Utpal Gangopadhyay

List of Publications by Year
in descending order

33	303	1040056	940533
papers	citations	9 h-index	16 g-index

34	34	34	289
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comparative study of different approaches of multicrystalline silicon texturing for solar cell fabrication. Solar Energy Materials and Solar Cells, 2007, 91, 285-289.	6.2	74
2	Novel low-cost approach for removal of surface contamination before texturization of commercial monocrystalline silicon solar cells. Solar Energy Materials and Solar Cells, 2007, 91, 1147-1151.	6.2	37
3	Solid-State wetting of graphite by Pb and Pb-Ni alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1994, 25, 607-615.	2.2	25
4	Effect of annealing on structural and optical properties of diamond-like nanocomposite thin films. Applied Physics A: Materials Science and Processing, 2014, 114, 965-972.	2.3	22
5	Anti-reflective nanocomposite based coating for crystalline silicon solar cells with noticeable significance. Journal of Renewable and Sustainable Energy, 2013, 5, .	2.0	18
6	NiB deposits on p-silicon using borohydride as a reducing agent. Materials Research Bulletin, 2004, 39, 2187-2192.	5.2	16
7	A Clue to Understand Environmental Influence on Friction and Wear of Diamond-Like Nanocomposite Thin Film. Advances in Tribology, 2013, 2013, 1-7.	2.1	15
8	A novel approach for co-firing optimization in RTP for the fabrication of large area mc-Si solar cell. Thin Solid Films, 2006, 511-512, 228-234.	1.8	14
9	N-acetyle cysteine assisted synthesis of coreâ¿¿shell Ag2S with enhanced light transmission and diminished reflectance: Surface modifier for c-SiNx solar cells. Journal of Industrial and Engineering Chemistry, 2016, 40, 54-61.	5.8	14
10	Review on different front surface modification of both n + -p-p + and p + -n-n + C- Si solar cell. Materials Today: Proceedings, 2017, 4, 12698-12707.	1.8	11
11	Novel technique for large area n-type black silicon solar cell by formation of silicon nanograss after diffusion process. Journal of Materials Science: Materials in Electronics, 2021, 32, 2590-2600.	2.2	8
12	Novel technique for fabrication of n-type crystalline silicon selective emitter for solar cell processing. Materials Research Express, 2019, 6, 075523.	1.6	6
13	Diamond-like nanocomposite: a novel promising carbon based thin film as antireflection and passivation coating for silicon solar cell. Materials Research Express, 2018, 5, 025601.	1.6	4
14	Effect of Induced Charges on the Performance of Different Dielecteric Layers of c-Si Solar Cell by Experimental and Theoretical Approach. Silicon, 2020, 12, 2601-2609.	3.3	4
15	Effect of diamond-like nanocomposite as antireflection layer on multi-crystalline silicon solar cells. Materials Today: Proceedings, 2021, 39, 2046-2049.	1.8	4
16	Texturization of Multi Crystalline Silicon without Conventional Alkaline and Acidic Solution for Solar Cell Processing. Materials Today: Proceedings, 2017, 4, 12684-12688.	1.8	3
17	Low temperature growth of diamond-like nanocomposite films prepared by PACVD from Ar diluted siloxane plasma. Materials Research Express, 2019, 6, 115614.	1.6	3
18	Optimization and characterization of silicon nano-grass antireflection layer on textured silicon wafer. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	3

#	Article	IF	Citations
19	Mathematical Modelling of a Novel Hetero-junction Dual SIS ZnO-Si-SnO Solar Cell. Silicon, 2022, 14, 3329-3338.	3.3	3
20	Mathematical modelling of a novel heterojunction SIS front surface and interdigitated back-contact solar cell. Journal of Computational Electronics, 2021, 20, 1779-1806.	2.5	3
21	Large-Area Crystalline Silicon Solar Cell Using Novel Antireflective Nanoabsorber Texturing Surface by Multihollow Cathode Plasma System and Spin-On Doping. , 2013, 2013, 1-5.		2
22	Fabrication of Nanowire on micro Textured Crystalline Silicon Wafer Before and After Diffusion Process: A comparative study of solar cell performance. Materials Today: Proceedings, 2017, 4, 12678-12683.	1.8	2
23	Performance analysis of crystalline-Si solar cell using MATLAB simulation. Materials Today: Proceedings, 2021, 39, 1894-1898.	1.8	2
24	Advancement and Challenges for Schottkey Barrier MIS/SIS Solar Cells: A Review. , 2022, 7, 13-28.		2
25	High-Temperature Crystallization of Amorphous Silicon on a Molybdenum Substrate. Solid State Phenomena, 2003, 93, 219-224.	0.3	1
26	Growth of Ni-B films on n-silicon. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 1786-1792.	1.8	1
27	Antireflective Nanocomposite Based Coating on Crystalline Silicon Solar Cells for Building-Integrated Photovoltaic Systems. Conference Papers in Energy, 2013, 2013, 1-6.	0.6	1
28	Multicrystalline Silicon Texturing By Novel Bi-Component Etching Solution. Materials Today: Proceedings, 2017, 4, 12671-12677.	1.8	1
29	Studyof Silver Sulphide Nanoparticle Decorated SiNW Array on Multi-c-Si Wafer. Materials Today: Proceedings, 2018, 5, 10016-10022.	1.8	1
30	A Comparative Study of SiO2:TiO2 Composite and SiO2 Film by Sol-Gel Method for Solar Cell Application. Springer Proceedings in Physics, 2019, , 341-347.	0.2	1
31	Mathematical Modelling of Bifacial Dual SIS Solar Cell and Optimization of Tilt Angle. Silicon, 2022, 14, 8721-8731.	3.3	1
32	Fabrication and Mathematical Modelling of a ITO-Al2O3-Si SIS Solar Cell. Silicon, 2022, 14, 11963-11977.	3.3	1
33	Fabrication of low cost nano-grass n-type C-Si solar cell with solâ€“gel Al2O3 passivation. SN Applied Sciences, 2020, 2, 1.	2.9	0