Fernando Angulo-Brown

List of Publications by Year
in descending order

106	2,305	236925 25	254184 43
papers	citations	h-index	g-index

109	109	109	735
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermodynamic restrictions on the heat capacity of a fermion gas. Physica A: Statistical Mechanics and Its Applications, 2022, 592, 126782.	2.6	0
2	Review and Update on Some Connections between a Spring-Block SOC Model and Actual Seismicity in the Case of Subduction Zones. Entropy, 2022, 24, 435.	2.2	4
3	Optimization of heat engines using different heat transfer laws by means of the method of saving functions. Journal of Physics: Conference Series, 2021, 1723, 012066.	0.4	0
4	Some Common Features Between a Spring-Block Self-Organized Critical Model, Stickâ€“Slip Experiments with Sandpapers and Actual Seismicity. Pure and Applied Geophysics, 2020, 177, 889-903.	1.9	7
5	A Simple Model to Relate the Elastic Ratio Gamma of a Critically Self-Organized Spring-Block Model with the Age of a Lithospheric Downgoing Plate in a Subduction Zone. Entropy, 2020, 22, 868.	2.2	6
6	Nowcasting Avalanches as Earthquakes and the Predictability of Strong Avalanches in the Olami-Feder-Christensen Model. Entropy, 2020, 22, 1228.	2.2	28
7	Thermodynamic analysis of an array of isothermal endoreversible electric engines. European Physical Journal Plus, 2020, 135, 1.	2.6	14
8	Distance distributions of human settlements. Chaos, Solitons and Fractals, 2020, 136, 109808.	5.1	1
9	Multifractal Spectrum Curvature of RR Tachograms of Healthy People and Patients with Congestive Heart Failure, a New Tool to Assess Health Conditions. Entropy, 2019, 21, 581.	2.2	10
10	On some inconsistences between two accepted approaches to treat reversible thermal cycles. Journal of Physics: Conference Series, 2019, 1221, 012045.	0.4	0
11	Anticorrelation between the elastic ratio Î³ and the b-value in a spring-block SOC-model of earthquakes. Journal of Physics: Conference Series, 2019, 1221, 012061.	0.4	3
12	A Comparative Study of Geoelectric Signals Possibly Associated with the Occurrence of Two Ms > 7 EQs in the South Pacific Coast of Mexico. Entropy, 2019, 21, 1225.	2.2	0
13	Ultrarelativistic Gas with Zero Chemical Potential. Symmetry, 2019, 11, 249.	2.2	0
14	Multifractality of Pseudo-Velocities and Seismic Quiescence Associated with the Tehuantepec M8.2 EQ. Entropy, 2018, 20, 961.	2.2	2
15	A Simple Thermodynamic Model of the Internal Convective Zone of the Earth. Entropy, 2018, 20, 985.	2.2	1
16	On the possible correlation between the Gutenberg-Richter parameters of the frequency-magnitude relationship. Journal of Seismology, 2018, 22, 1025-1035.	1.3	18
17	Ecological efficiency of finite-time thermodynamics: A molecular dynamics study. Physical Review E, 2018, 98, 022130.	2.1	15
18	Thermodynamic and thermoeconomic optimization of coupled thermal and chemical engines by means of an equivalent array of uncoupled endoreversible engines. European Physical Journal Plus, 2018, 133, 1.	2.6	15

