

# Abdollah Shafieezadeh

## List of Publications by Year in descending order

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Version: 2024-02-01

100  
papers

2,082  
citations

257101

24  
h-index

276539

41  
g-index

102  
all docs

102  
docs citations

102  
times ranked

1285  
citing authors

#	ARTICLE	IF	CITATIONS
1	REAK: Reliability analysis through Error rate-based Adaptive Kriging. Reliability Engineering and System Safety, 2019, 182, 33-45.	5.1	119
2	Scenario-based resilience assessment framework for critical infrastructure systems: Case study for seismic resilience of seaports. Reliability Engineering and System Safety, 2014, 132, 207-219.	5.1	117
3	Optimal intensity measures for probabilistic seismic demand modeling of extended pile-shaft-supported bridges in liquefied and laterally spreading ground. Bulletin of Earthquake Engineering, 2018, 16, 229-257.	2.3	116
4	Age-Dependent Fragility Models of Utility Wood Poles in Power Distribution Networks Against Extreme Wind Hazards. IEEE Transactions on Power Delivery, 2014, 29, 131-139.	2.9	114
5	ESC: an efficient error-based stopping criterion for kriging-based reliability analysis methods. Structural and Multidisciplinary Optimization, 2019, 59, 1621-1637.	1.7	100
6	Statistical models for shear strength of RC beam-column joints using machine learning techniques. Earthquake Engineering and Structural Dynamics, 2014, 43, 2075-2095.	2.5	83
7	Fractional order intensity measures for probabilistic seismic demand modeling applied to highway bridges. Earthquake Engineering and Structural Dynamics, 2012, 41, 391-409.	2.5	79
8	Intelligent hurricane resilience enhancement of power distribution systems via deep reinforcement learning. Applied Energy, 2021, 285, 116355.	5.1	74
9	A Decision Framework for Managing Risk to Airports from Terrorist Attack. Risk Analysis, 2015, 35, 292-306.	1.5	56
10	Optimal Life-Cycle Resilience Enhancement of Aging Power Distribution Systems: A MINLP-Based Preventive Maintenance Planning. IEEE Access, 2020, 8, 22324-22334.	2.6	54
11	Damage assessment of older highway bridges subjected to three-dimensional ground motions: Characterization of shear-axial force interaction on seismic fragilities. Engineering Structures, 2015, 87, 47-57.	2.6	49
12	Machine Learning for Risk and Resilience Assessment in Structural Engineering: Progress and Future Trends. Journal of Structural Engineering, 2022, 148, .	1.7	48
13	Optimal EDPs for Post-Earthquake Damage Assessment of Extended Pile-Shaft-Supported Bridges Subjected to Transverse Spreading. Earthquake Spectra, 2019, 35, 1367-1396.	1.6	46
14	Seismic Performance of Pile-Supported Wharf Structures considering Soil-Structure Interaction in Liquefied Soil. Earthquake Spectra, 2012, 28, 729-757.	1.6	41
15	Multi-dimensional wind fragility functions for wood utility poles. Engineering Structures, 2019, 183, 937-948.	2.6	36
16	Seismic response prediction and variable importance analysis of extended pile-shaft-supported bridges against lateral spreading: Exploring optimized machine learning models. Engineering Structures, 2021, 236, 112142.	2.6	36
17	Three-Dimensional Wharf Response to Far-Field and Impulsive Near-Field Ground Motions in Liquefiable Soils. Journal of Structural Engineering, 2013, 139, 1395-1407.	1.7	33
18	On confidence intervals for failure probability estimates in Kriging-based reliability analysis. Reliability Engineering and System Safety, 2020, 196, 106758.	5.1	28

