Petru Adrian Cotfas

List of Publications by Year
in descending order

69 papers	847 citations	566801 15 h-index	525886 27 g-index
69 all docs	69 docs citations	69 times ranked	700 citing authors

#	Article	IF	Citations
1	Experimental investigation on spectrum beam splitting photovoltaic–thermoelectric generator under moderate solar concentrations. Energy, 2022, 238, 121988.	4.5	38
2	Critical factors and parameters for hybrid Photovoltaic-Thermoelectric systems; review. Applied Thermal Engineering, 2022, 215, 118977.	3.0	24
3	Solar Hybrid System Component Study in Low Concentrated Sunlight. International Journal of Photoenergy, 2021, 2021, 1-13.	1.4	2
4	Analytical versus Metaheuristic Methods to Extract the Photovoltaic Cells and Panel Parameters. International Journal of Photoenergy, 2021, 2021, 1-17.	1.4	6
5	An Experimental Study on Transient Response of a Hybrid Thermoelectric–Photovoltaic System with Beam Splitter. Energies, 2021, 14, 8129.	1.6	6
6	Response of thermoelectric generators to Bi2Te3 and Zn4Sb3 energy harvester materials under variant solar radiation. Renewable Energy, 2020, 146, 2488-2498.	4.3	25
7	Comprehensive Review of Methods and Instruments for Photovoltaic–Thermoelectric Generator Hybrid System Characterization. Energies, 2020, 13, 6045.	1.6	16
8	Calculation of Seven Photovoltaic Cells Parameters Using Parallelized Successive Discretization Algorithm. International Journal of Photoenergy, 2020, 2020, 1-13.	1.4	6
9	Management and Performance Control Analysis of Hybrid Photovoltaic Energy Storage System under Variable Solar Irradiation. Energies, 2020, 13, 3043.	1.6	10
10	Study of photovoltaic cell degradation under rapid light variation. , 2020, , .		0
11	Enhancing energy efficiency for photovoltaic cells using thermoelectric hybridization. , 2020, , .		0
12	Application of successive discretization algorithm for determining photovoltaic cells parameters. Energy Conversion and Management, 2019, 196, 545-556.	4.4	41
13	Experimental and numerical study on the transient behavior of multi-junction solar cell-thermoelectric generator hybrid system. Energy Conversion and Management, 2019, 184, 448-455.	4.4	76
14	Virtual keyboard based on a brain-computer interface. IOP Conference Series: Materials Science and Engineering, 2019, 514, 012020.	0.3	2
15	Virtual robot arm controlled by hand gestures via Leap Motion Sensor. IOP Conference Series: Materials Science and Engineering, 2019, 514, 012021.	0.3	5
16	Advancements in Photovoltaic Cell and System Technologies. International Journal of Photoenergy, 2019, 2019, 1-2.	1.4	9
17	Multiconcept Methods to Enhance Photovoltaic System Efficiency. International Journal of Photoenergy, 2019, 2019, 1-14.	1.4	20
18	Comparative Study of Two Commercial Photovoltaic Panels under Natural Sunlight Conditions. International Journal of Photoenergy, 2019, 2019, 1-10.	1.4	6

#	Article	IF	Citations
19	Determination of Technological Features of a Solar Photovoltaic Cell Made of Monocrystalline Silicon P[+]PNN[+]. International Journal of Photoenergy, 2019, 2019, 1-14.	1.4	1
20	Transient behavior of concentrated solar oxide thermoelectric generator. Energy, 2019, 168, 823-832.	4.5	18
21	Using the genetic algorithm to determine the parameters of photovoltaic cells and panels. , 2018, , .		9
22	Performance evaluation of a high-temperature thermoelectric generator under different solar concentrations. Energy Procedia, 2018, 147, 624-630.	1.8	9
23	Experimental and numerical investigation of hybrid concentrated photovoltaic â€" Thermoelectric module under low solar concentration. Energy, 2018, 159, 1123-1131.	4.5	60
24	Study of Temperature Coefficients for Parameters of Photovoltaic Cells. International Journal of Photoenergy, 2018, 2018, 1-12.	1.4	89
25	Solar Cell Capacitance Determination Based on an RLC Resonant Circuit. Energies, 2018, 11, 672.	1.6	18
26	Characterization of Photovoltaicâ€"Thermoelectricâ€"Solar Collector Hybrid Systems in Natural Sunlight Conditions. Journal of Energy Engineering - ASCE, 2017, 143, .	1.0	24
27	System design to study hybrid systems in concentrated light using Fresnel lens. , 2017, , .		2
28	Study of combined photovoltaic cell/thermoelectric element/solar collector in medium concentrated light. , 2017, , .		8
29	Implementing a remote laboratory on a chip. , 2017, , .		1
30	Accelerated Life Test for Photovoltaic Cells Using Concentrated Light. International Journal of Photoenergy, 2016, 2016, 1-7.	1.4	11
31	Investigation of the photovoltaic cell/ thermoelectric element hybrid system performance. IOP Conference Series: Materials Science and Engineering, 2016, 133, 012037.	0.3	13
32	FPGA-enabled hardware multitasking applications in energy harvesting laboratories. , 2016, , .		1
33	Modelling and PSPICE simulation oi a photovoltaic/thermoelectric system. , 2016, , .		3
34	Methods and techniques to determine the dynamic parameters of solar cells: Review. Renewable and Sustainable Energy Reviews, 2016, 61, 213-221.	8.2	31
35	Design and implementation of RELab system to study the solar and wind energy. Measurement: Journal of the International Measurement Confederation, 2016, 93, 94-101.	2.5	17
36	REMOTE LABORATORIES BASED ON LABVIEW WEB SERVICES. , 2016, , .		1

