

Digby D Macdonald

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4669561/digby-d-macdonald-publications-by-citations.pdf>

Version: 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

161
papers

8,190
citations

47
h-index

87
g-index

168
ext. papers

9,297
ext. citations

5
avg, IF

6.63
L-index

#	Paper	IF	Citations
161	The Point Defect Model for the Passive State. <i>Journal of the Electrochemical Society</i> , 1992 , 139, 3434-3449	3.9	961
160	Reflections on the history of electrochemical impedance spectroscopy. <i>Electrochimica Acta</i> , 2006 , 51, 1376-1388	6.7	579
159	The history of the Point Defect Model for the passive state: A brief review of film growth aspects. <i>Electrochimica Acta</i> , 2011 , 56, 1761-1772	6.7	450
158	Theory of Steady-State Passive Films. <i>Journal of the Electrochemical Society</i> , 1990 , 137, 2395-2402	3.9	261
157	Applications of Kramers-Kronig transforms in the analysis of electrochemical impedance data III. Stability and linearity. <i>Electrochimica Acta</i> , 1990 , 35, 1559-1566	6.7	211
156	Steady-State Passive Films: Interfacial Kinetic Effects and Diagnostic Criteria. <i>Journal of the Electrochemical Society</i> , 1992 , 139, 170-177	3.9	209
155	Nature of the passive film on nickel. <i>Electrochimica Acta</i> , 2002 , 48, 69-77	6.7	202
154	A new method for estimating the diffusivities of vacancies in passive films. <i>Electrochimica Acta</i> , 1996 , 41, 783-789	6.7	191
153	Transient Techniques in Electrochemistry 1977 ,		191
152	Application of Kramers-Kronig Transforms in the Analysis of Electrochemical Impedance Data: II. Transformations in the Complex Plane. <i>Journal of the Electrochemical Society</i> , 1986 , 133, 2018-2024	3.9	168
151	Application of Kramers-Kronig Transforms in the Analysis of Electrochemical Systems: I. Polarization Resistance. <i>Journal of the Electrochemical Society</i> , 1985 , 132, 2316-2319	3.9	146
150	External Reference Electrodes for Use in High Temperature Aqueous Systems. <i>Journal of the Electrochemical Society</i> , 1979 , 126, 908-911	3.9	146
149	On the Existence of Our Metals-Based Civilization. <i>Journal of the Electrochemical Society</i> , 2006 , 153, B213	3.9	140
148	Characterization of the Passive State on Zinc. <i>Journal of the Electrochemical Society</i> , 1998 , 145, 3141-3149	3.9	130
147	The passivity of Type 316L stainless steel in borate buffer solution. <i>Journal of Nuclear Materials</i> , 2008 , 379, 54-58	3.3	128
146	An electrochemical impedance study of Alloy-22 in NaCl brine at elevated temperature: II. Reaction mechanism analysis. <i>Journal of Electroanalytical Chemistry</i> , 2004 , 572, 421-431	4.1	124
145	A coupled environment model for stress corrosion cracking in sensitized type 304 stainless steel in LWR environments. <i>Corrosion Science</i> , 1991 , 32, 51-81	6.8	119

