Rob E Melchers

List of Publications by Year in descending order

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POR F MELCHERS

#	Article	IF	CITATIONS
1	Reliability of Deteriorating RC Slab Bridges. Journal of Structural Engineering, 1997, 123, 1638-1644.	1.7	236
2	Effect of response surface parameter variation on structural reliability estimates. Structural Safety, 2001, 23, 429-444.	2.8	205
3	Modeling of Marine Immersion Corrosion for Mild and Low-Alloy Steels—Part 1: Phenomenological Model. Corrosion, 2003, 59, 319-334.	0.5	202
4	Momentâ€Rotation Curves for Bolted Connections. Journal of Structural Engineering, 1986, 112, 615-635.	1.7	184
5	The effect of corrosion on the structural reliability of steel offshore structures. Corrosion Science, 2005, 47, 2391-2410.	3.0	178
6	A fast approximate method for parameter sensitivity estimation in Monte Carlo structural reliability. Computers and Structures, 2004, 82, 55-61.	2.4	162
7	Corrosion uncertainty modelling for steel structures. Journal of Constructional Steel Research, 1999, 52, 3-19.	1.7	161
8	Mathematical modelling of the diffusion controlled phase in marine immersion corrosion of mild steel. Corrosion Science, 2003, 45, 923-940.	3.0	149
9	Effect of reinforcement corrosion on reliability of highway bridges. Engineering Structures, 1998, 20, 1010-1019.	2.6	141
10	Pitting Corrosion of Mild Steel in Marine Immersion Environment—Part 1: Maximum Pit Depth. Corrosion, 2004, 60, 824-836.	0.5	130
11	Early corrosion of mild steel in seawater. Corrosion Science, 2005, 47, 1678-1693.	3.0	126
12	Radial Importance Sampling for Structural Reliability. Journal of Engineering Mechanics - ASCE, 1990, 116, 189-203.	1.6	108
13	Pitting corrosion in pipeline steel weld zones. Corrosion Science, 2011, 53, 4026-4032.	3.0	108
14	Effect of small compositional changes on marine immersion corrosion of low alloy steels. Corrosion Science, 2004, 46, 1669-1691.	3.0	96
15	Long-term corrosion of cast irons and steel in marine and atmospheric environments. Corrosion Science, 2013, 68, 186-194.	3.0	94
16	Reinforcement corrosion initiation and activation times in concrete structures exposed to severe marine environments. Cement and Concrete Research, 2009, 39, 1068-1076.	4.6	92
17	The changing topography of corroding mild steel surfaces in seawater. Corrosion Science, 2007, 49, 2270-2288.	3.0	91
18	Models for the anaerobic phases of marine immersion corrosion. Corrosion Science, 2006, 48, 1791-1811.	3.0	90

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19	Corrosion of vertical mild steel strips in seawater. Corrosion Science, 2009, 51, 2291-2297.	3.0	90
20	Reliability of Underground Pipelines Subject to Corrosion. Journal of Transportation Engineering, 1994, 120, 989-1002.	0.9	86
21	Extreme value statistics and long-term marine pitting corrosion of steel. Probabilistic Engineering Mechanics, 2008, 23, 482-488.	1.3	86
22	Effect on marine immersion corrosion of carbon content of low alloy steels. Corrosion Science, 2003, 45, 2609-2625.	3.0	82
23	Corrosion of long vertical steel strips in the marine tidal zone and implications for ALWC. Corrosion Science, 2012, 65, 26-36.	3.0	82
24	Long-term immersion corrosion of steels in seawaters with elevated nutrient concentration. Corrosion Science, 2014, 81, 110-116.	3.0	79
25	Influence of Water Velocity on Marine Immersion Corrosion of Mild Steel. Corrosion, 2004, 60, 84-94.	0.5	68
26	Development of new applied models for steel corrosion in marine applications including shipping. Ships and Offshore Structures, 2008, 3, 135-144.	0.9	66
27	Bacteriological influence in the development of iron sulphide species in marine immersion environments. Corrosion Science, 2003, 45, 693-714.	3.0	64
28	Loadâ€Space Formulation for Timeâ€Dependent Structural Reliability. Journal of Engineering Mechanics - ASCE, 1992, 118, 853-870.	1.6	62
29	Probabilistic models for steel corrosion loss and pitting of marine infrastructure. Reliability Engineering and System Safety, 2008, 93, 423-432.	5.1	62
30	Concrete Delamination Caused by Steel Reinforcement Corrosion. Journal of Materials in Civil Engineering, 2007, 19, 591-600.	1.3	61
31	Probabilistic Model for Marine Corrosion of Steel for Structural Reliability Assessment. Journal of Structural Engineering, 2003, 129, 1484-1493.	1.7	60
32	Long-term under-deposit pitting corrosion of carbon steel pipes. Ocean Engineering, 2017, 133, 231-243.	1.9	60
33	Corrosion and pitting of 6060 series aluminium after 2 years exposure in seawater splash, tidal and immersion zones. Corrosion Science, 2018, 140, 286-296.	3.0	59
34	Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes. Journal of Engineering Mechanics - ASCE, 1993, 119, 2354-2361.	1.6	58
35	Effect of Temperature on the Marine Immersion Corrosion of Carbon Steels. Corrosion, 2002, 58, 768-782.	0.5	57
36	Pitting Corrosion of Mild Steel in Marine Immersion Environment—Part 2: Variability of Maximum Pit Depth. Corrosion, 2004, 60, 937-944.	0.5	56

