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	Long-range correlations in the electric signals that precede rupture. Physical Review E, 2002, 66, 011902.	0.8	301
2	Long-range correlations in the electric signals that precede rupture: Further investigations. Physical Review E, 2003, 67, 021109.	0.8	184
3	Attempt to distinguish electric signals of a dichotomous nature. Physical Review E, 2003, 68, 031106.	0.8	177
4	Similarity of fluctuations in correlated systems: The case of seismicity. Physical Review E, 2005, 72, 041103.	0.8	175
5	Natural Time Analysis: The New View of Time. , 2011, , .		168
6	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
7	Entropy of seismic electric signals: Analysis in natural time under time reversal. Physical Review E, 2006, 73, 031114.	0.8	135
8	Some properties of the entropy in the natural time. Physical Review E, 2005, 71, 032102.	0.8	132
9	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
10	Seismic Electric Signals: An additional fact showing their physical interconnection with seismicity. Tectonophysics, 2013, 589, 116-125.	0.9	127
11	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
12	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
13	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
14	Nonextensivity and natural time: The case of seismicity. Physical Review E, 2010, 82, 021110.	0.8	114
15	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
16	Entropy in the natural time domain. Physical Review E, 2004, 70, 011106.	0.8	108
17	Scale-specific order parameter fluctuations of seismicity in natural time before mainshocks. Europhysics Letters, 2011, 96, 59002.	0.7	99
18	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

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19	Natural entropy fluctuations discriminate similar-looking electric signals emitted from systems of different dynamics. Physical Review E, 2005, 71, 011110.	0.8	95
20	Origin of the Usefulness of the Natural-Time Representation of Complex Time Series. Physical Review Letters, 2005, 94, 170601.	2.9	92
21	Detrended fluctuation analysis of the magnetic and electric field variations that precede rupture. Chaos, 2009, 19, 023114.	1.0	88
22	Identifying sudden cardiac death risk and specifying its occurrence time by analyzing electrocardiograms in natural time. Applied Physics Letters, 2007, 91, .	1.5	86
23	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
24	Order parameter fluctuations of seismicity in natural time before and after mainshocks. Europhysics Letters, 2010, 91, 59001.	0.7	72
25	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
26	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
27	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
28	Multiplicative cascades and seismicity in natural time. Physical Review E, 2009, 80, 022102.	0.8	42
29	Similarity of fluctuations in systems exhibiting Self-Organized Criticality. Europhysics Letters, 2011, 96, 28006.	0.7	42
30	Scale-specific order parameter fluctuations of seismicity before mainshocks: Natural time and Detrended Fluctuation Analysis. Europhysics Letters, 2012, 99, 59001.	0.7	41
31	Natural-time analysis of critical phenomena:â€‰Theâ€‰caseâ€‰ofâ€‰seismicity. Europhysics Letters, 2010, 92, 29002.	0.7	40
32	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
33	Phenomena preceding major earthquakes interconnected through a physical model. Annales Geophysicae, 2019, 37, 315-324.	0.6	40
34	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
35	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
36	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

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37	Identifying the occurrence time of an impending major earthquake: a review. Earthquake Science, 2017, 30, 209-218.	0.4	33
38	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
39	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
40	Flux avalanches inYBa2Cu3O7â^'xfilms and rice piles: Natural time domain analysis. Physical Review B, 2006, 73, .	1.1	32
41	Heart rate variability in natural time and 1/f â€œnoiseâ€• Europhysics Letters, 2009, 87, 18003.	0.7	32
42	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
43	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
44	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
45	Causality between interplate (North Atlantic) and intraplate (Fennoscandia) seismicities. Tectonophysics, 1991, 185, 295-307.	0.9	24
46	Additional evidence on some relationship between Seismic Electric Signals (SES) and earthquake focal mechanism. Tectonophysics, 2006, 412, 279-288.	0.9	23
47	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
48	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
49	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
50	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
51	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
52	Detrended fluctuation analysis of seismicity and order parameter fluctuations before the M7.1 Ridgecrest earthquake. Natural Hazards, 2020, 100, 697-711.	1.6	18
53	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
54	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