144	The Passivity of Iron in the Presence of Ethylenediaminetetraacetic Acid I. General Electrochemical Behavior. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 4087	3.9	105
143	An electrochemical impedance spectroscopic study of the passive state on Alloy-22. <i>Electrochimica Acta</i> , 2006 , 51, 1767-1779	6.7	102
142	The electronic structure of the passive film on tungsten. <i>Electrochimica Acta</i> , 2000 , 45, 1875-1883	6.7	101
141	Unification of the deterministic and statistical approaches for predicting localized corrosion damage. I. Theoretical foundation. <i>Corrosion Science</i> , 2004 , 46, 2755-2780	6.8	97
140	Solute-Vacancy Interaction Model and the Effect of Minor Alloying Elements on the Initiation of Pitting Corrosion. <i>Journal of the Electrochemical Society</i> , 1985 , 132, 555-558	3.9	97
139	An electrochemical impedance analysis of passive films on nickel(111) in phosphate buffer solutions. <i>Electrochimica Acta</i> , 1990 , 35, 1949-1956	6.7	89
138	Theoretical and experimental studies of the pitting of type 316L stainless steel in borate buffer solution containing nitrate ion. <i>Electrochimica Acta</i> , 2007 , 52, 1871-1879	6.7	88
137	The Passivity of Iron in the Presence of Ethylenediaminetetraacetic Acid. II. The Defect and Electronic Structures of the Barrier Layer. <i>Journal of the Electrochemical Society</i> , 2001 , 148, B425	3.9	88
136	Role of Chloride Ion in Passivity Breakdown on Iron and Nickel. <i>Journal of the Electrochemical Society</i> , 2005 , 152, B482	3.9	84
135	An electrochemical impedance study of Alloy 22 in NaCl brine at elevated temperature. I. Corrosion behavior. <i>Journal of Electroanalytical Chemistry</i> , 2004 , 572, 409-419	4.1	71
134	Photoelectrochemical analysis on the passive film formed on Fe ₂ O ₃ /Cr in pH 8.5 buffer solution. <i>Electrochimica Acta</i> , 2002 , 47, 1661-1668	6.7	70
133	Electrochemical investigation and ab initio computation of passive film properties on copper in anaerobic sulphide solutions. <i>Corrosion Science</i> , 2017 , 116, 34-43	6.8	69
132	Modeling of the electrochemical impedance spectroscopic behavior of passive iron using a genetic algorithm approach. <i>Electrochimica Acta</i> , 2013 , 102, 161-173	6.7	69
131	Passivity breakdown on AISI Type 403 stainless steel in chloride-containing borate buffer solution. <i>Corrosion Science</i> , 2006 , 48, 3812-3823	6.8	69
130	Point defect model for the corrosion of steels in supercritical water: Part I, film growth kinetics. <i>Corrosion Science</i> , 2020 , 163, 108280	6.8	69
129	Theoretical Analysis of the Effects of Alloying Elements on Distribution Functions of Passivity Breakdown. <i>Journal of the Electrochemical Society</i> , 1989 , 136, 961-967	3.9	67
128	The Corrosion of Cu-Ni Alloys 706 and 715 in Flowing Sea Water. II Effect of Dissolved Sulfide. <i>Corrosion</i> , 1979 , 35, 367-378	1.8	66
127	EIS Studies of Porous Oxygen Electrodes with Discrete Particles. <i>Journal of the Electrochemical Society</i> , 2003 , 150, E423	3.9	61

126	An Impedance Interpretation of Small Amplitude Cyclic Voltammetry: I. Theoretical Analysis for a Resistive-Capacitive System. <i>Journal of the Electrochemical Society</i> , 1978 , 125, 1443-1449	3.9	61
125	Impact of Reversed Austenite on the Pitting Corrosion Behavior of Super 13Cr Martensitic Stainless Steel. <i>Electrochimica Acta</i> , 2016 , 191, 640-650	6.7	60
124	Development of localized corrosion damage on low pressure turbine disks and blades: I. Passivity. <i>Electrochimica Acta</i> , 2012 , 69, 1-11	6.7	60
123	Segregation of alloying elements in passive systems—XPS studies on the Ni/W system. <i>Electrochimica Acta</i> , 1998 , 43, 2661-2671	6.7	60
122	Tungsten/Tungsten Oxide pH Sensing Electrode for High Temperature Aqueous Environments. <i>Journal of the Electrochemical Society</i> , 1994 , 141, 3002-3005	3.9	59
121	Theoretical Distribution Functions for the Breakdown of Passive Films. <i>Journal of the Electrochemical Society</i> , 1987 , 134, 41-46	3.9	58
120	Some personal adventures in passivity—A review of the point defect model for film growth. <i>Russian Journal of Electrochemistry</i> , 2012 , 48, 235-258	1.2	51
119	Distribution functions for the breakdown of passive films. <i>Electrochimica Acta</i> , 1986 , 31, 1079-1086	6.7	50
118	Passivity Breakdown on Copper: Influence of Chloride Ion. <i>Electrochimica Acta</i> , 2014 , 144, 391-399	6.7	48
117	The Point Defect Model for Bi-Layer Passive Films. <i>ECS Transactions</i> , 2010 , 28, 123-144	1	48
116	Theoretical Prediction of the Scan Rate Dependencies of the Pitting Potential and the Probability Distribution in the Induction Time. <i>Journal of the Electrochemical Society</i> , 1997 , 144, 1574-1581	3.9	47
115	Transient growth and thinning of the barrier oxide layer on iron measured by real-time spectroscopic ellipsometry. <i>Electrochimica Acta</i> , 2008 , 53, 7696-7702	6.7	47
114	Passive film on 2205 duplex stainless steel studied by photo-electrochemistry and ARXPS methods. <i>Corrosion Science</i> , 2019 , 146, 221-232	6.8	47
113	The influence of UV light on the dissolution and passive behavior of copper-containing alloys in chloride solutions. <i>Electrochimica Acta</i> , 1998 , 44, 643-651	6.7	44
112	New Rate Laws for the Growth and Reduction of Passive Films. <i>Journal of the Electrochemical Society</i> , 2001 , 148, B343	3.9	44
111	Exploration of the effect of chloride ion concentration and temperature on pitting corrosion of carbon steel in saturated Ca(OH) ₂ solution. <i>Corrosion Science</i> , 2015 , 98, 708-715	6.8	42
110	L-cysteine/polydopamine nanoparticle-coatings for copper corrosion protection. <i>Corrosion Science</i> , 2015 , 91, 129-139	6.8	42
109	Investigation on early formation and evolution of oxide scales on ferritic/martensitic steels in supercritical water. <i>Corrosion Science</i> , 2018 , 135, 136-146	6.8	41