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19	A graphic approach to include dissipative-like effects in reversible thermal cycles. European Physical Journal B, 2017, 90, 1.	1.5	4
20	Thermodynamic and themoeconomic optimization of isothermal endoreversible chemical engine models. Physica A: Statistical Mechanics and Its Applications, 2017, 488, 149-161.	2.6	15
21	A simple model for determining the atmospheric thermal conductivity. Journal of Physics: Conference Series, 2017, 792, 012088.	0.4	0
22	Ecological optimization of a family of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.gif" display="inline" overflow="scroll"><mml:mi>n</mml:mi></mml:math>-MÃ¼ser engines for an arbitrary value of the solar concentration factor. Physica A: Statistical Mechanics and Its Applications, 2017, 469, 250-255.	2.6	11
23	Thermoeconomic Optimization of an Irreversible Novikov Plant Model under Different Regimes of Performance. Entropy, 2017, 19, 118.	2.2	10
24	On reversible, endoreversible, and irreversible heat device cycles versus the Carnot cycle: a pedagogical approach to account for losses. European Journal of Physics, 2016, 37, 045103.	0.6	12
25	Is the (3 + 1)-d nature of the universe a thermodynamic necessity?. Europhysics Letters, 2016, 113, 40006.	2.0	13
26	The role of the Stefanâ€“Boltzmann law in the thermodynamic optimization of an <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si18.gif" display="inline" overflow="scroll"><mml:mi>n</mml:mi></mml:math>-MÃ¼ser engine. Physica A: Statistical Mechanics and Its Applications, 2016, 444, 914-921.	2.6	18
27	Equivalent norms in ${{mathbb{R}}}^{n}$ from thermodynamical laws. European Journal of Physics, 2015, 36, 065021.	0.6	2
28	A Possible Cosmological Application of Some Thermodynamic Properties of the Black Body Radiation in n-Dimensional Euclidean Spaces. Entropy, 2015, 17, 4563-4581.	2.2	6
29	Crossover scaling evaluation in mixed correlated signals by means of Detrended Fluctuation Analysis. Journal of Physics: Conference Series, 2015, 582, 012062.	0.4	2
30	Patterns of significant seismic quiescence on the Mexican Pacific coast. Physics and Chemistry of the Earth, 2015, 85-86, 119-130.	2.9	4
31	Distributions of city sizes in Mexico during the 20th century. Chaos, Solitons and Fractals, 2015, 73, 64-70.	5.1	12
32	Thermoeconomical analysis of a non-endoreversible Novikov power plant model under different regimes of performance. Journal of Physics: Conference Series, 2015, 582, 012050.	0.4	1
33	Deduction of Lorentz Transformations from Classical Thermodynamics. Entropy, 2015, 17, 197-213.	2.2	3
34	Restrictions on linear heat capacities from Joule-Brayton maximum-work cycle efficiency. Physical Review E, 2014, 89, 022134.	2.1	7
35	Cycle-to-Cycle Variability. , 2014, , 107-145.		1
36	Validating and Comparing with Experiments and Other Models. , 2014, , 57-86.		0

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37	Connection between maximum-work and maximum-power thermal cycles. Physical Review E, 2013, 88, 052142.	2.1	34
38	The universality of the Carnot theorem. European Journal of Physics, 2013, 34, 273-289.	0.6	5
39	Fluctuations in the Energetic Properties of a Spark-Ignition Engine Model with Variability. Entropy, 2013, 15, 3277-3296.	2.2	6
40	An Endoreversible Thermodynamic Model Applied to the Convective Zone of the Sun. ISRN Astronomy and Astrophysics, 2012, 2012, 1-7.	0.2	1
41	The Faint Young Sun Paradox: A Simplified Thermodynamic Approach. Advances in Astronomy, 2012, 2012, 1-10.	1.1	1
42	Simulation and properties of a non-homogeneous spring-block earthquake model with asperities. Acta Geophysica, 2012, 60, 740-757.	2.0	10
43	Parameters of Higuchiâ€™s method to characterize primary waves in some seismograms from the Mexican subduction zone. Acta Geophysica, 2012, 60, 910-927.	2.0	5
44	Entropy of geoelectrical time series in the natural time domain. Natural Hazards and Earth System Sciences, 2011, 11, 219-225.	3.6	28
45	On cycle-to-cycle heat release variations in a simulated spark ignition heat engine. Applied Energy, 2011, 88, 1557-1567.	10.1	47
46	Scaling Differences of Heartbeat Excursions Between Wake and Sleep Periods. Methods in Enzymology, 2011, 487, 409-429.	1.0	3
47	DIFFERENCES IN THE STABILITY OF THE HEART INTERBEAT RATE DURING WAKE AND SLEEP PERIODS. Fluctuation and Noise Letters, 2011, 10, 405-416.	1.5	2
48	Finite-Time Thermoeconomic Optimization of a Solar-Driven Heat Engine Model. Entropy, 2011, 13, 171-183.	2.2	21
49	Pattern synchrony in electrical signals related to earthquake activity. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 1239-1252.	2.6	11
50	Monofractal and multifractal analysis of simulated heat release fluctuations in a spark ignition heat engine. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 5662-5670.	2.6	27
51	A COMPARATIVE STUDY OF VALIDITY RANGES OF SOME FRACTAL METHODS OF TIME SERIES ANALYSIS. Fractals, 2010, 18, 235-246.	3.7	7
52	Evolution in time and scales of the stability of heart interbeat rate. Europhysics Letters, 2010, 92, 68006.	2.0	3
53	A Proposal of Ecologic Taxes Based on Thermo-Economic Performance of Heat Engine Models. Energies, 2009, 2, 1042-1056.	3.1	10
54	Correlations and variability in electrical signals related to earthquake activity. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 4218-4228.	2.6	15

