

Enrique GarcÃ-a-MacÃ-as

List of Publications by Year in descending order

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56
papers

1,578
citations

304602

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58
all docs

58
docs citations

58
times ranked

989
citing authors

#	ARTICLE	IF	CITATIONS
1	Bayesian-Based Fusion of Monitoring Data and Visual Inspections in Monumental Structures. Lecture Notes in Civil Engineering, 2023, , 1066-1075.	0.3	1
2	Integrated SHM Systems: Damage Detection Through Unsupervised Learning and Data Fusion. Structural Integrity, 2022, , 247-268.	0.8	7
3	XFEM crack growth virtual monitoring in self-sensing CNT reinforced polymer nanocomposite plates using ANSYS. Composite Structures, 2022, 284, 115137.	3.1	8
4	Least Angle Regression for early-stage identification of earthquake-induced damage in a monumental masonry palace: Palazzo dei Consoli. Engineering Structures, 2022, 259, 114119.	2.6	11
5	Micromechanics-based phase field fracture modelling of CNT composites. Composites Part B: Engineering, 2022, 236, 109788.	5.9	17
6	Effective medium electrical response model of carbon nanotubes cement-based composites. Construction and Building Materials, 2022, 344, 128293.	3.2	8
7	Forced vibration analysis of composite beams based on the variable separation method. Mechanics of Advanced Materials and Structures, 2021, 28, 618-634.	1.5	5
8	An Innovative Methodology for Online Surrogate-Based Model Updating of Historic Buildings Using Monitoring Data. International Journal of Architectural Heritage, 2021, 15, 92-112.	1.7	37
9	Novel Structural Health Monitoring Software Systems Exploiting Heterogeneous Sensing Solutions and Data Fusion for Enhanced Local/Global Damage Identification of Historic Structures. Lecture Notes in Civil Engineering, 2021, , 927-936.	0.3	0
10	Bayesian-Based Damage Assessment of Historical Structures Using Vibration Monitoring Data. Lecture Notes in Civil Engineering, 2021, , 415-429.	0.3	3
11	Structural assessment of bridges through ambient noise deconvolution interferometry: application to the lateral dynamic behaviour of a RC multi-span viaduct. Archives of Civil and Mechanical Engineering, 2021, 21, 1.	1.9	1
12	Closed-form solutions for the piezoresistivity properties of short-fiber reinforced composites with percolation-type behavior. Carbon, 2021, 184, 923-940.	5.4	10
13	The use of receiver operating characteristic curves and precision-versus-recall curves as performance metrics in unsupervised structural damage classification under changing environment. Engineering Structures, 2021, 246, 113029.	2.6	23
14	A transfer Bayesian learning methodology for structural health monitoring of monumental structures. Engineering Structures, 2021, 247, 113089.	2.6	20
15	Design of lead-free PVDF/CNT/BaTiO ₃ piezocomposites for sensing and energy harvesting: the role of polycrystallinity, nanoadditives, and anisotropy. Smart Materials and Structures, 2020, 29, 015021.	1.8	18
16	Synergistic application of operational modal analysis and ambient noise deconvolution interferometry for structural and damage identification in historic masonry structures: three case studies of Italian architectural heritage. Structural Health Monitoring, 2020, 19, 1250-1272.	4.3	11
17	Design of nano-modified PVDF matrices for lead-free piezocomposites: Graphene vs carbon nanotube nano-additions. Mechanics of Materials, 2020, 142, 103275.	1.7	14
18	Evaluation of optimal sensor placement algorithms for the Structural Health Monitoring of architectural heritage. Application to the Monastery of San Jerónimo de Buenavista (Seville, Spain). Engineering Structures, 2020, 202, 109843.	2.6	26

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19	Metamodel-based pattern recognition approach for real-time identification of earthquake-induced damage in historic masonry structures. <i>Automation in Construction</i> , 2020, 120, 103389.	4.8	23
20	Hilbert transform-based semi-analytic meta-model for maximum response envelopes in dynamics of railway bridges. <i>Journal of Sound and Vibration</i> , 2020, 487, 115618.	2.1	2
21	Automated operational modal analysis and ambient noise deconvolution interferometry for the full structural identification of historic towers: A case study of the Sciri Tower in Perugia, Italy. <i>Engineering Structures</i> , 2020, 215, 110615.	2.6	22
22	A Weigh-in-Motion Characterization Algorithm for Smart Pavements Based on Conductive Cementitious Materials. <i>Sensors</i> , 2020, 20, 659.	2.1	27
23	Crack-induced electrical resistivity changes in cracked CNT-reinforced composites. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 106, 102470.	2.1	9
24	Mathematical modeling and simulation. , 2020, , 101-156.		3
25	MOVA/MOSS: Two integrated software solutions for comprehensive Structural Health Monitoring of structures. <i>Mechanical Systems and Signal Processing</i> , 2020, 143, 106830.	4.4	53
26	An XFEM-based numerical scheme to compute crack-induced electrical resistivity changes in cracked CNT-reinforced composites using ANSYS. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
27	ENHANCED CONTINUOUS DYNAMIC MONITORING OF A COMPLEX MONUMENTAL PALACE THROUGH A LARGER SENSOR NETWORK. , 2020, , .		2
28	Seismic interferometry for earthquake-induced damage identification in historic masonry towers. <i>Mechanical Systems and Signal Processing</i> , 2019, 132, 380-404.	4.4	16
29	An interactive computational strategy for teaching the analysis of silo structures in civil engineering. <i>Computer Applications in Engineering Education</i> , 2019, 27, 821-835.	2.2	5
30	Train-speed sensitivity approach for maximum response envelopes in dynamics of railway bridges. <i>Journal of Sound and Vibration</i> , 2019, 452, 13-33.	2.1	3
31	Earthquake-induced damage detection and localization in masonry structures using smart bricks and Kriging strain reconstruction: A numerical study. <i>Earthquake Engineering and Structural Dynamics</i> , 2019, 48, 548-569.	2.5	27
32	Multiscale modeling of the elastic moduli of CNT-reinforced polymers and fitting of efficiency parameters for the use of the extended rule-of-mixtures. <i>Composites Part B: Engineering</i> , 2019, 159, 114-131.	5.9	62
33	Two-step hierarchical micromechanics model of partially saturated porous composites doped with ellipsoidal particles with interface effects. <i>Composites Part B: Engineering</i> , 2018, 148, 49-60.	5.9	16
34	E. Torroja's bridge: Tailored experimental setup for SHM of a historical bridge with a reduced number of sensors. <i>Engineering Structures</i> , 2018, 162, 11-21.	2.6	44
35	Coupled effect of CNT waviness and agglomeration: A case study of vibrational analysis of CNT/polymer skew plates. <i>Composite Structures</i> , 2018, 193, 87-102.	3.1	20
36	Bending and free vibration analysis of functionally graded graphene vs. carbon nanotube reinforced composite plates. <i>Composite Structures</i> , 2018, 186, 123-138.	3.1	142

