

Dan M Frangopol

List of Publications by Year in descending order

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532
papers

20,062
citations

9756

73
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21474

114
g-index

579
all docs

579
docs citations

579
times ranked

6040
citing authors

#	ARTICLE	IF	CITATIONS
1	Maintenance and management of civil infrastructure based on condition, safety, optimization, and life-cycle cost. Structure and Infrastructure Engineering, 2007, 3, 29-41.	2.0	364
2	Life-Cycle Cost Design of Deteriorating Structures. Journal of Structural Engineering, 1997, 123, 1390-1401.	1.7	363
3	Life-cycle performance, management, and optimisation of structural systems under uncertainty: accomplishments and challenges. Structure and Infrastructure Engineering, 2011, 7, 389-413.	2.0	363
4	Resilience and Sustainability of Civil Infrastructure: Toward a Unified Approach. Journal of Infrastructure Systems, 2014, 20, .	1.0	340
5	Reliability-Based Life-Cycle Management of Highway Bridges. Journal of Computing in Civil Engineering, 2001, 15, 27-34.	2.5	325
6	Structural health monitoring and reliability estimation: Long span truss bridge application with environmental monitoring data. Engineering Structures, 2008, 30, 2347-2359.	2.6	310
7	Probabilistic models for life-cycle performance of deteriorating structures: review and future directions. Structural Control and Health Monitoring, 2004, 6, 197-212.	0.7	284
8	Probabilistic analysis of resistance degradation of reinforced concrete bridge beams under corrosion. Engineering Structures, 1998, 20, 960-971.	2.6	277
9	Bridge Reliability Assessment Based on Monitoring. Journal of Bridge Engineering, 2008, 13, 258-270.	1.4	255
10	Effects of Damage and Redundancy on Structural Reliability. Journal of Structural Engineering, 1987, 113, 1533-1549.	1.7	250
11	Reliability-based design of MEMS mechanisms by topology optimization. Computers and Structures, 2003, 81, 813-824.	2.4	231
12	Life-cycle of structural systems: recent achievements and future directions. Structure and Infrastructure Engineering, 2016, 12, 1-20.	2.0	200
13	Life-Cycle Reliability-Based Maintenance Cost Optimization of Deteriorating Structures with Emphasis on Bridges. Journal of Structural Engineering, 2003, 129, 818-828.	1.7	190
14	Life-Cycle Performance of Deteriorating Structural Systems under Uncertainty: Review. Journal of Structural Engineering, 2016, 142, .	1.7	190
15	Repair Optimization of Highway Bridges Using System Reliability Approach. Journal of Structural Engineering, 1999, 125, 766-775.	1.7	189
16	A probabilistic approach for the prediction of seismic resilience of bridges. Earthquake Engineering and Structural Dynamics, 2013, 42, 1469-1487.	2.5	185
17	Bridge life-cycle performance and cost: analysis, prediction, optimisation and decision-making. Structure and Infrastructure Engineering, 2017, 13, 1239-1257.	2.0	183
18	Bridge fatigue reliability assessment using probability density functions of equivalent stress range based on field monitoring data. International Journal of Fatigue, 2010, 32, 1221-1232.	2.8	182

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19	Reliability of Reinforced Concrete Girders under Corrosion Attack. Journal of Structural Engineering, 1997, 123, 286-297.	1.7	181
20	Risk and resilience assessment of bridges under mainshock and aftershocks incorporating uncertainties. Engineering Structures, 2015, 83, 198-208.	2.6	179
21	Life-cycle reliability-based optimization of civil and aerospace structures. Computers and Structures, 2003, 81, 397-410.	2.4	177
22	Service-Life Prediction of Deteriorating Concrete Bridges. Journal of Structural Engineering, 1998, 124, 309-317.	1.7	164
23	Time-variant sustainability assessment of seismically vulnerable bridges subjected to multiple hazards. Earthquake Engineering and Structural Dynamics, 2013, 42, 1451-1467.	2.5	162
24	Restoration of Bridge Networks after an Earthquake: Multicriteria Intervention Optimization. Earthquake Spectra, 2012, 28, 427-455.	1.6	157
25	Life-cycle reliability of RC bridge piers under seismic and airborne chloride hazards. Earthquake Engineering and Structural Dynamics, 2011, 40, 1671-1687.	2.5	153
26	Resilience assessment framework for critical infrastructure in a multi-hazard environment: Case study on transport assets. Science of the Total Environment, 2020, 714, 136854.	3.9	153
27	Optimal Resilience- and Cost-Based Postdisaster Intervention Prioritization for Bridges along a Highway Segment. Journal of Bridge Engineering, 2012, 17, 117-129.	1.4	152
28	Risk assessment of highway bridges under multiple hazards. Journal of Risk Research, 2011, 14, 1057-1089.	1.4	147
29	Condition Prediction of Deteriorating Concrete Bridges Using Bayesian Updating. Journal of Structural Engineering, 1999, 125, 1118-1125.	1.7	143
30	Two probabilistic life-cycle maintenance models for deteriorating civil infrastructures. Probabilistic Engineering Mechanics, 2004, 19, 345-359.	1.3	143
31	Lifetime-oriented multi-objective optimization of structural maintenance considering system reliability, redundancy and life-cycle cost using GA. Structural Safety, 2009, 31, 460-474.	2.8	140
32	Fatigue reliability assessment of steel bridge details integrating weigh-in-motion data and probabilistic finite element analysis. Computers and Structures, 2012, 112-113, 245-257.	2.4	130
33	Nonlinear Analysis of Composite Beams with Deformable Shear Connectors. Journal of Structural Engineering, 1998, 124, 1148-1158.	1.7	126
34	Toward life-cycle reliability-, risk- and resilience-based design and assessment of bridges and bridge networks under independent and interacting hazards: emphasis on earthquake, tsunami and corrosion. Structure and Infrastructure Engineering, 2020, 16, 26-50.	2.0	122
35	Optimal bridge maintenance planning based on probabilistic performance prediction. Engineering Structures, 2004, 26, 991-1002.	2.6	120
36	Time-dependent reliability analysis of existing RC structures in a marine environment using hazard associated with airborne chlorides. Engineering Structures, 2010, 32, 3768-3779.	2.6	119

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37	Probabilistic Time-Dependent Multihazard Life-Cycle Assessment and Resilience of Bridges Considering Climate Change. <i>Journal of Performance of Constructed Facilities</i> , 2016, 30, .	1.0	119
38	Cellular Automata Approach to Durability Analysis of Concrete Structures in Aggressive Environments. <i>Journal of Structural Engineering</i> , 2004, 130, 1724-1737.	1.7	114
39	Generalized Probabilistic Framework for Optimum Inspection and Maintenance Planning. <i>Journal of Structural Engineering</i> , 2013, 139, 435-447.	1.7	112
40	Updating Bridge Reliability Based on Bridge Management Systems Visual Inspection Results. <i>Journal of Bridge Engineering</i> , 2003, 8, 374-382.	1.4	111
41	Optimizing Bridge Network Maintenance Management under Uncertainty with Conflicting Criteria: Life-Cycle Maintenance, Failure, and User Costs. <i>Journal of Structural Engineering</i> , 2006, 132, 1835-1845.	1.7	111
42	Multiobjective Maintenance Planning Optimization for Deteriorating Bridges Considering Condition, Safety, and Life-Cycle Cost. <i>Journal of Structural Engineering</i> , 2005, 131, 833-842.	1.7	107
43	Use of monitoring extreme data for the performance prediction of structures: General approach. <i>Engineering Structures</i> , 2008, 30, 3644-3653.	2.6	105
44	Use of monitoring extreme data for the performance prediction of structures: Bayesian updating. <i>Engineering Structures</i> , 2008, 30, 3654-3666.	2.6	101
45	Bridge System Performance Assessment from Structural Health Monitoring: A Case Study. <i>Journal of Structural Engineering</i> , 2009, 135, 733-742.	1.7	98
46	Probabilistic Service Life Assessment and Maintenance Planning of Concrete Structures. <i>Journal of Structural Engineering</i> , 2006, 132, 810-825.	1.7	97
47	Life-cycle maintenance of deteriorating structures by multi-objective optimization involving reliability, risk, availability, hazard and cost. <i>Structural Safety</i> , 2014, 48, 40-50.	2.8	97
48	Fatigue reliability assessment of retrofitted steel bridges integrating monitored data. <i>Structural Safety</i> , 2010, 32, 77-89.	2.8	96
49	A stochastic computational framework for the joint transportation network fragility analysis and traffic flow distribution under extreme events. <i>Probabilistic Engineering Mechanics</i> , 2011, 26, 182-193.	1.3	95
50	Reinforced concrete bridge deck reliability model incorporating temporal and spatial variations of probabilistic corrosion rate sensor data. <i>Reliability Engineering and System Safety</i> , 2008, 93, 394-409.	5.1	94
51	RELSYS: A computer program for structural system reliability. <i>Structural Engineering and Mechanics</i> , 1998, 6, 901-919.	1.0	94
52	Assessment of the structural performance of corrosion-affected RC members based on experimental study and probabilistic modeling. <i>Engineering Structures</i> , 2016, 127, 189-205.	2.6	93
53	Bridge Lifetime System Reliability under Multiple Limit States. <i>Journal of Bridge Engineering</i> , 2001, 6, 523-528.	1.4	92
54	A probabilistic computational framework for bridge network optimal maintenance scheduling. <i>Reliability Engineering and System Safety</i> , 2011, 96, 332-349.	5.1	92