108	The kinetics of hydrogen evolution and oxygen reduction on Alloy 22. <i>Corrosion Science</i> , 2005 , 47, 195-215	6.8	41
107	Electrochemical Impedance Spectroscopic Study of Passive Zirconium. <i>Journal of the Electrochemical Society</i> , 2007 , 154, C43	3.9	39
106	Stress corrosion cracking of sensitized Type 304 stainless steel in thiosulphate solution. II. Dynamics of fracture. <i>Corrosion Science</i> , 2006 , 48, 1608-1622	6.8	38
105	Influence of uv light on the passive behaviour of SS316Effect of prior illumination. <i>Electrochimica Acta</i> , 1997 , 42, 127-136	6.7	37
104	Kramers-Kronig Transformation of Constant Phase Impedances. <i>Journal of the Electrochemical Society</i> , 1990 , 137, 515-517	3.9	37
103	The kinetics of growth of the passive film on tungsten in acidic phosphate solutions. <i>Electrochimica Acta</i> , 1998 , 43, 2851-2861	6.7	35
102	Predicting crack growth rate vs. temperature behaviour of Type 304 stainless steel in dilute sulphuric acid solutions. <i>Corrosion Science</i> , 2002 , 44, 1425-1441	6.8	34
101	Electrochemical Behavior of Lithium in Alkaline Aqueous Electrolytes. II. Point Defect Model. <i>Journal of the Electrochemical Society</i> , 1999 , 146, 1326-1335	3.9	33
100	Challenges in the theory of electron transfer at passive interfaces. <i>Corrosion Science</i> , 2005 , 47, 3111-3130	6.8	31
99	Stress corrosion cracking of sensitized Type 304 stainless steel in thiosulfate solution: I. Fate of the coupling current. <i>Corrosion Science</i> , 2003 , 45, 1455-1471	6.8	31
98	An Electrochemical Impedance Study of the Passive Film on Single Crystal Ni(111) in Phosphate Solutions. <i>Journal of the Electrochemical Society</i> , 1987 , 134, 2981-2986	3.9	31
97	The Validity of Electrochemical Methods for Measuring Corrosion Rates of Copper-Nickel Alloys in Sea Water. <i>Corrosion</i> , 1979 , 35, 505-509	1.8	31
96	Development of localized corrosion damage on low pressure turbine disks and blades: II. Passivity breakdown. <i>Electrochimica Acta</i> , 2012 , 69, 12-18	6.7	30
95	Prediction of primary water stress corrosion crack growth rates in Alloy 600 using artificial neural networks. <i>Corrosion Science</i> , 2015 , 92, 217-227	6.8	30
94	Electrochemical Impedance Spectroscopic Study of Passive Zirconium. <i>Journal of the Electrochemical Society</i> , 2007 , 154, C52	3.9	30
93	Prediction of crack growth rate in Type 304 stainless steel using artificial neural networks and the coupled environment fracture model. <i>Corrosion Science</i> , 2014 , 89, 69-80	6.8	29
92	Breakdown of the Passive Film on Polycrystal and Single Crystal (100) Nickel by Chloride. <i>Journal of the Electrochemical Society</i> , 1988 , 135, 1625-1632	3.9	27
91	Effect of SO ₂ on the corrosion of 316L stainless steel in molten FLiNaK salt. <i>Corrosion Science</i> , 2018 , 144, 224-229	6.8	27

