## Rob E Melchers

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2906669/publications.pdf

Version: 2024-02-01

229 papers 6,884 citations

50170 46 h-index 72 g-index

240 all docs

240 docs citations

times ranked

240

3016 citing authors

#	Article	IF	CITATIONS
1	Effects of inter-cavity corrosion on metallic wall ties in masonry structures. AIMS Materials Science, 2022, 9, 311-324.	0.7	O
2	The Transition from Short- to Long-Term Marine Corrosion of Carbon Steels: 2. Parameterization and Modeling. Corrosion, 2022, 78, 427-436.	0.5	3
3	The Transition from Short- to Long-Term Marine Corrosion of Carbon Steels: 1. Experimental Observations. Corrosion, 2022, 78, 415-426.	0.5	10
4	Long-term marine immersion corrosion of welded ABS grade steels. Corrosion Engineering Science and Technology, 2022, 57, 195-203.	0.7	1
5	Corrosion of Steels and Irons Immersed in Natural Seawater for up to 600 Y. Corrosion, 2022, 78, 87-95.	0.5	4
6	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
7	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
8	Atmospheric and immersion corrosion of steel alloyed with aluminium. Corrosion Engineering Science and Technology, 2021, 56, 162-170.	0.7	0
9	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
10	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
11	New insights from probabilistic modelling of corrosion in structural reliability analysis. Structural Safety, 2021, 88, 102034.	2.8	8
12	Experience-Based Physico-Chemical Models for Long-Term Reinforcement Corrosion. Corrosion and Materials Degradation, 2021, 2, 100-119.	1.0	12
13	Long-term corrosion of steels in deep, cold, low oxygen sea waters. Corrosion Engineering Science and Technology, 2021, 56, 736-741.	0.7	4
14	Changing Our Understanding of Reinforcement Corrosion in Marine Concrete Structures. Lecture Notes in Civil Engineering, 2021, , 43-52.	0.3	1
15	Estimating the Long-Term Reliability of Steel and Cast Iron Pipelines Subject to Pitting Corrosion. Sustainability, 2021, 13, 13235.	1.6	2
16	Durable Steel-Reinforced Concrete Structures for Marine Environments. Sustainability, 2021, 13, 13695.	1.6	4
17	Durability of reinforced concrete bridges in marine environments. Structure and Infrastructure Engineering, 2020, 16, 169-180.	2.0	11
18	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

#	Article	IF	Citations
19	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
20	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
21	Long-Term Durability of Marine Reinforced Concrete Structures. Journal of Marine Science and Engineering, 2020, 8, 290.	1.2	25
22	Modelling durability of reinforced concrete structures. Corrosion Engineering Science and Technology, 2020, 55, 171-181.	0.7	11
23	Nonlinear trending of corrosion of high nickel alloys in extended marine and atmospheric exposures. Corrosion Reviews, 2020, 38, 515-528.	1.0	3
24	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
25	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
26	Next-generation fracture prediction models for pipes with localized corrosion defects. Engineering Failure Analysis, 2019, 105, 610-626.	1.8	13
27	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
28	Predicting long-term corrosion of metal alloys in physical infrastructure. Npj Materials Degradation, 2019, 3, .	2.6	48
29	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
30	Reinforcement Corrosion in Marine Concretes—1: Initiation. ACI Materials Journal, 2019, 116, .	0.3	7
31	Bi-modal trending for corrosion loss of steels buried in soils. Corrosion Science, 2018, 137, 194-203.	3.0	25
32	Progress in developing realistic corrosion models. Structure and Infrastructure Engineering, 2018, 14, 843-853.	2.0	35
33	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
34	Long-term external pitting and corrosion of buried cast iron water pipes. Corrosion Engineering Science and Technology, 2018, 53, 93-101.	0.7	11
35	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
36	Service life estimation of concrete infrastructures. , 2018, , 15-41.		3

