Efthimios S Skordas

List of Publications by Year
in descending order

114 papers	4,467 citations	126708 33 h-index	114278 63 g-index
123 all docs	123 docs citations	123 times ranked	832 citing authors

#	Article	IF	Citations
1	Thermodynamics of Point Defects in Solids and Relation with the Bulk Properties: Recent Results. Crystals, 2022, 12, 686.	1.0	9
2	Order Parameter and Entropy of Seismicity in Natural Time before Major Earthquakes: Recent Results. Geosciences (Switzerland), 2022, 12, 225.	1.0	13
3	Remote sensing natural time analysis of heartbeat data by means of a portable photoplethysmography device. International Journal of Remote Sensing, 2021, 42, 2292-2302.	1.3	9
4	Estimating the Epicenter of an Impending Strong Earthquake by Combining the Seismicity Order Parameter Variability Analysis with Earthquake Networks and Nowcasting: Application in the Eastern Mediterranean. Applied Sciences (Switzerland), 2021, 11, 10093.	1.3	18
5	The unusual case of the ultra-deep 2015 Ogasawara earthquake (MW7.9): Natural time analysis. Europhysics Letters, 2021, 135, 49002.	0.7	5
6	Estimating the Epicenter of a Future Strong Earthquake in Southern California, Mexico, and Central America by Means of Natural Time Analysis and Earthquake Nowcasting. Entropy, 2021, 23, 1658.	1.1	20
7	Detrended fluctuation analysis of seismicity and order parameter fluctuations before the M7.1 Ridgecrest earthquake. Natural Hazards, 2020, 100, 697-711.	1.6	18
8	Natural Time Analysis of Seismicity within the Mexican Flat Slab before the M7.1 Earthquake on 19 September 2017. Entropy, 2020, 22, 730.	1.1	17
9	Applying the cBÎ© thermodynamical model to LiF using its equation of state obtained from high pressure diamond anvil cell measurements. Solid State Ionics, 2020, 354, 115404.	1.3	7
10	Natural Time Analysis: The Area under the Receiver Operating Characteristic Curve of the Order Parameter Fluctuations Minima Preceding Major Earthquakes. Entropy, 2020, 22, 583.	1.1	26
11	Fluctuations of the entropy change under time reversal: Further investigations on identifying the occurrence time of an impending major earthquake. Europhysics Letters, 2020, 130, 29001.	0.7	33
12	Precursory variations of Tsallis non-extensive statistical mechanics entropic index associated with the M9 Tohoku earthquake in 2011. European Physical Journal: Special Topics, 2020, 229, 851-859.	1.2	8
13	On the Statistical Significance of the Variability Minima of the Order Parameter of Seismicity by Means of Event Coincidence Analysis. Applied Sciences (Switzerland), 2020, 10, 662.	1.3	17
14	Self-organized criticality and earthquake predictability: A long-standing question in the light of natural time analysis. Europhysics Letters, 2020, 132, 29001.	0.7	43
15	Phenomena preceding major earthquakes interconnected through a physical model. Annales Geophysicae, 2019, 37, 315-324.	0.6	40
16	Natural time analysis: Important changes of the order parameter of seismicity preceding the 2011 M9 Tohoku earthquake in Japan. Europhysics Letters, 2019, 125, 69001.	0.7	18
17	Interconnection of a thermodynamical model for point defect parameters in solids with the dynamical theory of diffusion. Solid State Ionics, 2019, 335, 82-85.	1.3	10
18	Identifying the Occurrence Time of the Deadly Mexico M8.2 Earthquake on 7 September 2017. Entropy, 2019, 21, 301.	1.1	12

