Viorel Badescu

List of Publications by Year
in descending order

267 papers	4,980 citations	116194 36 h-index	145109 60 g-index
286 all docs	286 docs citations	286 times ranked	4323 citing authors

#	Article	IF	Citations
1	Potential for energy recovery from internal combustion engines driving electrical generators in Iraq cities. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2023, 45, 3421-3437.	1.2	1
2	Energy harvesting through backpacks employing piezoelectric stack systems optimized for users with different physiological features. International Journal of Energy and Environmental Engineering, 2022, 13, 331-351.	1.3	1
3	Upper bound efficiency for several configurations of work extractors receiving and releasing statistically deformed heat and radiation fluxes. Physica Scripta, 2022, 97, 030002.	1.2	1
4	Maximum Work Rate Extractable from Energy Fluxes. Journal of Non-Equilibrium Thermodynamics, 2022, 47, 77-93.	2.4	33
5	A simple but accurate two-state model for nowcasting PV power. Renewable Energy, 2022, 195, 322-330.	4.3	7
6	Statistical thermodynamics approach for the available work transported by particle fluxes. Physica A: Statistical Mechanics and Its Applications, 2022, 603, 127769.	1.2	5
7	Nowcasting solar irradiance for effective solar power plants operation and smart grid management. , 2021, , 249-270.		10
8	Self-Driven Reverse Thermal Engines Under Monotonous and Oscillatory Optimal Operation. Journal of Non-Equilibrium Thermodynamics, 2021, 46, 291-319.	2.4	22
9	Performance of double pass unglazed transpired collectors with energy storage in phase change materials during days with different radiative regimes. Sustainable Energy Technologies and Assessments, 2021, 46, 101309.	1.7	1
10	Beyond 3rd generation solar cells and the full spectrum project. Recent advances and new emerging solar cells. Sustainable Energy Technologies and Assessments, 2021, 46, 101287.	1.7	16
11	Ignition delay and its influence on the performance of a Diesel engine operating with different Diesel–biodiesel fuels. Energy Reports, 2021, 7, 5483-5494.	2.5	17
12	Basics: Thermodynamics. , 2021, , .		0
13	A new adaptive thermal comfort model for the Romanian climate. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2020, 173, 151-159.	0.4	6
14	A new perspective on the sunshine duration variability. Theoretical and Applied Climatology, 2020, 139, 1219-1230.	1.3	0
15	Usage of solar shading devices to improve the thermal comfort in summer in a Romanian PassivHaus. Simulation, 2020, 96, 471-486.	1.1	8
16	A new parameterization of the effective cloud fields. Theoretical and Applied Climatology, 2020, 142, 769-779.	1.3	0
17	Verification of deterministic solar forecasts. Solar Energy, 2020, 210, 20-37.	2.9	142
18	Optimal design and operation of ammonia decomposition reactors. International Journal of Energy Research, 2020, 44, 5360-5384.	2.2	21