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37	MWCNT/epoxy strip-like sensors for buckling detection in beam-like structures. <i>Thin-Walled Structures</i> , 2018, 133, 27-41.	2.7	17
38	Crack detection and localization in RC beams through smart MWCNT/epoxy strip-like strain sensors. <i>Smart Materials and Structures</i> , 2018, 27, 115022.	1.8	21
39	Recent Advances on SHM of Reinforced Concrete and Masonry Structures Enabled by Self-Sensing Structural Materials. <i>Proceedings (mdpi)</i> , 2018, 2, 119.	0.2	6
40	An Experimental Study on Static and Dynamic Strain Sensitivity of Embeddable Smart Concrete Sensors Doped with Carbon Nanotubes for SHM of Large Structures. <i>Sensors</i> , 2018, 18, 831.	2.1	71
41	CNT-polymer nanocomposites under frictional contact conditions. <i>Composites Part B: Engineering</i> , 2018, 154, 114-127.	5.9	22
42	3D mixed micromechanics-FEM modeling of piezoresistive carbon nanotube smart concrete. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 340, 396-423.	3.4	52
43	Continuous and embedded solutions for SHM of concrete structures using changing electrical potential in self-sensing cement-based composites. <i>Proceedings of SPIE</i> , 2017, , .	0.8	7
44	Enhanced lumped circuit model for smart nanocomposite cement-based sensors under dynamic compressive loading conditions. <i>Sensors and Actuators A: Physical</i> , 2017, 260, 45-57.	2.0	60
45	Multi-scale model updating of a timber footbridge using experimental vibration data. <i>Engineering Computations</i> , 2017, 34, 754-780.	0.7	9
46	Micromechanics modeling of the uniaxial strain-sensing property of carbon nanotube cement-matrix composites for SHM applications. <i>Composite Structures</i> , 2017, 163, 195-215.	3.1	131
47	Damage detection, localization and quantification in conductive smart concrete structures using a resistor mesh model. <i>Engineering Structures</i> , 2017, 148, 924-935.	2.6	66
48	Eshelby-Mori-Tanaka approach for post-buckling analysis of axially compressed functionally graded CNT/polymer composite cylindrical panels. <i>Composites Part B: Engineering</i> , 2017, 128, 208-224.	5.9	54
49	Micromechanics modeling of the electrical conductivity of carbon nanotube cement-matrix composites. <i>Composites Part B: Engineering</i> , 2017, 108, 451-469.	5.9	137
50	Buckling analysis of functionally graded carbon nanotube-reinforced curved panels under axial compression and shear. <i>Composites Part B: Engineering</i> , 2017, 108, 243-256.	5.9	64
51	Static and Dynamic Strain Monitoring of Reinforced Concrete Components through Embedded Carbon Nanotube Cement-Based Sensors. <i>Shock and Vibration</i> , 2017, 2017, 1-11.	0.3	38
52	Metamodel-based approach for stochastic free vibration analysis of functionally graded carbon nanotube reinforced plates. <i>Composite Structures</i> , 2016, 152, 183-198.	3.1	47
53	Static and free vibration analysis of functionally graded carbon nanotube reinforced skew plates. <i>Composite Structures</i> , 2016, 140, 473-490.	3.1	66
54	Uncertainty Analysis of Mechanical Behavior of Functionally Graded Carbon Nanotube Composite Materials. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2016, , 59-72.	0.3	2

#	ARTICLE	IF	CITATIONS
55	Structural health monitoring of grandstands: a review. MATEC Web of Conferences, 2015, 24, 07005.	0.1	0
56	Ambient Vibration Testing of Historic Steel-Composite Bridge, the E. Torroja Bridge, for Structural Identification and Finite Element Model Updating. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 147-155.	0.3	1