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19	Natural Time Analysis: Results Related to Two Earthquakes in Greece during 2019. Proceedings (mdpi), 2019, 24, 20.	0.2	2
20	A Prototype Photoplethysmography Electronic Device that Distinguishes Congestive Heart Failure from Healthy Individuals by Applying Natural Time Analysis. Electronics (Switzerland), 2019, 8, 1288.	1.8	30
21	Identifying the occurrence time of an impending major earthquake by means of the fluctuations of the entropy change under time reversal. Europhysics Letters, 2019, 128, 49001.	0.7	6
22	Investigation of the temporal correlations between earthquake magnitudes before the Mexico M8.2 earthquake on 7 September 2017. Physica A: Statistical Mechanics and Its Applications, 2019, 517, 475-483.	1.2	13
23	Study in Natural Time of Geoelectric Field and Seismicity Changes Preceding the Mw6.8 Earthquake on 25 October 2018 in Greece. Entropy, 2018, 20, 882.	1.1	16
24	A remarkable change of the entropy of seismicity in natural time under time reversal before the super-giant M9 Tohoku earthquake on 11 March 2011. Europhysics Letters, 2018, 124, 29001.	0.7	39
25	Tsallis Entropy Index q and the Complexity Measure of Seismicity in Natural Time under Time Reversal before the M9 Tohoku Earthquake in 2011. Entropy, 2018, 20, 757.	1.1	36
26	Study of Geo-Electric Data Collected by the Joint EMSEV-Bishkek RS-RAS Cooperation: Possible Earthquake Precursors. Entropy, 2018, 20, 614.	1.1	2
27	Natural time analysis: On the deadly Mexico M8.2 earthquake on 7 September 2017. Physica A: Statistical Mechanics and Its Applications, 2018, 506, 625-634.	1.2	40
28	Natural Time Analysis of Seismic Time Series. , 2018, , 199-235.		3
29	Micro-scale, mid-scale, and macro-scale in global seismicity identified by empirical mode decomposition and their multifractal characteristics. Scientific Reports, 2018, 8, 9206.	1.6	33
30	Comparison of the R-R intervals in ECG and Oximeter signals to be used in complexity measures of Natural Time Analysis. , 2018, , .		4
31	Seismic electric signals in seismic prone areas. Earthquake Science, 2018, 31, 44-51.	0.4	15
32	Identifying the occurrence time of an impending major earthquake: a review. Earthquake Science, 2017, 30, 209-218.	0.4	33
33	M W9 Tohoku earthquake in 2011 in Japan: precursors uncovered by natural time analysis. Earthquake Science, 2017, 30, 183-191.	0.4	8
34	Interconnection of defect entropies and enthalpies in BaF₂ revisited. Modern Physics Letters B, 2016, 30, 1650062.	1.0	1
35	A tentative model for the explanation of BÃ¥th law using the order parameter of seismicity in natural time. Earthquake Science, 2016, 29, 311-319.	0.4	7
36	Bulk moduli of PbSxSe1â^'x, PbSxTe1â^'x and PbSexTe1â^'x from the combination of the cBÎ© model with the modified Born theory compared to generalized gradient approximation. Modern Physics Letters B, 2016, 30, 1650409.	1.0	3

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37	Pressure and temperature dependence of the oxygen self-diffusion activation volume in UO2 by a thermodynamical model. Solid State Ionics, 2016, 290, 121-123.	1.3	14
38	On the Motivation and Foundation of Natural Time Analysis: Useful Remarks. Acta Geophysica, 2016, 64, 841-852.	1.0	9
39	Statistical Significance of Minimum of the Order Parameter Fluctuations of Seismicity Before Major Earthquakes in Japan. Pure and Applied Geophysics, 2016, 173, 165-172.	0.8	17
40	Bulk moduli of PbSxSe1â^'x, PbSxTe1â^'x and PbSexTe1â^'x from a thermodynamical model compared to generalized gradient approximation approach. Materials Science in Semiconductor Processing, 2016, 43, 65-68.	1.9	3
41	Estimating the Compressibility of Osmium from Recent Measurements of Irâ€“Os Alloys under High Pressure. Journal of Physical Chemistry A, 2016, 120, 1601-1604.	1.1	15
42	Minima of the fluctuations of the order parameter of global seismicity. Chaos, 2015, 25, 063110.	1.0	17
43	Identifying the occurrence time of an impending mainshock: a very recent case. Earthquake Science, 2015, 28, 215-222.	0.4	13
44	Spatiotemporal variations of seismicity before major earthquakes in the Japanese area and their relation with the epicentral locations. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 986-989.	3.3	85
45	On the increase of the â€œnon-uniformâ€•scaling of the magnetic field variations before the Mw9.0 earthquake in Japan in 2011. Chaos, 2014, 24, 023131.	1.0	7
46	Application of the Huang-Hilbert transform and natural time to the analysis of seismic electric signal activities. Chaos, 2014, 24, 043102.	1.0	1
47	Study of the temporal correlations in the magnitude time series before major earthquakes in Japan. Journal of Geophysical Research: Space Physics, 2014, 119, 9192-9206.	0.8	113
48	On the anomalous changes of seismicity and geomagnetic field prior to the 2011 9.0 Tohoku earthquake. Journal of Asian Earth Sciences, 2014, 80, 161-164.	1.0	34
49	Comment on â€œLiH as a Li+ and Hâ^' ion provider by Khang Hoang, Chris G. Van de Walle, Solid State Ionics 253 (2013) 53â€• Solid State Ionics, 2014, 261, 26-27.	1.3	20
50	Seismic Electric Signals: An additional fact showing their physical interconnection with seismicity. Tectonophysics, 2013, 589, 116-125.	0.9	127
51	A tentative model for estimating the compressibility of rock-salt AgCl x Br 1â€‰â^'â€‰x alloys. Pramana - Journal of Physics, 2013, 80, 307-313.	0.9	0
52	Minimum of the order parameter fluctuations of seismicity before major earthquakes in Japan. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13734-13738.	3.3	130
53	COMMENTS ON THE ELASTIC PROPERTIES IN SOLID SOLUTIONS OF SILVER HALIDES. Modern Physics Letters B, 2012, 26, 1250066.	1.0	3
54	Remarkable changes in the distribution of the order parameter of seismicity before mainshocks. Europhysics Letters, 2012, 100, 39002.	0.7	17