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19	Two classes of sub-optimal shapes for one dimensional slider bearings with couple stress lubricants. Applied Mathematical Modelling, 2020, 81, 887-909.	2.2	1
20	PLC Automation and Control Strategy in a Stirling Solar Power System. Energies, 2020, 13, 1917.	1.6	8
21	Capitalizing on Solar Energy in Romania and Improving the Thermal Comfort of Buildings with Solar Air Collectors. , 2020, , 75-94.		0
22	The stability of the radiative regime in Bucharest during 2017-2018. E3S Web of Conferences, 2019, 85, 04001.	0.2	1
23	Avoiding malfunction of ORC-based systems for heat recovery from internal combustion engines under multiple operation conditions. Applied Thermal Engineering, 2019, 150, 977-986.	3.0	13
24	Parametrization of cloud fields: Simple models for the probability of a clear line-of-sight. AIP Conference Proceedings, 2019, , .	0.3	1
25	Regularizing the operation of unglazed transpired collectors by incorporating phase change materials. Energy Conversion and Management, 2019, 184, 681-708.	4.4	14
26	Biomass - alternative renewable energy source and its conversion for hydrogen rich gas production. E3S Web of Conferences, 2019, 122, 01001.	0.2	4
27	Solar air collector performance in transient operation under radiative regimes with different levels of stability. Solar Energy, 2019, 177, 200-212.	2.9	18
28	A current perspective on the accuracy of incoming solar energy forecasting. Progress in Energy and Combustion Science, 2019, 70, 119-144.	15.8	164
29	The Carbon Dioxide Clathrate Disposal in a Pit near Japan. Proceedings of the International Conference on Business Excellence, 2019, 13, 288-297.	0.1	0
30	Upper Bounds for the Conversion Efficiency of Diluted Blackbody Radiation Energy into Work. Journal of Non-Equilibrium Thermodynamics, 2018, 43, 273-287.	2.4	3
31	Modeling air leakage in buildings caused by the cyclic variation of the atmospheric pressure. Building Services Engineering Research and Technology, 2018, 39, 430-462.	0.9	7
32	Performance of a hybrid solar collector system in days with stable and less stable radiative regime. International Journal of Sustainable Engineering, 2018, 11, 40-53.	1.9	3
33	Retrieval of effective cloud field parameters from radiometric data. Theoretical and Applied Climatology, 2018, 133, 437-446.	1.3	4
34	First adaptive thermal comfort equation for naturally ventilated buildings in Bucharest, Romania. International Journal of Ventilation, 2018, 17, 149-165.	0.2	10
35	The liquid CO_2 disposal in sea pits near Greece. MATEC Web of Conferences, 2018, 178, 07010.	0.1	1
36	Working fluid selection procedure for ORC-based systems coupled with internal combustion engines driving electrical generators. IOP Conference Series: Materials Science and Engineering, 2018, 444, 082002.	0.3	1

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37	Upper limits for the work extraction by nanofluid-filled selective flat-plate solar collectors. Energy, 2018, 160, 875-885.	4.5	18
38	How much work can be extracted from diluted solar radiation?. Solar Energy, 2018, 170, 1095-1100.	2.9	35
39	Autoignition Process in Compression Ignition Engine Fueled by Diesel Fuel and Biodiesel with 20% Rapeseed Biofuel in Diesel Fuel. Journal of Energy Engineering - ASCE, 2018, 144, .	1.0	7
40	Extracting the I-V Characteristics of the PV Modules from the Manufacture's Datasheet. Springer Proceedings in Energy, 2018, , 434-442.	0.2	3
41	Fluid Flow Control in Domestic Hot Water Systems During Days with Different Radiative Stability Levels. Annals of West University of Timisoara: Physics, 2018, 60, 88-96.	0.2	0
42	Extracting Work From Diluted Solar Radiation. , 2018, , .		0
43	Structured, physically inspired (gray box) models versus black box modeling for forecasting the output power of photovoltaic plants. Energy, 2017, 121, 792-802.	4.5	38
44	Ignition delay, combustion and emission characteristics of Diesel engine fueled with rapeseed biodiesel â€" A literature review. Renewable and Sustainable Energy Reviews, 2017, 73, 178-186.	8.2	113
45	Models for New Corrugated and Porous Solar Air Collectors under Transient Operation. Journal of Non-Equilibrium Thermodynamics, 2017, 42, .	2.4	3
46	Design and operational procedures for ORC-based systems coupled with internal combustion engines driving electrical generators at full and partial load. Energy Conversion and Management, 2017, 139, 206-221.	4.4	25
47	The stability of the radiative regime does influence the daily performance of solar air heaters. Renewable Energy, 2017, 107, 403-416.	4.3	9
48	Optimal Time-Dependent Operation of Closed Loop Solar Collector Systems. Studies in Systems, Decision and Control, 2017, , 373-410.	0.8	0
49	Consideration of a new extended power law of air infiltration through the building's envelope providing estimations of the leakage area. Energy and Buildings, 2017, 149, 400-423.	3.1	17
50	Effect of rapeseed biodiesel B20 on combustion characteristics and emissions of DI Diesel engine. , 2017, , .		1
51	Reconstruction of historical aerosol optical depth time series over Romania during summertime. International Journal of Climatology, 2017, 37, 4720-4732.	1.5	8
52	Investigation on the mixture formation, combustion characteristics and performance of a Diesel engine fueled with Diesel, Biodiesel B20 and hydrogen addition. International Journal of Hydrogen Energy, 2017, 42, 16793-16807.	3.8	80
53	Statistical properties of clear and dark duration lengths. Solar Energy, 2017, 153, 508-518.	2.9	4
54	Elements of Variational Calculus. Studies in Systems, Decision and Control, 2017, , 23-73.	0.8	0

