

Stelios M Potirakis

List of Publications by Year in descending order

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124
papers

1,423
citations

361045

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476904

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137
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137
docs citations

137
times ranked

753
citing authors

#	ARTICLE	IF	CITATIONS
1	Post-spontaneous-symmetry-breaking power-laws after a very strong earthquake: Indication for the preparation of a new strong earthquake or not?. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2022, 589, 126607.	1.2	3
2	Seismogenic Anomalies in Atmospheric Gravity Waves as Observed from SABER/TIMED Satellite during Large Earthquakes. <i>Journal of Sensors</i> , 2022, 2022, 1-23.	0.6	11
3	Application of the method of parallel trajectories on modeling the dynamics of COVID-19 third wave. <i>Chaos</i> , 2022, 32, 011103.	1.0	2
4	Direct and indirect evidence of pre-seismic electromagnetic emissions associated with two large earthquakes in Japan. <i>Natural Hazards</i> , 2022, 112, 2403-2432.	1.6	8
5	Unusual Surface Latent Heat Flux Variations and Their Critical Dynamics Revealed before Strong Earthquakes. <i>Entropy</i> , 2022, 24, 23.	1.1	18
6	A hybrid artificial neural network for the generation of critical fluctuations and inter-spike intervals. <i>Chaos, Solitons and Fractals</i> , 2022, 159, 112115.	2.5	1
7	On the chaotic nature of random telegraph noise in unipolar RRAM memristor devices. <i>Chaos, Solitons and Fractals</i> , 2022, 160, 112224.	2.5	3
8	Numerical modelling of sub-ionospheric Very Low Frequency radio signal anomalies during the Samos (Greece) earthquake (M _a = 6.9) on October 30, 2020. <i>Advances in Space Research</i> , 2022, 70, 1453-1471.	1.2	4
9	Diffraction-like stratified magnetic field in a device of circular rings. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	2
10	4 Solitons in Kirchhoff Wave Equation. <i>Springer Optimization and Its Applications</i> , 2021, , 71-80.	0.6	0
11	Evidence of critical dynamics in various electromagnetic precursors. <i>European Physical Journal: Special Topics</i> , 2021, 230, 151-177.	1.2	18
12	Does air ionization by radon cause low-frequency atmospheric electromagnetic earthquake precursors?. <i>Natural Hazards</i> , 2021, 106, 701-714.	1.6	9
13	TreeVibes: Modern Tools for Global Monitoring of Trees for Borers. <i>Smart Cities</i> , 2021, 4, 271-285.	5.5	13
14	Spontaneous symmetry breaking in the phase space. <i>Physica Scripta</i> , 2021, 96, 075204.	1.2	5
15	Study of Static and Dynamic Properties of Sand under Low Stress Compression. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3311.	1.3	5
16	Criticality in epidemic spread: An application in the case of COVID19 infected population. <i>Chaos</i> , 2021, 31, 043109.	1.0	7
17	Statistical and Criticality Analysis of the Lower Ionosphere Prior to the 30 October 2020 Samos (Greece) Earthquake (M _{6.9}), Based on VLF Electromagnetic Propagation Data as Recorded by a New VLF/LF Receiver Installed in Athens (Greece). <i>Entropy</i> , 2021, 23, 676.	1.1	13
18	An Exploratory Study of Geospace Perturbations Using Financial Analysis Tools in the Context of Complex Systems. <i>Geosciences (Switzerland)</i> , 2021, 11, 239.	1.0	1