#	ARTICLE	IF	CITATIONS
19	Real-time high-fidelity reliability updating with equality information using adaptive Kriging. Reliability Engineering and System Safety, 2020, 195, 106735.	5.1	27
20	Fractional Order Filter Enhanced LQR for Seismic Protection of Civil Structures. Journal of Computational and Nonlinear Dynamics, 2008, 3, .	0.7	26
21	Multiple hazard incidents lifecycle cost assessment of structural systems considering state-dependent repair times and fragility curves. Earthquake Engineering and Structural Dynamics, 2016, 45, 2327-2347.	2.5	26
22	Exploring Passive and Active Metamodeling-Based Reliability Analysis Methods for Soil Slopes: A New Approach to Active Training. International Journal of Geomechanics, 2020, 20, .	1.3	26
23	Error Quantification and Control for Adaptive Kriging-Based Reliability Updating with Equality Information. Reliability Engineering and System Safety, 2021, 207, 107323.	5.1	26
24	Simulation-free reliability analysis with active learning and Physics-Informed Neural Network. Reliability Engineering and System Safety, 2022, 226, 108716.	5.1	25
25	A high-fidelity computational investigation of buried concrete sewer pipes exposed to truckloads and corrosion deterioration. Engineering Structures, 2020, 221, 111043.	2.6	24
26	Soil-pile-structure interaction simulations in liquefiable soils via dynamic macroelements: Formulation and validation. Soil Dynamics and Earthquake Engineering, 2013, 47, 92-107.	1.9	23
27	Highly efficient Bayesian updating using metamodels: An adaptive Kriging-based approach. Structural Safety, 2020, 84, 101915.	2.8	23
28	Fractional order optimal intensity measures for probabilistic seismic demand modeling of extended pile-shaft-supported bridges in liquefiable and laterally spreading ground. Soil Dynamics and Earthquake Engineering, 2019, 120, 301-315.	1.9	22
29	Adaptive network reliability analysis: Methodology and applications to power grid. Reliability Engineering and System Safety, 2021, 216, 107973.	5.1	22
30	Effects of Adjacent Spans and Correlated Failure Events on System-Level Hurricane Reliability of Power Distribution Lines. IEEE Transactions on Power Delivery, 2018, 33, 2305-2314.	2.9	21
31	A posteriori optimal intensity measures for probabilistic seismic demand modeling. Bulletin of Earthquake Engineering, 2019, 17, 681-706.	2.3	20
32	Effect of modelling complexities on extreme wind hazard performance of steel lattice transmission towers. Structure and Infrastructure Engineering, 2020, 16, 898-915.	2.0	20
33	Value of information analysis in non-stationary stochastic decision environments: A reliability-assisted POMDP approach. Reliability Engineering and System Safety, 2022, 217, 108034.	5.1	20
34	An equivalent boundary model for effects of adjacent spans on wind reliability of wood utility poles in overhead distribution lines. Engineering Structures, 2016, 128, 441-452.	2.6	19
35	Bayesian calibration of multi-response systems via multivariate Kriging: Methodology and geological and geotechnical case studies. Engineering Geology, 2019, 260, 105248.	2.9	19
36	Influence of intensity measure selection on simulation-based regional seismic risk assessment. Earthquake Spectra, 2020, 36, 647-672.	1.6	19

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37	System reliability-based seismic collapse assessment of steel moment frames using incremental dynamic analysis and Bayesian probability network. <i>Engineering Structures</i> , 2016, 118, 274-286.	2.6	18
38	Metamodel-based subset simulation adaptable to target computational capacities: the case for high-dimensional and rare event reliability analysis. <i>Structural and Multidisciplinary Optimization</i> , 2021, 64, 649.	1.7	17
39	Adaptive reliability analysis for multi-fidelity models using a collective learning strategy. <i>Structural Safety</i> , 2022, 94, 102141.	2.8	17
40	BUAK-AIS: Efficient Bayesian Updating with Active learning Kriging-based Adaptive Importance Sampling. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 391, 114578.	3.4	17
41	A Probabilistic Framework for Prioritizing Wood Pole Inspections Given Pole Geospatial Data. <i>IEEE Transactions on Smart Grid</i> , 2015, 6, 973-979.	6.2	16
42	A multi-type multi-occurrence hazard lifecycle cost analysis framework for infrastructure management decision making. <i>Engineering Structures</i> , 2018, 167, 504-517.	2.6	16
43	Value of Information Analysis via Active Learning and Knowledge Sharing in Error-Controlled Adaptive Kriging. <i>IEEE Access</i> , 2020, 8, 51021-51034.	2.6	16
44	Significant variables for leakage and collapse of buried concrete sewer pipes: a global sensitivity analysis via Bayesian additive regression trees and Sobol'™ indices. <i>Structure and Infrastructure Engineering</i> , 2021, 17, 676-688.	2.0	16
45	A probabilistic framework for correlated seismic downtime and repair cost estimation of geostructures. <i>Earthquake Engineering and Structural Dynamics</i> , 2014, 43, 739-757.	2.5	15
46	Mitigation of the seismic response of multi-span bridges using MR dampers: Experimental study of a new SMC-based controller. <i>JVC/Journal of Vibration and Control</i> , 2018, 24, 83-99.	1.5	15
47	A risk-based life cycle cost strategy for optimal design and evaluation of control methods for nonlinear structures. <i>Earthquake Engineering and Structural Dynamics</i> , 2018, 47, 2297-2314.	2.5	15
48	Significant variables affecting the performance of concrete panels impacted by wind-borne projectiles: A global sensitivity analysis. <i>International Journal of Impact Engineering</i> , 2020, 144, 103650.	2.4	15
49	A randomized point-based value iteration POMDP enhanced with a counting process technique for optimal management of multi-state multi-element systems. <i>Structural Safety</i> , 2017, 65, 113-125.	2.8	14
50	High-Dimensional Reliability Analysis with Error-Guided Active-Learning Probabilistic Support Vector Machine: Application to Wind-Reliability Analysis of Transmission Towers. <i>Journal of Structural Engineering</i> , 2022, 148, .	1.7	13
51	Experimental study of the semi-active control of a nonlinear two-span bridge using stochastic optimal polynomial control. <i>Smart Materials and Structures</i> , 2015, 24, 065011.	1.8	12
52	FOSID: a fractional order spectrum intensity for probabilistic seismic demand modeling of extended pile-shaft-supported highway bridges under liquefaction and transverse spreading. <i>Bulletin of Earthquake Engineering</i> , 2021, 19, 2531-2559.	2.3	12
53	An Adaptive Kriging-Based Approach with Weakly Stationary Random Fields for Soil Slope Reliability Analysis. , 2019, , .		11
54	Life cycle resilience quantification and enhancement of power distribution systems: A risk-based approach. <i>Structural Safety</i> , 2021, 90, 102075.	2.8	11