90	Passivity Breakdown on Copper: Influence of Temperature. <i>Journal of the Electrochemical Society</i> , 2016 , 163, C707-C717	3.9	26
89	The Passive State in Our Reactive Metals-Based Civilization. <i>Arabian Journal for Science and Engineering</i> , 2012 , 37, 1143-1185		26
88	Deconvolution of the Partial Anodic and Cathodic Processes during the Corrosion of Carbon Steel in Concrete Pore Solution under Simulated Anoxic Conditions. <i>Electrochimica Acta</i> , 2014 , 143, 312-323	6.7	25
87	Volt Equivalent diagrams as a means of displaying the electrochemical thermodynamics of the sulfur/water system. <i>Corrosion Science</i> , 2014 , 81, 102-109	6.8	24
86	The effect of acetic acid on the stress corrosion cracking of 3.5NiCrMoV turbine steels in high temperature water. <i>Corrosion Science</i> , 2008 , 50, 2239-2250	6.8	24
85	Effect of variable intensity ultraviolet radiation on passivity breakdown of AISI Type 304 stainless steel. <i>Corrosion Science</i> , 2000 , 42, 1779-1799	6.8	24
84	Theoretical investigation of the evolution of the passive state on Alloy 22 in acidified, saturated brine under open circuit conditions. <i>Electrochimica Acta</i> , 2011 , 56, 7411-7420	6.7	23
83	Ab initio calculation and electrochemical verification of a passivated surface on copper with defects in 0.1 M NaOH. <i>Electrochemistry Communications</i> , 2016 , 68, 62-66	5.1	22
82	Oxidation of hydrogen on oxidized platinum. <i>Journal of Electroanalytical Chemistry</i> , 2007 , 600, 205-216	4.1	21
81	A Comprehensive Electrochemical Impedance Spectroscopic Study of Passive Carbon Steel in Concrete Pore Water. <i>Journal of the Electrochemical Society</i> , 2013 , 160, C316-C325	3.9	20
80	On the modeling of stress corrosion cracking in iron and nickel base alloys in high temperature aqueous environments. <i>Corrosion Science</i> , 1996 , 38, 1003-1010	6.8	20
79	The Irreversibility of the Passive State of Carbon Steel in the Alkaline Concrete Pore Solution under Simulated Anoxic Conditions. <i>Journal of the Electrochemical Society</i> , 2015 , 162, C572-C581	3.9	19
78	Proton-Conducting Films of Nanoscale Ribbons Formed by Exfoliation of the Layer Perovskite H ₂ SrTa ₂ O ₇ . <i>Chemistry of Materials</i> , 2008 , 20, 213-219	9.6	19
77	EIS Studies of Porous Oxygen Electrodes with Discrete Particles. <i>Journal of the Electrochemical Society</i> , 2003 , 150, E429	3.9	19
76	Estimation of corrosion cavity growth rate for predicting system service life. <i>Corrosion Science</i> , 2004 , 46, 1159-1187	6.8	19
75	Passivity of titanium, part 1: film growth model diagnostics. <i>Journal of Solid State Electrochemistry</i> , 2014 , 18, 1485-1493	2.6	18
74	The Kinetics of Nucleation of Metastable Pits on Metal Surfaces: The Point Defect Model and Its Optimization on Data Obtained on Stainless Steel, Carbon Steel, Iron, Aluminum and Alloy-22. <i>Journal of the Electrochemical Society</i> , 2016 , 163, C156-C163	3.9	17
73	Redox Potential Measurements in High Temperature Aqueous Systems. <i>Journal of the Electrochemical Society</i> , 1981 , 128, 250-257	3.9	17

