

Ilias D Stavrakas

List of Publications by Year in descending order

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Version: 2024-02-01

89
papers

1,174
citations

471509

17
h-index

454955

30
g-index

90
all docs

90
docs citations

90
times ranked

784
citing authors

#	ARTICLE	IF	CITATIONS
1	Refractive, dispersive and thermo-optic properties of twelve organic solvents in the visible and near-infrared. <i>Applied Physics B: Lasers and Optics</i> , 2014, 116, 617-622.	2.2	142
2	Electric earthquake precursors: from laboratory results to field observations. <i>Physics and Chemistry of the Earth</i> , 2004, 29, 339-351.	2.9	93
3	Pressure stimulated currents in rocks and their correlation with mechanical properties. <i>Natural Hazards and Earth System Sciences</i> , 2004, 4, 563-567.	3.6	62
4	An analysis of pressure stimulated currents (PSC), in marble samples under mechanical stress. <i>Physics and Chemistry of the Earth</i> , 2006, 31, 234-239.	2.9	60
5	Piezo stimulated currents in marble samples: precursory and concurrent-with-failure signals. <i>Natural Hazards and Earth System Sciences</i> , 2003, 3, 243-247.	3.6	58
6	Pressure stimulated electrical emissions from cement mortar used as failure predictors. <i>International Journal of Fracture</i> , 2012, 175, 53-61.	2.2	46
7	Electrical and Acoustic Emissions in cement mortar beams subjected to mechanical loading up to fracture. <i>Engineering Failure Analysis</i> , 2013, 35, 454-461.	4.0	38
8	A neural network approach for compressive strength prediction in cement-based materials through the study of pressure-stimulated electrical signals. <i>Construction and Building Materials</i> , 2012, 30, 294-300.	7.2	35
9	The correlation of electrical charge with strain on stressed rock samples. <i>Natural Hazards and Earth System Sciences</i> , 2008, 8, 1243-1248.	3.6	34
10	hackAIR: Towards Raising Awareness about Air Quality in Europe by Developing a Collective Online Platform. <i>ISPRS International Journal of Geo-Information</i> , 2018, 7, 187.	2.9	32
11	Temperature-dependent visible to near-infrared optical properties of 8 mol% Mg-doped lithium tantalate. <i>Optical Materials Express</i> , 2011, 1, 458.	3.0	30
12	Hidden Affinities Between Electric and Acoustic Activities in Brittle Materials at Near-Fracture Load Levels. <i>Rock Mechanics and Rock Engineering</i> , 2022, 55, 1325-1342.	5.4	28
13	Acoustic Emission Analysis of Cement Mortar Specimens During Three Point Bending Tests. <i>Latin American Journal of Solids and Structures</i> , 2016, 13, 2283-2297.	1.0	26
14	Interface states and MWS polarization contributions to the dielectric response of low voltage ZnO varistor. <i>Ceramics International</i> , 2011, 37, 207-214.	4.8	25
15	Notched marble plates under tension: Detecting prefailure indicators and predicting entrance to the critical stage. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2018, 41, 776-786.	3.4	25
16	Predicting fracture of mortar beams under three-point bending using non-extensive statistical modeling of electric emissions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2015, 419, 603-611.	2.6	23
17	Probing the microstructure of cement mortars through dielectric parameters' variation. <i>Journal of Physics and Chemistry of Solids</i> , 2009, 70, 576-583.	4.0	18
18	Notched marble plates under direct tension: Mechanical response and fracture. <i>Construction and Building Materials</i> , 2018, 167, 426-439.	7.2	18

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19	Complexity in Laboratory Seismology. , 2018, , 239-273.		17
20	An IoT-Based Participatory Antitheft System for Public Safety Enhancement in Smart Cities. Smart Cities, 2021, 4, 919-937.	9.4	17
21	Comparative Assessment of Criticality Indices Extracted from Acoustic and Electrical Signals Detected in Marble Specimens. Infrastructures, 2022, 7, 15.	2.8	17
22	Study of directivity effect on electromagnetic emissions in the HF band as earthquake precursors: Preliminary results on field observations. Tectonophysics, 2007, 431, 263-271.	2.2	13
23	Natural Time Analysis of Acoustic Emissions in Double Edge Notched Tension (DENT) Marble Specimens. Procedia Engineering, 2015, 109, 248-256.	1.2	12
24	Innovative Experimental Techniques in the Service of Restoration of Stone Monuments - Part II: Marble Epistyles under Shear. Procedia Engineering, 2015, 109, 276-284.	1.2	11
25	Non-extensive statistical analysis of acoustic emissions series recorded during the uniaxial compression of brittle rocks. Physica A: Statistical Mechanics and Its Applications, 2019, 528, 121498.	2.6	11
26	Marble epistyles under shear: An experimental study of the role of "Relieving Space". Frontiers of Structural and Civil Engineering, 2019, 13, 767-786.	2.9	11
27	The derivative method of critical-angle refractometry for attenuating media. Journal of Optics (United Kingdom), 2020, 22, 075601.	2.2	11
28	A preliminary study for prefailure indicators in acoustic emissions using wavelets and natural time analysis. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2016, 230, 780-788.	1.1	10
29	Low cost sensor implementation and evaluation for measuring NO2 and O3 pollutants. , 2020, , .		10
30	Low Temperature Dielectric Relaxations in ZnO Varistor. Japanese Journal of Applied Physics, 2010, 49, 051102.	1.5	9
31	On the Evaluation of Low-Cost PM Sensors for Air Quality Estimation. , 2019, , .		9
32	Mechanical response of notched marble beams under bending versus acoustic emissions and electric activity. Journal of Theoretical and Applied Mechanics, 0, , 523.	0.5	9
33	Innovative Experimental Techniques in the Service of Restoration of Stone Monuments - Part I: the Experimental Set up. Procedia Engineering, 2015, 109, 268-275.	1.2	8
34	Correlation of pressure stimulated currents and acoustic emissions during 3PB of cement-mortar beams and the role of loading rate. Procedia Structural Integrity, 2017, 3, 346-353.	0.8	8
35	Influence of the cation partner on levulinate ionic liquids properties. Journal of Molecular Liquids, 2022, 354, 118850.	4.9	8
36	Detecting Criticality by Exploring the Acoustic Activity in Terms of the "Natural-Time" Concept. Applied Sciences (Switzerland), 2022, 12, 231.	2.5	8