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37	A Review of Trends for Corrosion Loss and Pit Depth in Longer-Term Exposures. Corrosion and Materials Degradation, 2018, 1, 42-58.	1.0	56
38	Assessment of Existing Structures—Approaches and Research Needs. Journal of Structural Engineering, 2001, 127, 406-411.	1.7	55
39	Probabilistic Models for Corrosion in Structural Reliability Assessment—Part 2: Models Based on Mechanics. Journal of Offshore Mechanics and Arctic Engineering, 2003, 125, 272-280.	0.6	55
40	Statistical Characterization of Pitting Corrosion—Part 1: Data Analysis. Corrosion, 2005, 61, 655-664.	0.5	53
41	The effects of water pollution on the immersion corrosion of mild and low alloy steels. Corrosion Science, 2007, 49, 3149-3167.	3.0	51
42	Microbiological and abiotic processes in modelling longer-term marine corrosion of steel. Bioelectrochemistry, 2014, 97, 89-96.	2.4	51
43	Statistical Characterization of Pitting Corrosion—Part 2: Probabilistic Modeling for Maximum Pit Depth. Corrosion, 2005, 61, 766-777.	0.5	50
44	Effect of Nutrient-Based Water Pollution on the Corrosion of Mild Steel in Marine Immersion Conditions. Corrosion, 2005, 61, 237-245.	0.5	50
45	A numerical study of damage caused by combined pitting corrosion and axial stress in steel pipes. Corrosion Science, 2013, 76, 292-301.	3.0	50
46	Predicting long-term corrosion of metal alloys in physical infrastructure. Npj Materials Degradation, 2019, 3, .	2.6	48
47	Life-Cycle Performance of RC Bridges: Probabilistic Approach. Computer-Aided Civil and Infrastructure Engineering, 2000, 15, 14-25.	6.3	47
48	Corrosion of carbon steel in presence of mixed deposits under stagnant seawater conditions. Journal of Loss Prevention in the Process Industries, 2017, 45, 29-42.	1.7	47
49	Modeling of Marine Immersion Corrosion for Mild and Low-Alloy Steels—Part 2: Uncertainty Estimation. Corrosion, 2003, 59, 335-344.	0.5	44
50	Effect of Immersion Depth on Marine Corrosion of Mild Steel. Corrosion, 2005, 61, 895-906.	0.5	44
51	Corrosion loss of mild steel in high temperature hard freshwater. Corrosion Science, 2010, 52, 449-454.	3.0	44
52	A new approach to assess the remaining strength of corroded steel pipes. Engineering Failure Analysis, 2018, 93, 144-156.	1.8	43
53	Condition assessment of aged structures. , 2008, , .		43
54	Gradient and parameter sensitivity estimation for systems evaluated using Monte Carlo analysis. Reliability Engineering and System Safety, 2006, 91, 594-601.	5.1	42