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19	Detecting Apnea/Hypopnea Events Time Location from Sound Recordings for Patients with Severe or Moderate Sleep Apnea Syndrome. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6888.	1.3	2
20	Tachyons and Solitons in Spontaneous Symmetry Breaking in the Frame of Field Theory. <i>Symmetry</i> , 2021, 13, 1358.	1.1	5
21	Engendering self-similarity in Boson field by a natural feedback process. <i>Physica Scripta</i> , 2021, 96, 125211.	1.2	0
22	PSG-Audio, a scored polysomnography dataset with simultaneous audio recordings for sleep apnea studies. <i>Scientific Data</i> , 2021, 8, 197.	2.4	14
23	Pre-Seismic Irregularities during the 2020 Samos (Greece) Earthquake (M = 6.9) as Investigated from Multi-Parameter Approach by Ground and Space-Based Techniques. <i>Atmosphere</i> , 2021, 12, 1059.	1.0	33
24	Criticality in a hybrid spin model with Fermi-Dirac statistics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021, 577, 126073.	1.2	3
25	Can high-frequency ECG fluctuations differentiate between healthy and myocardial infarction cases?. <i>Biomedical Engineering Advances</i> , 2021, 2, 100011.	2.2	2
26	A Real-Time Snore Detector Using Neural Networks and Selected Sound Features. <i>Engineering Proceedings</i> , 2021, 11, .	0.4	1
27	Stickiness in the order parameter time-series as a signature of criticality. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 544, 123508.	1.2	4
28	A Universal Physics-Based Model Describing COVID-19 Dynamics in Europe. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 6525.	1.2	11
29	AI-Inspired Non-Terrestrial Networks for IIoT: Review on Enabling Technologies and Applications. <i>IoT</i> , 2020, 1, 21-48.	2.3	23
30	Criticality Hidden in Acoustic Emissions and in Changing Electrical Resistance during Fracture of Rocks and Cement-Based Materials. <i>Materials</i> , 2020, 13, 5608.	1.3	19
31	Wavelet-based detection of scaling behavior in noisy experimental data. <i>Physical Review E</i> , 2020, 101, 052104.	0.8	5
32	Natural Time Analysis of Global Navigation Satellite System Surface Deformation: The Case of the 2016 Kumamoto Earthquakes. <i>Entropy</i> , 2020, 22, 674.	1.1	21
33	Modelling acoustic and electric signals emitted during structural tests in terms of log-periodic power-law models. <i>Material Design and Processing Communications</i> , 2020, 2, e134.	0.5	0
34	Criticality analysis of 3-year-long VLF subionospheric propagation data possibly related to significant earthquake events in Japan. <i>Natural Hazards</i> , 2020, 102, 47-66.	1.6	5
35	Effect of soil loading/unloading on its acoustic behavior. , 2020, 67, .		2
36	Intermittency-induced criticality in the random telegraph noise of nanoscale UTBB FD-SOI MOSFETs. <i>Microelectronic Engineering</i> , 2019, 216, 111027.	1.1	9

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37	Acoustic Sensor Data Flow for Cultural Heritage Monitoring and Safeguarding. <i>Sensors</i> , 2019, 19, 1629.	2.1	8
38	LÃ©vy and Gauss statistics in the preparation of an earthquake. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 528, 121360.	1.2	13
39	In-Vivo Vibroacoustic Surveillance of Trees in the Context of the IoT. <i>Sensors</i> , 2019, 19, 1366.	2.1	19
40	On Possible Electromagnetic Precursors to a Significant Earthquake (Mw = 6.3) Occurred in Lesvos (Greece) on 12 June 2017. <i>Entropy</i> , 2019, 21, 241.	1.1	19
41	Neural Network Fusion and Selection Techniques for Noise-Efficient Sound Classification. <i>AES: Journal of the Audio Engineering Society</i> , 2019, 67, 27-37.	0.8	4
42	Analysis of the ultra-low frequency magnetic field fluctuations prior to the 2016 Kumamoto (Japan) earthquakes in terms of the method of critical fluctuations. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 514, 563-572.	1.2	8
43	A comparative study by using two different log-periodic power laws on acoustic emission signals from LiF specimens under compression. <i>Engineering Fracture Mechanics</i> , 2019, 210, 170-180.	2.0	5
44	Natural time analysis on the ultra-low frequency magnetic field variations prior to the 2016 Kumamoto (Japan) earthquakes. <i>Journal of Asian Earth Sciences</i> , 2018, 154, 419-427.	1.0	27
45	Experimental study of the dynamic evolution of cumulative energy release during LiF fracture under uniaxial compression. <i>International Journal of Solids and Structures</i> , 2018, 132-133, 59-65.	1.3	6
46	Intermittency-induced criticality in the lower ionosphere prior to the 2016 Kumamoto earthquakes as embedded in the VLF propagation data observed at multiple stations. <i>Tectonophysics</i> , 2018, 722, 422-431.	0.9	13
47	Investigation of acoustic emissions and pressure stimulated currents detected during bending of restored marble epistyles within the frame of log-periodic power-law models. <i>Procedia Structural Integrity</i> , 2018, 10, 319-325.	0.3	0
48	A Two-Level Sound Classification Platform for Environmental Monitoring. <i>Journal of Sensors</i> , 2018, 2018, 1-13.	0.6	14
49	Temporal organization of magnetospheric fluctuations unveiled by recurrence patterns in the Dst index. <i>Chaos</i> , 2018, 28, 085716.	1.0	14
50	Observation of Intermittency-Induced Critical Dynamics in Geomagnetic Field Time Series Prior to the Intense Magnetic Storms of March, June, and December 2015. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 4594-4613.	0.8	18
51	Four-Stage Model of Earthquake Generation in Terms of Fracture-Induced Electromagnetic Emissions. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 437-502.		12
52	Criticality Analysis of the Lower Ionosphere Perturbations Prior to the 2016 Kumamoto (Japan) Earthquakes as Based on VLF Electromagnetic Wave Propagation Data Observed at Multiple Stations. <i>Entropy</i> , 2018, 20, 199.	1.1	37
53	Signatures of the symmetry breaking phenomenon in pre-seismic electromagnetic emissions. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2018, 2018, 083208.	0.9	16
54	Possible relation of air ion density anomalies with earthquakes and the associated precursory ionospheric perturbations: An analysis in terms of criticality. <i>International Journal of Electronics and Applied Research</i> , 2018, 5, 56-75.	0.8	4