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55	Sustainability of Highway Bridge Networks Under Seismic Hazard. <i>Journal of Earthquake Engineering</i> , 2014, 18, 41-66.	1.4	92
56	System reliability and redundancy in structural design and evaluation. <i>Structural Safety</i> , 1994, 16, 47-71.	2.8	91
57	Sustainability-informed maintenance optimization of highway bridges considering multi-attribute utility and risk attitude. <i>Engineering Structures</i> , 2015, 102, 310-321.	2.6	91
58	Integration of the effects of airborne chlorides into reliability-based durability design of reinforced concrete structures in a marine environment. <i>Structure and Infrastructure Engineering</i> , 2012, 8, 125-134.	2.0	90
59	Structural Optimization Using Reliability Concepts. <i>Journal of Structural Engineering</i> , 1985, 111, 2288-2301.	1.7	89
60	Reliability analysis of chloride penetration in saturated concrete. <i>Probabilistic Engineering Mechanics</i> , 2002, 17, 305-315.	1.3	89
61	Reliability, risk and lifetime distributions as performance indicators for life-cycle maintenance of deteriorating structures. <i>Reliability Engineering and System Safety</i> , 2014, 123, 21-37.	5.1	86
62	Balancing weight, system reliability and redundancy in a multiobjective optimization framework. <i>Structural Safety</i> , 1990, 7, 165-175.	2.8	83
63	Maintenance, management, life-cycle design and performance of structures and infrastructures: a brief review. <i>Structure and Infrastructure Engineering</i> , 2012, 8, 1-25.	2.0	83
64	Probabilistic Lifetime-Oriented Multiobjective Optimization of Bridge Maintenance: Combination of Maintenance Types. <i>Journal of Structural Engineering</i> , 2006, 132, 1821-1834.	1.7	82
65	Condition, safety and cost profiles for deteriorating structures with emphasis on bridges. <i>Reliability Engineering and System Safety</i> , 2005, 89, 185-198.	5.1	81
66	Performance-based seismic assessment of conventional and base-isolated steel buildings including environmental impact and resilience. <i>Earthquake Engineering and Structural Dynamics</i> , 2016, 45, 739-756.	2.5	81
67	Maintenance and Operation of Infrastructure Systems: Review. <i>Journal of Structural Engineering</i> , 2016, 142, .	1.7	81
68	Risk-informed life-cycle optimum inspection and maintenance of ship structures considering corrosion and fatigue. <i>Ocean Engineering</i> , 2015, 101, 161-171.	1.9	80
69	Reliability-Based Performance Indicators for Structural Members. <i>Journal of Structural Engineering</i> , 2016, 142, .	1.7	80
70	Bridge network performance, maintenance and optimisation under uncertainty: accomplishments and challenges. <i>Structure and Infrastructure Engineering</i> , 2012, 8, 341-356.	2.0	78
71	Life-Cycle Risk Assessment of Spatially Distributed Aging Bridges under Seismic and Traffic Hazards. <i>Earthquake Spectra</i> , 2013, 29, 127-153.	1.6	78
72	Novel Approach for Multicriteria Optimization of Life-Cycle Preventive and Essential Maintenance of Deteriorating Structures. <i>Journal of Structural Engineering</i> , 2010, 136, 1009-1022.	1.7	77

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73	Performance Indicators for Structural Systems and Infrastructure Networks. Journal of Structural Engineering, 2016, 142, .	1.7	77
74	Probabilistic Lifetime-Oriented Multiobjective Optimization of Bridge Maintenance: Single Maintenance Type. Journal of Structural Engineering, 2006, 132, 991-1005.	1.7	76
75	Redundancy and robustness of highway bridge superstructures and substructures. Structure and Infrastructure Engineering, 2010, 6, 257-278.	2.0	74
76	Optimization of bridge maintenance strategies based on structural health monitoring information. Structural Safety, 2011, 33, 26-41.	2.8	74
77	Bridge Annual Maintenance Prioritization under Uncertainty by Multiobjective Combinatorial Optimization. Computer-Aided Civil and Infrastructure Engineering, 2005, 20, 343-353.	6.3	73
78	Risk-Based Approach for Optimum Maintenance of Bridges under Traffic and Earthquake Loads. Journal of Structural Engineering, 2013, 139, 422-434.	1.7	73
79	Reliability-based analysis and design optimization of electrostatically actuated MEMS. Computers and Structures, 2004, 82, 1007-1020.	2.4	71
80	Reliability of fiber-reinforced composite laminate plates. Probabilistic Engineering Mechanics, 2003, 18, 119-137.	1.3	69
81	Optimization of lifetime maintenance strategies for deteriorating structures considering probabilities of violating safety, condition, and cost thresholds. Probabilistic Engineering Mechanics, 2006, 21, 1-8.	1.3	69
82	Time-Dependent Reliability of PSC Box-Girder Bridge Considering Creep, Shrinkage, and Corrosion. Journal of Bridge Engineering, 2011, 16, 29-43.	1.4	69
83	Digital technologies can enhance climate resilience of critical infrastructure. Climate Risk Management, 2022, 35, 100387.	1.6	69
84	Cost-Reliability Interaction in Life-Cycle Cost Optimization of Deteriorating Structures. Journal of Structural Engineering, 2004, 130, 1704-1712.	1.7	68
85	Long-term resilience and loss assessment of highway bridges under multiple natural hazards. Structure and Infrastructure Engineering, 2020, 16, 626-641.	2.0	67
86	Optimum maintenance strategy for deteriorating bridge structures based on lifetime functions. Engineering Structures, 2006, 28, 196-206.	2.6	66
87	Bridge Safety Evaluation Based on Monitored Live Load Effects. Journal of Bridge Engineering, 2009, 14, 257-269.	1.4	66
88	Reliability estimation of corroded RC structures based on spatial variability using experimental evidence, probabilistic analysis and finite element method. Engineering Structures, 2019, 192, 30-52.	2.6	66
89	Evaluation of Expected Life-Cycle Maintenance Cost of Deteriorating Structures. Journal of Structural Engineering, 2003, 129, 682-691.	1.7	63
90	Rating and Reliability of Existing Bridges in a Network. Journal of Bridge Engineering, 2003, 8, 383-393.	1.4	63

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91	Probability-Based Bridge Network Performance Evaluation. <i>Journal of Bridge Engineering</i> , 2006, 11, 633-641.	1.4	63
92	Optimum inspection planning for minimizing fatigue damage detection delay of ship hull structures. <i>International Journal of Fatigue</i> , 2011, 33, 448-459.	2.8	63
93	Lifetime Bridge Maintenance Strategies Based on System Reliability. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , 1997, 7, 193-198.	0.5	61
94	Probabilistic limit analysis and lifetime prediction of concrete structures. <i>Structure and Infrastructure Engineering</i> , 2008, 4, 399-412.	2.0	60
95	Pre-Earthquake Multi-Objective Probabilistic Retrofit Optimization of Bridge Networks Based on Sustainability. <i>Journal of Bridge Engineering</i> , 2014, 19, .	1.4	60
96	Life-cycle management of deteriorating civil infrastructure considering resilience to lifetime hazards: A general approach based on renewal-reward processes. <i>Reliability Engineering and System Safety</i> , 2019, 183, 197-212.	5.1	60
97	Sensitivity of Reliability-Based Optimum Design. <i>Journal of Structural Engineering</i> , 1985, 111, 1703-1721.	1.7	59
98	A new look at reliability of reinforced concrete columns. <i>Structural Safety</i> , 1996, 18, 123-150.	2.8	59
99	Multiscale Modeling of Interactive Diffusion Processes in Concrete. <i>Journal of Engineering Mechanics - ASCE</i> , 2000, 126, 258-265.	1.6	58
100	Multi-objective design of post-tensioned concrete road bridges using artificial neural networks. <i>Structural and Multidisciplinary Optimization</i> , 2017, 56, 139-150.	1.7	58
101	Maintenance Planning for Deteriorating Concrete Bridges. <i>Journal of Structural Engineering</i> , 1999, 125, 1407-1414.	1.7	57
102	Bridge Rating and Reliability Correlation: Comprehensive Study for Different Bridge Types. <i>Journal of Structural Engineering</i> , 2004, 130, 1063-1074.	1.7	57
103	An efficient time-dependent reliability method. <i>Structural Safety</i> , 2019, 81, 101864.	2.8	57
104	Experimental investigation of the spatial variability of the steel weight loss and corrosion cracking of reinforced concrete members: novel X-ray and digital image processing techniques. <i>Structure and Infrastructure Engineering</i> , 2017, 13, 118-134.	2.0	56
105	Reliability assessment of ship structures using Bayesian updating. <i>Engineering Structures</i> , 2013, 56, 1836-1847.	2.6	55
106	Efficient, accurate, and simple Markov chain model for the life-cycle analysis of bridge groups. <i>Structural Safety</i> , 2013, 40, 51-64.	2.8	55
107	Long-term seismic performance of RC structures in an aggressive environment: emphasis on bridge piers. <i>Structure and Infrastructure Engineering</i> , 2014, 10, 865-879.	2.0	55
108	Improved assessment of mass concrete dams using acoustic travel time tomography. Part I " theory. <i>Construction and Building Materials</i> , 2000, 14, 133-146.	3.2	54

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109	Risk Matrix Integrating Risk Attitudes Based on Utility Theory. Risk Analysis, 2015, 35, 1437-1447.	1.5	54
110	Lifetime reliability-based optimization of post-tensioned box-girder bridges. Engineering Structures, 2017, 145, 381-391.	2.6	54
111	Reliability-based inspection optimization of complex structures: a brief retrospective. Computers and Structures, 2002, 80, 1133-1144.	2.4	53
112	A probabilistic approach for optimizing inspection, monitoring, and maintenance actions against fatigue of critical ship details. Structural Safety, 2016, 60, 91-101.	2.8	53
113	Reliability-Based Optimum Structural Design. , 1995, , 352-387.		52
114	Minimum expected cost-oriented optimal maintenance planning for deteriorating structures: application to concrete bridge decks. Reliability Engineering and System Safety, 2001, 73, 281-291.	5.1	52
115	Computational Platform for Predicting Lifetime System Reliability Profiles for Different Structure Types in a Network. Journal of Computing in Civil Engineering, 2004, 18, 92-104.	2.5	52
116	Balancing Connectivity of Deteriorating Bridge Networks and Long-Term Maintenance Cost through Optimization. Journal of Bridge Engineering, 2005, 10, 468-481.	1.4	52
117	Optimal bridge maintenance planning using improved multi-objective genetic algorithm. Structure and Infrastructure Engineering, 2006, 2, 33-41.	2.0	52
118	Optimization of Life-Cycle Maintenance of Deteriorating Bridges with Respect to Expected Annual System Failure Rate and Expected Cumulative Cost. Journal of Structural Engineering, 2014, 140, .	1.7	52
119	Reliability-based condition assessment of deteriorating concrete bridges considering load redistribution. Structural Safety, 1999, 21, 159-195.	2.8	51
120	Improved assessment of mass concrete dams using acoustic travel time tomography. Part II " application. Construction and Building Materials, 2000, 14, 147-156.	3.2	51
121	Time-variant redundancy of structural systems. Structure and Infrastructure Engineering, 2010, 6, 279-301.	2.0	51
122	Bridge fatigue assessment and management using reliability-based crack growth and probability of detection models. Probabilistic Engineering Mechanics, 2011, 26, 471-480.	1.3	51
123	Reliability, redundancy and risk as performance indicators of structural systems during their life-cycle. Engineering Structures, 2012, 41, 34-49.	2.6	51
124	Inspection and monitoring planning for RC structures based on minimization of expected damage detection delay. Probabilistic Engineering Mechanics, 2011, 26, 308-320.	1.3	50
125	Reliability-based optimum design of reinforced concrete girders. Structural Safety, 1996, 18, 239-258.	2.8	49
126	Service life prediction of structural systems using lifetime functions with emphasis on bridges. Reliability Engineering and System Safety, 2004, 86, 39-51.	5.1	49