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55	Statistical characterization of surfaces of corroded steel plates. Marine Structures, 2010, 23, 274-287.	1.6	42
56	Reliability Analysis of Creep and Shrinkage Effects. Journal of Structural Engineering, 1992, 118, 2323-2337.	1.7	41
57	Recent Progress in the Modeling of Corrosion of Structural Steel Immersed in Seawaters. Journal of Infrastructure Systems, 2006, 12, 154-162.	1.0	40
58	Corrosion of working chains continuously immersed in seawater. Journal of Marine Science and Technology, 2007, 12, 102-110.	1.3	39
59	Probabilistic Models for Corrosion in Structural Reliability Assessment—Part 1: Empirical Models. Journal of Offshore Mechanics and Arctic Engineering, 2003, 125, 264-271.	0.6	37
60	The effects of corrosion on 45-year-old pre-stressed concrete bridge beams. Structure and Infrastructure Engineering, 2011, 7, 101-108.	2.0	37
61	16S rRNA gene profiling of planktonic and biofilm microbial populations in the Gulf of Guinea using Illumina NGS. Marine Environmental Research, 2016, 122, 105-112.	1.1	37
62	Progress in developing realistic corrosion models. Structure and Infrastructure Engineering, 2018, 14, 843-853.	2.0	35
63	Transition from Marine Immersion to Coastal Atmospheric Corrosion for Structural Steels. Corrosion, 2007, 63, 500-514.	0.5	34
64	Extreme value analysis for assessing structural reliability of welded offshore steel structures. Structural Safety, 2014, 50, 9-15.	2.8	34
65	Bi-modal trends in the long-term corrosion of copper and high copper alloys. Corrosion Science, 2015, 95, 51-61.	3.0	34
66	Bi-modal trend in the long-term corrosion of aluminium alloys. Corrosion Science, 2014, 82, 239-247.	3.0	33
67	Extreme value statistics for pitting corrosion of old underground cast iron pipes. Reliability Engineering and System Safety, 2017, 162, 64-71.	5.1	32
68	A reinterpretation of the Romanoff NBS data for corrosion of steels in soils. Corrosion Engineering Science and Technology, 2018, 53, 131-140.	0.7	32
69	Multitangent-Plane Surface Method for Reliability Calculation. Journal of Engineering Mechanics - ASCE, 1997, 123, 996-1002.	1.6	31
70	Effect of Vertical Length on Corrosion of Steel in the Tidal Zone. Corrosion, 2009, 65, 695-702.	0.5	30
71	FORM for discontinuous and truncated probability density functions. Structural Safety, 2003, 25, 305-313.	2.8	29
72	Surface "Roughness―Effect on Marine Immersion Corrosion of Mild Steel. Corrosion, 2004, 60, 697-703.	0.5	29

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73	Accelerated low water corrosion of steel piling in harbours. Corrosion Engineering Science and Technology, 2013, 48, 496-505.	0.7	28
74	Probabilistic remaining life estimation for deteriorating steel marine infrastructure under global warming and nutrient pollution. Ocean Engineering, 2016, 126, 129-137.	1.9	28
75	Estimation of models for durability of epoxy coatings in water ballast tanks. Ships and Offshore Structures, 2006, 1, 61-70.	0.9	27
76	Microorganisms associated with corrosion of structural steel in diverse atmospheres. International Biodeterioration and Biodegradation, 2016, 114, 234-243.	1.9	27
77	Overload failure of structural components under random crack propagation and loading – a random process approach. Structural Safety, 2004, 26, 471-488.	2.8	26
78	SCORCH JIP: Examination and Testing of Severely-Corroded Mooring Chains From West Africa. , 2012, , .		26
79	Performance of 45-year-old corroded prestressed concrete beams. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2013, 166, 547-559.	0.4	26
80	Corrosion and durability of offshore steel water injection pipelines. Ships and Offshore Structures, 2016, 11, 424-437.	0.9	26
81	Simulation of human error in a design loading task. Structural Safety, 1988, 5, 285-297.	2.8	25
82	Temperature Effect on Seawater Immersion Corrosion of 90:10 Copper-Nickel Alloy. Corrosion, 2001, 57, 440-451.	0.5	25
83	Structural reliability theory in the context of structural safety. Civil Engineering and Environmental Systems, 2007, 24, 55-69.	0.4	25
84	Bi-modal trending for corrosion loss of steels buried in soils. Corrosion Science, 2018, 137, 194-203.	3.0	25
85	Long-Term Durability of Marine Reinforced Concrete Structures. Journal of Marine Science and Engineering, 2020, 8, 290.	1.2	25
86	Human Error in Structural Design Tasks. Journal of Structural Engineering, 1989, 115, 1795-1807.	1.7	24
87	Clustering of corrosion pit depths for buried cast iron pipes. Corrosion Science, 2018, 140, 92-98.	3.0	24
88	Time Dependent Development of Aluminium Pitting Corrosion. Advances in Materials Science and Engineering, 2015, 2015, 1-10.	1.0	23
89	Application of Paris' law for estimation of hydrogen-assisted fatigue crack growth. International Journal of Fatigue, 2015, 80, 357-363.	2.8	23
90	Estimation of failure probabilities for intersections of non-linear limit states. Structural Safety, 2001, 23, 123-135.	2.8	22

