Arvin Ebrahimkhanlou

List of Publications by Year
in descending order

42 papers	908 citations	566801 15 h-index	476904 29 g-index
42 all docs	42 docs citations	42 times ranked	599 citing authors

#	Article	IF	Citations
1	Single-Sensor Acoustic Emission Source Localization in Plate-Like Structures Using Deep Learning. Aerospace, 2018, 5, 50.	1.1	105
2	Acoustic emission source localization in thin metallic plates: A single-sensor approach based on multimodal edge reflections. Ultrasonics, 2017, 78, 134-145.	2.1	99
3	A generalizable deep learning framework for localizing and characterizing acoustic emission sources in riveted metallic panels. Mechanical Systems and Signal Processing, 2019, 130, 248-272.	4.4	88
4	Multifractal analysis of crack patterns in reinforced concrete shear walls. Structural Health Monitoring, 2016, 15, 81-92.	4.3	87
5	Damage localization in metallic plate structures using edge-reflected lamb waves. Smart Materials and Structures, 2016, 25, 085035.	1.8	83
6	A probabilistic framework for single-sensor acoustic emission source localization in thin metallic plates. Smart Materials and Structures, 2017, 26, 095026.	1.8	50
7	Fractal and Multifractal Analysis of Crack Patterns in Prestressed Concrete Girders. Journal of Bridge Engineering, 2019, 24, .	1.4	44
8	A machine learning approach based on multifractal features for crack assessment of reinforced concrete shells. Computer-Aided Civil and Infrastructure Engineering, 2020, 35, 565-578.	6.3	41
9	Higher order longitudinal guided wave modes in axially stressed seven-wire strands. Ultrasonics, 2018, 84, 382-391.	2.1	33
10	The effect of applied stress on the phase and group velocity of guided waves in anisotropic plates. Journal of the Acoustical Society of America, 2017, 142, 3553-3563.	0.5	24
11	Acoustic emission monitoring of containment structures during post-tensioning. Engineering Structures, 2020, 209, 109930.	2.6	23
12	Stress monitoring of prestressing strands in corrosive environments using modulated higher-order guided ultrasonic waves. Structural Health Monitoring, 2020, 19, 202-214.	4.3	22
13	Corrosion monitoring of prestressed concrete structures by using topological analysis of acoustic emission data. Smart Materials and Structures, 2019, 28, 055001.	1.8	18
14	High-dimensional data analytics in structural health monitoring and non-destructive evaluation: a review paper. Smart Materials and Structures, 2022, 31, 043001.	1.8	17
15	Computation of propagating and non-propagating guided modes in nonuniformly stressed plates using spectral methods. Journal of the Acoustical Society of America, 2018, 143, 3220-3230.	0.5	16
16	Multifractal analysis of two-dimensional images for damage assessment of reinforced concrete structures. Proceedings of SPIE, 2015, , .	0.8	15
17	Effect of pressurization on helical guided wave energy velocity in fluid-filled pipes. Ultrasonics, 2017, 75, 145-154.	2.1	14
18	Inversion algorithm for Lamb-wave-based depth characterization of acoustic emission sources in plate-like structures. Ultrasonics, 2019, 99, 105975.	2.1	12

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19	An algebraic reconstruction imaging approach for corrosion damage monitoring of pipelines. Smart Materials and Structures, 2019, 28, 055036.	1.8	12
20	Crack-induced guided wave motion and modal excitability in plates using elastodynamic reciprocity. Journal of Sound and Vibration, 2020, 476, 115287.	2.1	11
21	Spatial analysis of damage evolution in cyclic-loaded reinforced concrete shear walls. Journal of Building Engineering, 2022, 49, 104032.	1.6	11
22	A probabilistic model for visual inspection of concrete shear walls. , 2017, , .		9
23	Localization of multiple acoustic emission events occurring closely in time in thin-walled pipes using sparse reconstruction. Journal of Intelligent Material Systems and Structures, 2018, 29, 2362-2373.	1.4	8
24	Acoustic emission monitoring of corrosion in steel pipes using Lamb-type helical waves. Structural Health Monitoring, 2023, 22, 1225-1236.	4.3	8
25	A vision-based technique for damage assessment of reinforced concrete structures. Proceedings of SPIE, 2014, , .	0.8	7
26	A guided ultrasonic imaging approach in isotropic plate structures using edge reflections. Proceedings of SPIE, 2016, , .	0.8	6
27	Stress Measurement in Seven-Wire Strands using Higher Order Guided Ultrasonic Wave Modes. Transportation Research Record, 2018, 2672, 123-131.	1.0	6
28	Monitoring internal corrosion in steel pipelines: a two-step helical guided wave approach for localization and quantification. Structural Health Monitoring, 2021, 20, 2694-2707.	4.3	6
29	Sparse reconstruction localization of multiple acoustic emissions in large diameter pipelines. , 2017, , .		4
30	Acoustic emission monitoring of strengthened steel bridges: Inferring the mechanical behavior of post-installed shear connectors. , 2019, , .		4
31	A helical-based ultrasonic imaging algorithm for structural health monitoring of cylindrical structures. , 2019, , .		4
32	Corrosion damage estimation in multi-wire steel strands using guided ultrasonic waves. Proceedings of SPIE, 2015, , .	0.8	3
33	A Deep Learning Framework for Acoustic Emission Sources Localization and Characterization in Complex Aerospace Panels. Materials Evaluation, 2021, 79, 391-400.	0.1	3
34	Detection of the onset of delamination in a post-tensioned curved concrete structure using hidden Markov modeling of acoustic emissions. , 2018, , .		3
35	A deep learning-based framework for two-step localization and characterization of acoustic emission sources in metallic panels using only one sensor. , 2019, , .		3
36	Damage Localization in Plate-like Structures Using Guided Ultrasonic Waves Edge Reflections. , 0, , .		3

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37	Helical guided waves in liquid-filled cylindrical shells subjected to static pressurization stress. , 2016, , .		2
38	A spectral method for computing the effect of stress on guided modes in plates and rods. , 2018, , .		2
39	A Video-Based Crack Detection in Concrete Surfaces. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 245-252.	0.3	1
40	A computer vision-based crack quantification of reinforced concrete shells using graph theory measures. , 2022, , .		1
41	Data fusion approach for characterization of corrosion-induced stress change in prestressing strands using modulated higher-order guided ultrasonic waves. , 2019, , .		0
42	High-dimensional data analytics applications in SHM and NDE: tensor analysis of thermal videos. , 2022, , .		0