Tsvetelina Merdzhanova

List of Publications by Year
in descending order

27	551	759190 12	642715 23
papers	citations	h-index	g-index

27	27	27	730
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-Dimensional Composition Profiles of Single Quantum Dots Determined by Scanning-Probe-Microscopy-Based Nanotomography. Nano Letters, 2008, 8, 1404-1409.	9.1	106
2	Bioinspired phase-separated disordered nanostructures for thin photovoltaic absorbers. Science Advances, 2017, 3, e1700232.	10.3	98
3	UV nanoimprint for the replication of etched ZnO:Al textures applied in thinâ€film silicon solar cells. Progress in Photovoltaics: Research and Applications, 2014, 22, 1226-1236.	8.1	36
4	Development towards cell-to-cell monolithic integration of a thin-film solar cell and lithium-ion accumulator. Journal of Power Sources, 2016, 327, 340-344.	7.8	33
5	Efficient Area Matched Converter Aided Solar Charging of Lithium Ion Batteries Using High Voltage Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 431-439.	5.1	29
6	Thin-film silicon solar cell development on imprint-textured glass substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 617-622.	3.5	26
7	Advancing tandem solar cells by spectrally selective multilayer intermediate reflectors. Optics Express, 2014, 22, A1270.	3.4	26
8	From room to roof: How feasible is direct coupling of solar-battery power unit under variable irradiance?. Solar Energy, 2020, 206, 732-740.	6.1	21
9	Thin-film Silicon Solar Cells on Dry Etched Textured Glass. Energy Procedia, 2014, 44, 151-159.	1.8	20
10	Compatibility study towards monolithic self-charging power unit based on all-solid thin-film solar module and battery. Journal of Power Sources, 2017, 365, 303-307.	7.8	17
11	Photoelectrochemical application of thinâ€film silicon tripleâ€junction solar cell in batteries. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1926-1931.	1.8	16
12	A Biasâ€Free, Standâ€Alone, and Scalable Photovoltaicâ€“Electrochemical Device for Solar Hydrogen Production. Advanced Sustainable Systems, 2020, 4, 2000070.	5.3	16
13	Critical oxygen concentration in hydrogenated amorphous silicon solar cells dependent on the contamination source. Applied Physics Letters, 2010, 96, .	3.3	13
14	Bifunctional CoFeVO_x Catalyst for Solar Water Splitting by using Multijunction and Heterojunction Silicon Solar Cells. Advanced Materials Technologies, 2020, 5, 2000592.	5.8	13
15	Impurities in thin-film silicon: Influence on material properties and solar cell performance. Journal of Non-Crystalline Solids, 2012, 358, 2171-2178.	3.1	12
16	How Thin Practical Silicon Heterojunction Solar Cells Could Be? Experimental Study under 1â€‰Sun and under Indoor Illumination. Solar Rrl, 2022, 6, 2100594.	5.8	12
17	Process monitoring of texture-etched high-rate ZnO:Al front contacts for silicon thin-film solar cells. Thin Solid Films, 2013, 532, 66-72.	1.8	11
18	Coupling and Trapping of Light in Thin-Film Solar Cells Using Modulated Interface Textures. Applied Sciences (Switzerland), 2019, 9, 4648.	2.5	10

#	Article	IF	Citations
19	a-Si:H/Î¼c-Si:H solar cells prepared by the single-chamber processesâ€"minimization of phosphorus and boron cross contamination. Thin Solid Films, 2013, 540, 251-255.	1.8	7
20	Critical Concentrations of Atmospheric Contaminants in a-Si:H and Î¼c-Si:H Solar Cells. Materials Research Society Symposia Proceedings, 2010, 1245, 1.	0.1	6
21	Batteries to Keep Solarâ€Driven Water Splitting Running at Night: Performance of a Directly Coupled System. Solar Rrl, 2022, 6, .	5.8	6
22	High critical oxygen concentration in microcrystalline silicon solar cells. Physica Status Solidi - Rapid Research Letters, 2010, 4, 323-325.	2.4	5
23	Analysis of the light-induced degradation of differently matched tandem solar cells with and without an intermediate reflector using the Power Matching Method. Solar Energy Materials and Solar Cells, 2015, 143, 1-8.	6.2	4
24	An integrated photoanode based on non-critical raw materials for robust solar water splitting. Materials Advances, 2020, 1, 1202-1211.	5.4	4
25	Prediction of Limits of Solarâ€toâ€Hydrogen Efficiency from Polarization Curves of the Electrochemical Cells. Solar Rrl, 2022, 6, 2100783.	5.8	3
26	In Situ Current Determination of a-Si/Î¼c-Si Tandem Solar Cells via Transmission Measurements During Silicon PECVD. IEEE Journal of Photovoltaics, 2012, 2, 77-82.	2.5	1
27	Impact of transparent conductive oxide front side texture on the openâ€circuit voltage of aâ€Si:H solar cells. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1942-1948.	1.8	0