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55	Scale-specific order parameter fluctuations of seismicity before mainshocks: Natural time and Detrended Fluctuation Analysis. Europhysics Letters, 2012, 99, 59001.	0.7	41
56	Comment on â€œDependence of volume changes during solid solution formation and of volume size factor on solute volume, group number and crystalline structure by O. CoreÃ±o-Alonso, J. CoreÃ±o-Alonso, Intermetallics 2012; 22:142â€. Intermetallics, 2012, 25, 139.	1.8	0
57	Order parameter fluctuations in natural time and <i>b</i>-value variation before large earthquakes. Natural Hazards and Earth System Sciences, 2012, 12, 3473-3481.	1.5	28
58	Natural time analysis of critical phenomena. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11361-11364.	3.3	120
59	Identifying long-range correlated signals upon significant periodic data loss. Tectonophysics, 2011, 503, 189-194.	0.9	8
60	The change of the entropy in natural time under time-reversal in the Olamiâ€“Federâ€“Christensen earthquake model. Tectonophysics, 2011, 513, 49-53.	0.9	49
61	Scale-specific order parameter fluctuations of seismicity in natural time before mainshocks. Europhysics Letters, 2011, 96, 59002.	0.7	99
62	Similarity of fluctuations in systems exhibiting Self-Organized Criticality. Europhysics Letters, 2011, 96, 28006.	0.7	42
63	Natural Time Analysis: The New View of Time. , 2011, , .		168
64	Introduction to Seismic Electric Signals. , 2011, , 3-115.		15
65	Entropy in Natural Time. , 2011, , 159-187.		2
66	Natural Time Analysis of Electrocardiograms. , 2011, , 381-435.		2
67	Natural Time Analysis of Seismicity. , 2011, , 247-289.		0
68	Natural Time. Background. , 2011, , 119-157.		0
69	Natural Time Analysis of Dynamical Models. , 2011, , 341-380.		1
70	Natural Time Investigation of the Effect of Significant Data Loss on Identifying Seismic Electric Signals. , 2011, , 237-245.		0
71	Identifying the Occurrence Time of an Impending Mainshock. , 2011, , 291-339.		0
72	Natural Time Analysis of Seismic Electric Signals. , 2011, , 191-235.		1

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73	Defect entropies and enthalpies in BaF2. Open Physics, 2010, 8, .	0.8	3
74	On a universal relation for defect data in solids. Physica B: Condensed Matter, 2010, 405, 4320-4322.	1.3	2
75	Heterodiffusion coefficients in Î±-iron. Physica B: Condensed Matter, 2010, 405, 1915-1917.	1.3	2
76	Comments on the electrical conductivity in solid solutions of the silver halideâ€“cadmium halide systems. Solid State Ionics, 2010, 181, 1394-1397.	1.3	4
77	Effect of significant data loss on identifying electric signals that precede rupture estimated by detrended fluctuation analysis in natural time. Chaos, 2010, 20, 033111.	1.0	18
78	Order parameter fluctuations of seismicity in natural time before and after mainshocks. Europhysics Letters, 2010, 91, 59001.	0.7	72
79	Natural-time analysis of critical phenomena:â€‰Theâ€‰caseâ€‰ofâ€‰seismicity. Europhysics Letters, 2010, 92, 29002.	0.7	40
80	Nonextensivity and natural time: The case of seismicity. Physical Review E, 2010, 82, 021110.	0.8	114
81	Multiplicative cascades and seismicity in natural time. Physical Review E, 2009, 80, 022102.	0.8	42
82	Detrended fluctuation analysis of the magnetic and electric field variations that precede rupture. Chaos, 2009, 19, 023114.	1.0	88
83	Heart rate variability in natural time and 1/f â€œnoiseâ€. Europhysics Letters, 2009, 87, 18003.	0.7	32
84	Fluctuations, under time reversal, of the natural time and the entropy distinguish similar looking electric signals of different dynamics. Journal of Applied Physics, 2008, 103, 014906.	1.1	96
85	Investigation of seismicity after the initiation of a Seismic Electric Signal activity until the main shock. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2008, 84, 331-343.	1.6	121
86	Electric pulses some minutes before earthquake occurrences. Applied Physics Letters, 2007, 90, 064104.	1.5	17
87	Identifying sudden cardiac death risk and specifying its occurrence time by analyzing electrocardiograms in natural time. Applied Physics Letters, 2007, 91, .	1.5	86
88	Attempt to distinguish long-range temporal correlations from the statistics of the increments by natural time analysis. Physical Review E, 2006, 74, 021123.	0.8	140
89	On the recent advances in the study of seismic electric signals (VAN method). Physics and Chemistry of the Earth, 2006, 31, 189-197.	1.2	8
90	Additional evidence on some relationship between Seismic Electric Signals (SES) and earthquake focal mechanism. Tectonophysics, 2006, 412, 279-288.	0.9	23