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91	Localized corrosion of steel sheet piling. Corrosion Science, 2014, 79, 139-147.	3.0	22
92	Shape and size effects for marine immersion coupons. Corrosion Engineering Science and Technology, 2002, 37, 99-104.	0.3	21
93	First passage time of filtered Poisson process with exponential shape function. Probabilistic Engineering Mechanics, 2005, 20, 57-65.	1.3	21
94	Influence of Seawater Nutrient Content on the Early Immersion Corrosion of Mild Steel—Part 1: Empirical Observations. Corrosion, 2007, 63, 318-329.	0.5	21
95	Corrosion and capacity prediction of marine steel infrastructure under a changing environment. Structure and Infrastructure Engineering, 2017, 13, 988-1001.	2.0	21
96	Checking Models in Structural Design. Journal of Structural Engineering, 1989, 115, 1309-1324.	1.7	20
97	Examples of mathematical modelling of long term general corrosion of structural steels in sea water. Corrosion Engineering Science and Technology, 2006, 41, 38-44.	0.7	20
98	Modeling of Long-Term Corrosion Loss and Pitting for Chromium-Bearing and Stainless Steels in Seawater. Corrosion, 2008, 64, 143-154.	0.5	20
99	Long-Term Corrosion of Mild Steel in Natural and UV-Treated Coastal Seawater. Corrosion, 2014, 70, 804-818.	0.5	20
100	Effect of moisture content and compaction on the corrosion of mild steel buried in clay soils. Corrosion Engineering Science and Technology, 2019, 54, 587-600.	0.7	20
101	Effect of tensile strain on the rate of marine corrosion of steel plates. Corrosion Science, 2009, 51, 2298-2303.	3.0	19
102	Service life of corrosion pitted pipes subject to fatigue loading and hydrogen embrittlement. International Journal of Hydrogen Energy, 2018, 43, 8440-8450.	3.8	19
103	Error control in member design. Structural Safety, 1989, 6, 11-24.	2.8	18
104	Barrier failure dominance in time variant reliability analysis. Probabilistic Engineering Mechanics, 2005, 20, 79-85.	1.3	18
105	Probabilistic modelling of structural degradation. Reliability Engineering and System Safety, 2008, 93, 363.	5.1	18
106	Long-term corrosion of steels exposed to marine environments. European Journal of Environmental and Civil Engineering, 2009, 13, 527-546.	1.0	18
107	A comparative study of chlorides and longerâ€ŧerm reinforcement corrosion. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 613-621.	0.8	18
108	Durability of Glass Polymer Composites Subject to Stress Corrosion. Journal of Composites for Construction, 2003, 7, 109-117.	1.7	17

