dynamics in Nonfullerene Bulk Heterojunction Organic Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1901438.	19.5	115
6	Unifying Charge Generation, Recombination, and Extraction in Low-Offset Non-Fullerene Acceptor Organic Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 2001203.	19.5	74
7	Design of narrow bandgap non-fullerene acceptors for photovoltaic applications and investigation of non-geminate recombination dynamics. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15175-15182.	5.5	50
8	Excimers in organic electronics. <i>New Journal of Chemistry</i> , 2018, 42, 11249-11254.	2.8	46
9	Organic Electrochemical Transistors Based on the Conjugated Polyelectrolyte PCPDTBT- SO_3K (CPEK). <i>Advanced Materials</i> , 2020, 32, e1908120.	21.0	42
10	Polycyclic Aromatic Hydrocarbons Obtained by Lateral Core Extension of Mesogenic Perylenes: Absorption and Optoelectronic Properties. <i>Chemistry - A European Journal</i> , 2014, 20, 12026-12031.	3.3	41
11	On the recombination order of surface recombination under open circuit conditions. <i>Organic Electronics</i> , 2020, 86, 105905.	2.6	38
12	Insights into Bulk-Heterojunction Organic Solar Cells Processed from Green Solvent. <i>Solar Rrl</i> , 2021, 5, 2100213.	5.8	30
13	Bay-Extended, Distorted Perylene Esters Showing Visible Luminescence after Ultraviolet Excitation: Photophysical and Electrochemical Analysis. <i>Journal of Physical Chemistry C</i> , 2016, 120, 7839-7848.	3.1	24
14	Electroluminescent and Optoelectronic Properties of OLEDs with Bay-Extended, Distorted Perylene Esters as Emitter Materials. <i>ChemPhysChem</i> , 2017, 18, 2024-2032.	2.1	24
15	Temperature and Light Modulated Open-Circuit Voltage in Nonfullerene Organic Solar Cells with Different Effective Bandgaps. <i>Advanced Energy Materials</i> , 2021, 11, 2003091.	19.5	23
16	Explaining the Fill-Factor and Photocurrent Losses of Nonfullerene Acceptor-Based Solar Cells by Probing the Long-Range Charge Carrier Diffusion and Drift Lengths. <i>Advanced Energy Materials</i> , 2021, 11, 2100804.	19.5	23
17	Curved Polar Dibenzocoronene Esters and Imides versus Their Planar Centrosymmetric Homologs: Photophysical and Optoelectronic Analysis. <i>Journal of Physical Chemistry C</i> , 2019, 123, 4483-4492.	3.1	22
18	The Importance of Quantifying the Composition of the Amorphous Intermixed Phase in Organic Solar Cells. <i>Advanced Materials</i> , 2020, 32, e2005241.	21.0	21

#	ARTICLE	IF	CITATIONS
19	Enhanced organic light-emitting diode based on a columnar liquid crystal by integration in a microresonator. <i>International Journal of Energy Research</i> , 2014, 38, 452-458.	4.5	20
20	Liquid crystalline dithienothiophene derivatives for organic electronics. <i>Organic Electronics</i> , 2018, 61, 266-275.	2.6	20
21	Microresonator-enhanced electroluminescence of an organic light emitting diode based on a columnar liquid crystal. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	14
22	Determination of the charge carrier density in organic solar cells: A tutorial. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	13
23	Effects of Recombination Order on Open-Circuit Voltage Decay Measurements of Organic and Perovskite Solar Cells. <i>Energies</i> , 2021, 14, 4800.	3.1	12
24	On Charge Carrier Density in Organic Solar Cells Obtained via Capacitance Spectroscopy. <i>Advanced Electronic Materials</i> , 2020, 6, 2000517.	5.1	11
25	Enhanced columnar mesophase range through distortions in arene cores. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 646, 66-73.	0.9	9
26	Unraveling the electrochemical and spectroscopic properties of neutral and negatively charged perylene tetraethylesters. <i>Scientific Reports</i> , 2021, 11, 16097.	3.3	5
27	Blends of Two Perylene Derivatives: Mesogenic Properties and Application As Emitter Materials in OLEDs. <i>Polymer Science - Series C</i> , 2018, 60, 48-54.	1.7	2
28	Improved organic thin-film transistor performance by dielectric layer patterning. , 2019, , .		0