#	Article	IF	CITATIONS
37	Correlation between soil electrical resistivity, polarisation resistance and corrosion of steel. Corrosion Engineering Science and Technology, 2018, 53, 524-530.	0.7	17
38	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
39	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
40	A new approach to assess the remaining strength of corroded steel pipes. Engineering Failure Analysis, 2018, 93, 144-156.	1.8	43
41	Complex Pitting Corrosion in Long-Term Immersed Exposures of 6060 Aluminum Alloys in Temperate Natural Seawater. Corrosion, 2018, 74, 1272-1287.	0.5	6
42	Clustering of corrosion pit depths for buried cast iron pipes. Corrosion Science, 2018, 140, 92-98.	3.0	24
43	Long-term under-deposit pitting corrosion of carbon steel pipes. Ocean Engineering, 2017, 133, 231-243.	1.9	60
44	Extreme value statistics for pitting corrosion of old underground cast iron pipes. Reliability Engineering and System Safety, 2017, 162, 64-71.	5.1	32
45	A comparative study of chlorides and longerâ€term reinforcement corrosion. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 613-621.	0.8	18
46	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
47	Post-perforation external corrosion of cast iron pressurised water mains. Corrosion Engineering Science and Technology, 2017, 52, 541-546.	0.7	16
48	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
49	Long-term durability of reinforced concrete piles from the Hornibrook Highway Bridge. Australian Journal of Structural Engineering, 2017, 18, 41-57.	0.4	14
50	Corrosion and capacity prediction of marine steel infrastructure under a changing environment. Structure and Infrastructure Engineering, 2017, 13, 988-1001.	2.0	21
51	Pitting corrosion of older underground cast iron pipes. Corrosion Engineering Science and Technology, 2017, 52, 459-469.	0.7	13
52	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
53	Reliability of ductility requirements in concrete design codes. Structural Safety, 2016, 62, 76-87.	2.8	8
54	Investigations for structural safety assessment of corroded cast iron bridge piers. Australian Journal of Structural Engineering, 2016, 17, 55-66.	0.4	6

#	Article	IF	CITATIONS
55	Long term marine corrosion of cast iron bridge piers. Corrosion Engineering Science and Technology, 2016, 51, 248-255.	0.7	13
56	Probabilistic remaining life estimation for deteriorating steel marine infrastructure under global warming and nutrient pollution. Ocean Engineering, 2016, 126, 129-137.	1.9	28
57	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
58	Microorganisms associated with corrosion of structural steel in diverse atmospheres. International Biodeterioration and Biodegradation, 2016, 114, 234-243.	1.9	27
59	Principles of Marine Corrosion. , 2016, , 111-126.		6
60	Corrosion and durability of offshore steel water injection pipelines. Ships and Offshore Structures, 2016, 11, 424-437.	0.9	26
61	SCORCH JIP - Findings from Investigations Into Mooring Chain and Wire Rope Corrosion in Warm Waters. , 2015, , .		5
62	Time Dependent Development of Aluminium Pitting Corrosion. Advances in Materials Science and Engineering, 2015, 2015, 1-10.	1.0	23
63	Effect of Water Nutrient Pollution on Long-Term Corrosion of 90:10 Copper Nickel Alloy. Materials, 2015, 8, 8047-8058.	1.3	6
64	Long-term inter-link wear of model mooring chains. Marine Structures, 2015, 44, 61-84.	1.6	16
65	<i>Technical Note:</i> Rust Removal from Steel Coupons After Short-Term Marine Immersion. Corrosion, 2015, 71, 811-818.	0.5	17
66	Application of Paris' law for estimation of hydrogen-assisted fatigue crack growth. International Journal of Fatigue, 2015, 80, 357-363.	2.8	23
67	Capacity of pitting corroded pipes under hydrogen assisted cracking. International Journal of Hydrogen Energy, 2015, 40, 9388-9399.	3.8	16
68	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
69	Bi-modal trends in the long-term corrosion of copper and high copper alloys. Corrosion Science, 2015, 95, 51-61.	3.0	34
70	Field experience and the long-term durability of reinforced concrete structures. , $2015,  ,  .$		3
71	Corrosion of steel piling in seawater harbours. Proceedings of the Institution of Civil Engineers: Maritime Engineering, 2014, 167, 159-172.	1.4	5
72	Long-Term Corrosion of Mild Steel in Natural and UV-Treated Coastal Seawater. Corrosion, 2014, 70, 804-818.	0.5	20