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55	Electric pulses some minutes before earthquake occurrences. Applied Physics Letters, 2007, 90, 064104.	1.5	17
56	Remarkable changes in the distribution of the order parameter of seismicity before mainshocks. Europhysics Letters, 2012, 100, 39002.	0.7	17
57	Minima of the fluctuations of the order parameter of global seismicity. Chaos, 2015, 25, 063110.	1.0	17
58	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
59	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
60	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
61	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
62	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
63	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
64	Introduction to Seismic Electric Signals. , 2011, , 3-115.		15
65	Seismic electric signals in seismic prone areas. Earthquake Science, 2018, 31, 44-51.	0.4	15
66	Spatial and temporal variations of Fennoscandian seismicity. Geophysical Journal International, 1992, 111, 577-588.	1.0	14
67	Maximum Likelihood Estimation of Seismic Hazard for Sweden. Natural Hazards, 1993, 7, 41-57.	1.6	14
68	Magnetic field variations associated with SES. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2001, 77, 87-92.	1.6	14
69	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
70	Identifying the occurrence time of an impending mainshock: a very recent case. Earthquake Science, 2015, 28, 215-222.	0.4	13
71	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
72	Order Parameter and Entropy of Seismicity in Natural Time before Major Earthquakes: Recent Results. Geosciences (Switzerland), 2022, 12, 225.	1.0	13

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73	Identifying the Occurrence Time of the Deadly Mexico M8.2 Earthquake on 7 September 2017. Entropy, 2019, 21, 301.	1.1	12
74	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
75	On the Motivation and Foundation of Natural Time Analysis: Useful Remarks. Acta Geophysica, 2016, 64, 841-852.	1.0	9
76	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
77	Thermodynamics of Point Defects in Solids and Relation with the Bulk Properties: Recent Results. Crystals, 2022, 12, 686.	1.0	9
78	Time-difference between the electric field components of signals prior to major earthquakes. Applied Physics Letters, 2005, 86, 194101.	1.5	8
79	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
80	Identifying long-range correlated signals upon significant periodic data loss. Tectonophysics, 2011, 503, 189-194.	0.9	8
81	M W9 Tohoku earthquake in 2011 in Japan: precursors uncovered by natural time analysis. Earthquake Science, 2017, 30, 183-191.	0.4	8
82	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
83	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
84	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
85	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
86	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
87	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
88	The unusual case of the ultra-deep 2015 Ogasawara earthquake (MW7.9): Natural time analysis. Europhysics Letters, 2021, 135, 49002.	0.7	5
89	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
90	Comparison of the R-R intervals in ECG and Oximeter signals to be used in complexity measures of Natural Time Analysis. , 2018, , .		4

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91	Defect entropies and enthalpies in BaF2. Open Physics, 2010, 8, .	0.8	3
92	COMMENTS ON THE ELASTIC PROPERTIES IN SOLID SOLUTIONS OF SILVER HALIDES. Modern Physics Letters B, 2012, 26, 1250066.	1.0	3
93	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
94	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
95	Natural Time Analysis of Seismic Time Series. , 2018, , 199-235.		3
96	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
97	On a universal relation for defect data in solids. Physica B: Condensed Matter, 2010, 405, 4320-4322.	1.3	2
98	Heterodiffusion coefficients in Î±-iron. Physica B: Condensed Matter, 2010, 405, 1915-1917.	1.3	2
99	Study of Geo-Electric Data Collected by the Joint EMSEV-Bishkek RS-RAS Cooperation: Possible Earthquake Precursors. Entropy, 2018, 20, 614.	1.1	2
100	Natural Time Analysis: Results Related to Two Earthquakes in Greece during 2019. Proceedings (mdpi), 2019, 24, 20.	0.2	2
101	Entropy in Natural Time. , 2011, , 159-187.		2
102	Natural Time Analysis of Electrocardiograms. , 2011, , 381-435.		2
103	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
104	Application of the Huang-Hilbert transform and natural time to the analysis of seismic electric signal activities. Chaos, 2014, 24, 043102.	1.0	1
105	Interconnection of defect entropies and enthalpies in BaF₂ revisited. Modern Physics Letters B, 2016, 30, 1650062.	1.0	1
106	Natural Time Analysis of Dynamical Models. , 2011, , 341-380.		1
107	Natural Time Analysis of Seismic Electric Signals. , 2011, , 191-235.		1
108	The seismicity of Fennoscandia. Tectonophysics, 1992, 204, 193-195.	0.9	0

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109	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
110	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
111	Natural Time Analysis of Seismicity. , 2011, , 247-289.		0
112	Natural Time. Background. , 2011, , 119-157.		0
113	Natural Time Investigation of the Effect of Significant Data Loss on Identifying Seismic Electric Signals. , 2011, , 237-245.		0
114	Identifying the Occurrence Time of an Impending Mainshock. , 2011, , 291-339.		0