Hisham Nasser

List of Publications by Year
in descending order

39 papers	338 citations	840776 11 h-index	888059 17 g-index
39 all docs	39 docs citations	39 times ranked	372 citing authors

#	Article	IF	Citations
1	Physical device simulation of dopant-free asymmetric silicon heterojunction solar cell featuring tungsten oxide as a hole-selective layer with ultrathin silicon oxide passivation layer. Renewable Energy, 2022, 183, 188-201.	8.9	8
2	Fourteen percent efficiency ultrathin silicon solar cells with improved infrared light management enabled by holeâ€selective transition metal oxide fullâ€area rear passivating contacts. Progress in Photovoltaics: Research and Applications, 2022, 30, 823-834.	8.1	9
3	On the application of holeâ€selective MoO_x as fullâ€area rear contact for industrial scale pâ€type câ€Si solar cells. Progress in Photovoltaics: Research and Applications, 2021, 29, 281-293.	8.1	22
4	On the electrical and charge conduction properties of thermally evaporated MoOx on n- and p-type crystalline silicon. Journal of Materials Science: Materials in Electronics, 2021, 32, 1092-1104.	2.2	5
5	Effect of amorphous SiC layer on electrical and optical properties of Al/a-SiC/c-Si Schottky diode for optoelectronic applications. Journal of Materials Science: Materials in Electronics, 2021, 32, 20598-20611.	2.2	3
6	Ultra-thin Al2O3 capped with SiNx enabling implied open-circuit voltage reaching 720â€‰mV on industrial p-type Cz c-Si wafers for passivated emitter and rear solar cells. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 012409.	2.1	2
7	Laser Induced Periodic Surface Structured c-Si Solar Cell with more than 16% efficiency. , 2021, , .		0
8	MoO _x /Ag/MoO _x multilayers as hole transport transparent conductive electrodes for nâ€type crystalline silicon solar cells. International Journal of Energy Research, 2020, 44, 3098-3109.	4.5	16
9	Optical characteristics of Bi12SiO20 single crystals by spectroscopic ellipsometry. Materials Science in Semiconductor Processing, 2020, 120, 105286.	4.0	17
10	Numerical analysis of <scp>dopantâ€free</scp> asymmetric silicon heterostructure solar cell with <scp> SiO ₂ </scp> as passivation layer. International Journal of Energy Research, 2020, 44, 10739-10753.	4.5	8
11	Implementation of generalized Harvey-Shack theory in light scattering from rough surfaces. Physical Review A, 2020, 102, .	2.5	4
12	Optical constants and critical point energies of (AgInSe2)0.75â€“(In2Se3)0.25 single crystals. Journal of Materials Science: Materials in Electronics, 2020, 31, 4702-4707.	2.2	2
13	Slicing Crystalline Silicon Wafer by Deep Subsurface Laser Processing and Selective Chemical Etching. , 2019, , .		0
14	Electrical, optical and surface characterization of reactive RF magnetron sputtered molybdenum oxide films for solar cell applications. Materials Science in Semiconductor Processing, 2019, 101, 46-56.	4.0	24
15	Simulation of silicon heterostructure solar cell featuring dopant-free carrier-selective molybdenum oxide and titanium oxide contacts. Renewable Energy, 2019, 143, 359-367.	8.9	27
16	Development of electron-selective SiO2/TiO2 stack layers with superior surface passivation capacity for n-type silicon substrates (Conference Presentation). , 2019, , .		0
17	Effect of Laser Wavelength on AZO Surface Texturing by Direct Laser Processing / Patterning for Thin-Film Silicon Solar Cells Applications. MRS Advances, 2018, 3, 1411-1418.	0.9	1
18	Electrical response of electron selective atomic layer deposited TiO_{2â^'x}heterocontacts on crystalline silicon substrates. Semiconductor Science and Technology, 2018, 33, 045013.	2.0	7

#	Article	IF	Citations
19	Simulation of an efficient silicon heterostructure solar cell concept featuring molybdenum oxide carrier-selective contact. International Journal of Energy Research, 2018, 42, 1563-1579.	4.5	34
20	Effect of laser parameters and post-texturing treatments on the optical and electrical properties of laser textured c-Si wafers. AIP Conference Proceedings, 2018, , .	0.4	6
21	Optical properties of Cu3In5S9 single crystals by spectroscopic ellipsometry. Optik, 2018, 171, 77-82.	2.9	2
22	Surface Enhanced Raman Scattering with Photochemically Roughened Silicon Surfaces. , 2018, , .		0
23	Dependence of n-cSi/MoOx Heterojunction Performance on cSi Doping Concentration. Energy Procedia, 2017, 124, 418-424.	1.8	17
24	Advanced plasmonic interfaces for optimized light trapping in photovoltaics. Journal of Physics: Conference Series, 2017, 869, 012043.	0.4	0
25	Physical device simulation of partial dopant-free asymmetric silicon heterostructure solar cell (P-DASH) based on hole-selective Molybdenum oxide (MoOx) with Crystalline Silicon (cSi). , 2017, , .		7
26	Effect of Hole-Selective Molybdenum Oxide Work Function and Silicon Wafer Resistivity on Dopant-Free Asymmetric Silicon Heterostructure Solar Cell. , 2017, , .		4
27	Admittance analysis of thermally evaporated-hole selective MoO3 on crystalline silicon. , 2016, , .		6
28	Advanced light trapping interface for aâ€Si:H thin film. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1206-1210.	0.8	6
29	Dependence of plasmonic enhancement of photocurrent in a-Si:H on the position and thickness of SiNx spacer layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1220-1223.	0.8	0
30	Effect of aluminum thickness and etching time of aluminum induced texturing process on soda lime glass substrates for thin solar cell applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1201-1205.	0.8	9
31	Low temperature aluminum doped zinc oxide thin film deposition on ultraâ€thin flexible glass and PET substrates by RF magnetron sputtering. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1215-1219.	0.8	8
32	Optimized spacer layer thickness for plasmonic-induced enhancement of photocurrent in a-Si:H. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	3
33	High haze nature of textured Al:ZnO with Ag nanoparticles for light management in thin film solar cells. Optical Materials Express, 2015, 5, 932.	3.0	12
34	Enhanced Optical Absorption and Spectral Photocurrent in a-Si:H by Single- and Double-Layer Silver Plasmonic Interfaces. Plasmonics, 2014, 9, 357-365.	3.4	14
35	Fabrication of Ag Nanoparticles Embedded in Al:ZnO as Potential Light-Trapping Plasmonic Interface for Thin Film Solar Cells. Plasmonics, 2013, 8, 1485-1492.	3.4	21
36	Effect of surface type on structural and optical properties of Ag nanoparticles formed by dewetting. Optics Express, 2013, 21, A798.	3.4	26

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37	DETERMINATION OF TRAPPING CENTER PARAMETERS OF Tl₂Ga₂S₃Se LAYERED CRYSTALS BY THERMALLY STIMULATED CURRENT MEASUREMENTS. International Journal of Modern Physics B, 2010, 24, 2149-2161.	2.0	8
38	Analysis on the Capacitance-Voltage Characteristics of Metal-Insulator-Semiconductor Capacitors Based on Thermally Evaporated Wox on N- and P- Type Crystalline Silicon. SSRN Electronic Journal, 0, , .	0.4	0
39	Impact of Ion Implantation and Annealing Parameters on Bifacial Perc and Pert Solar Cell Performance. SSRN Electronic Journal, 0, , .	0.4	0