M H Faber

List of Publications by Year
in descending order

136 papers	2,695 citations	218677 26 h-index	214800 47 g-index
140 all docs	140 docs citations	140 times ranked	1603 citing authors

#	Article	IF	Citations
1	On the assessment of robustness. Structural Safety, 2008, 30, 253-267.	5.3	255
2	Risk assessment for civil engineering facilities: critical overview and discussion. Reliability Engineering and System Safety, 2003, 80, 173-184.	8.9	210
3	Risk based inspection planning for structural systems. Structural Safety, 2005, 27, 335-355.	5.3	177
4	Socio-economically sustainable civil engineering infrastructures by optimization. Structural Safety, 2005, 27, 187-229.	5.3	102
5	Proof load testing for bridge assessment and upgrading. Engineering Structures, 2000, 22, 1677-1689.	5.3	81
6	Computational Aspects of Risk-Based Inspection Planning. Computer-Aided Civil and Infrastructure Engineering, 2006, 21, 179-192.	9.8	71
7	The Ergodicity Assumption for Sea States in the Reliability Estimation of Offshore Structures. Journal of Offshore Mechanics and Arctic Engineering, 1991, 113, 241-246.	1.2	68
8	Aspects of parallel wire cable reliability. Structural Safety, 2003, 25, 201-225.	5.3	68
9	On the Treatment of Uncertainties and Probabilities in Engineering Decision Analysis. Journal of Offshore Mechanics and Arctic Engineering, 2005, 127, 243-248.	1.2	68
10	Prediction of road accidents: A Bayesian hierarchical approach. Accident Analysis and Prevention, 2013, 51, 274-291.	5.7	67
11	Risk Assessment of Decommissioning Options Using Bayesian Networks. Journal of Offshore Mechanics and Arctic Engineering, 2002, 124, 231-238.	1.2	64
12	Indicators for inspection and maintenance planning of concrete structures. Structural Safety, 2002, 24, 377-396.	5.3	61
13	Liquefaction Risk Assessment Using Geostatistics to account for Soil Spatial Variability. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2008, 134, 14-23.	3.0	61
14	Probabilistic modeling of timber structures. Structural Safety, 2007, 29, 255-267.	5.3	58
15	Optimal reliability-based code calibration. Structural Safety, 1994, 15, 197-208.	5.3	57
16	Statistics and Probability Theory. Topics in Safety, Risk, Reliability and Quality, 2012, , .	0.2	50
17	Risk Management of Large RC Structures within Spatial Information System. Computer-Aided Civil and Infrastructure Engineering, 2012, 27, 385-405.	9.8	41
18	Bayesian probabilistic network approach for managing earthquake risks of cities. Georisk, 2011, 5, 2-24.	3.5	40

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19	Reliability based assessment of existing structures. Structural Control and Health Monitoring, 2000, 2, 247-253.	0.7	34
20	Field Implementation of RBI for Jacket Structures. Journal of Offshore Mechanics and Arctic Engineering, 2005, 127, 220-226.	1.2	33
21	Optimal and acceptable reliabilities for structural design. Structural Safety, 2019, 76, 149-161.	5.3	33
22	Probabilistic investigations into the value of information: A comparison of condition-based and time-based maintenance strategies. Ocean Engineering, 2019, 188, 106181.	4.3	31
23	On the Probabilistic Characterization of Robustness and Resilience. Procedia Engineering, 2017, 198, 1070-1083.	1.2	30
24	Faith and fakes â€“ dealing with critical information in decision analysis. Civil Engineering and Environmental Systems, 2019, 36, 32-54.	0.9	30
25	Value of information analysis in civil and infrastructure engineering: a review. Journal of Infrastructure Preservation and Resilience, 2021, 2, .	3.2	29
26	Risk-Based Inspection Planning of Offshore Installations. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2002, 12, 200-208.	0.8	27
27	A Computational Framework for Risk Assessment of RC Structures Using Indicators. Computer-Aided Civil and Infrastructure Engineering, 2006, 21, 216-230.	9.8	27
28	Probabilistic modeling of graded timber material properties. Structural Safety, 2004, 26, 295-309.	5.3	26
29	Sensitivities in structural maintenance planning. Reliability Engineering and System Safety, 1996, 51, 317-329.	8.9	25
30	Numerical Investigations into the Value of Information in Lifecycle Analysis of Structural Systems. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2016, 2, .	1.7	24
31	Bridging resilience and sustainability - decision analysis for design and management of infrastructure systems. Sustainable and Resilient Infrastructure, 2020, 5, 102-124.	2.8	24
32	Constrained optimization of component reliabilities in complex systems. Structural Safety, 2009, 31, 168-178.	5.3	23
33	Risk-Based Inspection: The Framework. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2002, 12, 186-195.	0.8	22
34	Sustainable Decision Making in Civil Engineering. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2004, 14, 237-242.	0.8	22
35	Recent Advances in Risk Based Inspection Planning for Structures. , 2004, , 2416-2422.		22
36	A framework for the asset integrity management of large deteriorating concrete structures. Structure and Infrastructure Engineering, 2009, 5, 199-213.	3.7	21