#	Article	IF	Citations
73	Bi-modal trend in the long-term corrosion of aluminium alloys. Corrosion Science, 2014, 82, 239-247.	3.0	33
74	Extreme value analysis for assessing structural reliability of welded offshore steel structures. Structural Safety, 2014, 50, 9-15.	2.8	34
75	Localized corrosion of steel sheet piling. Corrosion Science, 2014, 79, 139-147.	3.0	22
76	Long-term immersion corrosion of steels in seawaters with elevated nutrient concentration. Corrosion Science, 2014, 81, 110-116.	3.0	79
77	Microbiological and abiotic processes in modelling longer-term marine corrosion of steel. Bioelectrochemistry, 2014, 97, 89-96.	2.4	51
78	SCORCH JIP - Feedback on MIC and Pitting Corrosion from Field Recovered Mooring Chain Links. , 2014, , .		8
79	Long-term corrosion of cast irons and steel in marine and atmospheric environments. Corrosion Science, 2013, 68, 186-194.	3.0	94
80	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
81	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
82	Corrosion of mild steel in elevated temperature hard freshwater. Corrosion Engineering Science and Technology, 2013, 48, 130-135.	0.7	1
83	Accelerated low water corrosion of steel piling in harbours. Corrosion Engineering Science and Technology, 2013, 48, 496-505.	0.7	28
84	Long term localised corrosion of marine steel piling welds. Corrosion Engineering Science and Technology, 2013, 48, 469-474.	0.7	12
85	Human intervention and the safety of complex structural systems. Civil Engineering and Environmental Systems, 2013, 30, 211-220.	0.4	2
86	SCORCH JIP: Examination and Testing of Severely-Corroded Mooring Chains From West Africa. , 2012, , .		26
87	Assessment of MIC in Carbon Steel Water Injection Pipelines. , 2012, , .		3
88	Corrosion of long vertical steel strips in the marine tidal zone and implications for ALWC. Corrosion Science, 2012, 65, 26-36.	3.0	82
89	The effects of corrosion on 45-year-old pre-stressed concrete bridge beams. Structure and Infrastructure Engineering, 2011, 7, 101-108.	2.0	37
90	Pitting corrosion in pipeline steel weld zones. Corrosion Science, 2011, 53, 4026-4032.	3.0	108

#	Article	IF	CITATIONS
91	Bacteria have transient influences on marine corrosion of steel. Nature Precedings, 2011, , .	0.1	O
92	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
93	Carbonates, Carbonation and the durability of Reinforced Concrete Marine Structures. Australian Journal of Structural Engineering, 2010, 10, 215-226.	0.4	12
94	Investigation of the Failure of the Newcastle Workers Club. Australian Journal of Structural Engineering, 2010, 11, 163-176.	0.4	0
95	Statistical characterization of surfaces of corroded steel plates. Marine Structures, 2010, 23, 274-287.	1.6	42
96	Estimating uncertainty in maximum pit depth from limited observational data. Corrosion Engineering Science and Technology, 2010, 45, 240-248.	0.7	14
97	Effect of flexure on rusting of ship's steel plating. Ships and Offshore Structures, 2010, 5, 25-31.	0.9	14
98	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
99	Corrosion loss of mild steel in high temperature hard freshwater. Corrosion Science, 2010, 52, 449-454.	3.0	44
100	Reinforcement Corrosion in Concrete Exposed to the North Sea for More than 60 Years. Corrosion, 2009, 65, 554-566.	0.5	16
101	Effect of Vertical Length on Corrosion of Steel in the Tidal Zone. Corrosion, 2009, 65, 695-702.	0.5	30
102	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
103	Long-term corrosion of steels exposed to marine environments. European Journal of Environmental and Civil Engineering, 2009, 13, 527-546.	1.0	18
104	Effect of tensile strain on the rate of marine corrosion of steel plates. Corrosion Science, 2009, 51, 2298-2303.	3.0	19
105	Corrosion of vertical mild steel strips in seawater. Corrosion Science, 2009, 51, 2291-2297.	3.0	90
106	Extreme value statistics and long-term marine pitting corrosion of steel. Probabilistic Engineering Mechanics, 2008, 23, 482-488.	1.3	86
107	Probabilistic models for steel corrosion loss and pitting of marine infrastructure. Reliability Engineering and System Safety, 2008, 93, 423-432.	5.1	62
108	Probabilistic modelling of structural degradation. Reliability Engineering and System Safety, 2008, 93, 363.	5.1	18