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55	A nonlinear strategy to reveal seismic precursory signatures in earthquake-related self-potential signals. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 2036-2040.	2.6	45
56	Scaling instability in self-potential earthquake-related signals. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 1181-1186.	2.6	15
57	Possible future scenarios for atmospheric concentration of greenhouse gases: A simplified thermodynamic approach. Renewable Energy, 2009, 34, 2344-2352.	8.9	8
58	Comparative analysis of two ecological type modes of performance for a simple energy converter. Journal of the Energy Institute, 2009, 82, 223-227.	5.3	28
59	Sliding size distribution in a simple spring-block system with asperities. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 3137-3144.	2.6	13
60	NON-UNIFORM SCALING BEHAVIOR IN SELF-POTENTIAL EARTHQUAKE-RELATED SIGNALS. Fluctuation and Noise Letters, 2008, 08, L261-L267.	1.5	2
61	First-order irreversible thermodynamic approach to a simple energy converter. Physical Review E, 2008, 77, 011123.	2.1	38
62	Statistical features of seismoelectric signals prior to M7.4 Guerrero-Oaxaca earthquake (MÃ©xico). Natural Hazards and Earth System Sciences, 2008, 8, 1001-1007.	3.6	15
63	Multiscale entropy analysis of electroseismic time series. Natural Hazards and Earth System Sciences, 2008, 8, 855-860.	3.6	44
64	SOME FRACTAL CELLULAR AUTOMATA MODELS OF SEISMIC FAULTS. Fractals, 2007, 15, 207-215.	3.7	4
65	Comment on â€œConvective heat transfer law for an endoreversible engineâ€•[J. Appl. Phys. 100, 014911 (2006)]. Journal of Applied Physics, 2007, 101, 036106.	2.5	0
66	Thermoeconomic optimisation of Novikov power plant model under maximum ecological conditions. Journal of the Energy Institute, 2007, 80, 96-104.	5.3	34
67	A statistical analysis of electric self-potential time series associated to two 1993 earthquakes in Mexico. Natural Hazards and Earth System Sciences, 2007, 7, 549-556.	3.6	11
68	A comparison of ground geoelectric activity between three regions of different level of seismicity. Natural Hazards and Earth System Sciences, 2007, 7, 591-598.	3.6	8
69	Time Evolution of the Fractal Dimension of Electric Self-Potential Time Series. , 2007, , 407-418.		2
70	Thermoeconomic optimisation of endoreversible heat engine under maximum modified ecological criterion. Journal of the Energy Institute, 2007, 80, 232-238.	5.3	19
71	A simplified irreversible Otto engine model with fluctuations in the combustion heat. International Journal of Ambient Energy, 2006, 27, 181-192.	2.5	21
72	Company size distribution for developing countries. Physica A: Statistical Mechanics and Its Applications, 2006, 359, 607-618.	2.6	28