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37	Graphical System Design approach in photovoltaic energy laboratories. , 2015, , .		1
38	Simulated, hands-on and remote laboratories for studying the solar cells. , 2015, , .		4
39	Ageing of photovoltaic cells under Concentrated Light. , 2015, , .		6
40	A Simple Method to Increase the Amount of Energy Produced by the Photovoltaic Panels. International Journal of Photoenergy, 2014, 2014, 1-6.	1.4	4
41	Monthly average daily global and diffuse solar radiation based on sunshine duration and clearness index for Brasov, Romania. Journal of Renewable and Sustainable Energy, 2014, 6, .	0.8	16
42	General physics remote laboratory based on the NI ELVIS platform and Moodle. , 2014, , .		0
43	Remote SoC/FPGA platform configuration for cloud applications. , 2014, , .		10
44	The study of the photovoltaic cells parameters in concentrated sunlight. , 2014, , .		1
45	New Tools in Hardware and Software Design Applied for Remote Photovoltaic Laboratory. , 2014, , 1073-1092.		1
46	RELab - virtual laboratory of the renewable energy. , 2013, , .		4
47	Methods to determine the dc parameters of solar cells: A critical review. Renewable and Sustainable Energy Reviews, 2013, 28, 588-596.	8.2	143
48	TRIZ method and remote engineering approach. , 2013, , .		0
49	Mobile virtual laboratory for renewable energy. , 2013, , .		2
50	Remote controlled robot for automatic measurements in concentrated sun. , 2013, , .		0
51	Measurements in Concentrated Sun using a Remote Controlled Robot. International Journal of Online and Biomedical Engineering, 2013, 9, 50.	0.9	1
52	PV cells test bench system with remote access trough Internet. , 2012, , .		3
53	Embedded system for mini solar vehicle. , 2012, , .		0
54	Tensile testing machine based on virtual instrumentation. , 2012, , .		2

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55	Energy balance for different positions of photovoltaic panels. , 2012, , .		1
56	Tester for photovoltaic charger using NI cRIO. , 2012, , .		0
57	Remote experiment and correlation with innovation process. , 2012, , .		0
58	Quantitative approaches in remote experiment design. , 2012, , .		0
59	The methods to determine the series resistance and the ideality factor of diode for solar cells-review. , 2012, , .		6
60	Improvements on Photovoltaic Cells Test Bench System. Journal of Engineering Science and Technology Review, 2012, 5, 38-41.	0.2	0
61	The Wireless Albedometer. Journal of Engineering Science and Technology Review, 2012, 5, 35-37.	0.2	2
62	Multifunction iLab implemented laboratory. , 2011, , .		5
63	WIRELESS SYSTEM FOR MONITORING THE SOLAR RADIATION. Environmental Engineering and Management Journal, 2011, 10, 1133-1137.	0.2	3
64	Methods of the quality assurance applied at the remote laboratory selection. , 2010, , .		0
65	Current-voltage characteristic raising techniques for solar cells. comparisons and applications. , 2010, , .		14
66	FPGA LabVIEW Programming, Monitoring and Remote Control. International Journal of Online and Biomedical Engineering, 2009, 5, 34.	0.9	5
67	Web Development Techniques and Remote Laboratories. International Journal of Online and Biomedical Engineering, 2009, 5, 81.	0.9	1
68	Remote Laboratory in Photovoltaics. International Journal of Online and Biomedical Engineering, 2009, 5, 14.	0.9	1
69	A brain-computer interface based on the integration of NI myRIO development device and NeuroSky Mindwave headset. IOP Conference Series: Materials Science and Engineering, 0, 444, 042014.	0.3	3