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127	Time-Dependent Bridge Network Reliability: Novel Approach. Journal of Structural Engineering, 2005, 131, 329-337.	1.7	49
128	Bridge stress calculation based on the dynamic response of coupled train-bridge system. Engineering Structures, 2015, 99, 334-345.	2.6	49
129	Monte Carlo simulation of rock slope reliability. Computers and Structures, 1989, 33, 1495-1505.	2.4	48
130	Lifetime reliability-based optimization of reinforced concrete cross-sections under corrosion. Structural Safety, 2009, 31, 483-489.	2.8	48
131	Optimization of bridge maintenance strategies based on multiple limit states and monitoring. Engineering Structures, 2010, 32, 627-640.	2.6	48
132	Time-variant reliability analysis of widened deteriorating prestressed concrete bridges considering shrinkage and creep. Engineering Structures, 2017, 153, 1-16.	2.6	48
133	Lifetime Performance Analysis of Existing Steel Girder Bridge Superstructures. Journal of Structural Engineering, 2004, 130, 1875-1888.	1.7	47
134	Automated finite element updating using strain data for the lifetime reliability assessment of bridges. Reliability Engineering and System Safety, 2012, 99, 139-150.	5.1	47
135	Hyperspace Division Method for Structural Reliability. Journal of Engineering Mechanics - ASCE, 1994, 120, 2405-2427.	1.6	46
136	Redundancy of structural systems with and without maintenance: An approach based on lifetime functions. Reliability Engineering and System Safety, 2010, 95, 520-533.	5.1	46
137	Resilience As Optimization Criterion for the Rehabilitation of Bridges Belonging to a Transportation Network Subject to Earthquake. , 2011, , .		46
138	Optimizing Bridge Network Retrofit Planning Based on Cost-Benefit Evaluation and Multi-Attribute Utility Associated with Sustainability. Earthquake Spectra, 2015, 31, 2255-2280.	1.6	46
139	Probabilistic Optimization of Aging Structures Considering Maintenance and Failure Costs. Journal of Structural Engineering, 2005, 131, 600-616.	1.7	45
140	The use of lifetime functions in the optimization of interventions on existing bridges considering maintenance and failure costs. Reliability Engineering and System Safety, 2006, 91, 698-705.	5.1	45
141	On Structural Robustness, Redundancy, and Static Indeterminacy. , 2008, , .		45
142	Generalized bridge network performance analysis with correlation and time-variant reliability. Structural Safety, 2011, 33, 155-164.	2.8	45
143	Life-Cycle Cost Evaluation of Conventional and Corrosion-Resistant Steel for Bridges. Journal of Bridge Engineering, 2015, 20, .	1.4	45
144	Geometrically nonlinear finite element reliability analysis of structural systems. I: theory. Computers and Structures, 2000, 77, 677-691.	2.4	44

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145	Probabilistic optimum inspection planning of steel bridges with multiple fatigue sensitive details. <i>Engineering Structures</i> , 2013, 49, 996-1006.	2.6	44
146	Probabilistic optimization framework for inspection/repair planning of fatigue-critical details using dynamic Bayesian networks. <i>Computers and Structures</i> , 2018, 198, 40-50.	2.4	44
147	Hierarchical life-cycle design of reinforced concrete structures incorporating durability, economic efficiency and green objectives. <i>Engineering Structures</i> , 2018, 157, 119-131.	2.6	44
148	Reliability of material and geometrically non-linear reinforced and prestressed concrete structures. <i>Computers and Structures</i> , 2004, 82, 1021-1031.	2.4	43
149	Time-dependent performance indicators of damaged bridge superstructures. <i>Engineering Structures</i> , 2011, 33, 2458-2471.	2.6	43
150	Probabilistic Fatigue Life Estimation of Steel Bridges by Using a Bilinear S-N Approach. <i>Journal of Bridge Engineering</i> , 2012, 17, 58-70.	1.4	43
151	Updating the Seismic Reliability of Existing RC Structures in a Marine Environment by Incorporating the Spatial Steel Corrosion Distribution: Application to Bridge Piers. <i>Journal of Bridge Engineering</i> , 2016, 21, .	1.4	43
152	Life cycle utility-informed maintenance planning based on lifetime functions: optimum balancing of cost, failure consequences and performance benefit. <i>Structure and Infrastructure Engineering</i> , 2016, 12, 830-847.	2.0	43
153	Lifetime Performance Analysis of Existing Prestressed Concrete Bridge Superstructures. <i>Journal of Structural Engineering</i> , 2004, 130, 1889-1903.	1.7	42
154	Integration of structural health monitoring in life-cycle performance assessment of ship structures under uncertainty. <i>Marine Structures</i> , 2010, 23, 303-321.	1.6	42
155	Probabilistic life-cycle optimization of durability-enhancing maintenance actions: Application to FRP strengthening planning. <i>Engineering Structures</i> , 2019, 188, 340-349.	2.6	42
156	Assessment of Risk Using Bridge Element Condition Ratings. <i>Journal of Infrastructure Systems</i> , 2013, 19, 252-265.	1.0	41
157	Connectivity-Based Optimal Scheduling for Maintenance of Bridge Networks. <i>Journal of Engineering Mechanics - ASCE</i> , 2013, 139, 760-769.	1.6	41
158	Probabilistic Optimum Inspection/Repair Planning to Extend Lifetime of Deteriorating Structures. <i>Journal of Performance of Constructed Facilities</i> , 2011, 25, 534-544.	1.0	40
159	Optimal planning of retrofitting interventions on bridges in a highway network. <i>Engineering Structures</i> , 1998, 20, 933-939.	2.6	39
160	Time-dependent interaction between load rating and reliability of deteriorating bridges. <i>Engineering Structures</i> , 2004, 26, 1751-1765.	2.6	39
161	Updating reliability of steel miter gates on locks and dams using visual inspection results. <i>Engineering Structures</i> , 2004, 26, 319-333.	2.6	39
162	Life-Cycle Management of Fatigue-Sensitive Structures Integrating Inspection Information. <i>Journal of Infrastructure Systems</i> , 2014, 20, .	1.0	39

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163	Incorporation of risk and updating in inspection of fatigue-sensitive details of ship structures. <i>International Journal of Fatigue</i> , 2016, 82, 676-688.	2.8	39
164	Probabilistic assessment of an interdependent healthcare“bridge network system under seismic hazard. <i>Structure and Infrastructure Engineering</i> , 2017, 13, 160-170.	2.0	39
165	Risk-Informed Bridge Ranking at Project and Network Levels. <i>Journal of Infrastructure Systems</i> , 2018, 24, .	1.0	39
166	Seismic fragility assessment of large-scale pile-supported wharf structures considering soil-pile interaction. <i>Engineering Structures</i> , 2019, 186, 270-281.	2.6	39
167	Probabilistic estimation of flexural loading capacity of existing RC structures based on observational corrosion-induced crack width distribution using machine learning. <i>Structural Safety</i> , 2021, 91, 102098.	2.8	39
168	Bridge Network Maintenance Optimization Using Stochastic Dynamic Programming. <i>Journal of Structural Engineering</i> , 2007, 133, 1772-1782.	1.7	38
169	Optimizing Lifetime Condition and Reliability of Deteriorating Structures with Emphasis on Bridges. <i>Journal of Structural Engineering</i> , 2008, 134, 544-552.	1.7	38
170	Cost-Based Optimum Scheduling of Inspection and Monitoring for Fatigue-Sensitive Structures under Uncertainty. <i>Journal of Structural Engineering</i> , 2011, 137, 1319-1331.	1.7	38
171	Risk-Based Maintenance Optimization of Deteriorating Bridges. <i>Journal of Structural Engineering</i> , 2015, 141, 04014120.	1.7	38
172	Bridge Adaptation and Management under Climate Change Uncertainties: A Review. <i>Natural Hazards Review</i> , 2018, 19, .	0.8	38
173	Network-Level Risk-Based Framework for Optimal Bridge Adaptation Management Considering Scour and Climate Change. <i>Journal of Infrastructure Systems</i> , 2020, 26, .	1.0	38
174	Life-cycle management of deteriorating bridge networks with network-level risk bounds and system reliability analysis. <i>Structural Safety</i> , 2020, 83, 101911.	2.8	38
175	Optimal Network-Level Bridge Maintenance Planning Based on Minimum Expected Cost. <i>Transportation Research Record</i> , 2000, 1696, 26-33.	1.0	37
176	Performance evaluation of concrete slabs of existing bridges using neural networks. <i>Engineering Structures</i> , 2003, 25, 1455-1477.	2.6	37
177	Time-dependent risk associated with deterioration of highway bridge networks. <i>Engineering Structures</i> , 2013, 54, 221-233.	2.6	37
178	Influence line- model correction approach for the assessment of engineering structures using novel monitoring techniques. <i>Smart Structures and Systems</i> , 2012, 9, 1-20.	1.9	37
179	Lifetime Performance Analysis of Existing Reinforced Concrete Bridges. I: Theory. <i>Journal of Infrastructure Systems</i> , 2005, 11, 122-128.	1.0	36
180	Life-cycle cost of civil infrastructure with emphasis on balancing structural performance and seismic risk of road network. <i>Structure and Infrastructure Engineering</i> , 2011, 7, 65-74.	2.0	36

