Swaminathan Venkatesan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8240538/publications.pdf

Version: 2024-02-01

48 papers	2,412 citations	218677 26 h-index	214800 47 g-index
48 all docs	48 docs citations	48 times ranked	4661 citing authors

#	Article	IF	Citations
1	Controlled Growth of MoS₂ Flakes from in-Plane to Edge-Enriched 3D Network and Their Surface-Energy Studies. ACS Applied Nano Materials, 2018, 1, 2356-2367.	5.0	44
2	Photoactivated Mixed In-Plane and Edge-Enriched p-Type MoS₂ Flake-Based NO₂ Sensor Working at Room Temperature. ACS Sensors, 2018, 3, 998-1004.	7.8	149
3	Additive assisted morphological optimization of photoactive layer in polymer solar cells. Solar Energy Materials and Solar Cells, 2018, 182, 246-254.	6.2	39
4	4Hâ€cyclopenta[2,1â€b:3,4â€bâ€²]dithiophenâ€4â€one (CPDTO) homopolymer with side chains on every other CPDTO. Journal of Polymer Science Part A, 2017, 55, 1077-1085.	2.3	2
5	Tailoring Nanoscale Morphology of Polymer:Fullerene Blends Using Electrostatic Field. ACS Applied Materials & Interfaces, 2017, 9, 2678-2685.	8.0	14
6	Moisture-driven phase transition for improved perovskite solar cells with reduced trap-state density. Nano Research, 2017, 10, 1413-1422.	10.4	20
7	Tailoring nucleation and grain growth by changing the precursor phase ratio for efficient organic lead halide perovskite optoelectronic devices. Journal of Materials Chemistry C, 2017, 5, 10114-10121.	5.5	18
8	Solvent Toolkit for Electrochemical Characterization of Hybrid Perovskite Films. Analytical Chemistry, 2017, 89, 9649-9653.	6.5	14
9	Role of interface in stability of perovskite solar cells. Current Opinion in Chemical Engineering, 2017, 15, 1-7.	7.8	37
10	Shelf life stability comparison in air for solution processed pristine PDPP3T polymer and doped spiro-OMeTAD as hole transport layer for perovskite solar cell. Data in Brief, 2016, 7, 139-142.	1.0	10
11	Electrostatic nanoassembly of contact interfacial layer for enhanced photovoltaic performance in polymer solar cells. Solar Energy Materials and Solar Cells, 2016, 153, 148-163.	6.2	31
12	Interaction of Organic Cation with Water Molecule in Perovskite MAPbI₃: From Dynamic Orientational Disorder to Hydrogen Bonding. Chemistry of Materials, 2016, 28, 7385-7393.	6.7	169
13	An oligothiophene chromophore with a macrocyclic side chain: synthesis, morphology, charge transport, and photovoltaic performance. RSC Advances, 2016, 6, 102043-102056.	3.6	3
14	Room temperature, air crystallized perovskite film for high performance solar cells. Journal of Materials Chemistry A, 2016, 4, 10231-10240.	10.3	60
15	Solution processed pristine PDPP3T polymer as hole transport layer for efficient perovskite solar cells with slower degradation. Solar Energy Materials and Solar Cells, 2016, 145, 193-199.	6.2	96
16	Critical kinetic control of non-stoichiometric intermediate phase transformation for efficient perovskite solar cells. Nanoscale, 2016, 8, 12892-12899.	5.6	98
17	Solvent engineering towards controlled grain growth in perovskite planar heterojunction solar cells. Nanoscale, 2015, 7, 10595-10599.	5.6	294
18	Vanadium oxide as new charge recombination blocking layer for high efficiency dye-sensitized solar cells. Nano Energy, 2015, 13, 368-375.	16.0	39