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73	Stability Analysis of an Endoreversible Heat Engine with Stefan-Boltzmann Heat Transfer Law Working in Maximum-Power-Like Regime. Open Systems and Information Dynamics, 2006, 13, 43-53.	1.2	13
74	Dynamic Robustness and Thermodynamic Optimization in a Non-Endoreversible Curzonâ€“Ahlborn Engine. Journal of Non-Equilibrium Thermodynamics, 2006, 31, .	4.2	36
75	Influence of the loss of time-constants repertoire in pathologic heartbeat dynamics. Physica A: Statistical Mechanics and Its Applications, 2005, 348, 304-316.	2.6	26
76	SOME CASES OF CROSSOVER BEHAVIOR IN HEART INTERBEAT AND ELECTROSEISMIC TIME SERIES. Fractals, 2005, 13, 253-263.	3.7	29
77	A proposal for relativistic transformations in thermodynamics. Journal of Physics A, 2005, 38, 2821-2834.	1.6	21
78	Spectral and multifractal study of electroseismic time series associated to the <i>M_w</i>=6.5 earthquake of 24 October 1993 in Mexico. Natural Hazards and Earth System Sciences, 2004, 4, 703-709.	3.6	31
79	A Variational Ecological-Type Optimization of Some Thermal-Engine Models. Open Systems and Information Dynamics, 2004, 11, 123-138.	1.2	11
80	Statistical behavior of the spectral exponent and the correlation time of electric self-potential time series associated to the Ms=7.4 September 14, 1995 earthquake in Mexico. Physics and Chemistry of the Earth, 2004, 29, 305-312.	2.9	19
81	On Some Nonendoreversible Engine Models with Nonlinear Heat Transfer Laws. Open Systems and Information Dynamics, 2003, 10, 351-375.	1.2	29
82	Simple model of the aging effect in heart interbeat time series. Physical Review E, 2003, 67, 052901.	2.1	37
83	FRACTAL CHANGES IN HEART RATE DYNAMICS WITH AGING AND HEART FAILURE. Fluctuation and Noise Letters, 2003, 03, L83-L89.	1.5	14
84	Some further analogies between the Bak-Sneppen model for biological evolution and the spring-block earthquake model. Canadian Journal of Physics, 2002, 80, 1675-1685.	1.1	0
85	A variational approach to ecological-type optimization criteria for finite-time thermal engine models. Journal Physics D: Applied Physics, 2002, 35, 1089-1093.	2.8	18
86	Local stability analysis of an endoreversible Curzon-Ahborn-Novikov engine working in a maximum-power-like regime. Journal Physics D: Applied Physics, 2001, 34, 2068-2072.	2.8	50
87	Reply to â€œComment on â€˜A general property of endoreversible thermal enginesâ€™â€Šâ€•[J. Appl. Phys. 89, 1518 (2001)]. Journal of Applied Physics, 2001, 89, 1520-1521.	2.5	27
88	A general property of non-endoreversible thermal cycles. Journal Physics D: Applied Physics, 1999, 32, 1415-1420.	2.8	42
89	A variational optimization of a finite-time thermal cycle with a nonlinear heat transfer law. Energy, 1999, 24, 997-1008.	8.8	15
90	Further seismic properties of a spring-block earthquake model. Geophysical Journal International, 1999, 139, 410-418.	2.4	17

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91	A simple relationship between the sunlight concentration factor and the thermal conductance in a class of photothermal engines. Journal Physics D: Applied Physics, 1998, 31, 1742-1744.	2.8	1
92	Black-body radiation and the maximum entropy production regime. European Journal of Physics, 1998, 19, 361-369.	0.6	13
93	A MÃ¼ser - Curzon - Ahlborn engine model for photothermal conversion. Journal Physics D: Applied Physics, 1997, 30, 2490-2496.	2.8	9
94	A general property of endoreversible thermal engines. Journal of Applied Physics, 1997, 81, 2973-2979.	2.5	84
95	A Thermodynamic Approach to the Compromise Between Power and Efficiency in Muscle Contraction. Journal of Theoretical Biology, 1997, 189, 391-398.	1.7	15
96	A non-endoreversible Otto cycle model: improving power output and efficiency. Journal Physics D: Applied Physics, 1996, 29, 80-83.	2.8	60
97	A nonendoreversible model for wind energy as a solarâ€driven heat engine. Journal of Applied Physics, 1996, 80, 4872-4876.	2.5	12
98	van't Hoff's Equation for Endoreversible Chemical Reactions. The Journal of Physical Chemistry, 1996, 100, 9193-9195.	2.9	23
99	Thermodynamic optimality in some biochemical reactions. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1995, 17, 87-90.	0.4	44
100	Electric field patterns as seismic precursors. Geophysical Research Letters, 1995, 22, 3087-3090.	4.0	21
101	Compression ratio of an optimized air standard Otto-cycle model. European Journal of Physics, 1994, 15, 38-42.	0.6	111
102	Finite-time thermodynamics approach to the superconducting transition. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 183, 431-436.	2.1	7
103	Endoreversible thermal cycle with a nonlinear heat transfer law. Journal of Applied Physics, 1993, 74, 2216-2219.	2.5	86
104	An ecological optimization criterion for finiteâ€time heat engines. Journal of Applied Physics, 1991, 69, 7465-7469.	2.5	498
105	Symbolic dynamics of the cubic map. Physica D: Nonlinear Phenomena, 1985, 14, 374-386.	2.8	14
106	Some Complexity Studies of Electroseismic Signals from Mexican Subduction Zone. , 0, , .		0