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55	Smooth and non-smooth optimal pin fin profiles beyond the Schmidt optimality assumption and â€œlength-of-arcâ€•approximation. Applied Mathematical Modelling, 2017, 47, 358-380.	2.2	7
56	Optimization of Solar Energy Collection Systems. Studies in Systems, Decision and Control, 2017, , 285-316.	0.8	0
57	Improving the Performance of Systems with Solar Water Collectors Used in Domestic Hot Water Production. Energy Procedia, 2017, 112, 398-403.	1.8	11
58	Optimal Time-Dependent Operation of Open Loop Solar Collector Systems. Studies in Systems, Decision and Control, 2017, , 349-371.	0.8	0
59	Heat Transfer Processes. Studies in Systems, Decision and Control, 2017, , 161-187.	0.8	0
60	Optimization of Pin Fin Profiles. Studies in Systems, Decision and Control, 2017, , 257-281.	0.8	0
61	Solar-driven Joule cycle reciprocating Ericsson engines for small scale applications. From improper operation to high performance. Energy Conversion and Management, 2017, 135, 101-116.	4.4	1
62	Overview and future challenges of nearly zero energy buildings (nZEB) design in Southern Europe. Energy and Buildings, 2017, 155, 439-458.	3.1	235
63	Performance of SDHW systems with fully mixed and stratified tank operation under radiative regimes with different degree of stability. Energy, 2017, 118, 1018-1034.	4.5	11
64	Experimental and numerical assessment of ignition delay period for pure diesel and biodiesel B20. IOP Conference Series: Materials Science and Engineering, 2017, 252, 012068.	0.3	3
65	Assessment of different models for computing the probability of a clear line of sight. AIP Conference Proceedings, 2017, , .	0.3	0
66	Thermodynamics of Photovoltaics â˜†. , 2017, , .		5
67	Endoreversible Heat Engines. Studies in Systems, Decision and Control, 2017, , 423-444.	0.8	0
68	Storage of Thermal Energy and Exergy. Studies in Systems, Decision and Control, 2017, , 205-229.	0.8	1
69	Heating and Cooling Processes. Studies in Systems, Decision and Control, 2017, , 231-246.	0.8	0
70	Optimization of Daniel Cam Engines. Studies in Systems, Decision and Control, 2017, , 467-512.	0.8	0
71	Diesel Engines. Studies in Systems, Decision and Control, 2017, , 445-465.	0.8	0
72	Dynamic Programming (Bellman Method). Studies in Systems, Decision and Control, 2017, , 137-157.	0.8	0

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73	The Gradient Method. Studies in Systems, Decision and Control, 2017, , 111-136.	0.8	0
74	Photochemical Engines. Studies in Systems, Decision and Control, 2017, , 513-525.	0.8	0
75	Optimization of Thermal Insulation of Seasonal Water Storage Tanks. Studies in Systems, Decision and Control, 2017, , 247-255.	0.8	0
76	Flat-Plate Solar Collectors. Optimization of Absorber Geometry. Studies in Systems, Decision and Control, 2017, , 317-348.	0.8	0
77	Numerical investigation of entropy generation in microchannels heat sink with different shapes. IOP Conference Series: Materials Science and Engineering, 2016, 147, 012134.	0.3	8
78	Exergy analysis of solar thermal collectors and processes. Progress in Energy and Combustion Science, 2016, 56, 106-137.	15.8	199
79	Thermal Comfort in a Romanian Passive House. Preliminary Results. Energy Procedia, 2016, 85, 575-583.	1.8	12
80	Simple rule to estimate the changes in the heating demand of the German Passivhaus when accomodating the climate of Eastern Europe. Sustainable Cities and Society, 2016, 24, 20-32.	5.1	3
81	CMSAF products Cloud Fraction Coverage and Cloud Type used for solar global irradiance estimation. Meteorology and Atmospheric Physics, 2016, 128, 525-535.	0.9	7
82	Simple solar radiation modelling for different cloud types and climatologies. Theoretical and Applied Climatology, 2016, 124, 141-160.	1.3	16
83	Thermal inertia of flat-plate solar collectors in different radiative regimes. Energy Conversion and Management, 2016, 111, 27-37.	4.4	22
84	Empirical versus Optimal Control of Flow in Solar Domestic Hot Water Systems. Journal of Energy Engineering - ASCE, 2016, 142, .	1.0	5
85	How significant is the stability of the radiative regime when the best operation of solar DHW systems is evaluated?. Renewable Energy, 2016, 88, 346-358.	4.3	8
86	A new perspective on the relationship between cloud shade and point cloudiness. Atmospheric Research, 2016, 172-173, 136-146.	1.8	4
87	A new point of view on the relationship between global solar irradiation and sunshine quantifiers. Solar Energy, 2016, 126, 252-263.	2.9	11
88	Reconstruction of effective cloud field geometry from series of sunshine number. Atmospheric Research, 2016, 176-177, 254-266.	1.8	9
89	Exergy analysis on solar thermal systems: A better understanding of their sustainability. Renewable Energy, 2016, 85, 1328-1333.	4.3	151
90	Geometrization of Thermodynamic Fluctuations. Understanding Complex Systems, 2016, , 151-172.	0.3	0

