Supravat Karak

List of Publications by Year
in descending order

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21 papers	609 citations	1040056 9 h-index	940533 16 g-index
21 all docs	21 docs citations	21 times ranked	1393 citing authors

#	Article	IF	Citations
1	Understanding the influences of In-situ annealing and substrate vibration on the charge carrier dynamics of ultrasonic spray-coated polymer solar cell. Journal of Materials Science: Materials in Electronics, 2022, 33, 15180-15190.	2.2	2
2	Defect mediated improved charge carrier dynamics in hybrid bulk-heterojunction solar cell induced by phase pure iron pyrite nanocubes. Nanotechnology, 2021, 32, 265401.	2.6	4
3	Understanding the Correlation Between Temperature Dependent Performance and Trap Distribution for Nickel Oxide Based Inverted Perovskite Solar Cells. IEEE Transactions on Electron Devices, 2021, 68, 3907-3913.	3.0	10
4	Defects in Phase-Pure Iron Pyrite Nanocubes: Implications for Photovoltaics. IEEE Journal of Photovoltaics, 2021, , 1-7.	2.5	1
5	Performance improvement of ultrasonic spray deposited polymer solar cell through droplet boundary reduction assisted by acoustic substrate vibration. Semiconductor Science and Technology, 2021, 36, 015002.	2.0	7
6	Structural and optical properties of exfoliated graphene-like carbon nitride into nanosheets and quantum dots. Materials Characterization, 2020, 169, 110646.	4.4	9
7	Investigation on the morphological and optical properties of Selenium based thin films for photovoltaic application. AIP Conference Proceedings, 2020, , .	0.4	0
8	Effect of In Situ Annealing on Phase Segregation And Optoelectronic Properties of Ultrasonic-Spray Deposited Polymer Blend Films. IEEE Journal of Photovoltaics, 2020, 10, 1727-1734.	2.5	7
9	Graphitic carbon nitride quantum dots (g-C₃N₄) to improve photovoltaic performance of polymer solar cell by combining FÃ¶rster resonance energy transfer (FRET) and morphological effects. Nano Express, 2020, 1, 010057.	2.4	19
10	2-D graphitic carbon nitride nanostructures for optoelectronic application. AIP Conference Proceedings, 2020, , .	0.4	0
11	Amino-fulleropyrrolidines as electrotropic additives to enhance organic photovoltaics. Sustainable Energy and Fuels, 2018, 2, 2143-2147.	4.9	9
12	A perovskite based plug and play AC photovoltaic device with ionic liquid induced transient opto-electronic conversion. Journal of Materials Chemistry A, 2016, 4, 9019-9028.	10.3	12
13	Raising efficiency of organic solar cells with electrotropic additives. Applied Physics Letters, 2015, 106, .	3.3	28
14	Kinetics of Ion Transport in Perovskite Active Layers and Its Implications for Active Layer Stability. Journal of the American Chemical Society, 2015, 137, 13130-13137.	13.7	394
15	Photovoltaic Effect at the Schottky Interface with Organic Single Crystal Rubrene. Advanced Functional Materials, 2014, 24, 1039-1046.	14.9	41
16	Rubrene: Photovoltaic Effect at the Schottky Interface with Organic Single Crystal Rubrene (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	14.9	0
17	Bulk Charge Carrier Transport in Pushâ€“Pull Type Organic Semiconductor. ACS Applied Materials & Interfaces, 2014, 6, 20904-20912.	8.0	22
18	Crystallinity and Morphology Effects on a Solvent-Processed Solar Cell Using a Triarylamine-Substituted Squaraine. ACS Applied Materials & Interfaces, 2014, 6, 11376-11384.	8.0	17

#	Article	IF	Citations
19	Solution-Processed Photovoltaics with a 3,6-Bis(diarylamino)fluoren-9-ylidene Malononitrile. ACS Applied Materials & Interfaces, 2014, 6, 16476-16480.	8.0	17
20	The effects of different atmospheric conditions on device stability of organic small-molecule solar cells under constant illumination. Semiconductor Science and Technology, 2011, 26, 095020.	2.0	6
21	Understanding the Linear and Nonlinear Optical Responses of Few-Layer Exfoliated MoS2 and WS2 Nanoflakes: Experimental and Simulation Studies. Nanotechnology, 0, , .	2.6	4