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55	A wearable magnetic sensing device for identifying the presence of static magnetic fields. Measurement: Journal of the International Measurement Confederation, 2017, 109, 44-50.	2.5	9
56	Critical features revealed in acoustic and electromagnetic emissions during fracture experiments on LiF. Physica A: Statistical Mechanics and Its Applications, 2017, 485, 11-22.	1.2	16
57	Intermittency-induced criticality in a resistor-inductor-diode circuit. Physical Review E, 2017, 95, 042206.	0.8	12
58	Fractal analysis of the ground-recorded ULF magnetic fields prior to the 11 March 2011 Tohoku earthquake ($M_W=9$): discriminating possible earthquake precursors from space-sourced disturbances. Natural Hazards, 2017, 85, 59-86.	1.6	23
59	Electromagnetic Precursors to the 2016 Kumamoto Earthquakes. Open Journal of Earthquake Research, 2017, 06, 168-179.	0.9	10
60	5th International Conference on Materials and Applications for Sensors and Transducers (IC-MAST2015). IOP Conference Series: Materials Science and Engineering, 2016, 108, 011001.	0.3	0
61	Sound-maps of environmentally sensitive areas constructed from Wireless Acoustic Sensors Network data. IOP Conference Series: Materials Science and Engineering, 2016, 108, 012012.	0.3	0
62	Recent seismic activity at Cephalonia (Greece): a study through candidate electromagnetic precursors in terms of non-linear dynamics. Nonlinear Processes in Geophysics, 2016, 23, 223-240.	0.6	29
63	Investigating Dynamical Complexity of Geomagnetic Jerks Using Various Entropy Measures. Frontiers in Earth Science, 2016, 4, .	0.8	10
64	Communication protocols for vital signs sensors used for the monitoring of athletes. , 2016, , 127-143.		1
65	Physiological parameters monitoring of fire-fighters by means of a wearable wireless sensor system. IOP Conference Series: Materials Science and Engineering, 2016, 108, 012011.	0.3	3
66	Multi-spectral detection of statistically significant components in pre-seismic electromagnetic emissions related with Athens 1999, $M=5.9$ earthquake. Journal of Applied Geophysics, 2016, 128, 41-57.	0.9	6
67	Computational Analysis of a Thermoelectric Generator for Waste-Heat Harvesting in Wearable Systems. Journal of Electronic Materials, 2016, 45, 2957-2966.	1.0	6
68	Intermittent criticality revealed in ULF magnetic fields prior to the 11 March 2011 Tohoku earthquake ($\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si21.gif" display="inline"/> Tj ETQq0 0 0 rgBT /Overlock 10 Tf$). Physica A: Statistical Mechanics and Its Applications, 2016, 452, 19-28.	1.2	23
69	On the Precursory Abnormal Animal Behavior and Electromagnetic Effects for the Kobe Earthquake ($M=6$) on April 12, 2013. Open Journal of Earthquake Research, 2016, 05, 165-171.	0.9	15
70	Criticality features in ultra-low frequency magnetic fields prior to the 2013 $M6.3$ Kobe earthquake. Annals of Geophysics, 2016, 59, .	0.5	12
71	A Wireless Acoustic Sensor Network for environmental monitoring based on flexible hardware nodes. , 2015, , .		1
72	Criticality features in ULF magnetic fields prior to the 2011 Tohoku earthquake. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2015, 91, 25-30.	1.6	45