#	Article	IF	CITATIONS
109	Development of new applied models for steel corrosion in marine applications including shipping. Ships and Offshore Structures, 2008, 3, 135-144.	0.9	66
110	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
111	Assessing and achieving structural safety. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2008, 161, 219-230.	0.4	6
112	Modeling of Long-Term Corrosion Loss and Pitting for Chromium-Bearing and Stainless Steels in Seawater. Corrosion, 2008, 64, 143-154.	0.5	20
113	Corrosion wastage in aged structures. , 2008, , 77-106.		9
114	Reliability of aged land-based structures. , 2008, , 352-363.		1
115	Investigating the effects of corrosion on 45-year-old prestressed concrete bridge beams. , 2008, , 421-426.		2
116	Condition assessment of aged structures. , 2008, , .		43
117	Influence of migration of iron particles, ions and compounds during long term marine immersion corrosion. Corrosion Engineering Science and Technology, 2007, 42, 145-151.	0.7	0
118	Transition from Marine Immersion to Coastal Atmospheric Corrosion for Structural Steels. Corrosion, 2007, 63, 500-514.	0.5	34
119	Influence of Seawater Nutrient Content on the Early Immersion Corrosion of Mild Steelâ€"Part 1: Empirical Observations. Corrosion, 2007, 63, 318-329.	0.5	21
120	Concrete Delamination Caused by Steel Reinforcement Corrosion. Journal of Materials in Civil Engineering, 2007, 19, 591-600.	1.3	61
121	Influence of Seawater Nutrient Content on the Early Immersion Corrosion of Mild Steelâ€"Part 2: The Role of Biofilms and Sulfate-Reducing Bacteria. Corrosion, 2007, 63, 405-415.	0.5	14
122	Structural Modeling: An Overview. , 2007, , 1-9.		0
123	Complex Structural Analysis and Structural Reliability. , 2007, , 313-340.		0
124	Effect of Orientation and Shielding in the Early Corrosion of Mild Steel in Tidal Marine Conditions. Corrosion, 2007, 63, 872-879.	0.5	5
125	The changing topography of corroding mild steel surfaces in seawater. Corrosion Science, 2007, 49, 2270-2288.	3.0	91
126	The effects of water pollution on the immersion corrosion of mild and low alloy steels. Corrosion Science, 2007, 49, 3149-3167.	3.0	51

#	Article	IF	CITATIONS
127	Structural reliability theory in the context of structural safety. Civil Engineering and Environmental Systems, 2007, 24, 55-69.	0.4	25
128	Corrosion of working chains continuously immersed in seawater. Journal of Marine Science and Technology, 2007, 12, 102-110.	1.3	39
129	Estimation of models for durability of epoxy coatings in water ballast tanks. Ships and Offshore Structures, 2006, 1, 61-70.	0.9	27
130	Models for the anaerobic phases of marine immersion corrosion. Corrosion Science, 2006, 48, 1791-1811.	3.0	90
131	Time-dependent serviceability of corrosion-affected concrete structures. Magazine of Concrete Research, 2006, 58, 567-574.	0.9	9
132	The Corrosion in Seawater of Structural Steels in Infrastructure Applications. Australian Journal of Structural Engineering, 2006, 6, 159-168.	0.4	0
133	Load combination analysis by â€ <sup>-</sup> Directional simulation in the load space'. Probabilistic Engineering Mechanics, 2006, 21, 159-170.	1.3	3
134	Gradient and parameter sensitivity estimation for systems evaluated using Monte Carlo analysis. Reliability Engineering and System Safety, 2006, 91, 594-601.	5.1	42
135	Modifications to the â€~directional simulation in the load space' approach to structural reliability analysis. Probabilistic Engineering Mechanics, 2006, 21, 148-158.	1.3	2
136	Statistical Characterization of Corroded Steel Plate Surfaces. Advances in Structural Engineering, 2006, 9, 83-90.	1.2	7
137	Pitting Corrosion of Mild Steel under Marine Anaerobic Conditionsâ€"Part 1: Experimental Observations. Corrosion, 2006, 62, 981-988.	0.5	15
138	Pitting Corrosion of Mild Steel under Marine Anaerobic Conditionsâ€"Part 2: Statistical Representation of Maximum Pit Depth. Corrosion, 2006, 62, 1074-1081.	0.5	7
139	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
140	Recent Progress in the Modeling of Corrosion of Structural Steel Immersed in Seawaters. Journal of Infrastructure Systems, 2006, 12, 154-162.	1.0	40
141	The marine corrosion of structural steels in brackish and fresh waters. Structure and Infrastructure Engineering, 2006, 2, 53-61.	2.0	9
142	Modelling deterioration of structural behaviour of reinforced concrete beams under saline environment corrosion. Magazine of Concrete Research, 2006, 58, 575-587.	0.9	7
143	Prediction of Naval Ship Ballast Tank Corrosion Using Operational Profiles. Transactions of the Royal Institution of Naval Architects Part A: International Journal of Maritime Engineering, 2006, 148, 15.	0.1	2
144	PROBABILISTIC MODELS FOR CORROSION IN STRUCTURAL RELIABILITY ASSESSMENT., 2006, , 141-164.		1

