M Amin Hariri-Ardebili

List of Publications by Year
in descending order

120 papers	2,406 citations	186265 28 h-index	265206 42 g-index
129 all docs	129 docs citations	129 times ranked	1146 citing authors

#	Article	IF	Citations
1	Probabilistic seismic demand model and optimal intensity measure for concrete dams. Structural Safety, 2016, 59, 67-85.	5.3	129
2	Support vector machine based reliability analysis of concrete dams. Soil Dynamics and Earthquake Engineering, 2018, 104, 276-295.	3.8	98
3	Seismic fragility analysis of concrete dams: A state-of-the-art review. Engineering Structures, 2016, 128, 374-399.	5.3	83
4	Quantitative failure metric for gravity dams. Earthquake Engineering and Structural Dynamics, 2015, 44, 461-480.	4.4	82
5	Performance-based seismic assessment of steel frames using endurance time analysis. Engineering Structures, 2014, 69, 216-234.	5.3	79
6	Risk, Reliability, Resilience (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 557 and beyond in dam engineering: A state-of-the-art review. International Journal of Disaster Risk Reduction, 2018, 31, 806-831.	3.9	79
7	Collapse Fragility Curves for Concrete Dams: Comprehensive Study. Journal of Structural Engineering, 2016, 142, .	3.4	61
8	Polynomial chaos expansion for uncertainty quantification of dam engineering problems. Engineering Structures, 2020, 203, 109631.	5.3	57
9	FEM-based parametric analysis of a typical gravity dam considering input excitation mechanism. Soil Dynamics and Earthquake Engineering, 2016, 84, 22-43.	3.8	53
10	Copula-based reliability and sensitivity analysis of aging dams: Adaptive Kriging and polynomial chaos Kriging methods. Applied Soft Computing Journal, 2021, 109, 107524.	7.2	53
11	Prediction, monitoring, and interpretation of dam leakage flow via adaptative kernel extreme learning machine. Measurement: Journal of the International Measurement Confederation, 2020, 166, 108161.	5.0	52
12	Developing a Library of Shear Walls Database and the Neural Network Based Predictive Meta-Model. Applied Sciences (Switzerland), 2019, 9, 2562.	2.5	51
13	Simplified reliability analysis of multi hazard risk in gravity dams via machine learning techniques. Archives of Civil and Mechanical Engineering, 2018, 18, 592-610.	3.8	49
14	Quantification of seismic potential failure modes in concrete dams. Earthquake Engineering and Structural Dynamics, 2016, 45, 979-997.	4.4	47
15	A mathematical model for the kinetics of the alkaliâ€“silica chemical reaction. Cement and Concrete Research, 2015, 68, 184-195.	11.0	46
16	Random finite element method for the seismic analysis of gravity dams. Engineering Structures, 2018, 171, 405-420.	5.3	46
17	Seismic cracking and instability of concrete dams: Smeared crack approach. Engineering Failure Analysis, 2015, 52, 45-60.	4.0	43
18	Integrative seismic safety evaluation of a high concrete arch dam. Soil Dynamics and Earthquake Engineering, 2014, 67, 85-101.	3.8	40