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91	Elements of Riemann Geometry. Understanding Complex Systems, 2016, , 65-98.	0.3	0
92	Algebraic Structures. Spaces. Reference Frames. Understanding Complex Systems, 2016, , 9-40.	0.3	0
93	Thermodynamics as a Contact Geometry Structure. Understanding Complex Systems, 2016, , 119-133.	0.3	0
94	Thermodynamic Curvature. Correlation. Stability. Understanding Complex Systems, 2016, , 173-195.	0.3	0
95	Thermodynamic Distance. Understanding Complex Systems, 2016, , 135-150.	0.3	0
96	Earth-to-air heat exchangers for passive houses located in South-Eastern European countries. Journal of Renewable and Sustainable Energy, 2015, 7, 043139.	0.8	4
97	Optimal piston motion for maximum net output work of Daniel cam engines with low heat rejection. Energy Conversion and Management, 2015, 101, 181-202.	4.4	10
98	Considerations concerning the feasibility of the German Passivhaus concept in Southern Hemisphere. Energy Efficiency, 2015, 8, 919-949.	1.3	19
99	Maximum reversible work extraction from a blackbody radiation reservoir. A way to closing the old controversy. Europhysics Letters, 2015, 109, 40008.	0.7	27
100	Optimal profiles for one dimensional slider bearings under technological constraints. Tribology International, 2015, 90, 198-216.	3.0	9
101	A simple but accurate procedure for solving the five-parameter model. Energy Conversion and Management, 2015, 105, 139-148.	4.4	66
102	Solar Radiation Estimation From Cloudiness Data. Satellite Vs. Ground-Based Observations. International Journal of Green Energy, 2015, 12, 852-864.	2.1	11
103	Preliminary Results Concerning the Thermal Comfort in a Romanian Passive House. , 2015, , 779-790.		0
104	Optimal profile of heat transfer pin fins under technological constraints. Energy, 2015, 93, 2292-2298.	4.5	13
105	Tailored vs black-box models for forecasting hourly average solar irradiance. Solar Energy, 2015, 111, 320-331.	2.9	16
106	Is Carnot efficiency the upper bound for work extraction from thermal reservoirs?. Europhysics Letters, 2014, 106, 18006.	0.7	26
107	Potential Investors for the Implementation of the Romanian National Strategy on PV Systems. International Journal of Green Energy, 2014, 11, 625-641.	2.1	4
108	Cloud shade by dynamic logistic modeling. Journal of Applied Statistics, 2014, 41, 1174-1188.	0.6	6

