Joachim Vollbrecht

List of Publications by Year
in descending order

28	1,470	448610 19	563245 28
papers	citations	h-index	g-index

29	29	29	1919
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Determination of the charge carrier density in organic solar cells: A tutorial. Journal of Applied Physics, 2022, 131, .	1.1	13
2	Temperature and Light Modulated Openâ€Circuit Voltage in Nonfullerene Organic Solar Cells with Different Effective Bandgaps. Advanced Energy Materials, 2021, 11, 2003091.	10.2	23
3	Explaining the Fillâ€Factor and Photocurrent Losses of Nonfullerene Acceptorâ€Based Solar Cells by Probing the Longâ€Range Charge Carrier Diffusion and Drift Lengths. Advanced Energy Materials, 2021, 11, 2100804.	10.2	23
4	Insights into Bulkâ€Heterojunction Organic Solar Cells Processed from Green Solvent. Solar Rrl, 2021, 5, 2100213.	3.1	30
5	Effects of Recombination Order on Open-Circuit Voltage Decay Measurements of Organic and Perovskite Solar Cells. Energies, 2021, 14, 4800.	1.6	12
6	Unraveling the electrochemical and spectroscopic properties of neutral and negatively charged perylene tetraethylesters. Scientific Reports, 2021, 11, 16097.	1.6	5
7	A Highâ€Performance Solutionâ€Processed Organic Photodetector for Nearâ€Infrared Sensing. Advanced Materials, 2020, 32, e1906027.	11.1	270
8	The Importance of Quantifying the Composition of the Amorphous Intermixed Phase in Organic Solar Cells. Advanced Materials, 2020, 32, e2005241.	11.1	21
9	On the recombination order of surface recombination under open circuit conditions. Organic Electronics, 2020, 86, 105905.	1.4	38
10	The role of bulk and interfacial morphology in charge generation, recombination, and extraction in non-fullerene acceptor organic solar cells. Energy and Environmental Science, 2020, 13, 3679-3692.	15.6	126
11	On Charge Carrier Density in Organic Solar Cells Obtained via Capacitance Spectroscopy. Advanced Electronic Materials, 2020, 6, 2000517.	2.6	11
12	Unifying Charge Generation, Recombination, and Extraction in Lowâ€Offset Nonâ€Fullerene Acceptor Organic Solar Cells. Advanced Energy Materials, 2020, 10, 2001203.	10.2	74
13	Design of narrow bandgap non-fullerene acceptors for photovoltaic applications and investigation of non-geminate recombination dynamics. Journal of Materials Chemistry C, 2020, 8, 15175-15182.	2.7	50
14	Organic Electrochemical Transistors Based on the Conjugated Polyelectrolyte PCPDTBTâ€SO₃K (CPEâ€K). Advanced Materials, 2020, 32, e1908120.	11.1	42
15	Quantifying the Nongeminate Recombination Dynamics in Nonfullerene Bulk Heterojunction Organic Solar Cells. Advanced Energy Materials, 2019, 9, 1901438.	10.2	115
16	Understanding the High Performance of over 15% Efficiency in Singleâ€Junction Bulk Heterojunction Organic Solar Cells. Advanced Materials, 2019, 31, e1903868.	11.1	211
17	Curved Polar Dibenzocoronene Esters and Imides versus Their Planar Centrosymmetric Homologs: Photophysical and Optoelectronic Analysis. Journal of Physical Chemistry C, 2019, 123, 4483-4492.	1.5	22
18	Side-Chain Engineering of Nonfullerene Acceptors for Near-Infrared Organic Photodetectors and Photovoltaics. ACS Energy Letters, 2019, 4, 1401-1409.	8.8	182

#	Article	IF	Citations
19	Improved organic thin-film transistor performance by dielectric layer patterning. , 2019, , .		0
20	Blends of Two Perylene Derivatives: Mesogenic Properties and Application As Emitter Materials in OLEDs. Polymer Science - Series C, 2018, 60, 48-54.	0.8	2
21	Excimers in organic electronics. New Journal of Chemistry, 2018, 42, 11249-11254.	1.4	46
22	Liquid crystalline dithienothiophene derivatives for organic electronics. Organic Electronics, 2018, 61, 266-275.	1.4	20
23	Electroluminescent and Optoelectronic Properties of OLEDs with Bayâ€Extended, Distorted Perylene Esters as Emitter Materials. ChemPhysChem, 2017, 18, 2024-2032.	1.0	24
24	Enhanced columnar mesophase range through distortions in arene cores. Molecular Crystals and Liquid Crystals, 2017, 646, 66-73.	0.4	9
25	Bay-Extended, Distorted Perylene Esters Showing Visible Luminescence after Ultraviolet Excitation: Photophysical and Electrochemical Analysis. Journal of Physical Chemistry C, 2016, 120, 7839-7848.	1.5	24
26	Enhanced organic light-emitting diode based on a columnar liquid crystal by integration in a microresonator. International Journal of Energy Research, 2014, 38, 452-458.	2.2	20
27	Polycyclic Aromatic Hydrocarbons Obtained by Lateral Core Extension of Mesogenic Perylenes: Absorption and Optoelectronic Properties. Chemistry - A European Journal, 2014, 20, 12026-12031.	1.7	41
28	Microresonator-enhanced electroluminescence of an organic light emitting diode based on a columnar liquid crystal. Applied Physics Letters, 2013, 103, .	1.5	14