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19	A new class of seismic damage and performance indices for arch dams via ETA method. Engineering Structures, 2016, 110, 145-160.	5.3	39
20	Prediction of arch dam deformation via correlated multi-target stacking. Applied Mathematical Modelling, 2021, 91, 1175-1193.	4.2	39
21	A simplified 3D model for soil-structure interaction with radiation damping and free field input. Bulletin of Earthquake Engineering, 2011, 9, 1387-1402.	4.1	36
22	Sensitivity and uncertainty quantification of the cohesive crack model. Engineering Fracture Mechanics, 2016, 155, 18-35.	4.3	36
23	A COMPARATIVE STUDY OF SEISMIC STABILITY OF COUPLED ARCH DAM-FOUNDATION-RESERVOIR SYSTEMS USING INFINITE ELEMENTS AND VISCOUS BOUNDARY MODELS. International Journal of Structural Stability and Dynamics, 2013, 13, 1350032.	2.4	35
24	A smeared crack model for seismic failure analysis of concrete gravity dams considering fracture energy effects. Structural Engineering and Mechanics, 2013, 48, 17-39.	1.0	33
25	A computational finiteâ€element program for hybrid simulation. Earthquake Engineering and Structural Dynamics, 2012, 41, 375-389.	4.4	31
26	Seismic capacity and fragility analysis of an ASR-affected nuclear containment vessel structure. Nuclear Engineering and Design, 2019, 346, 140-156.	1.7	31
27	MCS-based response surface metamodels and optimal design of experiments for gravity dams. Structure and Infrastructure Engineering, 2018, 14, 1641-1663.	3.7	30
28	A series of forecasting models for seismic evaluation of dams based on ground motion meta-features. Engineering Structures, 2020, 203, 109657.	5.3	29
29	An RF-PCE Hybrid Surrogate Model for Sensitivity Analysis of Dams. Water (Switzerland), 2021, 13, 302.	2.7	29
30	Triboelectric Nanogenerators for Energy Harvesting in Ocean: A Review on Application and Hybridization. Energies, 2021, 14, 5600.	3.1	28
31	Effects of near-fault ground motions in seismic performance evaluation of a symmetric arch dam. Soil Mechanics and Foundation Engineering, 2012, 49, 192-199.	0.7	27
32	An uncertainty-aware dynamic shape optimization framework: Gravity dam design. Reliability Engineering and System Safety, 2022, 222, 108402.	8.9	27
33	Experimental cyclic test and failure modes of a full scale enhanced modular steel plate shear wall. Engineering Failure Analysis, 2019, 95, 283-288.	4.0	26
34	Estimation of probable damages in arch dams subjected to strong ground motions using endurance time acceleration functions. KSCE Journal of Civil Engineering, 2014, 18, 574-586.	1.9	25
35	Anatomy of the vibration characteristics in old arch dams by random field theory. Engineering Structures, 2019, 179, 460-475.	5.3	23
36	Single and multi-hazard capacity functions for concrete dams. Soil Dynamics and Earthquake Engineering, 2017, 101, 234-249.	3.8	22

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37	Seismic risk prioritization of a large portfolio of dams: Revisited. Advances in Mechanical Engineering, 2018, 10, 168781401880253.	1.6	22
38	A proposed aging management program for alkali silica reactions in a nuclear power plant. Nuclear Engineering and Design, 2014, 277, 248-264.	1.7	21
39	Effect of alkaliâ€“silica reaction on the shear strength of reinforced concrete structural members. A numerical and statistical study. Nuclear Engineering and Design, 2016, 310, 295-310.	1.7	21
40	Seismic Stability Assessment of a High-Rise Concrete Tower Utilizing Endurance Time Analysis. International Journal of Structural Stability and Dynamics, 2014, 14, 1450016.	2.4	20
41	Living in a Multi-Risk Chaotic Condition: Pandemic, Natural Hazards and Complex Emergencies. International Journal of Environmental Research and Public Health, 2020, 17, 5635.	2.6	20
42	Kernel Matrix Approximation on Class-Imbalanced Data With an Application to Scientific Simulation. IEEE Access, 2021, , 1-1.	4.2	20
43	Coupling machine learning and stochastic finite element to evaluate heterogeneous concrete infrastructure. Engineering Structures, 2022, 260, 114190.	5.3	20
44	Mathematical Modeling and Numerical Analysis of Thermal Distribution in Arch Dams considering Solar Radiation Effect. Scientific World Journal, The, 2014, 2014, 1-15.	2.1	19
45	Response Surface Method for Material Uncertainty Quantification of Infrastructures. Shock and Vibration, 2018, 2018, 1-14.	0.6	19
46	Wave passage and incoherency effects on seismic response of high arch dams. Earthquake Engineering and Engineering Vibration, 2012, 11, 567-578.	2.3	18
47	Vibration Anatomy and Damage Detection in Power Transmission Towers with Limited Sensors. Sensors, 2020, 20, 1731.	3.8	17
48	An Empirical Evaluation of the t-SNE Algorithm for Data Visualization in Structural Engineering. , 2021, , .		17
49	Efficient seismic reliability analysis of large-scale coupled systems including epistemic and aleatory uncertainties. Soil Dynamics and Earthquake Engineering, 2019, 116, 761-773.	3.8	16
50	Engaging soft computing in material and modeling uncertainty quantification of dam engineering problems. Soft Computing, 2020, 24, 11583-11604.	3.6	16
51	Response of low-percentage FRC slabs under impact loading: Experimental, numerical, and soft computing methods. Structures, 2020, 27, 975-988.	3.6	16
52	Stochastic analysis of concrete dams with alkali aggregate reaction. Cement and Concrete Research, 2020, 132, 106032.	11.0	16
53	Superposed Natural Hazards and Pandemics: Breaking Dams, Floods, and COVID-19. Sustainability, 2021, 13, 8713.	3.2	16
54	Seismic analysis of a coupled dam-reservoir-foundation system considering pressure effects at opened joints. Structure and Infrastructure Engineering, 2015, 11, 833-850.	3.7	15

