Neil D Treat

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/11591032/publications.pdf

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43 papers	3,151 citations	172457 29 h-index	254184 43 g-index
44 all docs	44 docs citations	44 times ranked	5306 citing authors

#	Article	IF	Citations
1	Robust Processing of Small-Molecule:Fullerene Organic Solar Cells via Use of Nucleating Agents. ACS Applied Energy Materials, 2018, 1, 1973-1980.	5.1	2
2	Organic Gelators as Growth Control Agents for Stable and Reproducible Hybrid Perovskiteâ€Based Solar Cells. Advanced Energy Materials, 2017, 7, 1602600.	19.5	78
3	Origin of fullerene-induced vitrification of fullerene:donor polymer photovoltaic blends and its impact on solar cell performance. Journal of Materials Chemistry A, 2017, 5, 2689-2700.	10.3	29
4	Energy Quantization in Solutionâ€Processed Layers of Indium Oxide and Their Application in Resonant Tunneling Diodes. Advanced Functional Materials, 2016, 26, 1656-1663.	14.9	21
5	A Novel Alkylated Indacenodithieno[3,2â€b]thiopheneâ€Based Polymer for Highâ€Performance Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 3922-3927.	21.0	117
6	ORGANIC SEMICONDUCTORS: MANIPULATION AND CONTROL OF THE MICROSTRUCTURE OF ACTIVE LAYERS. Materials and Energy, 2016, , 159-193.	0.1	1
7	The influence of polymer purification on the efficiency of poly(3-hexylthiophene):fullerene organic solar cells. Scientific Reports, 2016, 6, 23651.	3.3	44
8	Significance of miscibility in multidonor bulk heterojunction solar cells. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 237-246.	2.1	16
9	Interfacial Characteristics of Efficient Bulk Heterojunction Solar Cells Fabricated on MoO_x Anode Interlayers. Advanced Materials, 2016, 28, 3944-3951.	21.0	21
10	Using Molecular Design to Increase Hole Transport: Backbone Fluorination in the Benchmark Material		

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19	Highâ€Efficiency Organic Photovoltaic Cells Based on the Solutionâ€Processable Hole Transporting Interlayer Copper Thiocyanate (CuSCN) as a Replacement for PEDOT:PSS. Advanced Energy Materials, 2015, 5, 1401529.	19.5	133
20	Nanostructures: Fullerene Nucleating Agents: A Route Towards Thermally Stable Photovoltaic Blends (Adv. Energy Mater. 9/2014). Advanced Energy Materials, 2014, 4, n/a-n/a.	19.5	0
21	Fullerene Nucleating Agents: A Route Towards Thermally Stable Photovoltaic Blends. Advanced Energy Materials, 2014, 4, 1301437.	19.5	65
22	Phase Separation in Bulk Heterojunctions of Semiconducting Polymers and Fullerenes for Photovoltaics. Annual Review of Physical Chemistry, 2014, 65, 59-81.	10.8	99
23	Decacyclene Triimides: Paving the Road to Universal Nonâ€Fullerene Acceptors for Organic Photovoltaics. Advanced Energy Materials, 2014, 4, 1301007.	19.5	57
24	Linking Vertical Bulkâ€Heterojunction Composition and Transient Photocurrent Dynamics in Organic Solar Cells with Solutionâ€Processed MoO_x Contact Layers. Advanced Energy Materials, 2014, 4, 1301290.	19.5	40
25	Use of a commercially available nucleating agent to control the morphological development of solution-processed small molecule bulk heterojunction organic solar cells. Journal of Materials Chemistry A, 2014, 2, 15717-15721.	10.3	43
26	Quadrites and Crossed-Chain Crystal Structures in Polymer Semiconductors. Nano Letters, 2014, 14, 3096-3101.	9.1	19
27	Controlling the Solidification of Organic Photovoltaic Blends with Nucleating Agents. Organic Photonics and Photovoltaics, 2014, 2, .	1.3	4
28	Controlling the Interaction of Light with Polymer Semiconductors. Advanced Materials, 2013, 25, 4906-4911.	21.0	42
29	Ultralow thermal conductivity of fullerene derivatives. Physical Review B, 2013, 88, .	3.2	98
30	Remarkable Order of a High-Performance Polymer. Nano Letters, 2013, 13, 2522-2527.	9.1	120
31	Microstructure formation in molecular and polymer semiconductors assisted by nucleation agents. Nature Materials, 2013, 12, 628-633.	27.5	131
32	Temperature Dependence of the Diffusion Coefficient of PCBM in Poly(3-hexylthiophene). Macromolecules, 2013, 46, 1002-1007.	4.8	63
33	PCBM Disperse-Red Ester with Strong Visible-Light Absorption: Implication of Molecular Design and Morphological Control for Organic Solar Cells. Journal of Physical Chemistry C, 2012, 116, 1313-1321.	3.1	19
34	A Modular Strategy for Fully Conjugated Donorâ€“Acceptor Block Copolymers. Journal of the American Chemical Society, 2012, 134, 16040-16046.	13.7	124
35	Polymer-Fullerene Miscibility: A Metric for Screening New Materials for High-Performance Organic Solar Cells. Journal of the American Chemical Society, 2012, 134, 15869-15879.	13.7	196
36	In situ current voltage measurements for optimization of a novel fullerene acceptor in bulk heterojunction photovoltaics. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 174-179.	2.1	3

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37	Deep Energetic Trap States in Organic Photovoltaic Devices. Advanced Energy Materials, 2012, 2, 111-119.	19.5	61
38	In situ measurement of power conversion efficiency and molecular ordering during thermal annealing in P3HT:PCBM bulk heterojunction solar cells. Journal of Materials Chemistry, 2011, 21, 15224.	6.7	84
39	A Facile Synthesis of Low-Band-Gap Donorâ€“Acceptor Copolymers Based on Dithieno[3,2-b:2â€²,3â€²-d]thiophene. Macromolecules, 2011, 44, 9533-9538.	4.8	31
40	Interdiffusion of PCBM and P3HT Reveals Miscibility in a Photovoltaically Active Blend. Advanced Energy Materials, 2011, 1, 82-89.	19.5	572
41	1,4â€Fullerene Derivatives: Tuning the Properties of the Electron Transporting Layer in Bulkâ€Heterojunction Solar Cells. Angewandte Chemie - International Edition, 2011, 50, 5166-5169.	13.8	100
42	Nanostructured Hybrid Solar Cells: Dependence of the Open Circuit Voltage on the Interfacial Composition. Advanced Materials, 2010, 22, 4982-4986.	21.0	21
43	A versatile approach to high-throughput microarrays using thiol-ene chemistry. Nature Chemistry, 2010, 2, 138-145.	13.6	206