#	ARTICLE	IF	CITATIONS
181	Survey and Evaluation of Damaged Concrete Bridges. <i>Journal of Bridge Engineering</i> , 2000, 5, 31-38.	1.4	35
182	Reliability-based importance assessment of structural members with applications to complex structures. <i>Computers and Structures</i> , 2002, 80, 1113-1131.	2.4	35
183	Probabilistic ship collision risk and sustainability assessment considering risk attitudes. <i>Structural Safety</i> , 2015, 53, 75-84.	2.8	35
184	Reliability-Based Vector Optimization of Structural Systems. <i>Journal of Structural Engineering</i> , 1990, 116, 2143-2161.	1.7	34
185	Reliability-Based Assessment of Suspension Bridges: Application to the Innoshima Bridge. <i>Journal of Bridge Engineering</i> , 2001, 6, 398-411.	1.4	34
186	Cross-entropy-based adaptive importance sampling for time-dependent reliability analysis of deteriorating structures. <i>Structural Safety</i> , 2017, 66, 38-50.	2.8	34
187	Optimal Risk-Based Management of Coastal Bridges Vulnerable to Hurricanes. <i>Journal of Infrastructure Systems</i> , 2017, 23, .	1.0	34
188	Reliability Bases for High-Strength Concrete Columns. <i>Journal of Structural Engineering</i> , 1997, 123, 1375-1381.	1.7	33
189	Life-cycle reliability assessment of reinforced concrete bridges under multiple hazards. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 1011-1024.	2.0	33
190	Life-Cycle Performance of Civil Structure and Infrastructure Systems: Survey. <i>Journal of Structural Engineering</i> , 2018, 144, .	1.7	33
191	Sustainability-Informed Bridge Ranking under Scour Based on Transportation Network Performance and Multiattribute Utility. <i>Journal of Bridge Engineering</i> , 2018, 23, .	1.4	33
192	Physics-Based Assessment of Climate Change Impact on Long-Term Regional Bridge Scour Risk Using Hydrologic Modeling: Application to Lehigh River Watershed. <i>Journal of Bridge Engineering</i> , 2019, 24, .	1.4	33
193	Probabilistic FEM for Nonlinear Concrete Structures. I: Theory. <i>Journal of Structural Engineering</i> , 1991, 117, 2674-2689.	1.7	32
194	Multi-objective design optimization of electrostatically actuated microbeam resonators with and without parameter uncertainty. <i>Reliability Engineering and System Safety</i> , 2007, 92, 1333-1343.	5.1	32
195	Fatigue reliability and service life prediction of aluminum naval ship details based on monitoring data. <i>Structural Health Monitoring</i> , 2015, 14, 3-19.	4.3	32
196	Framework for estimating the risk and resilience of road networks with bridges and embankments under both seismic and tsunami hazards. <i>Structure and Infrastructure Engineering</i> , 2021, 17, 494-514.	2.0	32
197	Bridge Load Testing: State-of-the-Practice. <i>Journal of Bridge Engineering</i> , 2021, 26, 03120002.	1.4	32
198	Interactive reliability-based structural optimization. <i>Computers and Structures</i> , 1984, 19, 559-563.	2.4	31

#	ARTICLE	IF	CITATIONS
199	Uncertainty effects on lifetime structural performance of cable-stayed bridges. Probabilistic Engineering Mechanics, 2008, 23, 509-522.	1.3	31
200	Optimal planning of structural performance monitoring based on reliability importance assessment. Probabilistic Engineering Mechanics, 2010, 25, 86-98.	1.3	31
201	Use of Lifetime Functions in the Optimization of Nondestructive Inspection Strategies for Bridges. Journal of Structural Engineering, 2011, 137, 531-539.	1.7	31
202	System Reliability of Ship Hull Structures Under Corrosion and Fatigue. Journal of Ship Research, 2012, 56, 234-251.	0.5	31
203	Reliability and redundancy assessment of ships under different operational conditions. Engineering Structures, 2012, 42, 457-471.	2.6	31
204	Fatigue Assessment and Service Life Prediction of Existing Steel Bridges by Integrating SHM into a Probabilistic Bilinear S-N Approach. Journal of Structural Engineering, 2013, 139, 1728-1740.	1.7	31
205	Incorporation of structural health monitoring data on load effects in the reliability and redundancy assessment of ship cross-sections using Bayesian updating. Structural Health Monitoring, 2013, 12, 377-392.	4.3	31
206	Lifetime Performance Analysis of Existing Reinforced Concrete Bridges. II: Application. Journal of Infrastructure Systems, 2005, 11, 129-141.	1.0	30
207	Reliability-based durability design and service life assessment of reinforced concrete deck slab of jetty structures. Structure and Infrastructure Engineering, 2017, 13, 468-477.	2.0	30
208	Multicriteria reliability-based structural optimization. Structural Safety, 1985, 3, 23-28.	2.8	29
209	Failure Time Prediction of Deteriorating Fail-Safe Structures. Journal of Structural Engineering, 1998, 124, 1448-1457.	1.7	29
210	Bridge Deck Replacement for Minimum Expected Cost Under Multiple Reliability Constraints. Journal of Structural Engineering, 2004, 130, 1414-1419.	1.7	29
211	Predictive Analysis by Incorporating Uncertainty through a Family of Models Calibrated with Structural Health-Monitoring Data. Journal of Engineering Mechanics - ASCE, 2013, 139, 712-723.	1.6	29
212	Probabilistic life-cycle cost-benefit analysis of portfolios of buildings under flood hazard. Engineering Structures, 2017, 142, 290-299.	2.6	29
213	Risk-based cost-benefit analysis for the retrofit of bridges exposed to extreme hydrologic events considering multiple failure modes. Engineering Structures, 2018, 159, 310-319.	2.6	29
214	System reliability of suspension bridges. Structural Safety, 2002, 24, 219-259.	2.8	28
215	Cost of life extension of deteriorating structures under reliability-based maintenance. Computers and Structures, 2004, 82, 1077-1089.	2.4	28
216	Societal risk assessment of transportation networks under uncertainties due to climate change and population growth. Structural Safety, 2019, 78, 33-47.	2.8	28

#	ARTICLE	IF	CITATIONS
217	Optimum maintenance of deteriorated steel bridges using corrosion resistant steel based on system reliability and life-cycle cost. <i>Engineering Structures</i> , 2021, 243, 112633.	2.6	28
218	Load Rating versus Reliability Analysis. <i>Journal of Structural Engineering</i> , 2005, 131, 843-847.	1.7	27
219	Lifetime cost optimization of structures by a combined conditionâ€“reliability approach. <i>Engineering Structures</i> , 2009, 31, 1572-1580.	2.6	27
220	Advanced Modeling for Efficient Computation of Life-Cycle Performance Prediction and Service-Life Estimation of Bridges. <i>Journal of Computing in Civil Engineering</i> , 2010, 24, 548-556.	2.5	27
221	Probabilistic functionality recovery model for resilience analysis. <i>Bridge Maintenance, Safety and Management</i> , 2012, , 1920-1927.	0.1	27
222	Multi-objective probabilistic optimum monitoring planning considering fatigue damage detection, maintenance, reliability, service life and cost. <i>Structural and Multidisciplinary Optimization</i> , 2018, 57, 39-54.	1.7	27
223	Reliability Assessment of Prestressed Concrete Beams. <i>Journal of Structural Engineering</i> , 1994, 120, 180-199.	1.7	26
224	Geometrically nonlinear finite element reliability analysis of structural systems. II: applications. <i>Computers and Structures</i> , 2000, 77, 693-709.	2.4	26
225	Computational platform for the integrated life-cycle management of highway bridges. <i>Engineering Structures</i> , 2011, 33, 2145-2153.	2.6	26
226	Gamma prediction models for long-term creep deformations of prestressed concrete bridges. <i>Journal of Civil Engineering and Management</i> , 2017, 23, 681-698.	1.9	26
227	Decision making for probabilistic fatigue inspection planning based on multi-objective optimization. <i>International Journal of Fatigue</i> , 2018, 111, 356-368.	2.8	26
228	Condition-Based Multiobjective Maintenance Decision Making for Highway Bridges Considering Risk Perceptions. <i>Journal of Structural Engineering</i> , 2020, 146, .	1.7	26
229	Fatigue Reliability Assessment of Railway Bridges Based on Probabilistic Dynamic Analysis of a Coupled Train-Bridge System. <i>Journal of Structural Engineering</i> , 2016, 142, .	1.7	25
230	Efficient Uncertainty Quantification of Wharf Structures under Seismic Scenarios Using Gaussian Process Surrogate Model. <i>Journal of Earthquake Engineering</i> , 2021, 25, 117-138.	1.4	25
231	Reliabilityâ€“Based Design of Prestressed Concrete Beams. <i>Journal of Structural Engineering</i> , 1994, 120, 3156-3177.	1.7	24
232	Real-time risk of ship structures integrating structural health monitoring data: Application to multi-objective optimal ship routing. <i>Ocean Engineering</i> , 2015, 96, 312-329.	1.9	24
233	Prediction of structural response of naval vessels based on available structural health monitoring data. <i>Ocean Engineering</i> , 2016, 125, 295-307.	1.9	24
234	A decision support system for mission-based ship routing considering multiple performance criteria. <i>Reliability Engineering and System Safety</i> , 2016, 150, 190-201.	5.1	24

#	ARTICLE	IF	CITATIONS
235	Time-Variant Risk Assessment of Bridges with Partially and Fully Closed Lanes due to Traffic Loading and Scour. <i>Journal of Bridge Engineering</i> , 2016, 21, .	1.4	24
236	Framework for probabilistic tsunami hazard assessment considering the effects of sea-level rise due to climate change. <i>Structural Safety</i> , 2022, 94, 102152.	2.8	24
237	Lifetime Multiobjective Optimization of Cost and Spacing of Corrosion Rate Sensors Embedded in a Deteriorating Reinforced Concrete Bridge Deck. <i>Journal of Structural Engineering</i> , 2007, 133, 777-787.	1.7	23
238	Cost-Effective Lifetime Structural Health Monitoring Based on Availability. <i>Journal of Structural Engineering</i> , 2011, 137, 22-33.	1.7	23
239	Life-Cycle Cost Analyses of a New Steel for Bridges. <i>Journal of Bridge Engineering</i> , 2012, 17, 168-172.	1.4	23
240	Risk-informed optimal routing of ships considering different damage scenarios and operational conditions. <i>Reliability Engineering and System Safety</i> , 2013, 119, 126-140.	5.1	23
241	Performance assessment of damaged ship hulls. <i>Ocean Engineering</i> , 2013, 68, 65-76.	1.9	23
242	Effect of the interaction of corrosion pits among multiple tensile rebars on the reliability of RC structures: Experimental and numerical investigation. <i>Structural Safety</i> , 2021, 93, 102115.	2.8	23
243	Material Behavior and Optimum Design of Structural Systems. <i>Journal of Structural Engineering</i> , 1989, 115, 1054-1075.	1.7	22
244	Life-Cycle Cost Analysis for Infrastructure Systems: Life-Cycle Cost vs. Safety Level vs. Service Life. , 2003, , 19.		22
245	Prediction of Reliability and Cost Profiles of Deteriorating Bridges under Time- and Performance-Controlled Maintenance. <i>Journal of Structural Engineering</i> , 2004, 130, 1865-1874.	1.7	22
246	Inclusion of Crawl Tests and Long-Term Health Monitoring in Bridge Serviceability Analysis. <i>Journal of Bridge Engineering</i> , 2010, 15, 312-326.	1.4	22
247	Probabilistic Assessment of Deteriorating Prestressed Concrete Box-Girder Bridges under Increased Vehicle Loads and Aggressive Environment. <i>Journal of Performance of Constructed Facilities</i> , 2011, 25, 564-576.	1.0	22
248	Strength and Ductility Simulation of High-Strength Concrete Columns. <i>Journal of Structural Engineering</i> , 1997, 123, 1365-1374.	1.7	21
249	Fatigue Life Assessment and Lifetime Management of Aluminum Ships Using Life-Cycle Optimization. <i>Journal of Ship Research</i> , 2012, 56, 91-105.	0.5	21
250	Probabilistic Assessment of Structural Performance of Bridges under Tsunami Hazard. , 2012, , .		21
251	Geometry control simulation for long-span steel cable-stayed bridges based on geometrically nonlinear analysis. <i>Engineering Structures</i> , 2015, 90, 71-82.	2.6	21
252	Multi-criteria robust optimization framework for bridge adaptation under climate change. <i>Structural Safety</i> , 2018, 74, 14-23.	2.8	21