72	Electrochemical measurements used for assessment of corrosion and protection of metallic materials in the field: A critical review. <i>Journal of Materials Science and Technology</i> , 2022 , 112, 151-183	9.1	17
71	Customization of the CEFM for predicting stress corrosion cracking in lightly sensitized AlMg alloys in marine applications. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 2319-2332	2.6	15
70	Frequency Domain Analysis of Photoprocesses at Illuminated Semiconductor Electrodes by Transient Transformation. <i>Journal of the Electrochemical Society</i> , 1992 , 139, 2538-2543	3.9	15
69	Effect of Temperature on Corrosion of Carbon Steel in Simulated Concrete Pore Solution under Anoxic Conditions. <i>Corrosion Science</i> , 2020 , 175, 108886	6.8	15
68	Passivity of titanium: part II, the defect structure of the anodic oxide film. <i>Journal of Solid State Electrochemistry</i> , 2019 , 23, 1967-1979	2.6	14
67	Theoretical Interpretation of Anion Size Effects in Passivity Breakdown. <i>Journal of the Electrochemical Society</i> , 2016 , 163, C738-C744	3.9	14
66	Studies on Pitting Corrosion of Al-Cu-Li Alloys Part I: Effect of Li Addition by Microstructural, Electrochemical, In-situ, and Pit Depth Analysis. <i>Materials</i> , 2019 , 12,	3.5	13
65	Effect of the chloride on passivity breakdown of Al-Zn-Mg alloy. <i>Corrosion Science</i> , 2020 , 163, 108254	6.8	13
64	Predictions and Analyses on the Growth Behavior of Oxide Scales Formed on FerriticMartensitic in Supercritical Water. <i>Oxidation of Metals</i> , 2019 , 92, 27-48	1.6	12
63	Modelling and Analysis of the Corrosion Characteristics of Ferritic-Martensitic Steels in Supercritical Water. <i>Materials</i> , 2019 , 12,	3.5	12
62	Possible distribution of potential and corrosion current density inside corroding crevices. <i>Electrochimica Acta</i> , 2012 , 65, 266-274	6.7	12
61	The passivity of titanium part III: characterization of the anodic oxide film. <i>Journal of Solid State Electrochemistry</i> , 2019 , 23, 2001-2008	2.6	11
60	The electrochemical properties of alloy 690 in simulated pressurized water reactor primary water: Effect of temperature. <i>Journal of Nuclear Materials</i> , 2019 , 518, 305-315	3.3	11
59	Galvanic corrosion of Type 316L stainless steel and Graphite in molten fluoride salt. <i>Corrosion Science</i> , 2020 , 170, 108677	6.8	11
58	Passivity breakdown on 300 M and S280 ultra-high strength steels in borate buffer solutions containing chloride ion. <i>Electrochimica Acta</i> , 2017 , 251, 324-335	6.7	11
57	Passivity Breakdown on Solid Versus Liquid Gallium. <i>Journal of the Electrochemical Society</i> , 1994 , 141, 2645-2649	3.9	11
56	Passivity of martensitic stainless steel in borate buffer solution: Influence of sulfide ion. <i>Applied Surface Science</i> , 2019 , 478, 255-265	6.7	10
55	Applications of Impedance Spectroscopy 2018 , 175-478		10