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109	<i>Technical Note:</i> Rust Removal from Steel Coupons After Short-Term Marine Immersion. Corrosion, 2015, 71, 811-818.	0.5	17
110	Correlation between soil electrical resistivity, polarisation resistance and corrosion of steel. Corrosion Engineering Science and Technology, 2018, 53, 524-530.	0.7	17
111	Reinforcement Corrosion in Concrete Exposed to the North Sea for More than 60 Years. Corrosion, 2009, 65, 554-566.	0.5	16
112	Long-term inter-link wear of model mooring chains. Marine Structures, 2015, 44, 61-84.	1.6	16
113	Capacity of pitting corroded pipes under hydrogen assisted cracking. International Journal of Hydrogen Energy, 2015, 40, 9388-9399.	3.8	16
114	Post-perforation external corrosion of cast iron pressurised water mains. Corrosion Engineering Science and Technology, 2017, 52, 541-546.	0.7	16
115	Enclosed atmospheric corrosion in ship spaces. Corrosion Engineering Science and Technology, 2001, 36, 272-276.	0.3	15
116	Risk assessment of LPG automotive refuelling facilities. Reliability Engineering and System Safety, 2001, 74, 283-290.	5.1	15
117	Pitting Corrosion of Mild Steel under Marine Anaerobic Conditions—Part 1: Experimental Observations. Corrosion, 2006, 62, 981-988.	0.5	15
118	A Conceptual Model for the Interaction between Carbon Content and Manganese Sulphide Inclusions in the Short-Term Seawater Corrosion of Low Carbon Steel. Metals, 2016, 6, 132.	1.0	15
119	Reliability of the conventional approach for stress/fatigue analysis of pitting corroded pipelines – Development of a safer approach. Structural Safety, 2020, 85, 101943.	2.8	15
120	Influence of Seawater Nutrient Content on the Early Immersion Corrosion of Mild Steel—Part 2: The Role of Biofilms and Sulfate-Reducing Bacteria. Corrosion, 2007, 63, 405-415.	0.5	14
121	Estimating uncertainty in maximum pit depth from limited observational data. Corrosion Engineering Science and Technology, 2010, 45, 240-248.	0.7	14
122	Effect of flexure on rusting of ship's steel plating. Ships and Offshore Structures, 2010, 5, 25-31.	0.9	14
123	Long-term durability of reinforced concrete piles from the Hornibrook Highway Bridge. Australian Journal of Structural Engineering, 2017, 18, 41-57.	0.4	14
124	Long term marine corrosion of cast iron bridge piers. Corrosion Engineering Science and Technology, 2016, 51, 248-255.	0.7	13
125	Next-generation fracture prediction models for pipes with localized corrosion defects. Engineering Failure Analysis, 2019, 105, 610-626.	1.8	13
126	Pitting corrosion of older underground cast iron pipes. Corrosion Engineering Science and Technology, 2017, 52, 459-469.	0.7	13

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127	Antipsychotic drug waste: A potential corrosion inhibitor for mild steel in the oil and gas industry. Waste Management, 2022, 145, 38-47.	3.7	13
128	Reliability of Parallel Structural Systems. Journal of Structural Engineering, 1983, 109, 2651-2665.	1.7	12
129	Load Space Reliability Formulation for Poisson Pulse Processes. Journal of Engineering Mechanics - ASCE, 1995, 121, 779-784.	1.6	12
130	Gradient estimation for applied Monte Carlo analyses. Reliability Engineering and System Safety, 2002, 78, 283-288.	5.1	12
131	Modeling Soil/Structure Interaction for Masonry Structures. Journal of Structural Engineering, 2004, 130, 641-649.	1.7	12
132	Carbonates, Carbonation and the durability of Reinforced Concrete Marine Structures. Australian Journal of Structural Engineering, 2010, 10, 215-226.	0.4	12
133	Long term localised corrosion of marine steel piling welds. Corrosion Engineering Science and Technology, 2013, 48, 469-474.	0.7	12
134	Experience-Based Physico-Chemical Models for Long-Term Reinforcement Corrosion. Corrosion and Materials Degradation, 2021, 2, 100-119.	1.0	12
135	Mathematical Modeling of the Effect of Water Velocity on the Marine Immersion Corrosion of Mild Steel Coupons. Corrosion, 2004, 60, 471-478.	0.5	11
136	Long-term external pitting and corrosion of buried cast iron water pipes. Corrosion Engineering Science and Technology, 2018, 53, 93-101.	0.7	11
137	The effect of atmospheric precipitation on the corrosion of ferrous metals buried inÂsoils. Corrosion Engineering Science and Technology, 2019, 54, 28-36.	0.7	11
138	Durability of reinforced concrete bridges in marine environments. Structure and Infrastructure Engineering, 2020, 16, 169-180.	2.0	11
139	Modelling durability of reinforced concrete structures. Corrosion Engineering Science and Technology, 2020, 55, 171-181.	0.7	11
140	Optimality-criteria-based probabilistic structural design. Structural and Multidisciplinary Optimization, 2001, 23, 34-39.	1.7	10
141	Transient early and longer term influence of bacteria on marine corrosion of steel. Corrosion Engineering Science and Technology, 2010, 45, 257-261.	0.7	10
142	Long-term immersion corrosion of steel subject to large annual variations in seawater temperature and nutrient concentration. Structure and Infrastructure Engineering, 2017, 13, 978-987.	2.0	10
143	The Transition from Short- to Long-Term Marine Corrosion of Carbon Steels: 1. Experimental Observations. Corrosion, 2022, 78, 415-426.	0.5	10
144	Discussion on †The strategies and value of risk based structural safety analysis' Special issue of Structural Safety, Vol. 21, No. 4, 1999. Structural Safety, 2000, 22, 281-286.	2.8	9