#	ARTICLE	IF	CITATIONS
253	Probabilistic risk, sustainability, and utility associated with ship grounding hazard. <i>Ocean Engineering</i> , 2018, 154, 311-321.	1.9	21
254	Evidence-based framework for real-time life-cycle management of fatigue-critical details of structures. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 509-522.	2.0	21
255	Time-variant redundancy and failure times of deteriorating concrete structures considering multiple limit states. <i>Structure and Infrastructure Engineering</i> , 2017, 13, 94-106.	2.0	20
256	Monitoring based nonlinear system modeling of bridge-continuous welded rail interaction. <i>Engineering Structures</i> , 2018, 155, 25-35.	2.6	20
257	Risk-based life-cycle optimal dry-docking inspection of corroding ship hull tankers. <i>Engineering Structures</i> , 2019, 195, 559-567.	2.6	20
258	Assessment of Existing Structures Based on Identification. <i>Journal of Structural Engineering</i> , 2010, 136, 86-97.	1.7	19
259	A random field based technique for the efficiency enhancement of bridge network life-cycle analysis under uncertainty. <i>Engineering Structures</i> , 2011, 33, 3208-3217.	2.6	19
260	Hazard-Based Optimum Lifetime Inspection and Repair Planning for Deteriorating Structures. <i>Journal of Structural Engineering</i> , 2013, 139, .	1.7	19
261	Applicability of simple expressions for bridge system reliability assessment. <i>Computers and Structures</i> , 2013, 114-115, 59-71.	2.4	19
262	Performance analysis of Tohoku-Shinkansen viaducts affected by the 2011 Great East Japan earthquake. <i>Structure and Infrastructure Engineering</i> , 2014, 10, 1228-1247.	2.0	19
263	Efficient multi-objective optimisation of probabilistic service life management. <i>Structure and Infrastructure Engineering</i> , 2017, 13, 147-159.	2.0	19
264	Time-variant reliability analysis of steel plates in marine environments considering pit nucleation and propagation. <i>Probabilistic Engineering Mechanics</i> , 2019, 57, 32-42.	1.3	19
265	A reliability-based optimization technique for automatic plastic design. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1984, 44, 105-117.	3.4	18
266	A methodology for analyzing the variability in the performance of a MEMS actuator made from a novel ceramic. <i>Sensors and Actuators A: Physical</i> , 2004, 116, 336-344.	2.0	18
267	Probabilistic modelling of structural degradation. <i>Reliability Engineering and System Safety</i> , 2008, 93, 363.	5.1	18
268	Application of the statistics of extremes to the reliability assessment and performance prediction of monitored highway bridges. <i>Structure and Infrastructure Engineering</i> , 2011, 7, 87-99.	2.0	18
269	Structural Identification for Performance Prediction Considering Uncertainties: Case Study of a Movable Bridge. <i>Journal of Structural Engineering</i> , 2013, 139, 1703-1715.	1.7	18
270	Effective optimum maintenance planning with updating based on inspection information for fatigue-sensitive structures. <i>Probabilistic Engineering Mechanics</i> , 2019, 58, 103003.	1.3	18

#	ARTICLE	IF	CITATIONS
271	Life-cycle reliability-based design and reliability updating of reinforced concrete shield tunnels in coastal regions. <i>Structure and Infrastructure Engineering</i> , 2020, 16, 726-737.	2.0	18
272	Reliability-based life-cycle cost design of asphalt pavement using artificial neural networks. <i>Structure and Infrastructure Engineering</i> , 2021, 17, 872-886.	2.0	18
273	Response Prediction of Geometrically Nonlinear Structures. <i>Journal of Structural Engineering</i> , 2000, 126, 1348-1355.	1.7	17
274	Bayesian estimation of rock mass boundary conditions with applications to the AECL underground research laboratory. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2001, 38, 995-1027.	2.6	17
275	Integration of structural health monitoring in a system performance based life-cycle bridge management framework. <i>Structure and Infrastructure Engineering</i> , 0, , 1-18.	2.0	17
276	Life-cycle reliability analysis of shield tunnels in coastal regions: emphasis on flexural performance of deteriorating segmental linings. <i>Structure and Infrastructure Engineering</i> , 2019, 15, 851-871.	2.0	17
277	Risk-informed structural repair decision making for service life extension of aging naval ships. <i>Marine Structures</i> , 2019, 64, 305-321.	1.6	17
278	Inclusion of environmental impacts in life-cycle cost analysis of bridge structures. <i>Sustainable and Resilient Infrastructure</i> , 2020, 5, 252-267.	1.7	17
279	Time-variant hull girder reliability considering spatial dependence of corrosion growth, geometric and material properties. <i>Reliability Engineering and System Safety</i> , 2020, 193, 106612.	5.1	17
280	Risk-based portfolio management of civil infrastructure assets under deep uncertainties associated with climate change: a robust optimisation approach. <i>Structure and Infrastructure Engineering</i> , 2020, 16, 531-546.	2.0	17
281	Random field-based reliability updating framework for existing RC structures incorporating the effect of spatial steel corrosion distribution. <i>Structure and Infrastructure Engineering</i> , 2022, 18, 967-982.	2.0	17
282	Multi-objective optimisation of in-service asphalt pavement maintenance schedule considering system reliability estimated via LSTM neural networks. <i>Structure and Infrastructure Engineering</i> , 2022, 18, 1002-1019.	2.0	17
283	Design of composite hybrid plate girder bridges based on reliability and optimization. <i>Structural Safety</i> , 1994, 15, 149-165.	2.8	16
284	Guest Editorial: Structural Reliability in Bridge Engineering. <i>Journal of Bridge Engineering</i> , 1998, 3, 151-154.	1.4	16
285	Time-dependent reliability assessment of ship structures under progressive and shock deteriorations. <i>Reliability Engineering and System Safety</i> , 2018, 173, 116-128.	5.1	16
286	Risk-based life-cycle optimization of deteriorating steel bridges: Investigation on the use of novel corrosion resistant steel. <i>Advances in Structural Engineering</i> , 2021, 24, 1668-1686.	1.2	16
287	Resilience of aging structures and infrastructure systems with emphasis on seismic resilience of bridges and road networks: Review. , 2022, 1, 23-41.		16
288	Probabilistic structural optimization. <i>Structural Control and Health Monitoring</i> , 1998, 1, 223-230.	0.7	15

#	ARTICLE	IF	CITATIONS
289	Optimum Lifetime Planning of Bridge Inspection and Repair Programs. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , 1999, 9, 219-223.	0.5	15
290	Time-Variant Structural Performance of the Certosa Cable-Stayed Bridge. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , 2006, 16, 235-244.	0.5	15
291	A stakeholder probability-based optimization approach for cost-effective bridge management under financial constraints. <i>Engineering Structures</i> , 2011, 33, 1439-1449.	2.6	15
292	Decision making framework for optimal SHM planning of ship structures considering availability and utility. <i>Ocean Engineering</i> , 2017, 135, 194-206.	1.9	15
293	Utility and Information Analysis for Optimum Inspection of Fatigue-Sensitive Structures. <i>Journal of Structural Engineering</i> , 2019, 145, .	1.7	15
294	Probabilistic FEM for Nonlinear Concrete Structures. II: Applications. <i>Journal of Structural Engineering</i> , 1991, 117, 2690-2707.	1.7	14
295	Nonlinear Finite Element Reliability Analysis of Concrete. <i>Journal of Engineering Mechanics - ASCE</i> , 1996, 122, 1174-1182.	1.6	14
296	Influence of the exposure scenario and spatial correlation on the probabilistic life-cycle seismic performance of deteriorating RC frames. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 986-996.	2.0	14
297	Reliability of steel girder bridges with dependent corrosion growth. <i>Engineering Structures</i> , 2020, 224, 111125.	2.6	14
298	Performance-based risk assessment of reinforced concrete bridge piers subjected to vehicle collision. <i>Engineering Structures</i> , 2021, 229, 111640.	2.6	14
299	Size Effect Hidden in Excessive Dead Load Factor. <i>Journal of Structural Engineering</i> , 2002, 128, 80-86.	1.7	13
300	Adaptation Optimization of Residential Buildings under Hurricane Threat Considering Climate Change in a Lifecycle Context. <i>Journal of Performance of Constructed Facilities</i> , 2017, 31, .	1.0	13
301	Probabilistic Life-Cycle Management Framework for Ship Structures Subjected to Coupled Corrosion-Fatigue Deterioration Processes. <i>Journal of Structural Engineering</i> , 2019, 145, .	1.7	13
302	Life-cycle optimization of structural systems based on cumulative prospect theory: Effects of the reference point and risk attitudes. <i>Reliability Engineering and System Safety</i> , 2022, 218, 108100.	5.1	13
303	RELTSYS: A computer program for life prediction of deteriorating systems. <i>Structural Engineering and Mechanics</i> , 2000, 9, 557-568.	1.0	13
304	Efficient Method Based on Optimization and Simulation for the Probabilistic Strength Computation of the Ship Hull. <i>Journal of Ship Research</i> , 2010, 54, 244-256.	0.5	13
305	Expected Maintenance Cost of Deteriorating Civil Infrastructures. , 2001, , 22.		12
306	Reliability of long span bridges based on design experience with the Honshu-Shikoku bridges. <i>Journal of Constructional Steel Research</i> , 2004, 60, 373-392.	1.7	12

