Joseph Appelbaum

List of Publications by Year
in descending order

98	1,801	279798	330143
papers	citations	23 h-index	37 g-index

98	98	98	1145
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Solar Radiation on a Parabolic Concave Surface. Energies, 2021, 14, 2245.	3.1	1
2	Shading and Masking of PV Collectors on Horizontal and Sloped Planes Facing South and Northâ€"A Comparative Study. Energies, 2021, 14, 3850.	3.1	3
3	Distribution of Solar Radiation on Greenhouse Convex Rooftop. Sustainability, 2020, 12, 7197.	3.2	3
4	Dependence of PV Module Temperature on Incident Time-Dependent Solar Spectrum. Applied Sciences (Switzerland), 2020, 10, 914.	2.5	16
5	Curved photovoltaic collectors-convex surface. Solar Energy, 2020, 199, 832-836.	6.1	7
6	Shading on Photovoltaic Collectors on Rooftops. Applied Sciences (Switzerland), 2020, 10, 2977.	2.5	4
7	Experimental Verification of the Sky View Factor Model in Multiple-Row Photovoltaic Fields. Journal of Solar Energy Engineering, Transactions of the ASME, 2020, 142, .	1.8	3
8	The Effect of Collector Shading and Masking on Optimized PV Field Designs. Energies, 2019, 12, 3471.	3.1	3
9	Corrections to anisotropic diffuse radiation model. Solar Energy, 2019, 193, 523-528.	6.1	11
10	Shading by Overhang PV Collectors. Applied Sciences (Switzerland), 2019, 9, 4280.	2.5	4
11	Shading and masking affect the performance of photovoltaic systemsâ€"a review. AIMS Energy, 2019, 7, 77-87.	1.9	4
12	The effect of sky view factors on optimized photovoltaic fields. Journal of Renewable and Sustainable Energy, 2018, 10, 013501.	2.0	2
13	The viewâ€factor effect shaping of <scp>Iâ€V</scp> characteristics. Progress in Photovoltaics: Research and Applications, 2018, 26, 273-280.	8.1	9
14	The role of view factors in solar photovoltaic fields. Renewable and Sustainable Energy Reviews, 2018, 81, 161-171.	16.4	41
15	The effect of sky diffuse radiation on photovoltaic fields. Journal of Renewable and Sustainable Energy, 2018, 10, 033505.	2.0	7
16	Enhancing the power output of PV modules by considering the view factor to sky effect and rearranging the interconnections of solar cells. Progress in Photovoltaics: Research and Applications, 2017, 25, 810-818.	8.1	18
17	Design optimization of photovoltaic solar fields-insight and methodology. Renewable and Sustainable Energy Reviews, 2017, 76, 882-893.	16.4	27
18	Minimizing the current mismatch resulting from different locations of solar cells within a PV module by proposing new interconnections. Solar Energy, 2016, 135, 840-847.	6.1	13

#	Article	IF	Citations
19	View Factors to Grounds of Photovoltaic Collectors. Journal of Solar Energy Engineering, Transactions of the ASME, 2016, 138, .	1.8	13
20	View factors of photovoltaic collectors on Roof Tops. Journal of Renewable and Sustainable Energy, 2016, 8, .	2.0	19
21	The effect of interconnecting solar cells in the PV module on the power output. , 2016, , .		1
22	Enhancing the power production of PV modules by rearranging the solar-cells interconnections. , 2016, , .		0
23	Multi-sensor for measuring erythemally weighted irradiance in various directions simultaneously. Theoretical and Applied Climatology, 2016, 126, 339-350.	2.8	2
24	Shadow analysis of wind turbines for dual use of land for combined wind and solar photovoltaic power generation. Renewable and Sustainable Energy Reviews, 2016, 55, 713-718.	16.4	23
25	Current mismatch in PV panels resulting from different locations of cells in the panel. Solar Energy, 2016, 126, 264-275.	6.1	20
26	Bifacial photovoltaic panels field. Renewable Energy, 2016, 85, 338-343.	8.9	79
27	Parameters extraction of solar cells â€“ A comparative examination of three methods. Solar Energy Materials and Solar Cells, 2014, 122, 164-173.	6.2	117
28	Dependence of multi-junction solar cells parameters on concentration and temperature. Solar Energy Materials and Solar Cells, 2014, 130, 234-240.	6.2	49
29	Estimation of multiâ€junction solar cell parameters. Progress in Photovoltaics: Research and Applications, 2013, 21, 713-723.	8.1	17
30	Performance analysis of concentrator photovoltaic dense-arrays under non-uniform irradiance. Solar Energy Materials and Solar Cells, 2013, 117, 110-119.	6.2	17
31	Evaluation of solar radiation properties by statistical tools and wavelet analysis. Renewable Energy, 2013, 59, 30-38.	8.9	17
32	View factors of photovoltaic collector systems. Solar Energy, 2012, 86, 1701-1708.	6.1	40
33	Solar Radiation on Horizontal Tubular Microalgae Photobioreactor: Direct Beam Radiation. Journal of Solar Energy Engineering, Transactions of the ASME, 2011, 133, .	1.8	1
34	Horizontal Tubular Microalgae Photobioreactor Plant View Factors and Diffuse Radiation. Journal of Solar Energy Engineering, Transactions of the ASME, 2011, 133, .	1.8	0
35	Optimization of Solar Photovoltaic Fields. Journal of Solar Energy Engineering, Transactions of the ASME, 2009, 131, .	1.8	41
36	Salt water chlorination by photovoltaic power â€“ performance matching and optimum sizing. Australian Journal of Electrical and Electronics Engineering, 2008, 4, 277-284.	1.2	1