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91	Entropy of seismic electric signals: Analysis in natural time under time reversal. Physical Review E, 2006, 73, 031114.	0.8	135
92	Flux avalanches inYBa2Cu3O7â˜xfilms and rice piles: Natural time domain analysis. Physical Review B, 2006, 73, .	1.1	32
93	Some properties of the entropy in the natural time. Physical Review E, 2005, 71, 032102.	0.8	132
94	Similarity of fluctuations in correlated systems: The case of seismicity. Physical Review E, 2005, 72, 041103.	0.8	175
95	Origin of the Usefulness of the Natural-Time Representation of Complex Time Series. Physical Review Letters, 2005, 94, 170601.	2.9	92
96	Time-difference between the electric field components of signals prior to major earthquakes. Applied Physics Letters, 2005, 86, 194101.	1.5	8
97	Natural entropy fluctuations discriminate similar-looking electric signals emitted from systems of different dynamics. Physical Review E, 2005, 71, 011110.	0.8	95
98	Entropy in the natural time domain. Physical Review E, 2004, 70, 011106.	0.8	108
99	On the difference in the rise times of the two SES electric field components. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2004, 80, 276-282.	1.6	5
100	A plausible universal behaviour of earthquakes in the natural time-domain. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2004, 80, 283-289.	1.6	54
101	A plausible explanation of the b-value in the Gutenberg-Richter law from first Principles. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2004, 80, 429-434.	1.6	15
102	Electric Fields that â€œArriveâ€•before the Time Derivative of the Magnetic Field prior to Major Earthquakes. Physical Review Letters, 2003, 91, 148501.	2.9	114
103	Attempt to distinguish electric signals of a dichotomous nature. Physical Review E, 2003, 68, 031106.	0.8	177
104	Long-range correlations in the electric signals that precede rupture: Further investigations. Physical Review E, 2003, 67, 021109.	0.8	184
105	Long-range correlations in the electric signals that precede rupture. Physical Review E, 2002, 66, 011902.	0.8	301
106	Magnetic field variations associated with SES. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2001, 77, 87-92.	1.6	14
107	Magnetic field variations associated with the SES before the 6.6 Grevena-Kozani earthquake. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2001, 77, 93-97.	1.6	17
108	Field experimentation on the detectability of co-seismic electric signals. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2000, 76, 51-56.	1.6	20

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109	Reply to â€œRe-Rebuttal to the Reply of Varotsos et al.â€, by F. Mulargia, W. Marzocchi, and P. Gasperini. Geophysical Research Letters, 1996, 23, 1345-1346.	1.5	2
110	Reply to â€œRebuttal to Replies I and II by Varotsos et al.â€•by F. Mulargia, W. Marzocchi and P. Gasperini. Geophysical Research Letters, 1996, 23, 1341-1342.	1.5	1
111	Maximum Likelihood Estimation of Seismic Hazard for Sweden. Natural Hazards, 1993, 7, 41-57.	1.6	14
112	The seismicity of Fennoscandia. Tectonophysics, 1992, 204, 193-195.	0.9	0
113	Spatial and temporal variations of Fennoscandian seismicity. Geophysical Journal International, 1992, 111, 577-588.	1.0	14
114	Causality between interplate (North Atlantic) and intraplate (Fennoscandia) seismicities. Tectonophysics, 1991, 185, 295-307.	0.9	24