#	ARTICLE	IF	CITATIONS
307	Sensitivity Analysis in Reliability-Based Lifetime Performance Prediction Using Simulation. Journal of Materials in Civil Engineering, 2005, 17, 296-306.	1.3	12
308	Optimization of retrofitting distortion-induced fatigue cracking of steel bridges using monitored data under uncertainty. Engineering Structures, 2010, 32, 3467-3477.	2.6	12
309	Probability-based multiple-criteria optimization of bridge maintenance using monitoring and expected error in the decision process. Structural and Multidisciplinary Optimization, 2011, 44, 137-148.	1.7	12
310	Fatigue Damage in Railway Steel Bridges: Approach Based on a Dynamic Train-Bridge Coupled Model. Journal of Bridge Engineering, 2017, 22, .	1.4	12
311	Novel Technique for Configuration Transformation of 3D Curved Cables of Suspension Bridges: Application to the Dongtiao River Bridge. Journal of Performance of Constructed Facilities, 2018, 32, .	1.0	12
312	LCC-based identification of geographical locations suitable for using stainless steel rebars in reinforced concrete girder bridges. Structure and Infrastructure Engineering, 2020, 16, 1201-1227.	2.0	12
313	Integrating system reliability and optimization in prestressed concrete design. Computers and Structures, 1997, 64, 729-735.	2.4	11
314	Reliability Assessment of High-Strength Concrete Columns. Journal of Engineering Mechanics - ASCE, 1998, 124, 529-536.	1.6	11
315	New light on performance of short and slender reinforced concrete columns under random loads. Engineering Structures, 2001, 23, 147-157.	2.6	11
316	Weight-strength-redundancy interaction in optimum design of three-dimensional brittle-ductile trusses. Computers and Structures, 1989, 31, 775-787.	2.4	10
317	RBSA and RBSA-OPT: Two computer programs for structural system reliability analysis and optimization. Computers and Structures, 1990, 36, 13-27.	2.4	10
318	Incorporation of corrosion effects in reliability-based optimization of composite hybrid plate girders. Structural Safety, 1994, 16, 145-169.	2.8	10
319	Safety evaluation of slender high-strength concrete columns under sustained loads. Computers and Structures, 2003, 81, 1475-1486.	2.4	10
320	Bridge Performance Monitoring Based on Traffic Data. Journal of Engineering Mechanics - ASCE, 2013, 139, 1508-1520.	1.6	10
321	Critical issues, condition assessment and monitoring of heavy movable structures: emphasis on movable bridges. Structure and Infrastructure Engineering, 2014, 10, 261-276.	2.0	10
322	Effects of post-failure material behaviour on redundancy factor for design of structural components in nondeterministic systems. Structure and Infrastructure Engineering, 2015, 11, 466-485.	2.0	10
323	Introduction to the State of the Art Collection: Risk-Based Lifecycle Performance of Structural Systems. Journal of Structural Engineering, 2016, 142, .	1.7	10
324	Risk-Based Vulnerability Analysis of Deteriorating Coastal Bridges under Hurricanes Considering Deep Uncertainty of Climatic and Socioeconomic Changes. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2020, 6, .	1.1	10

#	ARTICLE	IF	CITATIONS
325	Risk estimation of the disaster waste generated by both ground motion and tsunami due to the anticipated Nankai Trough earthquake. <i>Earthquake Engineering and Structural Dynamics</i> , 2021, 50, 2134-2155.	2.5	10
326	Determining Target Reliability Index of Structures Based on Cost Optimization and Acceptance Criteria for Fatality Risk. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2021, 7, .	1.1	10
327	Ship service life extension considering ship condition and remaining design life. <i>Marine Structures</i> , 2021, 78, 102940.	1.6	10
328	A Decision-Making Framework for Load Rating Planning of Aging Bridges Using Deep Reinforcement Learning. <i>Journal of Computing in Civil Engineering</i> , 2021, 35, .	2.5	10
329	Time-dependent reliability of rock-anchored structures. <i>Reliability Engineering and System Safety</i> , 1995, 47, 231-236.	5.1	9
330	CONTROL OF BUILDING VIBRATIONS WITH ACTIVE/PASSIVE DEVICES. <i>Earthquake Engineering and Structural Dynamics</i> , 1996, 25, 1019-1039.	2.5	9
331	Evaluation of Load Rating and System Reliability of Movable Bridge. <i>Transportation Research Record</i> , 2011, 2251, 114-122.	1.0	9
332	Design, assessment, monitoring and maintenance of bridges and infrastructure networks. <i>Structure and Infrastructure Engineering</i> , 2015, 11, 413-414.	2.0	9
333	Risk-based decision-making on corrosion delay for ship hull tankers. <i>Engineering Structures</i> , 2020, 212, 110455.	2.6	9
334	Error analysis for approximate structural life-cycle reliability and risk using machine learning methods. <i>Structural Safety</i> , 2021, 89, 102033.	2.8	9
335	Seismic Response of a Bridge Crossing a Canyon to Near-Fault Acceleration-Pulse Ground Motions. <i>Journal of Bridge Engineering</i> , 2021, 26, .	1.4	9
336	Transfer prior knowledge from surrogate modelling: A meta-learning approach. <i>Computers and Structures</i> , 2022, 260, 106719.	2.4	9
337	Life-cycle connectivity-based maintenance strategy for bridge networks subjected to corrosion considering correlation of bridge resistances. <i>Structure and Infrastructure Engineering</i> , 2022, 18, 1614-1637.	2.0	9
338	OPTIMUM PROBABILITY-BASED DESIGN OF PLASTIC STRUCTURES. <i>Engineering Optimization</i> , 1977, 3, 17-25.	1.5	8
339	Computer-automated sensitivity analysis in reliability-based plastic design. <i>Computers and Structures</i> , 1986, 22, 63-75.	2.4	8
340	Reliability-based structural optimization using interactive graphics. <i>Computers and Structures</i> , 1990, 37, 27-34.	2.4	8
341	Maintenance, monitoring, risk and life-cycle performance of bridges. <i>Structure and Infrastructure Engineering</i> , 2020, 16, 1-2.	2.0	8
342	Computational platform for probabilistic optimum monitoring planning for effective and efficient service life management. <i>Journal of Civil Structural Health Monitoring</i> , 2020, 10, 1-15.	2.0	8

#	ARTICLE	IF	CITATIONS
343	Optimum Target Reliability Determination for Efficient Service Life Management of Bridge Networks. Journal of Bridge Engineering, 2020, 25, .	1.4	8
344	Probabilistic cost-benefit analysis for service life extension of ships. Ocean Engineering, 2020, 201, 107094.	1.9	8
345	Life Cycle Evaluation and Condition Assessment of Structures. , 2005, , .		8
346	Time-Variant Robustness of Aging Structures. , 2014, , 163-200.		8
347	Seismic hazard prediction using a probabilistic-fuzzy approach. Structural Safety, 1988, 5, 109-117.	2.8	7
348	Optimization of damage-tolerant structural systems. Computers and Structures, 1991, 40, 1085-1095.	2.4	7
349	Time-Dependent Risk Assessment of Bridges Based on Cumulative-Time Failure Probability. Journal of Bridge Engineering, 2016, 21, 06016009.	1.4	7
350	Preferred dry-docking interval of corroded ship hull girders based on cumulative prospect theory. Ocean Engineering, 2019, 192, 106440.	1.9	7
351	Investigation of Effects of Time Preference and Risk Perception on Life-Cycle Management of Civil Infrastructure. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2020, 6, .	1.1	7
352	LIKELIHOOD OF IMPACT EVENTS IN TRANSPORT NETWORKS CONSIDERING ROAD CONDITIONS, TRAFFIC AND ROUTING ELEMENTS PROPERTIES. Journal of Civil Engineering and Management, 2020, 26, 95-112.	1.9	7
353	Sensitivity studies in reliability-based analysis of redundant structures. Structural Safety, 1985, 3, 13-22.	2.8	6
354	TOWARDS RELIABILITY-BASED COMPUTER AIDED OPTIMIZATION OF REINFORCED CONCRETE STRUCTURES. Engineering Optimization, 1985, 8, 301-313.	1.5	6
355	Isosafety loading functions in system reliability analysis. Computers and Structures, 1986, 24, 425-436.	2.4	6
356	Optimum design of shear-wall systems. Computers and Structures, 1991, 38, 171-184.	2.4	6
357	A real time human-machine interface for an ultrahigh temperature MEMS sensor-igniter. Sensors and Actuators A: Physical, 2003, 105, 23-30.	2.0	6
358	Deterioration and Maintenance Models for Insuring Safety of Civil Infrastructures at Lowest Life-Cycle Cost. , 2003, , 384.		6
359	Probabilistic Performance Prediction of Deteriorating Structures Under Different Maintenance Strategies: Condition, Safety and Cost. , 2003, , 9.		6
360	Optimization of Bridge Management under Budget Constraints. Transportation Research Record, 2010, 2202, 148-158.	1.0	6

#	ARTICLE	IF	CITATIONS
361	Seismic Resilience of Deteriorating Concrete Structures. , 2015, , .		6
362	Acceptance of Corrosion-Resistant Steel in Design of Steel Girder Bridges Based on Expected Utility Theory. Journal of Bridge Engineering, 2020, 25, .	1.4	6
363	Full-scale experimental and numerical investigation on the ductility, plastic redistribution, and redundancy of deteriorated concrete bridges. Engineering Structures, 2021, 234, 111930.	2.6	6
364	Strand Development and Transfer Length Tests on High Performance Concrete Box Girders. PCI Journal, 2000, 45, 96-109.	0.4	6
365	Experimental and numerical investigation on wave impacts on box-girder bridges. Structure and Infrastructure Engineering, 2022, 18, 1379-1397.	2.0	6
366	Computer-automated design of structural systems under reliability-based performance constraints. Engineering Computations, 1986, 3, 109-115.	0.7	5
367	Computer modeling and reliability evaluation of steel through truss bridges. Structural Safety, 1990, 7, 255-267.	2.8	5
368	Holonomic Elastoplastic Reliability Analysis of Truss Systems. II: Applications. Journal of Structural Engineering, 1993, 119, 1792-1806.	1.7	5
369	Performance Evaluation System for Main Reinforced Concrete Girders of Existing Bridges. Transportation Research Record, 2004, 1866, 67-78.	1.0	5
370	Maintenance Planning of Deteriorating Bridges by Using Multiobjective Optimization. Transportation Research Record, 2005, 11s, 491-500.	1.0	5
371	Monitoring Based Evaluation of Design Criteria for Concrete Frame Bridges. IABSE Symposium Report, 2010, , .	0.0	5
372	Movable bridges: condition, modelling and damage simulations. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2011, 164, 145-155.	0.3	5
373	Life-cycle of engineering systems: emphasis on sustainable civil infrastructure. Structure and Infrastructure Engineering, 2018, 14, 831-832.	2.0	5
374	Risk-based inspection planning of deteriorating structures. Structure and Infrastructure Engineering, 2022, 18, 109-128.	2.0	5
375	Optimization of Structural Systems under Reserve and Residual Reliability Requirements. Lecture Notes in Engineering, 1989, , 135-145.	0.1	5
376	Simulating the construction process of steel-concrete composite bridges. Steel and Composite Structures, 2015, 18, 1239-1258.	1.3	5
377	Fatigue Life Assessment and Lifetime Management of Aluminum Ships Using Life-Cycle Optimization. Journal of Ship Research, 2012, 56, 91-105.	0.5	5
378	Effects of galvanostatic and artificial chloride environment methods on the steel corrosion spatial variability and probabilistic flexural capacity of RC beams. Structure and Infrastructure Engineering, 2022, 18, 1506-1525.	2.0	5