#	Article	IF	Citations
37	Optimization of Economic Solar Field Design of Stationary Thermal Collectors. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 363-370.	1.8	18
38	Photovoltaic Systems for Electrolysis Using a Maximum Power Point Tracker. , 2006, , .		4
39	Characterisation of an Electric Motor Directly coupled to a Photovoltaic Solar Array in a Refrigeration Facility for Milk Cooling. Biosystems Engineering, 2006, 95, 461-471.	4.3	8
40	Optimal Solar Field Design of Stationary Collectors. Journal of Solar Energy Engineering, Transactions of the ASME, 2004, 126, 898-905.	1.8	39
41	Discussion of â€œTheoretical and Experimental Analyses of Photovoltaic Systems With Voltage and Current-Based Maximum Power Point Trackingâ€• IEEE Transactions on Energy Conversion, 2004, 19, 651-652.	5.2	10
42	Comparative study by simulation of photovoltaic pumping systems with stationary and polar tracking arrays. Progress in Photovoltaics: Research and Applications, 2003, 11, 453-465.	8.1	7
43	A refrigeration facility for milk cooling powered by photovoltaic solar energy. Progress in Photovoltaics: Research and Applications, 2003, 11, 467-479.	8.1	22
44	Discussion of "Measurement of /spl lambda/-i characteristics of asymmetric three-phase transformers and their applications". IEEE Transactions on Power Delivery, 2003, 18, 641.	4.3	0
45	The effect of electron damage on silicon solar cells coated with diamond-like carbon films. Progress in Photovoltaics: Research and Applications, 2000, 8, 571-578.	8.1	3
46	The packing of circles on a hemisphere. Measurement Science and Technology, 1999, 10, 1015-1019.	2.6	5
47	Screening solar cells for improved array performance. Progress in Photovoltaics: Research and Applications, 1999, 7, 113-128.	8.1	1
48	Properties of GaAs solar cells coated with diamondlike carbon films. Thin Solid Films, 1998, 320, 159-162.	1.8	6
49	Solar Cell Temperature on Mars. Journal of Propulsion and Power, 1998, 14, 119-125.	2.2	17
50	The influence of diamond-like carbon films on the properties of silicon solar cells. Thin Solid Films, 1997, 303, 273-276.	1.8	22
51	Modelling a permanent magnet DC motor/centrifugal pump assembly in a photovoltaic energy system. Solar Energy, 1997, 59, 37-42.	6.1	29
52	Low-intensity low-temperature (LILT) measurements and coefficients on new photovoltaic structures. Progress in Photovoltaics: Research and Applications, 1996, 4, 117-127.	8.1	11
53	Concentrating and splitting of solar radiation for laser pumping and photovoltaic conversion. Journal of Propulsion and Power, 1996, 12, 405-409.	2.2	5
54	Solar radiation on Mars - Tracking photovoltaic array. Journal of Propulsion and Power, 1996, 12, 410-419.	2.2	5

#	Article	IF	Citations
55	Amorphous diamond-like carbon filmsâ€"a hard anti-reflecting coating for silicon solar cells. Thin Solid Films, 1995, 256, 1-3.	1.8	35
56	A method for screening solar cells. Solid-State Electronics, 1995, 38, 246-248.	1.4	4
57	Solar radiation on Mars - Stationary photovoltaic array. Journal of Propulsion and Power, 1995, 11, 554-561.	2.2	22
58	Photovoltaic arrays for Martian surface power. Acta Astronautica, 1993, 30, 127-142.	3.2	8
59	Parameter estimation and screening of solar cells. Progress in Photovoltaics: Research and Applications, 1993, 1, 93-106.	8.1	25
60	Solar radiation on Marsâ€"Update 1991. Solar Energy, 1993, 50, 35-51.	6.1	38
61	Losses in a three-dimensional compound parabolic concentrator as a second stage of a solar concentrator. Solar Energy, 1993, 51, 45-51.	6.1	13
62	Starting characteristics of direct current motors powered by solar cells. IEEE Transactions on Energy Conversion, 1993, 8, 47-53.	5.2	46
63	Starting Characteristics of Permanent Magnet and Series Excited Motors Powered by Solar Cells: Variation with Solar Radiation and Temperature. Electric Power Components and Systems, 1992, 20, 173-181.	0.1	15
64	Internal impedance of nickelî—¸cadmium batteries with applications to space. Journal of Power Sources, 1992, 38, 295-301.	7.8	4
65	Solar radiation on Mars. Solar Energy, 1990, 45, 353-363.	6.1	61
66	The operation of permanent magnet DC motors powered by a common source of solar cells. IEEE Transactions on Energy Conversion, 1989, 4, 635-642.	5.2	49
67	The Operation of Loads Powered by Separate Sources or by a Common Source of Solar Cells. IEEE Power Engineering Review, 1989, 9, 37-37.	0.1	0
68	The operation of loads powered by separate sources or by a common source of solar cells. IEEE Transactions on Energy Conversion, 1989, 4, 351-357.	5.2	35
69	A solar radiation distribution sensor. Solar Energy, 1987, 39, 1-10.	6.1	9
70	The effect of shading on the design of a field of solar collectors. Solar Cells, 1987, 20, 201-228.	0.6	73
71	Starting and Steady-State Characteristics of DC Motors Powered by Solar Cell Generators. IEEE Transactions on Energy Conversion, 1986, EC-1, 17-25.	5.2	141
72	Starting and Steady-State Characteristics of DC Motors Powered by Solar Cell Generators. IEEE Power Engineering Review, 1986, PER-6, 28-29.	0.1	1