#	Article	lF	Citations
145	Coating Life Prediction for Water Ballast Tank. , 2005, , 869.		O
146	Effect of Alloying on Maximum Depth of Pits in Mild Steel in Marine Immersion Environments. Corrosion, 2005, 61, 355-363.	0.5	6
147	Vulnerability assessment of corrosion-affected concrete structures. Magazine of Concrete Research, 2005, 57, 557-565.	0.9	2
148	First passage time of filtered Poisson process with exponential shape function. Probabilistic Engineering Mechanics, 2005, 20, 57-65.	1.3	21
149	Barrier failure dominance in time variant reliability analysis. Probabilistic Engineering Mechanics, 2005, 20, 79-85.	1.3	18
150	On extending the range of Michell-like optimal topology structures. Structural and Multidisciplinary Optimization, 2005, 29, 85-92.	1.7	9
151	Statistical Characterization of Pitting Corrosion—Part 1: Data Analysis. Corrosion, 2005, 61, 655-664.	0.5	53
152	Effect of Immersion Depth on Marine Corrosion of Mild Steel. Corrosion, 2005, 61, 895-906.	0.5	44
153	Statistical Characterization of Pitting Corrosion—Part 2: Probabilistic Modeling for Maximum Pit Depth. Corrosion, 2005, 61, 766-777.	0.5	50
154	Effect of Nutrient-Based Water Pollution on the Corrosion of Mild Steel in Marine Immersion Conditions. Corrosion, 2005, 61, 237-245.	0.5	50
155	Early corrosion of mild steel in seawater. Corrosion Science, 2005, 47, 1678-1693.	3.0	126
156	The effect of corrosion on the structural reliability of steel offshore structures. Corrosion Science, 2005, 47, 2391-2410.	3.0	178
157	Pitting Corrosion of Mild Steel in Marine Immersion Environmentâ€"Part 2: Variability of Maximum Pit Depth. Corrosion, 2004, 60, 937-944.	0.5	56
158	Influence of Water Velocity on Marine Immersion Corrosion of Mild Steel. Corrosion, 2004, 60, 84-94.	0.5	68
159	A fast approximate method for parameter sensitivity estimation in Monte Carlo structural reliability. Computers and Structures, 2004, 82, 55-61.	2.4	162
160	Overload failure of structural components under random crack propagation and loading – a random process approach. Structural Safety, 2004, 26, 471-488.	2.8	26
161	Surface "Roughness―Effect on Marine Immersion Corrosion of Mild Steel. Corrosion, 2004, 60, 697-703.	0.5	29
162	Modeling Soil/Structure Interaction for Masonry Structures. Journal of Structural Engineering, 2004, 130, 641-649.	1.7	12