#	ARTICLE	IF	CITATIONS
379	Risk assessment for gas pipelines using fuzzy sets. <i>Civil Engineering and Environmental Systems</i> , 1987, 4, 147-152.	0.2	4
380	Life-cycle Cost Analysis for Highways Bridges: Accomplishments and Challenges. , 2004, , 1.		4
381	Structural Performance Updating and Optimization with Conflicting Objectives under Uncertainty. , 2008, , .		4
382	Structural Health Monitoring of Bridges: Fundamentals, Application Case Study, and Organizational Considerations. , 2009, , .		4
383	Probabilistic bicriterion optimum inspection/monitoring planning: applications to naval ships and bridges under fatigue. <i>Structure and Infrastructure Engineering</i> , 2011, , 1-16.	2.0	4
384	Life-cycle of civil engineering systems. <i>Structure and Infrastructure Engineering</i> , 2011, 7, 1-2.	2.0	4
385	Reliability and Remaining Life Assessment of Fatigue Critical Steel Structures: Integration of Inspection and Monitoring Information. , 2013, , .		4
386	Effects of Postfailure Material Behavior on System Reliability. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2015, 1, 04014002.	1.1	4
387	Risk-, resilience-, and sustainability-informed assessment and management of civil infrastructure in a life-cycle context. <i>Structure and Infrastructure Engineering</i> , 2021, 17, 441-442.	2.0	4
388	Monitoring and influence lines based performance indicators. , 2011, , 1059-1068.		4
389	Risk-Based Optimal Life-Cycle Maintenance Strategy for Bridge Networks Considering Stochastic User Equilibrium. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2022, 8, .	1.1	4
390	Accuracy of methods for structural system reliability evaluation. <i>Engineering Computations</i> , 1987, 4, 90-103.	0.7	3
391	Reliability analysis of deflection "drift limited structures. <i>Structural Safety</i> , 1988, 5, 159-168.	2.8	3
392	Holonomic Elastoplastic Reliability Analysis of Truss Systems. I: Theory. <i>Journal of Structural Engineering</i> , 1993, 119, 1778-1791.	1.7	3
393	How to Incorporate Reliability in Structural Optimization. , 1997, , 211-236.		3
394	<title>Reliability-based lifetime maintenance of aging highway bridges</title>. , 2000, 3995, 4.		3
395	Temperature-dependent variability in lifetime prediction of thermally activated systems. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 1471-1476.	1.1	3
396	Long-term performance of structural systems. <i>Structure and Infrastructure Engineering</i> , 2008, 4, 75-75.	2.0	3

#	ARTICLE	IF	CITATIONS
397	Life-Cycle Performance of Structural Systems under Uncertainty. , 2014, , .		3
398	Reliability of Bridges under Seismic and Tsunami Hazards. , 2014, , .		3
399	System reliability and the redundancy factor by simplified modeling. Life-cycle of Civil Engineering Systems, 2014, , 614-618.	0.1	3
400	Reliability index and parameter importance for bridge traffic loading definition changes. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2018, 171, 13-24.	0.3	3
401	Optimal Maintenance of Naval Vessels Considering Service Life Uncertainty. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 301-307.	0.3	3
402	System reliability of corroded ship hull girders. Structure and Infrastructure Engineering, 2020, 16, 1302-1310.	2.0	3
403	Life-cycle, risk, resilience and sustainability of civil infrastructure. Structure and Infrastructure Engineering, 2020, 16, 517-519.	2.0	3
404	Multi-stakeholder framework for assessing the life-cycle social cost of construction projects. Structure and Infrastructure Engineering, 2022, 18, 129-144.	2.0	3
405	Optimal load rating-based inspection planning of corroded steel girders using Markov decision process. Probabilistic Engineering Mechanics, 2021, 66, 103160.	1.3	3
406	Integration of health monitoring in asset management in a life-cycle perspective. , 2008, , .		3
407	Lifetime structural robustness of concrete bridge piers under corrosion. Bridge Maintenance, Safety and Management, 2012, , 1602-1608.	0.1	3
408	Mode shape-informed tension force estimation of stay cables. , 2014, , 636-639.		3
409	Efficient adaptive importance sampling for time-dependent reliability analysis of structures. , 2015, , .		3
410	Probabilistic Optimum Bridge System Maintenance Management Considering Correlations of Deteriorating Components and Service Life Extensions. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.1	3
411	Sensitivity studies in reliability-based plastic design. Engineering Computations, 1984, 1, 237-246.	0.7	2
412	Combining human errors in structural risk analysis. Civil Engineering and Environmental Systems, 1986, 3, 93-99.	0.2	2
413	Influence of load and strength correlation on the reliability of ductile systems. Computers and Structures, 1986, 22, 637-647.	2.4	2
414	Closure to "Life-Cycle Cost Design of Deteriorating Structures" by Dan M. Frangopol. Journal of Structural Engineering, 1998, 124, 1368-1369.	1.7	2

#	ARTICLE	IF	CITATIONS
415	Safety Assessment of Bridges Based on System Reliability and Redundancy. , 2000, , .		2
416	Condition Assessment of Suspension Bridges - A Probabilistic Approach. , 2000, , .		2
417	Long-Term Performance of HSC Columns under Sustained Loads. , 2000, , 1.		2
418	Probabilistic Life-Cycle Analysis of Deteriorating Structures under Multiple Performance Constraints. , 2004, , 1.		2
419	Monitoring of Steel Railway Floor Beams Prestressed by Steel Plates. Journal of Bridge Engineering, 2006, 11, 681-687.	1.4	2
420	Life-cycle cost of civil infrastructure with emphasis on bridges. , 2008, , 47-58.		2
421	Infrastructure Decision-Making Based on Structural Identification. , 2010, , .		2
422	Fatigue performance assessment and service life prediction of high-speed ship structures based on probabilistic lifetime sea loads. Structure and Infrastructure Engineering, 0, , 1-14.	2.0	2
423	Fatigue system reliability analysis of riveted railway bridge connections. Structure and Infrastructure Engineering, 0, , 1-18.	2.0	2
424	Practical Applications of Life-Cycle Considerations in Sustainable Development of Infrastructure. , 2014, , .		2
425	Bridge design, maintenance and management. Structure and Infrastructure Engineering, 2014, 10, 419-419.	2.0	2
426	Advances in life-cycle civil engineering. Structure and Infrastructure Engineering, 2014, 10, 843-843.	2.0	2
427	Lifetime resilience of aging concrete bridges under corrosion. , 2014, , 1691-1698.		2
428	Structural Deterioration Mechanisms. , 2019, , 1-31.		2
429	Decision Support System for Bridge Network Maintenance Planning. , 2006, , 833-840.		2
430	Damage to Ship Structures Under Uncertainty: Evaluation and Prediction. , 2013, , 1-22.		2
431	Lifetime risk assessment of bridges affected by multiple hazards. Bridge Maintenance, Safety and Management, 2012, , 2922-2929.	0.1	2
432	Computationally Efficient Simulation Techniques for Bridge Network Maintenance Optimization under Uncertainty. , 2011, , .		2

#	ARTICLE	IF	CITATIONS
433	Handling Uncertainties in Optimal Design of Suspension Bridges with Special Emphasis on Loads. , 2004, , 217-222.		2
434	Damage to Ship Structures Under Uncertainty: Evaluation and Prediction. , 2015, , 565-588.		2
435	Probabilistic multi-objective optimum combined inspection and monitoring planning and decision making with updating. Structure and Infrastructure Engineering, 2022, 18, 1487-1505.	2.0	2
436	Discussion of "Reliability Based Optimum Design of Concrete Structures" by Adang Surahman and Kamal B. Rojiani (March, 1983). Journal of Structural Engineering, 1984, 110, 669-670.	1.7	1
437	Reliability analysis of nondeterministic steel beam-columns. Computers and Structures, 1991, 41, 745-756.	2.4	1
438	OPTIMUM MAINTENANCE STRATEGY: STEEL BRIDGES. , 2000, , 1-12.		1
439	Reliability- and Cost-Oriented Optimal Bridge Maintenance Planning. , 2000, , 1.		1
440	Discussion and Closure: Condition Prediction of Deteriorating Concrete Bridges Using Bayesian Updating. Journal of Structural Engineering, 2001, 127, 594-595.	1.7	1
441	The Damage of Concrete Structures Due to Coupled Moisture Transfer and Drying Shrinkage. , 2001, , 1.		1
442	Cost of reliability improvement and deterioration delay of maintained structures. , 2003, , 2332-2335.		1
443	Reliability-Based Optimization of Civil and Aerospace Structural Systems. , 2004, , .		1
444	An educational experiment to address infrastructure needs. International Journal of Critical Infrastructures, 2005, 1, 269.	0.1	1
445	Life-Cycle Cost Design Using Improved Multi-Objective Genetic Algorithm. , 2006, , 1.		1
446	A Practical Decision-Support System for Bridge Management Based on JAVA Techniques. , 2006, , 1.		1
447	Quantifying the Benefits of Smart Technologies in a Life-Cycle Context. Advances in Science and Technology, 0, , .	0.2	1
448	Redundancy of Structural Systems Based on Survivor Functions. , 2009, , .		1
449	Life-Cycle Performance of Reinforced Concrete Structures Exposed to Aggressive Agents: Design Issues. , 2010, , .		1
450	Probabilistic Approach to Service Life Prediction of Concrete Structures Subjected to Load and Environmental Actions. , 2011, , 273-281.		1