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55	Parametrized Windâ€™Surgeâ€™Wave Fragility Functions for Wood Utility Poles. Journal of Structural Engineering, 2022, 148, .	1.7	11
56	Time-dependent probabilistic capacity degradation assessment of prestressed concrete piles in marine environment. Structure and Infrastructure Engineering, 2018, 14, 1372-1385.	2.0	10
57	Probabilistic Sustainability Assessment of Bridges Subjected to Multi-Occurrence Hazards. , 2019, , .		9
58	A Physics-Informed Graph Attention-based Approach for Power Flow Analysis. , 2021, , .		9
59	Confidence intervals for reliability indices using likelihood ratio statistics. Structural Safety, 2012, 38, 48-55.	2.8	8
60	A ground motion prediction equation for novel peak ground fractional order response intensity measures. Bulletin of Earthquake Engineering, 2017, 15, 3437-3461.	2.3	8
61	Probabilistic Lifecycle Cost Analysis of Levees against Backward Erosion. , 2019, , .		8
62	Shake table testing and computational investigation of the seismic performance of modularized suspended building systems. Bulletin of Earthquake Engineering, 2020, 18, 5247-5279.	2.3	8
63	Crossâ€™level fragility analysis of modularized suspended buildings based on experimentally validated numerical models. Structural Design of Tall and Special Buildings, 2020, 29, e1778.	0.9	8
64	Coupled backward erosion piping and slope instability performance model for levees. Transportation Geotechnics, 2020, 24, 100394.	2.0	7
65	A quantile-based sequential approach to reliability-based design optimization via error-controlled adaptive Kriging with independent constraint boundary sampling. Structural and Multidisciplinary Optimization, 2021, 63, 2231-2252.	1.7	7
66	Reliabilityâ€™based control algorithms for nonlinear hysteretic systems based on enhanced stochastic averaging of energy envelope. Earthquake Engineering and Structural Dynamics, 2017, 46, 2381-2397.	2.5	6
67	Ohio Bridge Condition Index: Multilevel Cost-Based Performance Index for Bridge Systems. Transportation Research Record, 2017, 2612, 152-160.	1.0	6
68	A Markovian approach to infrastructure lifeâ€™cycle analysis: Modeling the interplay of hazard effects and recovery. Earthquake Engineering and Structural Dynamics, 2021, 50, 736-755.	2.5	6
69	Shallow-Layer <i>p</i> Relationships for Micropiles Embedded in Saturated Medium Dense Sand Using Quasi-Static Test. Geotechnical Testing Journal, 2018, 41, 193-206.	0.5	6
70	Enhanced stochastic averaging of non-integrable nonlinear systems subjected to stochastic excitations. Soil Dynamics and Earthquake Engineering, 2018, 113, 256-264.	1.9	5
71	Implementation and evaluation of coupled discontinuous Galerkin methods for simulating overtopping of flood defenses by storm waves. Advances in Water Resources, 2020, 136, 103501.	1.7	5
72	Parameter Estimation of a Fractional Order Soil Constitutive Model Using KiK-Net Downhole Array Data: A Bayesian Updating Approach. , 2020, , .		5

