

Franck Schoefs

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

2,115
citations

257450

24
h-index

276875

41
g-index

99
all docs

99
docs citations

99
times ranked

1403
citing authors

#	ARTICLE	IF	CITATIONS
1	A comprehensive probabilistic model of chloride ingress in unsaturated concrete. <i>Engineering Structures</i> , 2011, 33, 720-730.	5.3	159
2	Non-destructive methods for measuring chloride ingress into concrete: State-of-the-art and future challenges. <i>Construction and Building Materials</i> , 2014, 68, 68-81.	7.2	129
3	Reliability assessments of corroded pipelines based on internal pressure – A review. <i>Engineering Failure Analysis</i> , 2019, 98, 190-214.	4.0	116
4	Texture Analysis Based Damage Detection of Ageing Infrastructural Elements. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2013, 28, 162-177.	9.8	86
5	An extended stochastic finite element method for solving stochastic partial differential equations on random domains. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008, 197, 4663-4682.	6.6	83
6	Principal component analysis and polynomial chaos expansion for time-variant reliability problems. <i>Reliability Engineering and System Safety</i> , 2017, 167, 406-416.	8.9	83
7	Probabilistic modeling of inspection results for offshore structures. <i>Structural Safety</i> , 2003, 25, 379-399.	5.3	75
8	Assessment of ROC curves for inspection of random fields. <i>Structural Safety</i> , 2009, 31, 409-419.	5.3	55
9	Development of a two-stage inspection process for the assessment of deteriorating infrastructure. <i>Reliability Engineering and System Safety</i> , 2010, 95, 182-194.	8.9	53
10	Stochastic improvement of inspection and maintenance of corroding reinforced concrete structures placed in unsaturated environments. <i>Engineering Structures</i> , 2012, 41, 50-62.	5.3	52
11	Statistical investigation of different analysis methods for chloride profiles within a real structure in a marine environment. <i>Ocean Engineering</i> , 2018, 157, 96-107.	4.3	52
12	Global kriging surrogate modeling for general time-variant reliability-based design optimization problems. <i>Structural and Multidisciplinary Optimization</i> , 2018, 58, 955-968.	3.5	49
13	Regionally Enhanced Multiphase Segmentation Technique for Damaged Surfaces. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2014, 29, 644-658.	9.8	47
14	Semantic Segmentation of Underwater Imagery Using Deep Networks Trained on Synthetic Imagery. <i>Journal of Marine Science and Engineering</i> , 2018, 6, 93.	2.6	43
15	Cluster analysis of acoustic emission activity within wood material: Towards a real-time monitoring of crack tip propagation. <i>Engineering Fracture Mechanics</i> , 2017, 180, 254-267.	4.3	40
16	Polynomial Chaos Representation for Identification of Mechanical Characteristics of Instrumented Structures. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2011, 26, 173-189.	9.8	35
17	An underwater lighting and turbidity image repository for analysing the performance of image-based non-destructive techniques. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 104-123.	3.7	31
18	Updating probabilities of bridge reinforcement corrosion using health monitoring data. <i>Engineering Structures</i> , 2019, 190, 41-51.	5.3	31