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37	Risk assessment for structural design criteria of FPSO systems. Part I: Generic models and acceptance criteria. Marine Structures, 2012, 28, 120-133.	3.8	21
38	On the assessment of marginal life saving costs for risk acceptance criteria. Structural Safety, 2013, 44, 37-46.	5.3	21
39	Risk Based Acceptance Criteria for Joints Subject to Fatigue Deterioration. Journal of Offshore Mechanics and Arctic Engineering, 2005, 127, 150-157.	1.2	20
40	Robustness: Theoretical Framework. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2012, 22, 66-72.	0.8	20
41	Risk assessment for structural design criteria of FPSO systems. Part II: Consequence models and applications to determination of target reliabilities. Marine Structures, 2012, 28, 50-66.	3.8	20
42	Unified Approach to Risk-Based Inspection Planning for Offshore Production Facilities. Journal of Offshore Mechanics and Arctic Engineering, 2003, 125, 126-131.	1.2	18
43	System Effects in Generic Risk-Based Inspection Planning. Journal of Offshore Mechanics and Arctic Engineering, 2004, 126, 265-271.	1.2	18
44	Uncertainty treatment in earthquake modelling using Bayesian probabilistic networks. Georisk, 2011, 5, 44-58.	3.5	18
45	Hierarchical Modeling of Pipeline Defect Growth Subject to ILI Uncertainty. , 2009, , .		15
46	Bayesian framework for managing preferences in decision-making. Reliability Engineering and System Safety, 2006, 91, 556-569.	8.9	14
47	Risk Based Structural Maintenance Planning. Solid Mechanics and Its Applications, 1997, , 377-402.	0.2	13
48	Support Structure Reliability of Offshore Wind Turbines Utilizing an Adaptive Response Surface Method. , 2010, , .		13
49	Temporal Variability in Corrosion Modeling and Reliability Updating. Journal of Offshore Mechanics and Arctic Engineering, 2007, 129, 265-272.	1.2	12
50	On information modeling in structural integrity management. Structural Health Monitoring, 2022, 21, 59-71.	7.5	12
51	Issues in societal optimal engineering decision making. Structure and Infrastructure Engineering, 2008, 4, 335-351.	3.7	11
52	Impacts of sustainability and resilience research on risk governance, management and education. Sustainable and Resilient Infrastructure, 2019, , 1-46.	2.8	11
53	Fatigue inspection and maintenance optimization: A comparison of information value, life cycle cost and reliability based approaches. Ocean Engineering, 2021, 220, 108286.	4.3	11
54	On the Quantification of Robustness of Structures. , 2006, , 79.		10

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55	VoI-informed decision-making for SHM system arrangement. Structural Health Monitoring, 2022, 21, 37-58.	7.5	10
56	Bayesian Updating in Natural Hazard Risk Assessment. Australian Journal of Structural Engineering, 2009, 9, 35-44.	1.1	9
57	On the governance of global and catastrophic risks. International Journal of Risk Assessment and Management, 2011, 15, 400.	0.1	9
58	Ultimate Limit State Model Basis for Assessment of Offshore Wind Energy Converters. Journal of Offshore Mechanics and Arctic Engineering, 2012, 134, .	1.2	9
59	Value of Information Analysis in Structural Safety. , 2014, , .		9
60	Resilience Informed Integrity Management of Wind Turbine Parks. Energies, 2019, 12, 2729.	3.1	9
61	On sustainability and resilience of engineered systems. , 2018, , 28-49.		9
62	VoI analysis of temporally continuous SHM information in the context of adaptive risk-based inspection planning. Structural Safety, 2022, 99, 102258.	5.3	9
63	Preferences, utility and risk perception in engineering decision making. International Journal of Risk Assessment and Management, 2007, 7, 813.	0.1	8
64	Fatigue and Serviceability Limit State Model Basis for Assessment of Offshore Wind Energy Converters. Journal of Offshore Mechanics and Arctic Engineering, 2012, 134, .	1.2	8
65	Computing the value of information from periodic testing in holistic decision making under uncertainty. Reliability Engineering and System Safety, 2021, 206, 107242.	8.9	8
66	Benefits of Risk Based Inspection Planning for Offshore Structures. , 2006, , 59.		7
67	A budget management approach for societal infrastructure projects. Structure and Infrastructure Engineering, 2009, 5, 41-47.	3.7	7
68	Common cause effects in portfolio loss estimation. Structure and Infrastructure Engineering, 2012, 8, 497-506.	3.7	7
69	Introduction: Robustness. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2012, 22, 66-66.	0.8	7
70	Consistent and coherent treatment of uncertainties and dependencies in fatigue crack growth calculations using multi-level Bayesian models. Reliability Engineering and System Safety, 2020, 204, 107117.	8.9	7
71	On the distribution of maximum crest and wave height at intermediate water depths. Ocean Engineering, 2020, 217, 107485.	4.3	7
72	A simplified method for holistic value of information computation for informed structural integrity management under uncertainty. Marine Structures, 2021, 76, 102888.	3.8	7