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109	Simple models to compute solar global irradiance from the CMSAF product Cloud Fractional Coverage. Renewable Energy, 2014, 66, 118-131.	4.3	20
110	Generalized additive models for nowcasting cloud shading. Solar Energy, 2014, 101, 272-282.	2.9	13
111	Experimental Investigation of Waste Heat Available for a Hybrid Micro-Cogeneration Group Involving a Diesel Engine Electric Generator and Organic Rankine Cycle. Applied Mechanics and Materials, 2014, 659, 440-445.	0.2	1
112	Accuracy of CM-SAF solar irradiance incident on horizontal surface. Theoretical and Applied Climatology, 2014, 117, 233-246.	1.3	4
113	How much work can be extracted from a radiation reservoir?. Physica A: Statistical Mechanics and Its Applications, 2014, 410, 110-119.	1.2	29
114	New procedure and field-tests to assess photovoltaic module performance. Energy, 2014, 70, 49-57.	4.5	27
115	New types of simple non-linear models to compute solar global irradiance from cloud cover amount. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 117, 54-70.	0.6	24
116	Thermal Comfort Analyses in Naturally Ventilated Buildings. Mathematical Modelling in Civil Engineering, 2014, 10, 60-66.	0.1	2
117	Accuracy analysis for fifty-four clear-sky solar radiation models using routine hourly global irradiance measurements in Romania. Renewable Energy, 2013, 55, 85-103.	4.3	82
118	Reducing the Risk Associated to Desalination Brine Disposal on the Coastal Areas of Red Sea. Coastal Research Library, 2013, , 285-316.	0.2	0
119	Nowcasting sunshine number using logistic modeling. Meteorology and Atmospheric Physics, 2013, 120, 61-71.	0.9	11
120	The CMSAF hourly solar irradiance database (product CM54): Accuracy and bias corrections with illustrations for Romania (south-eastern Europe). Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 93, 100-109.	0.6	16
121	Simple technological guidelines for the implementation of the Romanian National Strategy on PV systems. Energy for Sustainable Development, 2013, 17, 220-227.	2.0	5
122	Solar System and Ground Heat Exchanger at Bragadiru Passivehouse â€" Amvic Office Building. Energy Procedia, 2013, 42, 210-219.	1.8	0
123	Assessing the performance of solar radiation computing models and model selection procedures. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 105-106, 119-134.	0.6	29
124	New models to compute solar global hourly irradiation from point cloudiness. Energy Conversion and Management, 2013, 67, 75-91.	4.4	21
125	Tools for PV (photovoltaic) plant operators: Nowcasting of passing clouds. Energy, 2013, 54, 104-112.	4.5	21
126	Modeling Solar Radiation at the Earth Surface. Green Energy and Technology, 2013, , 127-179.	0.4	21

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127	Accuracy and sensitivity analysis for 54 models of computing hourly diffuse solar irradiation on clear sky. Theoretical and Applied Climatology, 2013, 111, 379-399.	1.3	25
128	Solar Radiation Measurements. Green Energy and Technology, 2013, , 17-42.	0.4	14
129	Preface to Special Issue: Renewable Energy in South-Eastern Europe. Journal of Renewable and Sustainable Energy, 2013, 5, 041701.	0.8	0
130	Forecasting the Power Output of PV Systems. Green Energy and Technology, 2013, , 325-345.	0.4	0
131	Desalination Brine Disposal by Submerged Pipes in the Red Sea. Journal of Coastal Research, 2013, 291, 81-92.	0.1	6
132	Weather Modeling and Forecasting of PV Systems Operation. Green Energy and Technology, 2013, , .	0.4	67
133	Lost available work and entropy generation: Heat versus radiation reservoirs. Journal of Non-Equilibrium Thermodynamics, 2013, 38, .	2.4	16
134	Stochastic modeling of sunshine number data. , 2013, , .		0
135	Macro-engineering Australia's Lake Eyre with imported seawater. International Journal of Environment and Sustainable Development, 2013, 12, 264.	0.2	0
136	Outdoor Operation of PV Systems. Green Energy and Technology, 2013, , 271-324.	0.4	10
137	Air Temperature-Based Models. Green Energy and Technology, 2013, , 239-269.	0.4	0
138	Stability of the Radiative Regime. Green Energy and Technology, 2013, , 89-126.	0.4	0
139	Fuzzy Logic Approaches. Green Energy and Technology, 2013, , 203-237.	0.4	0
140	State of the Sky Assessment. Green Energy and Technology, 2013, , 43-88.	0.4	0
141	Shaped Metal Earth-Delivery Systems. , 2013, , 507-537.		0
142	Implementation of the German Passivhaus Concept in Southeast Europe: Considerations for Romania. Journal of Energy Engineering - ASCE, 2012, 138, 146-162.	1.0	10
143	Thermodynamics of Photovoltaics. , 2012, , 315-352.		0
144	The potential of the local administration as driving force for the implementation of the National PV systems Strategy in Romania. Renewable Energy, 2012, 38, 117-125.	4.3	25