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145	On extending the range of Michell-like optimal topology structures. Structural and Multidisciplinary Optimization, 2005, 29, 85-92.	1.7	9
146	Time-dependent serviceability of corrosion-affected concrete structures. Magazine of Concrete Research, 2006, 58, 567-574.	0.9	9
147	The marine corrosion of structural steels in brackish and fresh waters. Structure and Infrastructure Engineering, 2006, 2, 53-61.	2.0	9
148	Corrosion wastage in aged structures. , 2008, , 77-106.		9
149	Empirical models for long-term localised corrosion of cast iron pipes buried in soils. Corrosion Engineering Science and Technology, 2019, 54, 678-687.	0.7	9
150	Rational optimization of reliability and safety policies. Reliability Engineering and System Safety, 2001, 73, 263-268.	5.1	8
151	Safety and risk in structural engineering. Structural Control and Health Monitoring, 2002, 4, 193-202.	0.7	8
152	Aspects of long-term durability of reinforced concrete structures in marine environments. European Journal of Environmental and Civil Engineering, 2011, 15, 969-980.	1.0	8
153	SCORCH JIP - Feedback on MIC and Pitting Corrosion from Field Recovered Mooring Chain Links. , 2014, ,		8
154	Reliability of ductility requirements in concrete design codes. Structural Safety, 2016, 62, 76-87.	2.8	8
155	New insights from probabilistic modelling of corrosion in structural reliability analysis. Structural Safety, 2021, 88, 102034.	2.8	8
156	Statistical Characterization of Corroded Steel Plate Surfaces. Advances in Structural Engineering, 2006, 9, 83-90.	1.2	7
157	Pitting Corrosion of Mild Steel under Marine Anaerobic Conditions—Part 2: Statistical Representation of Maximum Pit Depth. Corrosion, 2006, 62, 1074-1081.	0.5	7
158	Modelling deterioration of structural behaviour of reinforced concrete beams under saline environment corrosion. Magazine of Concrete Research, 2006, 58, 575-587.	0.9	7
159	Reinforcement corrosion of the Phoenix caissons after 75 years of marine exposure. Proceedings of the Institution of Civil Engineers: Maritime Engineering, 2021, 174, 19-30.	1.4	7
160	Reinforcement Corrosion in Marine Concretesâ \in "1: Initiation. ACI Materials Journal, 2019, 116, .	0.3	7
161	Incremental formulation for structural reliability analysis. Civil Engineering and Environmental Systems, 1988, 5, 153-158.	0.2	6
162	THE NEWCASTLE (NEW SOUTH WALES) EARTHQUAKE Proceedings of the Institution of Civil Engineers: Structures and Buildings, 1992, 94, 143-156.	0.4	6