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19	ROC dependent event isolation method for image processing based assessment of corroded harbour structures. <i>Structure and Infrastructure Engineering</i> , 2010, 6, 365-378.	3.7	30
20	Sensitivity approach for modelling the environmental loading of marine structures through a matrix response surface. <i>Reliability Engineering and System Safety</i> , 2008, 93, 1004-1017.	8.9	29
21	Sustainable maintenance and repair of RC coastal structures. <i>Proceedings of the Institution of Civil Engineers: Maritime Engineering</i> , 2015, 168, 162-173.	0.2	28
22	X-SFEM, a computational technique based on X-FEM to deal with random shapes. <i>European Journal of Computational Mechanics</i> , 2007, 16, 277-293.	0.6	26
23	Characterization of random fields from NDT measurements: A two stages procedure. <i>Engineering Structures</i> , 2016, 111, 312-322.	5.3	26
24	Investigation of the effect of the quality of inspection techniques on the optimal inspection interval for structures. <i>Structure and Infrastructure Engineering</i> , 2012, 8, 557-568.	3.7	25
25	Time-function reliability of harbour infrastructures from stochastic modelling of corrosion. <i>European Journal of Environmental and Civil Engineering</i> , 2012, 16, 1187-1201.	2.1	25
26	Quantification and uncertainty analysis of a structural monitoring device: detection of chloride in concrete using DC electrical resistivity measurement. <i>Nondestructive Testing and Evaluation</i> , 2015, 30, 216-232.	2.1	25
27	Marine Growth Colonization Process in Guinea Gulf: Data Analysis. <i>Journal of Offshore Mechanics and Arctic Engineering</i> , 2007, 129, 97-106.	1.2	23
28	Towards an understanding of marine fouling effects on the vortex-induced vibrations of circular cylinders: partial coverage issue. <i>Biofouling</i> , 2017, 33, 268-280.	2.2	23
29	Management Strategies and Improvement of Performance of Sewer Networks. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2007, 22, 462-477.	9.8	21
30	Quantitative evaluation of contactless impact echo for non-destructive assessment of void detection within tendon ducts. <i>Construction and Building Materials</i> , 2012, 37, 885-892.	7.2	21
31	Probabilistic Modelling of Compressive Strength of Concrete Using Response Surface Methodology and Neural Networks. <i>Arabian Journal for Science and Engineering</i> , 2014, 39, 4451-4460.	1.1	21
32	A Condition-Based Deterioration Model for the Stochastic Dependency of Corrosion Rate and Crack Propagation in Corroded Concrete Structures. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2017, 32, 18-33.	9.8	21
33	The $\hat{I}\pm\hat{I}$ method for modelling expert judgement and combination of non-destructive testing tools in risk-based inspection context: application to marine structures. <i>Structure and Infrastructure Engineering</i> , 2012, 8, 531-543.	3.7	20
34	Stochastic Modeling of Forces on Jacket-Type Offshore Structures Colonized by Marine Growth. <i>Journal of Marine Science and Engineering</i> , 2019, 7, 158.	2.6	20
35	Markovian Bridge Maintenance Planning Incorporating Corrosion Initiation and Nonlinear Deterioration. <i>Journal of Bridge Engineering</i> , 2013, 18, 189-199.	2.9	19
36	A Stereo-Matching Technique for Recovering 3D Information from Underwater Inspection Imagery. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2018, 33, 193-208.	9.8	19

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37	Optimal embedded sensor placement for spatial variability assessment of stationary random fields. <i>Engineering Structures</i> , 2017, 152, 35-44.	5.3	16
38	Modeling time and spatial variability of degradation through gamma processes for structural reliability assessment. <i>Structural Safety</i> , 2019, 76, 162-173.	5.3	16
39	Measurements and statistical analysis of fillet weld geometrical parameters for probabilistic modelling of the fatigue capacity. <i>Marine Structures</i> , 2013, 34, 226-248.	3.8	15
40	Improved Bayesian network configurations for random variable identification of concrete chlorination models. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 4705-4718.	3.1	15
41	A condition-based dynamic segmentation of large systems using a Changepoints algorithm: A corroding pipeline case. <i>Structural Safety</i> , 2020, 84, 101912.	5.3	15
42	Technical management of French harbour structures - Part 1: Description of built assets. <i>Revue Paralia</i> , 0, 2, 6.1-6.11.	0.0	15
43	Integration of tidal range energy with undersea pumped storage. <i>Renewable Energy</i> , 2018, 126, 38-48.	8.9	14
44	Accounting for variability and uncertainties in NDT condition assessment of corroded RC-structures. <i>European Journal of Environmental and Civil Engineering</i> , 2009, 13, 573-591.	2.1	13
45	Life Cycle Cost Analysis of Ageing Structural Components Based on Non-Destructive Condition Assessment. <i>Australian Journal of Structural Engineering</i> , 2009, 9, 55-66.	1.1	13
46	Improved Bayesian network configurations for probabilistic identification of degradation mechanisms: application to chloride ingress. <i>Structure and Infrastructure Engineering</i> , 2016, 12, 1162-1176.	3.7	13
47	A Bayesian network framework for statistical characterisation of model parameters from accelerated tests: application to chloride ingress into concrete. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 580-593.	3.7	13
48	Applications of Virtual Data in Subsea Inspections. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 328.	2.6	13
49	Experimental study of hard marine growth effect on the hydrodynamical behaviour of a submarine cable. <i>Applied Ocean Research</i> , 2021, 114, 102810.	4.1	13
50	Monitoring of a Reinforced Concrete Wharf Using Structural Health Monitoring System and Material Testing. <i>Journal of Marine Science and Engineering</i> , 2019, 7, 84.	2.6	12
51	Long-Term Stochastic Modeling of Sheet Pile Corrosion in Coastal Environment from On-Site Measurements. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 70.	2.6	12
52	Fractal Dimension as an Effective Feature for Characterizing Hard Marine Growth Roughness from Underwater Image Processing in Controlled and Uncontrolled Image Environments. <i>Journal of Marine Science and Engineering</i> , 2021, 9, 1344.	2.6	12
53	Comparison of Additional Costs for Several Replacement Strategies of Randomly Ageing Reinforced Concrete Pipes. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2009, 24, 492-508.	9.8	11
54	Methodology for modeling and service life monitoring of mooring lines of floating wind turbines. <i>Ocean Engineering</i> , 2019, 193, 106603.	4.3	11