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73	Probabilistischer Ansatz zur Beurteilung der Dauerhaftigkeit von bestehenden Stahlbetonbauten. Beton- Und Stahlbetonbau, 2002, 97, 421-429.	0.4	6
74	Codified Risk-Based Inspection Planning. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2002, 12, 195-199.	0.8	6
75	Temporal and Spatial Aspects of Probabilistic Corrosion Models. , 2003, , 183.		6
76	Uncertainty Modeling and Probabilities in Engineering Decision Analysis. , 2003, , 171.		6
77	Optimality and Acceptance Criteria in Offshore Design. Journal of Offshore Mechanics and Arctic Engineering, 2004, 126, 258-264.	1.2	6
78	Risk Based Structural Integrity Management of Marine Platforms Using Bayesian Probabilistic Nets. Journal of Offshore Mechanics and Arctic Engineering, 2009, 131, .	1.2	6
79	Extrapolation Method for System Reliability Assessment: A New Scheme. Advances in Structural Engineering, 2012, 15, 1893-1909.	2.4	6
80	Towards resilience of offshore wind farms: A framework and application to asset integrity management. Applied Energy, 2022, 322, 119429.	10.1	6
81	Reliability-Based Management of Marine Fouling. Journal of Offshore Mechanics and Arctic Engineering, 2001, 123, 76-83.	1.2	5
82	Field Implementation of RBI for Jacket Structures. , 2003, , 295.		5
83	Industrial Implementation of Risk Based Inspection Planning Lessons Learnt From Experience: Part 1 â€" The Case of FPSOs. , 2004, , 553.		5
84	Bayesian approach to proof loading of quasi-identical multi-components structural systems. Civil Engineering and Environmental Systems, 2007, 24, 111-121.	0.9	5
85	Combining engineering and data-driven approaches: Development of a generic fire risk model facilitating calibration. Fire Safety Journal, 2014, 70, 23-33.	3.1	5
86	A costâ€"benefit analysis of mitigation options for optimal management of risks posed by flow-like phenomena. Natural Hazards, 2016, 81, 117-144.	3.4	5
87	An integrated probabilistic approach for optimum maintenance of fatigue-critical structural components. Marine Structures, 2019, 68, 102649.	3.8	5
88	Risikobasierter Ansatz zur Bewertung der Robustheit von Bauwerken. Stahlbau, 2010, 79, 547-555.	0.1	4
89	Combining engineering and data-driven approaches: Calibration of a generic fire risk model with data. Fire Safety Journal, 2015, 74, 32-42.	3.1	4
90	Proposal of Guidelines for the Evolution of Robustness Framework in the Future Generation of Eurocodes. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2019, 29, 433-442.	0.8	4

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91	Risk Based Acceptance Criteria for Joints Subject to Fatigue Deterioration. , 2003, , .		4
92	Risk based inspection planning Methodology and application to an offshore structure. Revue EuropÃ©enne De GÃ©nie Civil, 2002, 6, 489-503.	0.0	4
93	Reliability-Based Optimal Planning of Maintenance and Inspection. , 2001, , 271.		3
94	Condition Indicators for Inspection and Maintenance Planning. , 2003, , 344.		3
95	An Overview of the Reassessment Studies of Fixed Offshore Platforms in the Bay of Campeche, Mexico. , 2005, , 123.		3
96	Sustainable decisions for life-cycle based design and maintenance. Australian Journal of Civil Engineering, 2007, 4, 59-72.	1.6	3
97	Bewertung der ErmÃ¼dungsfestigkeit von Baustrukturen in Offshore-Windenergie-Anlagen. Stahlbau, 2008, 77, 630-638.	0.1	3
98	Optimierung des Managements der TragwerksintegritÃt fÃ¼r Offshore-Windenergieanlagen. Bautechnik, 2012, 89, 525-532.	0.1	3
99	Risk Informed Structural Systems Integrity Management: A Decision Analytical Perspective. , 2017, , .		3
100	Reliability Assessment of a Bridge Structure Subjected to Chloride Attack. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2018, 28, 318-324.	0.8	3
101	A holistic approach to risk-based decision on inspection and design of fatigue-sensitive structures. Engineering Structures, 2020, 221, 110949.	5.3	3
102	On a generic framework for systems resilience modelling of bridges - accounting for historic and cultural values. Sustainable and Resilient Infrastructure, 2022, 7, 366-379.	2.8	3
103	Bayesian probabilistic representation of complex systems: With application to wave load modeling. Computer-Aided Civil and Infrastructure Engineering, 2022, 37, 935-955.	9.8	3
104	Decision-theoretic inspection planning using imperfect and incomplete data. Data-Centric Engineering, 2021, 2, .	2.3	3
105	On a simple scheme for systems modeling and identification using big data techniques. Reliability Engineering and System Safety, 2022, 220, 108219.	8.9	3
106	Optimality and Acceptance Criteria in Offshore Design. , 2002, , 401.		2
107	System Effects in Generic Risk Based Inspection Planning. , 2002, , 391.		2
108	Life-Cycle Performance of Deteriorating Structures. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2003, 13, 202-204.	0.8	2