#	ARTICLE	IF	CITATIONS
451	Performance Indicators for Structures and Infrastructures. , 2011, , .		1
452	Uncertainty Modeling in Bridge Network Maintenance Optimization. , 2011, , .		1
453	A General Framework for Probabilistic Risk-Based Optimization of Life-Cycle Management of Infrastructure Systems under Gradual and Sudden Deterioration. , 2014, , .		1
454	Redundancy of Structures and Fatigue of Bridges and Ships Under Uncertainty. , 2016, , 1-25.		1
455	Bridge design, assessment and monitoring. Structure and Infrastructure Engineering, 2017, 13, 417-417.	2.0	1
456	Bridge analysis, design, assessment, monitoring and management. Structure and Infrastructure Engineering, 2018, 14, 411-411.	2.0	1
457	Life-Cycle Performance of Deteriorating Structures. , 2019, , 33-64.		1
458	Life-Cycle Performance of Infrastructure Networks. , 2019, , 65-94.		1
459	Damage Assessment of Reinforced Concrete Bridge Decks Using TAM Network. , 2006, , 81-86.		1
460	Reliability Quantification of High-Speed Naval Vessels Based on SHM Data. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 99-106.	0.3	1
461	Optimal Allocation of Resources for Life-Cycle Management of Structures and Highway Networks. , 1997, , 1213-1220.		1
462	Reliability-based importance assessment of structural members. , 2001, , 198-200.		1
463	Life cycle utility-informed maintenance planning based on lifetime functions: optimum balancing of cost, failure consequences and performance benefit. , 0, .		1
464	DESIGN OPTIMIZATION WITH UNCERTAINTY, LIFE-CYCLE PERFORMANCE AND COST CONSIDERATIONS. , 2007, , 291-329.		1
465	Systems-based monitoring approaches for improved infrastructure management under uncertainty. , 2008, , .		1
466	Optimization of assessment strategies for aging bridges. , 2011, , 581-586.		1
467	Bridge Health Monitoring. , 2014, , 247-268.		1
468	Life-Cycle Performance Analysis and Optimization. , 2014, , 537-566.		1

#	ARTICLE	IF	CITATIONS
469	Damage modeling and life-cycle reliability analysis of aging bridges. , 2008, , .		1
470	Lifetime robustness of a RC bridge pier under corrosion considering bridge importance. , 2014, , 1699-1704.		1
471	Experimental investigation on the relationship between the spatial variation of steel weight loss and the cracking width of RC members using X-ray photograms. Life-cycle of Civil Engineering Systems, 2014, , 429-436.	0.1	1
472	Bridge network performance, maintenance and optimisation under uncertainty: accomplishments and challenges. , 2019, , 30-45.		1
473	Probabilistic Long-Term Resilience of Bridges under Seismic and Deterioration Processes. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 0, , 1-33.	0.3	1
474	Discussion of "Probability of Failure From Abnormal Load" by Bruce Ellingwood, E. V. Leyendecker and James T. P. Yao (April, 1983). Journal of Structural Engineering, 1984, 110, 931-933.	1.7	0
475	Interactive reliability-based optimum CAD of framed structures. CAD Computer Aided Design, 1984, 16, 103.	1.4	0
476	Reliability analysis of sediment control steel dams. Structural Safety, 1994, 15, 131-148.	2.8	0
477	System Function, Redundancy, and Component Importance: Feedback for Optimal System Design. , 2000, , 1.		0
478	Life-Cycle Safety and Costing for Maintenance of Aging Bridges. , 2001, , 1.		0
479	Closure to "Response Prediction of Geometrically Nonlinear Structures" by Kiyohiro Imai and Dan M. Frangopol. Journal of Structural Engineering, 2002, 128, 960-961.	1.7	0
480	Probabilistic Performance of Concrete Structures in Aggressive Environments. , 2003, , 83.		0
481	<title>A network of field test sites as a platform for research on engineering and management of the highway transportation infrastructure</title>. , 2004, , .		0
482	Monitoring of Steel Railway Floor Beams Prestressed by Steel Plates. , 2005, , 1.		0
483	Dr Torgeir Moan. Structure and Infrastructure Engineering, 2006, 2, 77-78.	2.0	0
484	Optimizing Lifetime Condition and Reliability of Deteriorating Structures with Emphasis on Bridges. , 2006, , 1.		0
485	Bridge Maintenance Strategy Considering User Cost and Connectivity. , 2006, , 19.		0
486	Some Aspects of the Life-Cycle Reliability of the Twin Cable-Stayed Bridges at Malpensa Airport in Italy. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
487	Structural safety [Special Issue: Optimization under uncertainty with emphasis on structural applications]. Structural Safety, 2009, 31, 449.	2.8	0
488	Reliability Assessment and Prediction using Monitoring Information. , 2009, , .		0
489	Closure to "Bridge Reliability Assessment Based on Monitoring" by D. M. Frangopol, A. Strauss, and S. Kim. Journal of Bridge Engineering, 2010, 15, 763-763.	1.4	0
490	Long-Term Seismic Performance of RC Bridge Piers in an Aggressive Marine Environment. , 2011, , .		0
491	Optimization of Structural Damage Detection Planning for Civil Infrastructure. , 2012, , 45-51.		0
492	Reliability-based Performance Indicators for Buildings, Bridges and Other Civil Infrastructure. , 2013, , .		0
493	Inspection, Monitoring, and Maintenance of Infrastructure Systems in a Life-cycle Context: Emphasis on Bridges. IABSE Symposium Report, 2014, , .	0.0	0
494	Reliability Assessment of RC Structures Subjected to Carbonation by Incorporating Spatial Variations. , 2014, , .		0
495	Redundancy of Structures and Fatigue of Bridges and Ships Under Uncertainty. , 2015, , 1-25.		0
496	Performance assessment of concrete structures based on probabilistic prediction models and monitoring information. IABSE Symposium Report, 2015, , .	0.0	0
497	Decision Support System for Optimum Lifetime Sustainability-Based Maintenance Planning of Highway Bridges. , 2017, , .		0
498	Guest Editorial: IJF Special issue of the International Conference on Structural Integrity and Durability, ICSID 2017, "Fatigue at all Scales". International Journal of Fatigue, 2018, 116, 692.	2.8	0
499	Probabilistic Modeling of Impact of Vehicles on the Road Furniture. Lecture Notes in Civil Engineering, 2021, , 605-614.	0.3	0
500	Spatial Variability of Rebar Corrosion and Performance Evaluation of Corroded RC Structures Using Probabilistic Analysis and Finite Element Method. Lecture Notes in Civil Engineering, 2021, , 733-739.	0.3	0
501	Probabilistic models for predicting the failure time of deteriorating structural systems. , 2001, , 290-293.		0
502	LCC Based Maintenance System of Highway Network Bridges. , 2002, , .		0
503	Whole Life Costing of Optimum Maintenance Strategies for Bridge Groups. , 2002, , .		0
504	Robust Reliability-based Design Optimization of Suspension Bridges. , 2004, , 211-216.		0

#	ARTICLE	IF	CITATIONS
505	Identification Strategies for Maintenance of Bridges. IABSE Symposium Report, 2007, , .	0.0	0
506	Probabilistic treatment of bridge monitoring data and associated errors for reliability assessment and prediction. , 2008, , 391-396.		0
507	Monitoring based structural performance assessment. , 2008, , 649-654.		0
508	Bridge fatigue reliability assessment and prediction. , 2008, , .		0
509	Structural geometry effects on the life-cycle performance of concrete bridge structures in aggressive environments. , 2008, , .		0
510	Application of Evolutionary Optimization in Structural Engineering. IFIP Advances in Information and Communication Technology, 2009, , 36-81.	0.5	0
511	Reliability analysis of prestressed concrete bridges located in a marine environment. , 2011, , 573-580.		0
512	Use of Family of Models for Performance Predictions and Decision Making. Conference Proceedings of the Society for Experimental Mechanics, 2012, , 423-431.	0.3	0
513	Monitoring based assessment of a jointless bridge. Bridge Maintenance, Safety and Management, 2012, , 922-929.	0.1	0
514	Evaluating and forecasting bridge performance under uncertainty. Bridge Maintenance, Safety and Management, 2012, , 2553-2560.	0.1	0
515	Performance indicators based on structural health monitoring for management of bridges. Bridge Maintenance, Safety and Management, 2012, , 298-304.	0.1	0
516	Reliability-Based Structural Optimization Research at the University of Colorado: A Brief Retrospective 1983â€“1991. Solid Mechanics and Its Applications, 1991, , 301-322.	0.1	0
517	Reliability of Anchored Monolith Structures under Corrosion Effects. , 1995, , 120-127.		0
518	A Probabilistic-Fuzzy Model for Seismic Hazard. , 1995, , 302-325.		0
519	Assessment of Acoustic Travel Time Tomography (ATTT) at Barker Dam. , 1998, , 549-554.		0
520	A framework for risk-based optimum cable replacement strategies for cable-stayed bridges. , 2014, , 740-745.		0
521	Resistant-wear road expansion joints. , 2014, , 513-517.		0
522	Probabilistic shear strength models for reinforced concrete deep beams. , 2014, , 1163-1167.		0

#	ARTICLE	IF	CITATIONS
523	Sustainability-based pre-earthquake probabilistic retrofit optimization of highway bridges considering risk attitudes. , 2014, , 284-289.		0
524	Time-variant risk of aging bridges under seismic mainshock followed by aftershocks. , 2014, , 277-283.		0
525	Sustainability-based Bi-objective Optimization for Seismic Retrofit of Bridge Networks Considering Risk Attitudes. Life-cycle of Civil Engineering Systems, 2014, , 606-613.	0.1	0
526	Fatigue assessment of concrete offshore wind energy foundations. Life-cycle of Civil Engineering Systems, 2014, , 221-223.	0.1	0
527	Time-Dependent Earthquake Risk Assessment Modeling Incorporating. Life-cycle of Civil Engineering Systems, 2014, , 50-69.	0.1	0
528	LIFE-CYCLE DESIGN OF BRIDGES IN SEISMIC REGIONS BASED ON LESSONS FROM THE 2011 GREAT EAST JAPAN EARTHQUAKE. , 2015, , .		0
529	Redundancy of Structures and Fatigue of Bridges and Ships Under Uncertainty. , 2017, , 1541-1565.		0
530	Nonlinear Prediction Surfaces for Estimating the Structural Response of Naval Vessels. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 21-28.	0.3	0
531	Is the reliability of suspension bridges too high?. , 2018, , 221-228.		0
532	Application of Cumulative Prospect Theory to Optimal Inspection Decision-Making for Ship Structures. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 65-74.	0.3	0