#	Article	IF	Citations
163	Pitting Corrosion of Mild Steel in Marine Immersion Environmentâ€"Part 1: Maximum Pit Depth. Corrosion, 2004, 60, 824-836.	0.5	130
164	Effect of small compositional changes on marine immersion corrosion of low alloy steels. Corrosion Science, 2004, 46, 1669-1691.	3.0	96
165	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
166	Time-Variant Reliability., 2004, , .		0
167	FORM for discontinuous and truncated probability density functions. Structural Safety, 2003, 25, 305-313.	2.8	29
168	Modeling of Marine Immersion Corrosion for Mild and Low-Alloy Steelsâ€"Part 1: Phenomenological Model. Corrosion, 2003, 59, 319-334.	0.5	202
169	Bacteriological influence in the development of iron sulphide species in marine immersion environments. Corrosion Science, 2003, 45, 693-714.	3.0	64
170	Mathematical modelling of the diffusion controlled phase in marine immersion corrosion of mild steel. Corrosion Science, 2003, 45, 923-940.	3.0	149
171	Effect on marine immersion corrosion of carbon content of low alloy steels. Corrosion Science, 2003, 45, 2609-2625.	3.0	82
172	Probabilistic Model for Marine Corrosion of Steel for Structural Reliability Assessment. Journal of Structural Engineering, 2003, 129, 1484-1493.	1.7	60
173	Durability of Glass Polymer Composites Subject to Stress Corrosion. Journal of Composites for Construction, 2003, 7, 109-117.	1.7	17
174	Modeling of Marine Immersion Corrosion for Mild and Low-Alloy Steelsâ€"Part 2: Uncertainty Estimation. Corrosion, 2003, 59, 335-344.	0.5	44
175	Probabilistic Models for Corrosion in Structural Reliability Assessmentâ€"Part 1: Empirical Models. Journal of Offshore Mechanics and Arctic Engineering, 2003, 125, 264-271.	0.6	37
176	Probabilistic Models for Corrosion in Structural Reliability Assessmentâ€"Part 2: Models Based on Mechanics. Journal of Offshore Mechanics and Arctic Engineering, 2003, 125, 272-280.	0.6	55
177	A micromechanics model for environmental stress corrosion in GFRP. International Journal of Materials and Product Technology, 2003, 19, 2.	0.1	2
178	Fatigue and fracture reliability analysis under random loading. , 2003, , 2201-2203.		2
179	Shape and size effects for marine immersion coupons. Corrosion Engineering Science and Technology, 2002, 37, 99-104.	0.3	21
180	Probabilistic risk assessment for structures. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2002, 152, 351-359.	0.4	3

#	Article	IF	CITATIONS
181	Effect of Temperature on the Marine Immersion Corrosion of Carbon Steels. Corrosion, 2002, 58, 768-782.	0.5	57
182	Gradient estimation for applied Monte Carlo analyses. Reliability Engineering and System Safety, 2002, 78, 283-288.	5.1	12
183	Safety and risk in structural engineering. Structural Control and Health Monitoring, 2002, 4, 193-202.	0.7	8
184	Assessment of Existing Structuresâ€"Approaches and Research Needs. Journal of Structural Engineering, 2001, 127, 406-411.	1.7	55
185	Enclosed atmospheric corrosion in ship spaces. Corrosion Engineering Science and Technology, 2001, 36, 272-276.	0.3	15
186	Temperature Effect on Seawater Immersion Corrosion of 90:10 Copper-Nickel Alloy. Corrosion, 2001, 57, 440-451.	0.5	25
187	Optimality-criteria-based probabilistic structural design. Structural and Multidisciplinary Optimization, 2001, 23, 34-39.	1.7	10
188	Estimation of failure probabilities for intersections of non-linear limit states. Structural Safety, 2001, 23, 123-135.	2.8	22
189	Effect of response surface parameter variation on structural reliability estimates. Structural Safety, 2001, 23, 429-444.	2.8	205
190	Rational optimization of reliability and safety policies. Reliability Engineering and System Safety, 2001, 73, 263-268.	5.1	8
191	Risk assessment of LPG automotive refuelling facilities. Reliability Engineering and System Safety, 2001, 74, 283-290.	5.1	15
192	Discussion on †The strategies and value of risk based structural safety analysis†Mecial issue of Structural Safety, Vol. 21, No. 4, 1999. Structural Safety, 2000, 22, 281-286.	2.8	9
193	Life-Cycle Performance of RC Bridges: Probabilistic Approach. Computer-Aided Civil and Infrastructure Engineering, 2000, 15, 14-25.	6.3	47
194	Corrosion uncertainty modelling for steel structures. Journal of Constructional Steel Research, 1999, 52, 3-19.	1.7	161
195	Effect of reinforcement corrosion on reliability of highway bridges. Engineering Structures, 1998, 20, 1010-1019.	2.6	141
196	Reliability of Deteriorating RC Slab Bridges. Journal of Structural Engineering, 1997, 123, 1638-1644.	1.7	236
197	Multitangent-Plane Surface Method for Reliability Calculation. Journal of Engineering Mechanics - ASCE, 1997, 123, 996-1002.	1.6	31
198	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