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163	Effect of Alloying on Maximum Depth of Pits in Mild Steel in Marine Immersion Environments. Corrosion, 2005, 61, 355-363.	0.5	6
164	Assessing and achieving structural safety. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2008, 161, 219-230.	0.4	6
165	Effect of Water Nutrient Pollution on Long-Term Corrosion of 90:10 Copper Nickel Alloy. Materials, 2015, 8, 8047-8058.	1.3	6
166	Investigations for structural safety assessment of corroded cast iron bridge piers. Australian Journal of Structural Engineering, 2016, 17, 55-66.	0.4	6
167	Principles of Marine Corrosion. , 2016, , 111-126.		6
168	Complex Pitting Corrosion in Long-Term Immersed Exposures of 6060 Aluminum Alloys in Temperate Natural Seawater. Corrosion, 2018, 74, 1272-1287.	0.5	6
169	Development of long-term localised corrosion of cast iron pipes in backfill soils based on time of wetness. Corrosion Engineering Science and Technology, 2020, 55, 550-561.	0.7	6
170	Two years pitting corrosion of AA5005-H34 aluminium alloy immersed in natural seawater: morphology characterisation. Corrosion Engineering Science and Technology, 2020, 55, 696-707.	0.7	6
171	Terrain wetness indices derived from LiDAR to inform soil moisture and corrosion potential for underground infrastructure. Science of the Total Environment, 2021, 756, 144138.	3.9	6
172	Human Errors and Structural Reliability. , 1995, , 211-237.		5
173	Effect of Orientation and Shielding in the Early Corrosion of Mild Steel in Tidal Marine Conditions. Corrosion, 2007, 63, 872-879.	0.5	5
174	Corrosion of steel piling in seawater harbours. Proceedings of the Institution of Civil Engineers: Maritime Engineering, 2014, 167, 159-172.	1.4	5
175	SCORCH JIP - Findings from Investigations Into Mooring Chain and Wire Rope Corrosion in Warm Waters. , 2015, , .		5
176	Using models to interpret data for monitoring and life prediction of deteriorating infrastructure systems. Structure and Infrastructure Engineering, 2015, 11, 63-72.	2.0	5
177	Optimization of Structural Design Checking. Journal of Structural Engineering, 1989, 115, 2448-2460.	1.7	4
178	Gaussian upcrossing rate solution for structural serviceability. Structural Safety, 1993, 12, 293-303.	2.8	4
179	Discussion on "Stochastic modeling of pitting corrosion: A new model for initiation and growth of multiple pits―by A. Valor, F. Caleyo, L. Alfonso, D. Rivas, J.M. Hallen [Corros. Sci. 49 (2007) 559]. Corrosion Science, 2008, 50, 1518-1519.	3.0	4
180	Long-term corrosion of steels in deep, cold, low oxygen sea waters. Corrosion Engineering Science and Technology, 2021, 56, 736-741.	0.7	4

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181	Durable Steel-Reinforced Concrete Structures for Marine Environments. Sustainability, 2021, 13, 13695.	1.6	4
182	Corrosion of Steels and Irons Immersed in Natural Seawater for up to 600 Y. Corrosion, 2022, 78, 87-95.	0.5	4
183	Decision model for overview checking of engineering designs. International Journal of Industrial Ergonomics, 1989, 4, 19-27.	1.5	3
184	Probabilistic risk assessment for structures. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2002, 152, 351-359.	0.4	3
185	Load combination analysis by â€ [~] Directional simulation in the load space'. Probabilistic Engineering Mechanics, 2006, 21, 159-170.	1.3	3
186	Assessment of MIC in Carbon Steel Water Injection Pipelines. , 2012, , .		3
187	Service life estimation of concrete infrastructures. , 2018, , 15-41.		3
188	Two years pitting corrosion of AA5005-H34 aluminium alloy immersed in natural seawater: data interpretation. Corrosion Engineering Science and Technology, 2021, 56, 129-136.	0.7	3
189	Field experience and the long-term durability of reinforced concrete structures. , 2015, , .		3
190	Nonlinear trending of corrosion of high nickel alloys in extended marine and atmospheric exposures. Corrosion Reviews, 2020, 38, 515-528.	1.0	3
191	LiDAR derived terrain wetness indices to infer soil moisture above underground pipelines. International Journal on Smart Sensing and Intelligent Systems, 2020, 13, 1-7.	0.4	3
192	The Transition from Short- to Long-Term Marine Corrosion of Carbon Steels: 2. Parameterization and Modeling. Corrosion, 2022, 78, 427-436.	0.5	3
193	On probabilistic absolute optimum design. Structural Optimization, 1989, 1, 107-112.	0.7	2
194	A benchmark study on importance sampling techniques in structural reliability. Structural Safety, 1994, 14, 299-302.	2.8	2
195	STRUCTURAL SYSTEMS RELIABILITY UNDER STOCHASTIC LOADS Proceedings of the Institution of Civil Engineers: Structures and Buildings, 1994, 104, 251-255.	0.4	2
196	TIME-DEPENDENT RESISTANCE DETERIORATION IN PROBABILISTIC STRUCTURAL SYSTEMS. Civil Engineering and Environmental Systems, 1995, 12, 115-132.	0.2	2
197	Closure to "Reliability of Underground Pipelines Subject to Corrosion―by M. Ahammed and R. E. Melchers. Journal of Transportation Engineering, 1996, 122, 408-408.	0.9	2
198	A micromechanics model for environmental stress corrosion in GFRP. International Journal of Materials and Product Technology, 2003, 19, 2.	0.1	2

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199	Vulnerability assessment of corrosion-affected concrete structures. Magazine of Concrete Research, 2005, 57, 557-565.	0.9	2
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