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145	Computing global and diffuse solar hourly irradiation on clear sky. Review and testing of 54 models. Renewable and Sustainable Energy Reviews, 2012, 16, 1636-1656.	8.2	114
146	Hydrodynamics of tsunamis generated by asteroid impact in the Black Sea. Open Physics, 2012, 10, .	0.8	1
147	Principles of Efficient Usage of Thermal Resources for Heating on Moon. , 2012, , 439-468.		0
148	Considerations on the Implementation of the Passive House Concept in South-Eastern Europe (Romania). International Journal of Green Energy, 2011, 8, 780-794.	2.1	14
149	Statistical properties of the sunshine number illustrated with measurements from Timisoara (Romania). Atmospheric Research, 2011, 101, 194-204.	1.8	43
150	Aral Sea partial restoration. II. Simulation of time-dependent processes. International Journal of Environment and Waste Management, 2011, 7, 164.	0.2	7
151	Aral Sea partial restoration. I. A Caspian water importation macroproject. International Journal of Environment and Waste Management, 2011, 7, 142.	0.2	4
152	Free-floating planets as potential seats for aqueous and non-aqueous life. Icarus, 2011, 216, 485-491.	1.1	38
153	Constraints on the free-floating planets supporting aqueous life. Acta Astronautica, 2011, 69, 788-808.	1.7	5
154	Thermodynamic Constrains for Life Based on Non-Aqueous Polar Solvents on Free-Floating Planets. Origins of Life and Evolution of Biospheres, 2011, 41, 73-99.	0.8	2
155	Peculiarities of tsunamis generated by Asteroid impact or nuclear explosions in the northwest of Black Sea. Natural Hazards, 2011, 58, 45-66.	1.6	1
156	Autocorrelation properties of the sunshine number and sunshine stability number. Meteorology and Atmospheric Physics, 2011, 112, 139-154.	0.9	19
157	New approach to measure the stability of the solar radiative regime. Theoretical and Applied Climatology, 2011, 103, 459-470.	1.3	55
158	Dynamics and Coastal Effects of Tsunamis Generated by Asteroids Impacting the Black Sea. Pure and Applied Geophysics, 2011, 168, 1813-1834.	0.8	4
159	Pneumatic and thermal design procedure and analysis of earth-to-air heat exchangers of registry type. Applied Energy, 2011, 88, 1266-1280.	5.1	31
160	Metamorphoses of cogeneration-based district heating in Romania: A case study. Energy Policy, 2011, 39, 269-280.	4.2	13
161	Modeling, validation and time-dependent simulation of the first large passive building in Romania. Renewable Energy, 2011, 36, 142-157.	4.3	49
162	Antarctica-to-Western Australia Liquid Freshwater Shipments Using Stauber Bags in a Paternoster-Like Transfer System: Inaugurating a Southern Ocean Antidrought Action Sea-Lane. Journal of Coastal Research, 2011, 277, 1005-1018.	0.1	2

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163	Case study for active solar space heating and domestic hot water preparation in a passive house. Journal of Renewable and Sustainable Energy, 2011, 3, 023102.	0.8	7
164	Geo-Engineering South Australia: The Case of Lake Eyre. , 2011, , 1549-1566.		0
165	Statistically <i>q</i>â€deformed and tauâ€deformed systems. Complexity, 2010, 15, 19-25.	0.9	3
166	Tables of Rosseland mean opacities for candidate atmospheres of life hosting free-floating planets. Open Physics, 2010, 8, .	0.8	7
167	Sub-brown dwarfs as seats of life based on non-polar solvents: Thermodynamic restrictions. Planetary and Space Science, 2010, 58, 1650-1659.	0.9	3
168	Aral Sea; Irretrievable Loss or Irtysh Imports?. Water Resources Management, 2010, 24, 597-616.	1.9	30
169	Transatlantic Freshwater Aqueduct. Water Resources Management, 2010, 24, 1645-1675.	1.9	2
170	Warm season cooling requirements for passive buildings in Southeastern Europe (Romania). Energy, 2010, 35, 3284-3300.	4.5	64
171	The Hormuz Strait Dam Macroproject. Environmental Science and Engineering, 2010, , 149-165.	0.1	0
172	Dune Sand Fixation: Mauritania Seawater Pipeline Macroproject. Environmental Science and Engineering, 2010, , 465-488.	0.1	1
173	Macro-Engineering Lake Eyre with Imported Seawater. Environmental Science and Engineering, 2010, , 553-581.	0.1	1
174	Aral Sea Partial Refill with Imported Caspian Sea Water. Environmental Science and Engineering, 2010, , 317-349.	0.1	0
175	Red Sea Heliohydropower: Bab-al-Mandab Sill Macro-Project. Environmental Science and Engineering, 2010, , 125-147.	0.1	0
176	Aral Sea Rehabilitation with Irtysh Imports. Environmental Science and Engineering, 2010, , 351-363.	0.1	0
177	ASTEROID IMPACTS OR NUCLEAR EXPLOSIONS IN THE NORTHERN PART OF BLACK SEA AND RISKS FOR POISONING THE INLAND POPULATION. Journal of Environmental Assessment Policy and Management, 2009, 11, 131-159.	4.3	1
178	Modelling of solar cells with down-conversion of high energy photons, anti-reflection coatings and light trapping. Energy Conversion and Management, 2009, 50, 328-336.	4.4	40
179	Improved model for solar cells with up-conversion of low-energy photons. Renewable Energy, 2009, 34, 1538-1544.	4.3	70
180	Exergy of nuclear radiation â€" a quantum statistical thermodynamics approach. Open Physics, 2009, 7, .	0.8	10