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55	Effect of Roughness of Mussels on Cylinder Forces from a Realistic Shape Modelling. Journal of Marine Science and Engineering, 2021, 9, 598.	2.6	11
56	Sensitivity Approach for Modeling Stochastic Field of Keuleganâ€“Carpenter and Reynolds Numbers Through a Matrix Response Surface. Journal of Offshore Mechanics and Arctic Engineering, 2010, 132, .	1.2	10
57	Multi-algorithm approach for identification of structural behavior of complex structures under cyclic environmental loading. Structural Health Monitoring, 2012, 11, 51-67.	7.5	10
58	Assessing the Capability of Analytical Carbonation Models to Propagate Uncertainties and Spatial Variability of Reinforced Concrete Structures. Frontiers in Built Environment, 2017, 3, .	2.3	10
59	Uncertainty assessment of concrete electrical resistivity measurements on a coastal bridge. Structure and Infrastructure Engineering, 2019, 15, 443-453.	3.7	10
60	Reliability Updating of Offshore Structures Subjected to Marine Growth. Energies, 2022, 15, 414.	3.1	10
61	Statistical Analysis of the Effects of Building Conditions on the Initial Loadings of On-piles Quays. Structural Health Monitoring, 2008, 7, 245-263.	7.5	9
62	Surface response meta-models for the assessment of embankment frictional angle stochastic properties from monitoring data: An application to harbour structures. Computers and Geotechnics, 2013, 53, 122-132.	4.7	9
63	Spatial identification of exposure zones of concrete structures exposed to a marine environment with respect to reinforcement corrosion. Structure and Infrastructure Engineering, 2020, 16, 346-354.	3.7	9
64	A two-scale probabilistic time-dependent fatigue model for offshore steel wind turbines. International Journal of Fatigue, 2020, 136, 105620.	5.7	9
65	SCAP-1D : A Spatial Correlation Assessment Procedure from unidimensional discrete data. Reliability Engineering and System Safety, 2019, 191, 106498.	8.9	8
66	Reliability of inflatable structures: challenge and first results. European Journal of Environmental and Civil Engineering, 2020, 24, 1533-1557.	2.1	8
67	Model of Bio-Colonisation on Mooring Lines: Updating Strategy Based on a Static Qualifying Sea State for Floating Wind Turbines. Journal of Marine Science and Engineering, 2020, 8, 108.	2.6	8
68	A Perturbed Markovian process with stateâ€“dependent increments and measurement uncertainty in degradation modeling. Computer-Aided Civil and Infrastructure Engineering, 2021, 36, 978-995.	9.8	8
69	Matching of corroded defects in onshore pipelines based on In-Line Inspections and Voronoi partitions. Reliability Engineering and System Safety, 2022, 223, 108520.	8.9	8
70	Risk Analysis of Structures in Presence of Stochastic Fields of Deterioration: Flowchart for Coupling Inspection Results and Structural Reliability. Australian Journal of Structural Engineering, 2009, 9, 67-78.	1.1	7
71	Partial safety factor calibration from stochastic finite element computation of welded joint with random geometries. Reliability Engineering and System Safety, 2016, 155, 44-54.	8.9	7
72	Chlordetect: Commercial Calcium Aluminate Based Conductimetric Sensor for Chloride Presence Detection. Sensors, 2017, 17, 2099.	3.8	7

