Mohammad I Hossain

List of Publications by Year
in descending order

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37 papers	990 citations	331670 21 h-index	434195 31 g-index
38 all docs	38 docs citations	38 times ranked	975 citing authors

#	Article	IF	Citations
1	Growth and reaction mechanism of solution-processed Cu2ZnSnSe4 thin films for realising efficient photovoltaic applications. Journal of Alloys and Compounds, 2022, 900, 163457.	5.5	6
2	Reproducible perovskite solar cells using a simple solvent-mediated solâˆ'gel synthesized NiO _x hole transport layer. Applied Physics Express, 2022, 15, 015504.	2.4	6
3	Optics in high efficiency perovskite tandem solar cells. , 2022, , 319-345.		1
4	Organometal halide perovskite photovoltaics. , 2022, , 273-317.		1
5	Beyond Tristimulus Color Vision with Perovskite-Based Multispectral Sensors. ACS Applied Materials & Interfaces, 2022, 14, 11645-11653.	8.0	7
6	Nanophotonic-structured front contact for high-performance perovskite solar cells. Science China Materials, 2022, 65, 1727-1740.	6.3	5
7	Sputtered WOx thin film as the electron transport layer for efficient perovskite solar cells. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	9
8	Perovskite/perovskite planar tandem solar cells: A comprehensive guideline for reaching energy conversion efficiency beyond 30%. Nano Energy, 2021, 79, 105400.	16.0	69
9	Spray Pyrolyzed TiO2 Embedded Multi-Layer Front Contact Design for High-Efficiency Perovskite Solar Cells. Nano-Micro Letters, 2021, 13, 36.	27.0	50
10	Solar Driven Interfacial Steam Generation Derived from Biodegradable Luffa Sponge. Advanced Sustainable Systems, 2021, 5, 2000291.	5.3	35
11	Effects of oxygen concentration variation on the structural and optical properties of reactive sputtered WOx thin film. Solar Energy, 2021, 222, 202-211.	6.1	26
12	Improved Nanophotonic Front Contact Design for Highâ€Performance Perovskite Singleâ€Junction and Perovskite/Perovskite Tandem Solar Cells. Solar Rrl, 2021, 5, 2100509.	5.8	23
13	Reversible photochromic and photoluminescence in iodide perovskites. Thin Solid Films, 2021, 737, 138950.	1.8	4
14	Near field control for enhanced photovoltaic performance and photostability in perovskite solar cells. Nano Energy, 2021, 89, 106388.	16.0	25
15	Low-temperature treated anatase TiO2 nanophotonic-structured contact design for efficient triple-cation perovskite solar cells. Chemical Engineering Journal, 2021, 426, 131831.	12.7	22
16	Enhancing spectral response towards high-performance dye-sensitised solar cells by multiple dye approach: A comprehensive review. Applied Materials Today, 2021, 25, 101204.	4.3	11
17	Tin Telluride Quantum Dots as a Novel Saturable Absorber for Qâ€Switching and Mode Locking in Fiber Lasers. Advanced Optical Materials, 2021, 9, 2001821.	7.3	30
18	Electrical and Optical Properties of Nickelâ€Oxide Films for Efficient Perovskite Solar Cells. Small Methods, 2020, 4, 2000454.	8.6	37

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19	Perovskite Color Detectors: Approaching the Efficiency Limit. ACS Applied Materials & Interfaces, 2020, 12, 47831-47839.	8.0	29
20	Vertically Stacked Perovskite Detectors for Color Sensing and Color Vision. Advanced Materials Interfaces, 2020, 7, 2000459.	3.7	28
21	Influence of Perovskite Interface Morphology on the Photon Management in Perovskite/Silicon Tandem Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 15080-15086.	8.0	30
22	Non-resonant metal-oxide metasurfaces for efficient perovskite solar cells. Solar Energy, 2020, 198, 570-577.	6.1	23
23	Atomic layer deposition of metal oxides for efficient perovskite single-junction and perovskite/silicon tandem solar cells. RSC Advances, 2020, 10, 14856-14866.	3.6	18
24	Enhancing the energy conversion efficiency of low mobility solar cells by a 3D device architecture. Journal of Materials Chemistry C, 2019, 7, 10289-10296.	5.5	10
25	Perovskite/Silicon Tandem Solar Cells: From Detailed Balance Limit Calculations to Photon Management. Nano-Micro Letters, 2019, 11, 58.	27.0	115
26	Optics of Perovskite Solar Cell Front Contacts. ACS Applied Materials & Interfaces, 2019, 11, 14693-14701.	8.0	32
27	Photoluminescence of PdS₂ and PdSe₂ quantum dots. RSC Advances, 2019, 9, 38077-38084.	3.6	13
28	Rough versus planar interfaces: How to maximize the short circuit current of perovskite single and tandem solar cells. Materials Today Energy, 2019, 11, 106-113.	4.7	32
29	Maximizing the short circuit current of organic solar cells by partial decoupling of electrical and optical properties. Applied Nanoscience (Switzerland), 2018, 8, 339-346.	3.1	7
30	Nanophotonic design of perovskite/silicon tandem solar cells. Journal of Materials Chemistry A, 2018, 6, 3625-3633.	10.3	53
31	Approaching Perfect Light Incoupling in Perovskite and Silicon Thin Film Solar Cells by Moth Eye Surface Textures. Advanced Theory and Simulations, 2018, 1, 1800030.	2.8	38
32	Femtosecond Chargeâ€Injection Dynamics at Hybrid Perovskite Interfaces. ChemPhysChem, 2017, 18, 2381-2389.	2.1	24
33	Time and pressure dependent deformation of microcontact printed channels fabricated using self-assembled monolayers of alkanethiol on gold. Journal of Science: Advanced Materials and Devices, 2017, 2, 385-391.	3.1	10
34	Modeling of self-assembled monolayers (SAMs) of Octadecanethiol and Hexadecanethiol on gold (Au) and silver (Ag). Results in Physics, 2017, 7, 2289-2295.	4.1	25
35	Effect of back reflectors on photon absorption in thin-film amorphous silicon solar cells. Applied Nanoscience (Switzerland), 2017, 7, 489-497.	3.1	39
36	Efficient amorphous silicon solar cells: characterization, optimization, and optical loss analysis. Results in Physics, 2017, 7, 4287-4293.	4.1	69

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37	On the interplay of cell thickness and optimum period of silicon thinâ€film solar cells: light trapping and plasmonic losses. Progress in Photovoltaics: Research and Applications, 2016, 24, 379-388.	8.1	27