54	Modelling the crack propagation rate for corrosion fatigue at high frequency of applied stress. <i>Corrosion Science</i> , 2010 , 52, 1115-1122	6.8	10
53	Corrosion of rebar in concrete. Part I: Calculation of the corrosion potential in the passive state. <i>Corrosion Science</i> , 2020 , 177, 109018	6.8	10
52	Prediction of corrosion fatigue crack growth rate in alloys. Part I: General corrosion fatigue model for aero-space aluminum alloys. <i>Corrosion Science</i> , 2018 , 141, 22-29	6.8	10
51	Measurement of steady-state hydrogen electrode reactions on Alloys 600 and 690 tubes. <i>Corrosion Science</i> , 2010 , 52, 1139-1145	6.8	9
50	Prediction of Long Term Corrosion Behaviour in Nuclear Waste Systems. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 932, 1		9
49	Corrosion Characteristics of Typical NiCr Alloys and NiCrMo Alloys in Supercritical Water: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 18727-18739	3.9	9
48	Corrosion characteristics and mechanisms of typical Ni-based corrosion-resistant alloys in sub- and supercritical water. <i>Journal of Supercritical Fluids</i> , 2021 , 170, 105138	4.2	9
47	Spent Li-Ion Battery Graphite Turned Into Valuable and Active Catalyst for Electrochemical Oxygen Reduction. <i>ChemSusChem</i> , 2021 , 14, 1103-1111	8.3	9
46	Passivity of titanium, part IV: reversible oxygen vacancy generation/annihilation. <i>Journal of Solid State Electrochemistry</i> , 2019 , 23, 2863-2879	2.6	8
45	On the shape of stress corrosion cracks in sensitized Type 304 SS in Boiling Water Reactor primary coolant piping at 288 °C. <i>Journal of Nuclear Materials</i> , 2014 , 454, 359-372	3.3	8
44	Combating marine corrosion on engineered oxide surface by repelling, blocking and capturing Cl ⁻ . A mini review. <i>Corrosion Communications</i> , 2021 , 2, 1-7		8
43	Passivity breakdown on 436 ferritic stainless steel in solutions containing chloride. <i>Journal of Materials Science and Technology</i> , 2019 , 35, 637-643	9.1	8
42	Studies on Pitting Corrosion of Al-Cu-Li Alloys Part II: Breakdown Potential and Pit Initiation. <i>Materials</i> , 2019 , 12,	3.5	7
41	On the nature of the electric field within the barrier layer of a passive film. <i>Electrochimica Acta</i> , 2019 , 313, 367-377	6.7	7
40	Prediction of corrosion fatigue crack growth rate in alloys. Part II: effect of electrochemical potential, NaCl concentration, and temperature on crack propagation in AA2024-T351. <i>Corrosion Science</i> , 2019 , 152, 130-139	6.8	7
39	Investigation of artificial pit growth in carbon steel in highly alkaline solutions containing 0.5 M NaCl under oxic and anoxic conditions. <i>Electrochimica Acta</i> , 2019 , 320, 134554	6.7	7
38	Growth and Properties of Oxide Films on Platinum II. pH Dependence in Alkaline Solutions. <i>ECS Transactions</i> , 2006 , 2, 1-10	1	7
37	Corrosion of rebar in concrete. Part II: Literature survey and statistical analysis of existing data on chloride threshold. <i>Corrosion Science</i> , 2021 , 185, 109439	6.8	7

36	Studies on the degree of sensitization of hyper-duplex stainless steel 2707 at 900? using a modified DL-EPR test. <i>Corrosion Science</i> , 2021 , 185, 109432	6.8	7
35	Effect of Cu on the passivity of TiCu (x = 0, 3 and 5wt%) alloy in phosphate-buffered saline solution within the framework of PDM-II. <i>Electrochimica Acta</i> , 2021 , 386, 138466	6.7	7
34	Studies on Pitting Corrosion of Al-Cu-Li Alloys Part III: Passivation Kinetics of AA2098-T851 Based on the Point Defect Model. <i>Materials</i> , 2019 , 12,	3.5	6
33	Customization of the coupled environment fracture model for predicting stress corrosion cracking in Alloy 600 in PWR environment. <i>Corrosion Science</i> , 2018 , 139, 58-67	6.8	6
32	Corrosion of rebar in concrete. Part IV. On the theoretical basis of the chloride threshold. <i>Corrosion Science</i> , 2021 , 185, 109460	6.8	6
31	Electrochemical study of the dissolution of oxide films grown on type 316L stainless steel in molten fluoride salt. <i>Corrosion Science</i> , 2021 , 186, 109457	6.8	6
30	Determining the electric-field strength in a passive film via photo-induced electric fields. <i>Corrosion Science</i> , 2019 , 154, 239-245	6.8	5
29	Monte-Carlo Simulation of Pitting Corrosion with a Deterministic Model for Repassivation. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 013540	3.9	5
28	An advanced coupled environment fracture model for hydrogen-induced cracking in alloy 600 in PWR primary heat transport environment. <i>Theoretical and Applied Fracture Mechanics</i> , 2018 , 95, 233-241	3.7	5
27	Growth Kinetics of the Anodic Oxide Film on Platinum under Potentiodynamic Polarization Conditions. <i>Zeitschrift Fur Physikalische Chemie</i> , 2013 , 227, 541-559	3.1	5
26	General corrosion of carbon steel in a synthetic concrete pore solution. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021 , 72, 107-119	1.6	5
25	Passivity breakdown on copper: Influence of borate anion. <i>Electrochimica Acta</i> , 2019 , 320, 134545	6.7	4
24	Effects of temperature and pH on the electrochemical behaviour of alloy 600 in simulated pressurized water reactor primary water. <i>Journal of Nuclear Materials</i> , 2020 , 528, 151850	3.3	4
23	The inhibition of type 304LSS general corrosion in hydrochloric acid by the New Fuchsin compound. <i>Corrosion Science</i> , 2021 , 178, 109072	6.8	4
22	Modulating Schottky Barrier of MoS ₂ to Enhance Hydrogen Evolution Reaction Activity by Incorporating with Vertical Graphene Nanosheets Derived from Organic Liquid Waste. <i>ChemElectroChem</i> , 2018 , 5, 3841-3846	4.3	4
21	Measuring Techniques and Data Analysis 2018 , 107-174		3
20	Theoretical aspects of stress corrosion cracking of Alloy 22. <i>Journal of Nuclear Materials</i> , 2018 , 503, 124-139	3.3	3
19	Charge Carrier Tunneling Across the Passive Film on Platinum. <i>ECS Transactions</i> , 2006 , 3, 1-13	1	3