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73	Temporal global sensitivity analysis of concrete sewer pipes under compounding corrosion and heavy traffic loads. <i>Structure and Infrastructure Engineering</i> , 2023, 19, 1108-1121.	2.0	5
74	Updating Bridge Deck Condition Transition Probabilities as New Inspection Data Are Collected: Methodology and Empirical Evaluation. <i>Transportation Research Record</i> , 2018, 2672, 93-102.	1.0	4
75	Seismic Response of Pile-Supported Container Wharves. , 2009, , .		3
76	Fragility Assessment of Wood Poles in Power Distribution Networks against Extreme Wind Hazards. , 2012, , .		3
77	A stochastic averaging-based optimal control method for nonlinear systems: Application to a building with soil-structure interactions. <i>Engineering Structures</i> , 2016, 127, 635-644.	2.6	3
78	Resilience Assessment of Distribution Systems Considering the Effect of Hurricanes. , 2018, , .		3
79	A physics-based approach for predicting time-dependent progression length of backward erosion piping. <i>Canadian Geotechnical Journal</i> , 0, , .	1.4	3
80	Resilience of Sewer Networks to Extreme Weather Hazards: Past Experiences and an Assessment Framework. , 2020, , .		3
81	Hurricane Fragility Assessment of Power Transmission Towers for a New Set of Performance-Based Limit States. <i>Springer Tracts in Civil Engineering</i> , 2022, , 167-188.	0.3	3
82	Fragility Models for Container Cargo Wharves. , 2009, , .		2
83	Demonstration of robust stability and performance of filter-enhanced H2/LQG controllers for a nonlinear structure. <i>Structural Control and Health Monitoring</i> , 2011, 18, 710-720.	1.9	2
84	Evolutionary optimization for resilience-based planning for power distribution networks. , 2021, , 47-61.		2
85	Optimal budget allocation for bridge portfolios with element-level inspection data: a constrained integer linear programming formulation. <i>Structure and Infrastructure Engineering</i> , 2022, 18, 864-878.	2.0	2
86	Data-Driven Model for Estimating the Probability of Riverine Levee Breach Due to Overtopping. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2022, 148, .	1.5	2
87	Optimum weighted arithmetic means of peak- and spectral-based intensity measures for probabilistic seismic demand modeling of modularized suspended buildings. <i>Bulletin of Earthquake Engineering</i> , 2022, 20, 5383-5426.	2.3	2
88	Systematic Procedures for the Analysis of Agency and User Costs of Bridge Repair Actions. <i>Transportation Research Record</i> , 2018, 2672, 116-126.	1.0	1
89	A framework for assessing the effectiveness of resilience enhancement strategies for interdependent infrastructure systems. , 2014, , 573-580.		1
90	Probabilistic Seismic Demand Analysis of Pile-Supported Transmission Towers on Infinite Slopes: Exploring Machine Learning Models for Optimal Intensity Measures. , 2022, , .		1

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91	Fractional Order LQR for Optimal Robust Control of a Simple Structure. , 2007, , 1235.		0
92	Dynamic Interaction Behavior of Pile-Supported Wharves and Container Cranes in Liquefiable Soil Embankments. , 2012, , .		0
93	Time-Dependent Probabilistic Capacity Assessment of a Prestressed Concrete Pile in a Spatially Varying Corrosive Marine Environment Using Detailed Finite Element Methods. , 2015, , .		0
94	Waveform-Based Condition Assessments in Civil Engineering. Shock and Vibration, 2016, 2016, 1-1.	0.3	0
95	Modeling the Impact of Adjacent Spans in Overhead Distribution Lines on the Wind Response of Utility Poles. , 2016, , .		0
96	Advanced Materials for Structural Vibration Control. Shock and Vibration, 2018, 2018, 1-1.	0.3	0
97	An Integrated Assessment of Seismic Hazard Vulnerability and Resilience of Seaports. , 2019, , .		0
98	A risk informed decision framework for risk management of infrastructure systems against terrorist attacks. , 2014, , 2731-2738.		0
99	Characterization of main-shock effects on the aftershock fragility of rigid electrical equipment. , 2014, , 4415-4421.		0
100	Likelihood-based approaches for confidence interval estimation of reliability indices. , 2014, , 1851-1851.		0