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109	Epistemic Uncertainties in Decision Making. , 2005, , 115.		2
110	Fatigue Analysis and Risk Based Inspection Planning for Life Extension of Fixed Offshore Platforms. , 2005, , 511.		2
111	Societal Performance of Infrastructure Subject to Natural Hazards. Australian Journal of Structural Engineering, 2009, 9, 9-16.	1.1	2
112	On the Value of Forecasting in Cable Ice Risk Management. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2015, 25, 61-70.	0.8	2
113	SOCIAL AND TECHNOLOGICAL ASPECTS OF DISASTER RESILIENCE. International Journal of Strategic Property Management, 2016, 20, 277-290.	1.8	2
114	Systems Modeling Using Big Data Analysis Techniques and Evidence. , 2019, , .		2
115	Evaluation of inspection features including exposure risk using a value of information analysis. Civil Engineering and Environmental Systems, 2021, 38, 36-58.	0.9	2
116	Toward an information theoretic ontology of risk, resilience and sustainability and a blueprint for educationâ€“ Part I. Sustainable and Resilient Infrastructure, 2022, 7, 459-479.	2.8	2
117	Risk informed integrity management of sub-surface well production tubings subject to combined scale and corrosion degradations. International Journal of Pressure Vessels and Piping, 2021, 192, 104424.	2.6	2
118	A Framework for Offshore Load Environment Modeling1. Journal of Offshore Mechanics and Arctic Engineering, 2020, 142, .	1.2	2
119	Value of Information in Resilience Management of Infrastructure Systems. IABSE Symposium Report, 2019, , .	0.0	2
120	Industrial Implementation of Risk Based Inspection Planning Lessons Learned From Experience: Part 2 â€” The Case of Steel Offshore Structures. , 2004, , 565.		1
121	Acceptance Criteria for the Design of High-Rise Buildings. , 2004, , 318.		1
122	Risk Based Structural Integrity Management Using Bayesian Probabilistic Nets. , 2006, , 311.		1
123	Probabilistic Assessment of Extreme Events Subject to Epistemic Uncertainties. , 2008, , .		1
124	Hierarchical Bayes Analysis of Rare Events Using High-Dispersion Poisson Mixtures. , 2008, , .		1
125	Probabilistic Assessment of the Occurrence and Duration of Ice Accretion on Cables. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2015, 25, 91-101.	0.8	1
126	A Framework for Offshore Load Environment Modeling. , 2018, , .		1

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127	GLOBE â€“ Global Consensus on Sustainability in the Built Environmentâ€”Report. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2020, 30, 600-601.	0.8	1
128	Consequence and Utility Modeling in Rational Decision Making. , 2004, , .		1
129	Optimal Design and Portfolio Risk Management for Groups of Structures. , 2004, , .		1
130	Temporal Variability in Corrosion Modeling and Reliability Updating. , 2005, , 97.		0
131	Spatial Effects in Risk-Based Design and Maintenance of Pipelines. , 2007, , 137.		0
132	Consequence modelling based on stated preferences. Australian Journal of Civil Engineering, 2007, 4, 47-58.	1.6	0
133	Hierarchical Modeling of Risk-Based Optimization and Inspection Planning of Complex Hull Structures. Ship Technology Research, 2008, 55, 2-11.	2.5	0
134	FPSO Risk Assessment and Acceptance Criteria With Application to FPSO Mooring Systems. , 2009, , .		0
135	9th IFED forum event on â€˜resilient infrastructures â€“ integration of risk and sustainabilityâ€™. Sustainable and Resilient Infrastructure, 2020, 5, 1-3.	2.8	0
136	Towards a New Paradigm for Governance and Management of the Built Environment. IABSE Symposium Report, 2020, , .	0.0	0