#	Article	IF	CITATIONS
199	TIME-DEPENDENT RESISTANCE DETERIORATION IN PROBABILISTIC STRUCTURAL SYSTEMS. Civil Engineering and Environmental Systems, 1995, 12, 115-132.	0.2	2
200	Load Space Reliability Formulation for Poisson Pulse Processes. Journal of Engineering Mechanics - ASCE, 1995, 121, 779-784.	1.6	12
201	Human Errors and Structural Reliability. , 1995, , 211-237.		5
202	Closure to " Reliability Analysis of Creep and Shrinkage Effects ―by C. Q. Li and R. E. Melchers (September, 1992, Vol. 118, No. 9). Journal of Structural Engineering, 1994, 120, 1050-1050.	1.7	0
203	A benchmark study on importance sampling techniques in structural reliability. Structural Safety, 1994, 14, 299-302.	2.8	2
204	Reliability of Underground Pipelines Subject to Corrosion. Journal of Transportation Engineering, 1994, 120, 989-1002.	0.9	86
205	STRUCTURAL SYSTEMS RELIABILITY UNDER STOCHASTIC LOADS Proceedings of the Institution of Civil Engineers: Structures and Buildings, 1994, 104, 251-255.	0.4	2
206	Some Developments in Directional Simulation for Time Variant Structural Systems., 1994,, 347-365.		1
207	Gaussian upcrossing rate solution for structural serviceability. Structural Safety, 1993, 12, 293-303.	2.8	4
208	Outcrossings from Convex Polyhedrons for Nonstationary Gaussian Processes. Journal of Engineering Mechanics - ASCE, 1993, 119, 2354-2361.	1.6	58
209	Reliability Analysis of Creep and Shrinkage Effects. Journal of Structural Engineering, 1992, 118, 2323-2337.	1.7	41
210	THE NEWCASTLE (NEW SOUTH WALES) EARTHQUAKE Proceedings of the Institution of Civil Engineers: Structures and Buildings, 1992, 94, 143-156.	0.4	6
211	Loadâ€Space Formulation for Timeâ€Dependent Structural Reliability. Journal of Engineering Mechanics - ASCE, 1992, 118, 853-870.	1.6	62
212	Closure to " Checking Models in Structural Design ―by Mark G. Stewart and Robert E. Melchers (June,) Tj ET	TQq0,000 rş	gBT /Overlock
213	Discussion of paper. Civil Engineering and Environmental Systems, 1991, 8, 59-60.	0.2	0
214	Directional Simulation for Time-Dependent Reliability Problems. Lecture Notes in Engineering, 1991, , 261-272.	0.1	1
215	Radial Importance Sampling for Structural Reliability. Journal of Engineering Mechanics - ASCE, 1990, 116, 189-203.	1.6	108
216	Discussion of paper. Civil Engineering and Environmental Systems, 1990, 7, 242-243.	0.2	0

#	Article	IF	CITATIONS
217	Optimization of Structural Design Checking. Journal of Structural Engineering, 1989, 115, 2448-2460.	1.7	4
218	Checking Models in Structural Design. Journal of Structural Engineering, 1989, 115, 1309-1324.	1.7	20
219	Human Error in Structural Design Tasks. Journal of Structural Engineering, 1989, 115, 1795-1807.	1.7	24
220	Error control in member design. Structural Safety, 1989, 6, 11-24.	2.8	18
221	On probabilistic absolute optimum design. Structural Optimization, 1989, 1, 107-112.	0.7	2
222	Decision model for overview checking of engineering designs. International Journal of Industrial Ergonomics, 1989, 4, 19-27.	1.5	3
223	Simulation of human error in a design loading task. Structural Safety, 1988, 5, 285-297.	2.8	25
224	Incremental formulation for structural reliability analysis. Civil Engineering and Environmental Systems, 1988, 5, 153-158.	0.2	6
225	Closure to " Moment Rotation Curves for Bolted Connections ―by Yoke Leong Yee and Robert E. Melchers (March, 1986, Vol. 112, No. 3). Journal of Structural Engineering, 1987, 113, 2327-2329.	1.7	O
226	Momentâ€Rotation Curves for Bolted Connections. Journal of Structural Engineering, 1986, 112, 615-635.	1.7	184
227	Reliability of Parallel Structural Systems. Journal of Structural Engineering, 1983, 109, 2651-2665.	1.7	12
228	Deflection of Hyperstatic Thermoelastic Structures. Journal of Structural Mechanics, 1982, 10, 227-240.	0.7	1
229	Reconstructing the Detailed Proportions of Archaeological Iron Anchors. Journal of Maritime Archaeology, 0, , 1.	0.2	1