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55	An Improved Strength Reduction-Based Slope Stability Analysis. Geosciences (Switzerland), 2019, 9, 55.	2.2	15
56	Impact of Foundation Nonlinearity on the Crack Propagation of High Concrete Dams. Soil Mechanics and Foundation Engineering, 2014, 51, 72-82.	0.7	14
57	Uncertainty quantification of heterogeneous mass concrete in macro-scale. Soil Dynamics and Earthquake Engineering, 2020, 137, 106137.	3.8	14
58	Time-dependent seismic fragility analysis of corroded pile-supported wharves with updating limit states. Soil Dynamics and Earthquake Engineering, 2021, 142, 106551.	3.8	14
59	Sensitivity and uncertainty analysis of AAR affected reinforced concrete shear walls. Engineering Structures, 2018, 172, 334-345.	5.3	13
60	Resource Efficiency and Thermal Comfort of 3D Printable Concrete Building Envelopes Optimized by Performance Enhancing Insulation: A Numerical Study. Energies, 2022, 15, 1069.	3.1	13
61	Structural safety evaluation of Karun III Dam and calibration of its finite element model using instrumentation and site observation. Case Studies in Structural Engineering, 2014, 1, 6-12.	1.6	12
62	Optimal FRP Jacket Placement in RC Frame Structures Towards a Resilient Seismic Design. Sustainability, 2019, 11, 6985.	3.2	12
63	Instrumented Health Monitoring of an Earth Dam. Infrastructures, 2020, 5, 26.	2.8	12
64	Machine learning-aided PSDM for dams with stochastic ground motions. Advanced Engineering Informatics, 2022, 52, 101615.	8.0	12
65	Nonlinear finite element analysis and size effect study in a metal-reinforced ceramics-composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 323, 129-137.	5.6	11
66	Analytical failure probability model for generic gravity dam classes. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2017, 231, 546-557.	0.7	11
67	Matrix completion for cost reduction in finite element simulations under hybrid uncertainties. Applied Mathematical Modelling, 2019, 69, 164-180.	4.2	11
68	Risk-Informed Condition Assessment of a Bridge with Alkali Aggregate Reaction. ACI Structural Journal, 2018, 115, .	0.2	11
69	Feasibility Study of Dez Arch Dam Heightening Based on Nonlinear Numerical Analysis of Existing Dam. Archives of Civil Engineering, 2013, 59, 21-49.	0.7	10
70	Dynamic behavior of corroded RC slabs with macro-level stochastic finite element simulations. Engineering Structures, 2021, 239, 112056.	5.3	10
71	Free Surface Sloshing Effect on Dynamic Response of Rectangular Storage Tanks. American Journal of Fluid Dynamics, 2012, 2, 23-30.	0.5	10
72	Reservoir Fluctuation Effects on Seismic Response of High Concrete Arch Dams Considering Material Nonlinearity. Journal of Civil Engineering Research, 2012, 1, 9-20.	0.5	10