#	Article	IF	Citations
19	Strategic review of secondary phases, defects and defect-complexes in kesterite CZTSâ€“Se solar cells. Energy and Environmental Science, 2015, 8, 3134-3159.	30.8	451
20	Critical role of domain crystallinity, domain purity and domain interface sharpness for reduced bimolecular recombination in polymer solar cells. Nano Energy, 2015, 12, 457-467.	16.0	41
21	Enhanced Lifetime of Polymer Solar Cells by Surface Passivation of Metal Oxide Buffer Layers. ACS Applied Materials & Interfaces, 2015, 7, 16093-16100.	8.0	57
22	A futuristic strategy to influence the solar cell performance using fixed and mobile dopants incorporated sulfonated polyaniline based buffer layer. Solar Energy Materials and Solar Cells, 2015, 141, 275-290.	6.2	32
23	Improved performance by morphology control via fullerenes in PBDT-TBT-alkoBT based organic solar cells. Journal of Materials Chemistry A, 2015, 3, 15307-15313.	10.3	20
24	Morphological Evolution and Its Impacts on Performance of Polymer Solar Cells. IEEE Transactions on Electron Devices, 2015, 62, 1284-1290.	3.0	13
25	Efficient Perovskite Solar Cells by Temperature Control in Single and Mixed Halide Precursor Solutions and Films. Journal of Physical Chemistry C, 2015, 119, 25747-25753.	3.1	55
26	Versatile Role of Solvent Additive for Tailoring Morphology in Polymer Solar Cells for Efficient Charge Transport. Journal of Nanoscience and Nanotechnology, 2015, 15, 7040-7044.	0.9	8
27	Influence of Nanoscale Morphology on Performance of Inverted Structure Metallated Conjugated Polymer Solar Cells. IEEE Transactions on Electron Devices, 2015, 62, 3029-3033.	3.0	3
28	Interfacial Study To Suppress Charge Carrier Recombination for High Efficiency Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 26445-26454.	8.0	90
29	Low temperature efficient interconnecting layer for tandem polymer solar cells. Nano Energy, 2015, 11, 56-63.	16.0	40
30	Electron and Force Microscopy Characterization of Particle Size Effects and Surface Phenomena Associated with Individual Natural Organic Matter Fractions. Microscopy and Microanalysis, 2014, 20, 521-530.	0.4	4
31	Polymer Solar Cells Processed Using Anisole as a Relatively Nontoxic Solvent. Energy Technology, 2014, 2, 269-274.	3.8	38
32	Benzothiadiazole-based polymer for single and double junction solar cells with high open circuit voltage. Nanoscale, 2014, 6, 7093.	5.6	30
33	Interplay of nanoscale domain purity and size on charge transport and recombination dynamics in polymer solar cells. Nanoscale, 2014, 6, 1011-1019.	5.6	69
34	Polymer Photovoltaics With Top Metal Electrode Deposited by Solution-Processing. IEEE Transactions on Electron Devices, 2014, 61, 2957-2962.	3.0	6
35	Enhanced charge transport and photovoltaic performance of PBDTTT-C-T/PC70BM solar cells via UVâ€“ozone treatment. Nanoscale, 2013, 5, 10007.	5.6	49
36	Oxygen induced limitation on grain growth in RF sputtered Indium tin oxide thin films. , 2013, , .		0

#	Article	IF	Citations
37	Photovoltaic devices and characterization of a dodecyloxybenzothiadiazole-based copolymer. Physical Chemistry Chemical Physics, 2013, 15, 6856.	2.8	28
38	Study of polymer/ZnO nanostructure interfaces by Kelvin probe force microscopy. Solar Energy Materials and Solar Cells, 2013, 108, 246-251.	6.2	20
39	Polymer Photovoltaic Performance and Degradation on Spray and Spin Coated Electron Transport Layer and Active Layer. IEEE Transactions on Electron Devices, 2013, 60, 2372-2378.	3.0	12
40	Enhanced Performance of PDPP3T/${m PC}_{60}{m BM}$ Solar Cells Using High Boiling Solvent and UV - Ozone Treatment. IEEE Transactions on Electron Devices, 2013, 60, 1763-1768.	3.0	12
41	Kelvin Probe Force Microscopic Imaging of the Energy Barrier and Energetically Favorable Offset of Interfaces in Double-Junction Organic Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 1279-1286.	8.0	27
42	Materials and devices design for efficient double junction polymer solar cells. Solar Energy Materials and Solar Cells, 2013, 108, 225-229.	6.2	14
43	Ring-protected small molecules for organic photovoltaics. Proceedings of SPIE, 2013, , .	0.8	5
44	Oleamide as a self-assembled cathode buffer layer for polymer solar cells: the role of the terminal group on the function of the surfactant. Journal of Materials Chemistry, 2012, 22, 24067.	6.7	40
45	Direct growth of CdSe nanorods on ITO substrates by co-anchoring of ZnO nanoparticles and ethylenediamine. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	4
46	Nb2O5 as a new electron transport layer for double junction polymer solar cells. Physical Chemistry Chemical Physics, 2012, 14, 4682.	2.8	37
47	Enhanced performance in dye-sensitized solar cells via carbon nanofibersâ€“platinum composite counter electrodes. Nanoscale, 2012, 4, 4726.	5.6	67
48	Regioregularity and solar cell device performance of poly(3â€dodecylthienylenevinylene). Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 917-922.	2.1	3