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73	Intrinsic vs. spurious long-range memory in high-frequency records of environmental radioactivity. <i>European Physical Journal: Special Topics</i> , 2015, 224, 741-762.	1.2	13
74	High-Level Sound Classification in the ESOUNDMAPS Project. <i>Key Engineering Materials</i> , 2015, 644, 83-86.	0.4	2
75	Temporal correlation patterns in pre-seismic electromagnetic emissions reveal distinct complexity profiles prior to major earthquakes. <i>Physics and Chemistry of the Earth</i> , 2015, 85-86, 44-55.	1.2	19
76	Tricritical crossover in earthquake preparation by analyzing preseismic electromagnetic emissions. <i>Journal of Geodynamics</i> , 2015, 84, 40-54.	0.7	31
77	Wireless sensor network-based communication for cooperative simultaneous localization and mapping. <i>Computers and Electrical Engineering</i> , 2015, 41, 407-425.	3.0	13
78	Recent Field Observations Indicating an Earth System in Critical Condition Before the Occurrence of a Significant Earthquake. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2015, 12, 631-635.	1.4	28
79	On the effect of compression on the complexity characteristics of wireless acoustic sensor network signals. <i>Signal Processing</i> , 2015, 107, 153-163.	2.1	7
80	Design Considerations for an Environmental Monitoring Wireless Acoustic Sensor Network. <i>Sensor Letters</i> , 2015, 13, 549-555.	0.4	1
81	An Integrated Study of ULF Magnetic Field Variations in Association with the 2008 Sichuan Earthquake, on the Basis of Statistical and Critical Analyses. <i>Open Journal of Earthquake Research</i> , 2015, 04, 85-93.	0.9	19
82	Budget Analysis for Water Reservoirs Using an Autonomous Sensor-Equipped Mini Boat. <i>Sensor Letters</i> , 2015, 13, 543-548.	0.4	0
83	Performance Evaluation of a Communication Protocol for Vital Signs Sensors Used for the Monitoring of Athletes. <i>International Journal of Distributed Sensor Networks</i> , 2014, 10, 453182.	1.3	3
84	A socially-intelligent multi-robot service team for in-home monitoring. , 2014, , .		0
85	Analyzing the Water Budgets of Reservoirs by Using Autonomous Mini Boats. <i>Key Engineering Materials</i> , 2014, 605, 51-54.	0.4	0
86	A Wireless Network of Acoustic Sensors for Environmental Monitoring. <i>Key Engineering Materials</i> , 2014, 605, 43-46.	0.4	7
87	Wireless Sensor Network-Based Water Quality Monitoring System. <i>Key Engineering Materials</i> , 2014, 605, 47-50.	0.4	6
88	ANN-Based Estimation of Groundwater Quality Using a Wireless Water Quality Network. <i>International Journal of Distributed Sensor Networks</i> , 2014, 10, 458329.	1.3	16
89	ANN-Based Control of a Multiboat Group for the Deployment of an Underwater Sensor Network. <i>International Journal of Distributed Sensor Networks</i> , 2014, 10, 786154.	1.3	4
90	A Real-Time Remote Monitoring of Water Quality by Means of a Wireless Sensor Network. <i>Sensor Letters</i> , 2014, 12, 1414-1421.	0.4	1