#	Article	IF	Citations
73	Performance characteristics of a permanent magnet D.C. motor powered by solar cells. Solar Cells, 1986, 17, 343-362.	0.6	19
74	Parameters of solar cell arrays. IEEE Transactions on Electron Devices, 1983, 30, 616-618.	3.0	5
75	Quality factors of solar cell arrays. Solar Cells, 1983, 9, 295-309.	0.6	5
76	Battery State of Charge Determination in Photovoltaic Systems. Journal of the Electrochemical Society, 1982, 129, 1928-1933.	2.9	14
77	Transient Analysis of a DC Series Motor (Linear Versus Nonlinear Models). IEEE Transactions on Industrial Electronics and Control Instrumentation, 1981, IECI-28, 120-125.	0.2	9
78	Performance analysis of d.c.-motor-photovoltaic converter systemâ€”II series and shunt excited motors. Solar Energy, 1981, 27, 421-431.	6.1	24
79	OPERATION OF DC MOTORS POWERED BY PHOTOVOLTAIC CONVERTERS. Electric Power Components and Systems, 1979, 3, 209-220.	0.1	5
80	Shadow effect of adjacent solar collectors in large scale systems. Solar Energy, 1979, 23, 497-507.	6.1	104
81	Performance analysis of d.c.-motor-photovoltaic converter systemâ€”I separately excited motor. Solar Energy, 1979, 22, 439-445.	6.1	45
82	SOME ASPECTS OF OPTIMIZATION TECHNIQUES FOR ELECTROMAGNETIC DEVICES. Electric Power Components and Systems, 1978, 3, 1-10.	0.1	4
83	Spectrum analysis and characteristics of a 2-level pulse-width modulation inverterâ€. International Journal of Electronics, 1978, 45, 225-240.	1.4	1
84	Stepped Voltage Dc/Ac Inverter --Part I: Analysis. IEEE Transactions on Industrial Electronics and Control Instrumentation, 1977, IECI-24, 192-199.	0.2	7
85	Stepped Voltage Dc/Ac Inverter -- Part II: Optimal Construction Of Waveforms By Means Of Discrete Levels. IEEE Transactions on Industrial Electronics and Control Instrumentation, 1977, IECI-24, 273-276.	0.2	2
86	A Method for the Optimization of a Production Line of Electromagnetic Devices. IEEE Transactions on Systems, Man, and Cybernetics, 1977, 7, 443-452.	0.9	5
87	The influence of parameter dispersion of electrical cells on the array power output. IEEE Transactions on Electron Devices, 1977, 24, 1032-1040.	3.0	7
88	Performance analysis of a solar-electrical system with a load and storage batteries. Energy Conversion, 1977, 16, 105-110.	0.3	14
89	Determination of solar cell equation parameters from empirical data. Energy Conversion, 1977, 17, 1-6.	0.3	30
90	Solution of Practical Optimization Problems. IEEE Transactions on Systems Science and Cybernetics, 1970, 6, 49-52.	0.5	8

#	Article	IF	Citations
91	Optimized Parameter Analysis of an Induction Machine. IEEE Transactions on Power Apparatus and Systems / Technical Operations Committee, 1965, 84, 1017-1024.	0.4	16
92	A problem of economic optimization of electric equipment design. IEEE Transactions on Communication and Electronics, 1964, 83, 773-776.	0.2	11
93	Amorphous diamondlike carbon films-a hard optical material for silicon solar cells. , 0, , .		0
94	Photovoltaic conversion in a common solar concentrating and spectrally splitting system. , 0, , .		2
95	Advantage of boost vs. buck topology for maximum power point tracker in photovoltaic systems. , 0, , .		19
96	Verification of Mars solar radiation model based on Mars Pathfinder data. , 0, , .		4
97	Optimal design of solar fields. , 0, , .		5
98	Shadow variation on photovoltaic collectors in a solar field. , 0, , .		12