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73	Random Response Spectrum Analysis of Gravity Dam Classes: Simplified, Practical, and Fast Approach. Earthquake Spectra, 2018, 34, 941-975.	3.1	9
74	A cost-effective neural networkâ€“based damage detection procedure for cylindrical equipment. Advances in Mechanical Engineering, 2019, 11, 168781401986694.	1.6	9
75	On the Dynamic Capacity of Concrete Dams. Infrastructures, 2019, 4, 57.	2.8	9
76	Nonlinear Seismic Assessment of Arch Dams and Investigation of Joint Behavior Using Endurance Time Analysis Method. Arabian Journal for Science and Engineering, 2014, 39, 3599-3615.	1.1	8
77	Safety and reliability assessment of heterogeneous concrete components in nuclear structures. Reliability Engineering and System Safety, 2020, 203, 107104.	8.9	8
78	Neural Networks and Imbalanced Learning for Data-Driven Scientific Computing With Uncertainties. IEEE Access, 2021, 9, 15334-15350.	4.2	8
79	Strain-based seismic failure evaluation of coupled dam-reservoir-foundation system. Coupled Systems Mechanics, 2013, 2, 85-110.	0.4	8
80	Seismic analysis of high arch dams considering contraction-peripheral joints coupled effects. Open Engineering, 2013, 3, .	1.6	7
81	Life-cycle cost analysis of pile-supported wharves under multi-hazard condition: aging and shaking. Structure and Infrastructure Engineering, 2023, 19, 269-289.	3.7	7
82	Probabilistic Identification of Seismic Response Mechanism in a Class of Similar Arch Dams. Infrastructures, 2019, 4, 44.	2.8	6
83	Aging of Concrete Structures and Infrastructures: Causes, Consequences, and Cures (C³). Advances in Materials Science and Engineering, 2020, 2020, 1-3.	1.8	6
84	Total risk and seismic hazard analysis of large embankment dams: case study of Northwest Anatolia, Turkey. Life Cycle Reliability and Safety Engineering, 2020, 9, 329-338.	1.0	6
85	Seismic behavior of three dimensional concrete rectangular containers including sloshing effects. Coupled Systems Mechanics, 2012, 1, 79-98.	0.4	6
86	Nonlinear Analysis of Concrete Structural Components Using Co-axial Rotating Smeared Crack Model. Journal of Applied Sciences, 2012, 12, 221-232.	0.3	6
87	Taguchi design-based seismic reliability analysis of geostructures. Georisk, 2019, 13, 34-52.	3.5	5
88	Seismic Analysis of Pine Flat Concrete Dam: Formulation and Synthesis of Results. Lecture Notes in Civil Engineering, 2021, , 3-97.	0.4	5
89	Structural uncertainty quantification with partial information. Expert Systems With Applications, 2022, 198, 116736.	7.6	5
90	Numerical simulation of large-scale structural systems. Advances in Mechanical Engineering, 2019, 11, 168781401985342.	1.6	4

