# Arvin Ebrahimkhanlou

List of Publications by Year
in descending order

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

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Acoustic emission monitoring of corrosion in steel pipes using Lamb-type helical waves. Structural Health Monitoring, 2023, 22, 1225-1236. | 4.3 | 8 |
| 2 | A Video-Based Crack Detection in Concrete Surfaces. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 245-252. | 0.3 | 1 |
| 3 | 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 |
| 4 | Spatial analysis of damage evolution in cyclic-loaded reinforced concrete shear walls. Journal of Building Engineering, 2022, 49, 104032. | 1.6 | 11 |
| 5 | A computer vision-based crack quantification of reinforced concrete shells using graph theory measures. , 2022, , . | | 1 |
| 6 | High-dimensional data analytics applications in SHM and NDE: tensor analysis of thermal videos. , 2022, , . | | 0 |
| 7 | 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 |
| 8 | A Deep Learning Framework for Acoustic Emission Sources Localization and Characterization in Complex Aerospace Panels. Materials Evaluation, 2021, 79, 391-400. | 0.1 | 3 |
| 9 | 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 |
| 10 | 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 |
| 11 | Acoustic emission monitoring of containment structures during post-tensioning. Engineering Structures, 2020, 209, 109930. | 2.6 | 23 |
| 12 | Crack-induced guided wave motion and modal excitability in plates using elastodynamic reciprocity. Journal of Sound and Vibration, 2020, 476, 115287. | 2.1 | 11 |
| 13 | Inversion algorithm for Lamb-wave-based depth characterization of acoustic emission sources in plate-like structures. Ultrasonics, 2019, 99, 105975. | 2.1 | 12 |
| 14 | An algebraic reconstruction imaging approach for corrosion damage monitoring of pipelines. Smart Materials and Structures, 2019, 28, 055036. | 1.8 | 12 |
| 15 | 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 |
| 16 | Fractal and Multifractal Analysis of Crack Patterns in Prestressed Concrete Girders. Journal of Bridge Engineering, 2019, 24, . | 1.4 | 44 |
| 17 | Corrosion monitoring of prestressed concrete structures by using topological analysis of acoustic emission data. Smart Materials and Structures, 2019, 28, 055001. | 1.8 | 18 |
| 18 | A deep learning-based framework for two-step localization and characterization of acoustic emission sources in metallic panels using only one sensor. , 2019, , . | | 3 |

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|---|---------|-----|-----------|
| 19 | Acoustic emission monitoring of strengthened steel bridges: Inferring the mechanical behavior of post-installed shear connectors. , 2019, , . | | 4 |
| 20 | A helical-based ultrasonic imaging algorithm for structural health monitoring of cylindrical structures. , 2019, , . | | 4 |
| 21 | Data fusion approach for characterization of corrosion-induced stress change in prestressing strands using modulated higher-order guided ultrasonic waves. , 2019, , . | | 0 |
| 22 | 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 |
| 23 | Higher order longitudinal guided wave modes in axially stressed seven-wire strands. Ultrasonics, 2018, 84, 382-391. | 2.1 | 33 |
| 24 | Single-Sensor Acoustic Emission Source Localization in Plate-Like Structures Using Deep Learning. Aerospace, 2018, 5, 50. | 1.1 | 105 |
| 25 | Stress Measurement in Seven-Wire Strands using Higher Order Guided Ultrasonic Wave Modes. Transportation Research Record, 2018, 2672, 123-131. | 1.0 | 6 |
| 26 | 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 |
| 27 | Detection of the onset of delamination in a post-tensioned curved concrete structure using hidden Markov modeling of acoustic emissions. , 2018, , . | | 3 |
| 28 | A spectral method for computing the effect of stress on guided modes in plates and rods. , 2018, , . | | 2 |
| 29 | Sparse reconstruction localization of multiple acoustic emissions in large diameter pipelines. , 2017, , . | | 4 |
| 30 | Effect of pressurization on helical guided wave energy velocity in fluid-filled pipes. Ultrasonics, 2017, 75, 145-154. | 2.1 | 14 |
| 31 | 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 |
| 32 | A probabilistic framework for single-sensor acoustic emission source localization in thin metallic plates. Smart Materials and Structures, 2017, 26, 095026. | 1.8 | 50 |
| 33 | 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 |
| 34 | A probabilistic model for visual inspection of concrete shear walls. , 2017, , . | | 9 |
| 35 | A guided ultrasonic imaging approach in isotropic plate structures using edge reflections. Proceedings of SPIE, 2016, , . | 0.8 | 6 |
| 36 | Damage localization in metallic plate structures using edge-reflected lamb waves. Smart Materials and Structures, 2016, 25, 085035. | 1.8 | 83 |

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|---|---------|-----|-----------|
| 37 | Helical guided waves in liquid-filled cylindrical shells subjected to static pressurization stress. , 2016, , . | | 2 |
| 38 | Multifractal analysis of crack patterns in reinforced concrete shear walls. Structural Health Monitoring, 2016, 15, 81-92. | 4.3 | 87 |
| 39 | Multifractal analysis of two-dimensional images for damage assessment of reinforced concrete structures. Proceedings of SPIE, 2015, , . | 0.8 | 15 |
| 40 | Corrosion damage estimation in multi-wire steel strands using guided ultrasonic waves. Proceedings of SPIE, 2015, , . | 0.8 | 3 |
| 41 | A vision-based technique for damage assessment of reinforced concrete structures. Proceedings of SPIE, 2014, , . | 0.8 | 7 |
| 42 | Damage Localization in Plate-like Structures Using Guided Ultrasonic Waves Edge Reflections. , 0, , . | | 3 |