18	Photostimulated anodic oxide film formation. <i>Journal of Applied Physics</i> , 1996 , 79, 157-162	2.5	3
17	Point defect model for passivity breakdown on hyper-duplex stainless steel 2707 in solutions containing bromide at different temperatures. <i>Corrosion Science</i> , 2022 , 194, 109959	6.8	3
16	Corrosion of rebar in concrete. Part III: Artificial Neural Network analysis of chloride threshold data. <i>Corrosion Science</i> , 2021 , 185, 109438	6.8	3
15	Pitting of carbon steel in the synthetic concrete pore solution. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021 , 72, 166-193	1.6	3
14	Corrosion behavior of carbon steel in dilute ammonia solution. <i>Electrochimica Acta</i> , 2020 , 364, 137295	6.7	2
13	Effect of tungsten alloying on passivity breakdown of nickel. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2019 , 70, 216-233	1.6	2
12	Study the existing form of copper (p-type oxide/segregation) and its release mechanism from the passive film of Ti-7Cu alloy. <i>Corrosion Science</i> , 2021 , 190, 109693	6.8	2
11	An Electrochemical Impedance Spectroscopic Study of Oxide Films in Liquid Metal. <i>Jom</i> , 2020 , 72, 2082-2088		1
10	Corrosion Considerations Related to Carbon Steel Radioactive Waste Packages Exposed to Cementitious Materials. <i>MRS Advances</i> , 2016 , 1, 4193-4199	0.7	1
9	Theoretical and experimental studies of passivity breakdown of Aermet 100 ultra-high stainless steel in chloride ion medium. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2019 , 70, 2020-2032	1.6	1
8	Kinetic study of hydrogen transport in graphite under molten fluoride salt environment. <i>Electrochimica Acta</i> , 2020 , 352, 136459	6.7	1
7	Hydrogen permeation in 2205 duplex stainless steel under hydrostatic pressure and simulation by COMSOL. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2019 , 70, 838-852	1.6	1
6	Electrochemical Impedance Spectroscopy 2014 , 349-365		0
5	Re-defining the kinetics of redox reactions on passive metal surfaces. <i>Journal of Solid State Electrochemistry</i> , 2020 , 24, 2663-2677	2.6	0
4	Overview of anaerobic corrosion of carbon steel radioactive waste packages in alkaline media in support of the Belgian supercontainer concept. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2021 , 72, 32-51	1.6	0
3	Effect of Chloride on the Pitting Corrosion of Carbon Steel in Alkaline Solutions. <i>Journal of the Electrochemical Society</i> , 2022 , 169, 031501	3.9	0
2	Mixed potential model for passivity characters of hyper-duplex stainless steel 2707 in ammonium carbonate solution containing chloride. <i>Corrosion Science</i> , 2022 , 110302	6.8	0
1	Electromagnetic induction corrosion control technology (EICCT). <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2018 , 69, 436-446	1.6	