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181	Endoreversible thermodynamics approach for optimum oven operation. International Journal of Exergy, 2009, 6, 49.	0.2	2
182	Exergy of boson and fermion fluxes. International Journal of Exergy, 2009, 6, 749.	0.2	3
183	Available Solar Energy and Weather Forecasting on Mars Surface. , 2009, , 25-66.		3
184	Weather Influence on Solar Thermal Power Plants Operation on Mars. , 2009, , 99-138.		0
185	Ecopoiesis and Liquid Water Transportation on Mars. , 2009, , 661-682.		0
186	Weather Influence on PV Solar Cells Operation on Mars. , 2009, , 67-82.		1
187	Risks for poisoning of coastal and inland population due to asteroid impacts in Southern regions of Black Sea. Stochastic Environmental Research and Risk Assessment, 2008, 22, 461-476.	1.9	3
188	Sand dune fixation: A solarâ€powered Sahara seawater pipeline macroproject. Land Degradation and Development, 2008, 19, 676-691.	1.8	6
189	Theoretical derivation of heliostat tracking errors distribution. Solar Energy, 2008, 82, 1192-1197.	2.9	47
190	Exergy transported by particle fluxes. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 1818-1826.	1.2	11
191	Exact and approximate statistical approaches for the exergy of blackbody radiation. Open Physics, 2008, 6, .	0.8	11
192	Optimal control of flow in solar collector systems with fully mixed water storage tanks. Energy Conversion and Management, 2008, 49, 169-184.	4.4	68
193	PHYSICAL TEMPERATURE AND PRESSURE IN FULLY NONEXTENSIVE STATISTICAL THERMODYNAMICS. International Journal of Modeling, Simulation, and Scientific Computing, 2008, 11, 43-54.	0.9	6
194	An extended model for upconversion in solar cells. Journal of Applied Physics, 2008, 104, .	1.1	31
195	Radiation exergy: the case of thermal and nuclear energy. International Journal of Nuclear Governance, Economy and Ecology, 2008, 2, 90.	0.2	4
196	Irreversible Jaynes Engine for More Efficient Heating. Journal of Non-Equilibrium Thermodynamics, 2008, 33, .	2.4	2
197	Unified upper bound for photothermal and photovoltaic conversion efficiency. Journal of Applied Physics, 2008, 103, .	1.1	25
198	Poisonous Effects of Asteroid Impacts or Nuclear Explosions in the Western Regions of the Black Sea. Earth Interactions, 2007, 11, 1-27.	0.7	6

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199	Asteroid impacts or nuclear explosions in the Black Sea may lead to poisoning of the coastal population. International Journal of Environmental Studies, 2007, 64, 19-29.	0.7	1
200	Power from closing the Red Sea: economic and ecological costs and benefits following the isolation of the Red Sea. International Journal of Global Environmental Issues, 2007, 7, 341.	0.1	8
201	Influence of some design parameters on the efficiency of solar cells with down-conversion and down shifting of high-energy photons. Journal of Applied Physics, 2007, 102, 073102.	1.1	47
202	Improved model for solar cells with down-conversion and down-shifting of high-energy photons. Journal Physics D: Applied Physics, 2007, 40, 341-352.	1.3	60
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