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37	Computer as a Tool in Teaching, Examining and Assessing Electronic Engineering Students. , 2007, , .		7
38	WSN Open Source Development Platform: Application to Green Learning. Procedia Engineering, 2011, 25, 1049-1052.	1.2	7
39	Nonlinear control of a DC-motor based on radial basis function neural networks. , 2011, , .		7
40	Carbon nanotube reinforced mortar as a sensor to monitor the structural integrity of restored marble epistyles under shear. Procedia Structural Integrity, 2016, 2, 2833-2840.	0.8	7
41	Pull-out of threaded reinforcing bars from marble blocks. Procedia Structural Integrity, 2016, 2, 2865-2872.	0.8	7
42	Towards Air Quality Estimation Using Collected Multimodal Environmental Data. Lecture Notes in Computer Science, 2016, , 147-156.	1.3	7
43	Exploring the acoustic activity in brittle materials in terms of the position of the acoustic sources and the power of the acoustic signalsâ€”Part I: Founding the approach. Forces in Mechanics, 2022, 7, 100088.	2.8	7
44	The influence of externally applied uniaxial stress on Isothermal Depolarization Current mechanisms in rock samples. Journal of Materials Science, 2005, 40, 4593-4596.	3.7	6
45	Temperature-dependent refractive index of potassium acid phthalate (KAP) in the visible and near-infrared. Optical Materials, 2011, 33, 812-816.	3.6	6
46	A comparative study on the use of the extended-Cauchy dispersion equation for fitting refractive index data in crystals. Optical and Quantum Electronics, 2013, 45, 837-859.	3.3	6
47	Non-Extensive Statistical Analysis of Acoustic Emissions Recorded in Marble and Cement Mortar Specimens Under Mechanical Load Until Fracture. Entropy, 2020, 22, 1115.	2.2	6
48	The relaxation processes of Pressure Stimulated Currents under the concept of Non-extensive statistical physics. Procedia Structural Integrity, 2020, 26, 277-284.	0.8	6
49	Relaxation phenomena of electrical signal emissions from rock following application of abrupt mechanical stress. Annals of Geophysics, 2012, 55, .	1.0	6
50	Embedded compact flash. IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems, 2005, 21, 27-34.	0.4	5
51	Modelling of electric signals stimulated by bending of rock beams. International Journal of Microstructure and Materials Properties, 2009, 4, 5.	0.1	5
52	Assessing the acoustic activity in marble specimens under stepwise compressive loading. Material Design and Processing Communications, 2020, 2, e100.	0.9	5
53	Electric and acoustic activity in notched fiber-reinforced concrete beams under three-point bending. Materials Today: Proceedings, 2020, 32, 148-155.	1.8	5
54	Comparative Iba€value and Fa€function analysis of Acoustic Emissions from elementary and structural tests with marble specimens. Material Design and Processing Communications, 2021, 3, e176.	0.9	5