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91	Glass Covered Magnetic Micro-Wires Operating in the Domain Wall Nucleation and Propagation Sensing Mode for Stress Detection in FRP Composite Structures. <i>Sensor Letters</i> , 2014, 12, 1481-1487.	0.4	0
92	The ALICE Collaboration. <i>Nuclear Physics A</i> , 2013, 904-905, 1033c-1040c.	0.6	1
93	Assessment of military intercom headsets for maximum voice reproduction level in high noise conditions. <i>Applied Acoustics</i> , 2013, 74, 870-881.	1.7	0
94	Dynamical analogy between economical crisis and earthquake dynamics within the nonextensive statistical mechanics framework. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 2940-2954.	1.2	8
95	Dynamical analogy between epileptic seizures and seismogenic electromagnetic emissions by means of nonextensive statistical mechanics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 497-509.	1.2	21
96	Statistical Mechanics and Information-Theoretic Perspectives on Complexity in the Earth System. <i>Entropy</i> , 2013, 15, 4844-4888.	1.1	85
97	On the Efficiency of the Shortened Error Correcting Codes. <i>International Journal of Electrical Engineering and Education</i> , 2013, 50, 201-212.	0.4	0
98	Natural time analysis of critical phenomena: The case of pre-fracture electromagnetic emissions. <i>Chaos</i> , 2013, 23, 023117.	1.0	41
99	The Earth as a living planet: human-type diseases in the earthquake preparation process. <i>Natural Hazards and Earth System Sciences</i> , 2013, 13, 125-139.	1.5	23
100	On the puzzling feature of the silence of precursory electromagnetic emissions. <i>Natural Hazards and Earth System Sciences</i> , 2013, 13, 2381-2397.	1.5	24
101	Current challenges for pre-earthquake electromagnetic emissions: shedding light from micro-scale plastic flow, granular packings, phase transitions and self-affinity notion of fracture process. <i>Nonlinear Processes in Geophysics</i> , 2013, 20, 771-792.	0.6	32
102	Implementing a Trust and Reputation Model for Robotic Sensor Networks. <i>Elektronika Ir Elektrotechnika</i> , 2013, 19, .	0.4	1
103	Navigation System of an Unmanned Boat for Autonomous Analyses of Water Quality. <i>Elektronika Ir Elektrotechnika</i> , 2013, 19, .	0.4	3
104	Sudden drop of fractal dimension of electromagnetic emissions recorded prior to significant earthquake. <i>Natural Hazards</i> , 2012, 64, 641-650.	1.6	13
105	Environmental monitoring of radon in soil during a very seismically active period occurred in South West Greece. <i>Journal of Environmental Monitoring</i> , 2012, 14, 564-578.	2.1	30
106	The role of propagating stress waves on a geophysical scale: Evidence in terms of nonextensivity. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 5648-5657.	1.2	13
107	Relation between seismicity and pre-earthquake electromagnetic emissions in terms of energy, information and entropy content. <i>Natural Hazards and Earth System Sciences</i> , 2012, 12, 1179-1183.	1.5	24
108	Analysis of electromagnetic pre-seismic emissions using Fisher information and Tsallis entropy. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 300-306.	1.2	53

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109	Linking electromagnetic precursors with earthquake dynamics: An approach based on nonextensive fragment and self-affine asperity models. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 2232-2244.	1.2	40
110	A multidisciplinary analysis for traces of the last state of earthquake generation in preseismic electromagnetic emissions. <i>Natural Hazards and Earth System Sciences</i> , 2011, 11, 2859-2879.	1.5	19
111	Sonic perceptual crossings. , 2011, , .		7
112	Building a low-cost network for power-quality monitoring with open-source-hardware nodes. , 2010, , .		0
113	On the use of time-frequency distributions for the power quality problem of harmonics. , 2010, , .		4
114	The ALICE Collaboration. <i>Nuclear Physics A</i> , 2009, 830, 919c-924c.	0.6	18
115	Natural soundscapes and identification of environmental sounds: A pattern recognition approach. , 2009, , .		8
116	Steady-State and Transient Evaluation of FPAA Implemented Analog Filters Using a MLS System Analyzer. , 2009, , .		3
117	Phase Spectral Processing for improved Time-Domain Soft Microphone based Noise Estimation. <i>Proceedings of Meetings on Acoustics</i> , 2008, , .	0.3	2
118	An accurate calculation of Miller effect on the frequency response and on the input and output impedances of feedback amplifiers. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs</i> , 2005, 52, 491-495.	2.3	5
119	The Feedback Decomposition Theorem: The evolution of Miller's Theorem. <i>International Journal of Electronics</i> , 1998, 85, 571-587.	0.9	4
120	An alternative two-port feedback analysis approach. , 0, , .		2
121	Generalized two-port performance evaluation. , 0, , .		3
122	Characterization of Thermochromic Fibersâ€™™ Response to Temperature Change. <i>Key Engineering Materials</i> , 0, 644, 74-77.	0.4	0
123	A Smart Sensor Platform for Greenhouse Applications. <i>Key Engineering Materials</i> , 0, 644, 92-95.	0.4	1
124	Breathing sound detector as a means to identify possible apneic periods from tracheal sound recordings. , 0, , .		0