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91	Advances in Dam Engineering. Infrastructures, 2020, 5, 39.	2.8	4
92	A hybrid FE-based predictive framework for ASR-affected structures coupled with accelerated experiments. Engineering Structures, 2021, 234, 111709.	5.3	4
93	Discussion of â€œHydrodynamic Pressure on Gravity Dams with Different Heights and the Westergaard Correction Formulaâ€•by Mingming Wang, Jianyun Chen, Liang Wu, and Bingyue Song. International Journal of Geomechanics, 2022, 22, .	2.7	4
94	Orthotropic Material and Anisotropic Damage Mechanics Approach for Numerically Seismic Assessment of Arch Damâ€“Reservoirâ€“Foundation System. Strength of Materials, 2013, 45, 648-665.	0.5	3
95	Free and Forced Vibration Analysis of an Infilled Steel Frame: Experimental, Numerical, and Analytical Methods. Shock and Vibration, 2014, 2014, 1-14.	0.6	3
96	Impact of load combination on the stability analysis of an arch dam subjected to stochastic non-uniform excitations. European Journal of Environmental and Civil Engineering, 2015, 19, 263-277.	2.1	3
97	A frictional damping based design methodology for structures. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2016, 169, 174-183.	0.8	3
98	Integrative experimental and numerical study of ASR affected nuclear concrete containments. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1.	3.1	3
99	A Perspective towards Multi-Hazard Resilient Systems: Natural Hazards and Pandemics. Sustainability, 2022, 14, 4508.	3.2	3
100	Seismic Performance Evaluation and Analysis of Major Arch Dams Considering Material and Joint Nonlinearity Effects. ISRN Civil Engineering, 2012, 2012, 1-10.	0.4	2
101	Nonlinear Response of High Arch Dams to Nonuniform Seismic Excitation Considering Joint Effects. Journal of Engineering (United States), 2013, 2013, 1-6.	1.0	2
102	Uncertainty Quantification. , 2021, , 423-454.		2
103	Concrete Dams: From Failure Modes to Seismic Fragility. , 2016, , 1-26.		2
104	Kernel Ridge Regression Using Importance Sampling with Application to Seismic Response Prediction. , 2020, , .		2
105	Quantifying Material Uncertainty in Seismic Evaluations of Reinforced Concrete Bridge Column Structures. ACI Structural Journal, 2022, 119, .	0.2	2
106	Vibration and Control in Structures under Single and Multiple Hazards. Shock and Vibration, 2017, 2017, 1-2.	0.6	1
107	Myths and realities of endurance time analysis: Discussion/Comments Regarding â€œSeismic assessment of deep water bridges in reservoir considering hydrodynamic effects using endurance time analysisâ€• by Yutao Pang, Li Cai, Wei He, and Li Wu; Ocean Engineering, 2020, 198:106846. Ocean Engineering, 2021, 221, 108499.	4.3	1
108	Perimetral Joint Effects on Stress Distribution and Seismic Behaviour of Arch Dams. IABSE Symposium Report, 2010, , .	0.0	0

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109	Risk, Reliability, and Uncertainty Quantification of Structural Systems Subjected to Shock and Vibration. Shock and Vibration, 2018, 2018, 1-3.	0.6	0
110	Risk-Informed Decision Making. , 2021, , 667-684.		0
111	Analysis of Nuclear Containment Structures; Introduction. , 2021, , 849-873.		0
112	Alkali Aggregate Reaction. , 2021, , 215-235.		0
113	Ground Motion Intensity Measures. , 2021, , 529-548.		0
114	Analysis of Nuclear Containment Structures; Analyses by the Authors. , 2021, , 931-946.		0
115	Metamodeling and Machine Learning. , 2021, , 485-515.		0
116	Massive Reinforced Concrete Structures. , 2021, , 949-968.		0
117	Call for Special Issue Papers: Big Scientific Data and Machine Learning in Science and Engineering. Big Data, 2021, 9, 326-327.	3.4	0
118	Call for Special Issue Papers: Big Scientific Data and Machine Learning in Science and Engineering. Big Data, 2021, 9, 404-405.	3.4	0
119	Numerical simulation of reservoir fluctuation effects on the nonlinear dynamic response of concrete arch dams. WIT Transactions on Engineering Sciences, 2010, , .	0.0	0
120	Call for Special Issue Papers: Big Scientific Data and Machine Learning in Science and Engineering. Big Data, 2021, 9, 409-410.	3.4	0