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73	Technical management of French harbour structures - Part 2: Current practices, needs & Experience feedback of owners. <i>Revue Paralia</i> , 0, 2, 7.1-7.12.	0.0	7
74	Evaluation of Hydrodynamic Force Coefficients in Presence of Biofouling on Marine/Offshore Structures, a Review and New Approach. <i>Journal of Marine Science and Engineering</i> , 2022, 10, 558.	2.6	7
75	Sources of uncertainties for total chloride profile measurements in concrete: quantization and impact on probability assessment of corrosion initiation. <i>European Journal of Environmental and Civil Engineering</i> , 2020, 24, 232-247.	2.1	6
76	Probabilistic computational mechanics of structures with a ground anchor device: from identification by SHM to reliability assessment of quays. <i>Journal of Civil Structural Health Monitoring</i> , 2015, 5, 307-320.	3.9	5
77	Multifidelity adaptive kriging metamodel based on discretization error bounds. <i>International Journal for Numerical Methods in Engineering</i> , 2020, 121, 4566-4583.	2.8	5
78	Effects of turbidity and lighting on the performance of an image processing based damage detection technique. , 2014, , 2645-2650.		5
79	A cracked beam finite element for through-cracked tube. <i>Communications in Numerical Methods in Engineering</i> , 2007, 24, 761-775.	1.3	4
80	Probabilistic Evaluation to Improve Design of ImpactÊlesources. <i>Transportation Research Record</i> , 2012, 2313, 109-115.	1.9	4
81	Characterisation and propagation of spatial fields in deterioration models: application to concrete carbonation. <i>European Journal of Environmental and Civil Engineering</i> , 2023, 27, 2261-2287.	2.1	4
82	High dynamic range image processing for non-destructive-testing. <i>European Journal of Environmental and Civil Engineering</i> , 2011, 15, 1085-1096.	2.1	3
83	Spatial variability assessment of structures from adaptive NDT measurements. <i>Structural Safety</i> , 2021, 89, 102052.	5.3	3
84	StratÊlegie dÊleinstrumentation pour la gestion optimisÊle des ouvrages portuaires. , 2004, , .		3
85	Investigating the effects of climate change on structural resistance and actions. , 2021, , .		3
86	Probabilistic Modeling of Roughness Effects Caused by Bio-Colonization on Hydrodynamic Coefficients: A Sensitivity Study for Jacket-Platforms in Gulf of Guinea. , 2013, , .		2
87	Assessment of uncertainty propagation using first-order Markov chain for maintenance of pavement degradation. <i>International Journal of Pavement Engineering</i> , 2020, 21, 1841-1852.	4.4	2
88	Extreme storm loading on in-service wharf structures. Interest of monitoring for reliability updating. <i>Revue Europe&Ecircenne De G&Ecircnie Civil</i> , 2006, 10, 565-581.	0.0	2
89	Statistical analysis and probabilistic modeling of chloride ingress spatial variability in concrete coastal infrastructures. , 0, , .		2
90	Added value of monitoring for the maintenance of a reinforced concrete wharf with spatial variability of chloride content: a practical implementation. <i>Structure and Infrastructure Engineering</i> , 2024, 20, 56-68.	3.7	2

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91	Probabilistic Modeling of the Bio-Colonization Effects on Hydrodynamic Forces With Several Combinations of Sea-State Condition: A Study on Jacket-Platforms in the Gulf of Guinea. , 2013, , .		1
92	Effect of corrosion on time-dependent reliability of steel sheet-pile seawalls in marine environment conditions. , 2010, , 751-758.		1
93	Thermal Characterization and Thermal Effect Assessment of Biofouling around a Dynamic Submarine Electrical Cable. Energies, 2022, 15, 3087.	3.1	1
94	Risk assessment based on performantial criterion for inspection of offshore structures in presence of large cracks. Revue Europeenne De Génie Civil, 2006, 10, 531-547.	0.0	0
95	Efficacité de la maintenance conditionnelle sur des structures à dégradation aléatoire. European Journal of Environmental and Civil Engineering, 2008, 12, 1211-1225.	2.1	0
96	The fuzzy method for modeling NDT results in risk based inspection of corroded steel wharves. Materiaux Et Techniques, 2013, 101, 507.	0.9	0