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55	Damage evolution in marble under uniaxial compression monitored by Pressure Stimulated Currents and Acoustic Emissions. <i>Frattura Ed Integrita Strutturale</i> , 2019, 13, 573-583.	0.9	5
56	Nondestructive Testing Electrical Methods for Sensing Damages in Cement Mortar Beams. <i>Open Journal of Applied Sciences</i> , 2013, 03, 50-55.	0.4	5
57	Electrical Methods for Sensing Damage in Cement Mortar Beams Combined with Acoustic Emissions. <i>Materials</i> , 2022, 15, 4682.	2.9	5
58	Thermally activated conduction mechanisms in Silicon Nitride MIS structures. <i>Thin Solid Films</i> , 2010, 518, 2357-2360.	1.8	4
59	Study of Weak Electric Current Emissions on Cement Mortar under Uniaxial Compressional Mechanical Stress up to the Vicinity of Fracture. <i>Strojniski Vestnik/Journal of Mechanical Engineering</i> , 2011, 2011, 237-244.	1.1	4
60	Monitoring the mechanical response of early aged cement-mortar specimens using the Pressure Stimulated Currents technique. <i>Procedia Structural Integrity</i> , 2020, 28, 502-510.	0.8	4
61	Correlation of pressure stimulated currents in rocks with the damage parameter. <i>Annals of Geophysics</i> , 2009, 50, .	1.0	4
62	A Physical Access Control System that utilizes existing networking and computer infrastructure. , 2007, , .		3
63	Recording the mechanical response and fracture of marble DENT specimens using modern sensing techniques. <i>Procedia Structural Integrity</i> , 2017, 3, 326-333.	0.8	3
64	DIELECTRIC SPECTROSCOPY IN CRUSTAL ROCKS: PRELIMINARY RESULTS FROM NORTHEASTERN SICILY (ITALY) AND THE GULF OF CORINTH (GREECE). <i>Bulletin of the Geological Society of Greece</i> , 2004, 36, 1925.	0.5	3
65	Non-destructive assessment of the three-point-bending strength of mortar beams using radial basis function neural networks. <i>Computers and Concrete</i> , 2015, 16, 919-932.	0.7	3
66	Acoustic emissions and pressure stimulated currents experimental techniques used to verify Kaiser effect during compression tests of Dionysos marble. <i>Frattura Ed Integrita Strutturale</i> , 2017, 11, 32-40.	0.9	3
67	Correlation of Acoustic Emissions and Pressure Stimulated Currents recorded in Alfas-stone specimens under three-point bending. The role of the specimensâ€™ porosity: Preliminary results.. <i>Procedia Structural Integrity</i> , 2022, 41, 452-460.	0.8	3
68	Isothermal depolarization currents in marble rocks subjected to different stress modes before fracture. , 0, , .		2
69	Preference for Multiple Choice and Constructed Response Exams for Engineering Students with and without Learning Difficulties. , 2021, , .		2
70	Acceptance of Distance Learning during the COVID-19 Movement Restrictions: Does the Year of Studies Matter?. , 2021, , .		2
71	Non-Extensive Statistical Analysis of Acoustic Emissions: The Variability of Entropic Index q during Loading of Brittle Materials Until Fracture. <i>Entropy</i> , 2021, 23, 276.	2.2	2
72	A method for the calculation the activation energies of thermally stimulated depolarization current peaks: Application in polyvinylidene fluoride/graphene nanocomposites. <i>Physica B: Condensed Matter</i> , 2021, 622, 413338.	2.7	2

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73	Acoustic Emissions versus Pressure Stimulated Currents during bending of restored marble epistyles: Preliminary results. <i>Frattura Ed Integrita Strutturale</i> , 2017, 11, 536-551.	0.9	2
74	Using AC Conductivity Measurements to Study the Influence of Mechanical Stress on the Strength of Geomaterials. <i>Open Journal of Applied Sciences</i> , 2012, 02, 61-65.	0.4	2
75	Weighted Scoring of Multiple-choice Questions based Exams: Expert and Empirical Weighting Factors. , 2020, , .		2
76	Dielectric Study of Tetraalkylammonium and Tetraalkylphosphonium Levulinate Ionic Liquids. <i>International Journal of Molecular Sciences</i> , 2022, 23, 5642.	4.1	2
77	Beowulf Clusters for Parallel Programming Courses. , 2005, , .		1
78	Isothermal depolarization currents measurements of cement mortar during the hardening process. Commentaries on previous work. <i>Journal of Physics and Chemistry of Solids</i> , 2011, 72, 1554-1556.	4.0	1
79	Exploring the acoustic activity in marble specimens under tension while entering into the stage of impending fracture. <i>Procedia Structural Integrity</i> , 2021, 33, 330-336.	0.8	1
80	The determination of mode-I fracture toughness (by means of the Brazilian disc configuration) in the light of data provided by the 3D digital image correlation technique. <i>International Journal of Building Pathology and Adaptation</i> , 2022, ahead-of-print, .	1.3	1
81	Load balancing incoming IP requests across a farm of clustered MySQL servers. , 2007, , .		0
82	Probing the electrical properties of the Si nitride/Si interface. , 2010, , .		0
83	An adaptive soft-sensor for non-destructive cement-based material testing, through the use of RBF networks. , 2012, , .		0
84	Electrical characterization of polymer matrix “TiO ₂ filler composites through isothermal polarization / depolarization currents and “V tests. <i>Open Physics</i> , 2014, 12, .	1.7	0
85	Tsallis entropy modeling of Pressure Stimulated Currents when cement-based materials are subjected to abrupt repetitive bending loadings. <i>Procedia Structural Integrity</i> , 2018, 10, 97-103.	0.8	0
86	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.	0.8	0
87	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.	0.9	0
88	Post-COVID-19 Education: A Case of Technology Driven Change?. , 2021, , .		0
89	The Use of PSC Technique to Estimate the Damage Extension During Three Point Bending Test. <i>Advanced Structured Materials</i> , 2015, , 363-372.	0.5	0