Gerald S Frankel

List of Publications by Year
in descending order

195	11,903	24978	30848
papers	citations	57 h-index	102 g-index

197	197	197	6591
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fundamentals and advances in magnesium alloy corrosion. Progress in Materials Science, 2017, 89, 92-193.	16.0	1,321
2	Characterization of AA2024â€T3 by Scanning Kelvin Probe Force Microscopy. Journal of the Electrochemical Society, 1998, 145, 2285-2295.	1.3	385
3	Understanding localized corrosion. Materials Today, 2008, 11, 38-44.	8.3	335
4	Evolution of hydrogen at dissolving magnesium surfaces. Corrosion Science, 2013, 70, 104-111.	3.0	333
5	Corrosion mechanism and hydrogen evolution on Mg. Current Opinion in Solid State and Materials Science, 2015, 19, 85-94.	5.6	288
6	Corrosion Study of AA2024â€T3 by Scanning Kelvin Probe Force Microscopy and In Situ Atomic Force Microscopy Scratching. Journal of the Electrochemical Society, 1998, 145, 2295-2306.	1.3	275
7	Corrosion Protection of Untreated AAâ€2024â€T3 in Chloride Solution by a Chromate Conversion Coating Monitored with Raman Spectroscopy. Journal of the Electrochemical Society, 1998, 145, 2258-2264.	1.3	239
8	Characterization of Corrosion Interfaces by the Scanning Kelvin Probe Force Microscopy Technique. Journal of the Electrochemical Society, 2001, 148, B163.	1.3	237
9	A Study of Corrosion and Pitting Initiation of AA2024-T3 Using Atomic Force Microscopy. Journal of the Electrochemical Society, 2002, 149, B239.	1.3	234
10	Transitions between pitting and intergranular corrosion in AA2024. Electrochimica Acta, 2003, 48, 1193-1210.	2.6	228
11	Effects of chromate and chromate conversion coatings on corrosion of aluminum alloy 2024-T3. Surface and Coatings Technology, 2001, 140, 51-57.	2.2	222
12	Role of Grain-Boundary Precipitates and Solute-Depleted Zone on the Intergranular Corrosion of Aluminum Alloy 7150. Corrosion, 2002, 58, 687-697.	0.5	195
13	Effect of Cu Content on Corrosion Behavior of 7xxx Series Aluminum Alloys. Journal of the Electrochemical Society, 2004, 151, B271.	1.3	186
14	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings Equilibrium Aspects of Cr[sup VI] Concentration. Journal of the Electrochemical Society, 2000, 147, 2556.	1.3	177
15	Evidence for enhanced catalytic activity of magnesium arising from anodic dissolution. Electrochimica Acta, 2014, 132, 277-283.	2.6	163
16	A comparative review of the aqueous corrosion of glasses, crystalline ceramics, and metals. Npj Materials Degradation, 2018, 2, .	2.6	150
17	Effect of impurities on the enhanced catalytic activity for hydrogen evolution in high purity magnesium. Electrochimica Acta, 2015, 165, 255-267.	2.6	149
18	Passivation of a corrosion resistant high entropy alloy in non-oxidizing sulfate solutions. Acta Materialia, 2019, 164, 362-376.	3.8	145

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19	Mechanisms of corrosion inhibition of AA2024-T3 by vanadates. Corrosion Science, 2007, 49, 2371-2391.	3.0	143
20	Stainless-steel corrosion and MnS inclusions. Nature, 2003, 424, 389-390.	13.7	142
21	Corrosion behavior of Î² titanium alloys for biomedical applications. Materials Science and Engineering C, 2011, 31, 885-891.	3.8	138
22	Potential control under thin aqueous layers using a Kelvin Probe. Corrosion Science, 2007, 49, 2021-2036.	3.0	133
23	Intermetallic Phases in Aluminum Alloys and Their Roles in Localized Corrosion. Journal of the Electrochemical Society, 2018, 165, C807-C820.	1.3	129
24	Reviewâ€"Conversion Coatings Based on Zirconium and/or Titanium. Journal of the Electrochemical Society, 2018, 165, C127-C144.	1.3	124
25	Characterization of trivalent chromium process coating on AA2024-T3. Surface and Coatings Technology, 2012, 206, 3895-3902.	2.2	118
26	Hexafluorozirconic acid based surface pretreatments: Characterization and performance assessment. Electrochimica Acta, 2011, 56, 1912-1924.	2.6	114
27	Electrochemical Behavior of Thin Film Analogs of Mg(Zn,â€ŠCu,â€ŠAl)[sub 2]. Journal of the Electrochemical Society, 2001, 148, B348.	1.3	112
28	Effects of compressive stress on localized corrosion in AA2024-T3. Corrosion Science, 2006, 48, 3309-3329.	3.0	112
29	Influence of Dichromate Ions on Corrosion Processes on Pure Magnesium. Journal of the Electrochemical Society, 2003, 150, B99.	1.3	111
30	A Galvanic Corrosion Approach to Investigating Chromate Effects on Aluminum Alloy 2024-T3. Journal of the Electrochemical Society, 2002, 149, B179.	1.3	105
31	Effects of carbon nanotube content on adhesion strength and wear and corrosion resistance of epoxy composite coatings on AA2024-T3. Progress in Organic Coatings, 2014, 77, 72-80.	1.9	104
32	Localized Corrosion: Passive Film Breakdown vs. Pit Growth Stability: Part III. A Unifying Set of Principal Parameters and Criteria for Pit Stabilization and Salt Film Formation. Journal of the Electrochemical Society, 2018, 165, C762-C770.	1.3	104
33	The growth of 2-D pits in thin film aluminum. Corrosion Science, 1990, 30, 1203-1218.	3.0	101
34	Localized Corrosion: Passive Film Breakdown vs Pit Growth Stability: Part II. A Model for Critical Pitting Temperature. Journal of the Electrochemical Society, 2018, 165, C484-C491.	1.3	99
35	Influence of Dichromate Ions on Corrosion of Pure Aluminum and AA2024â€T3 in NaCl Solution Studied by AFM Scratching. Journal of the Electrochemical Society, 1999, 146, 4461-4472.	1.3	98
36	On the first breakdown in AA7075-T6. Corrosion Science, 2007, 49, 3064-3088.	3.0	96

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37	Computational materials design of a corrosion resistant high entropy alloy for harsh environments. Scripta Materialia, 2018, 153, 19-22.	2.6	93
38	The Source of Anodic Hydrogen Evolution on Ultra High Purity Magnesium. Electrochimica Acta, 2016, 212, 510-521.	2.6	86
39	Effects of Sodium Chloride Particles, Ozone, UV, and Relative Humidity on Atmospheric Corrosion of Silver. Journal of the Electrochemical Society, 2010, 157, C146.	1.3	82
40	Corrosion behaviour of investment cast and friction stir processed Tiâ€“6Alâ€“4V. Corrosion Science, 2010, 52, 3062-3069.	3.0	82
41	Pitting Corrosion of Bare Stainless Steel 304 under Chloride Solution Droplets. Journal of the Electrochemical Society, 2010, 157, C302.	1.3	77
42	Introductory lecture on corrosion chemistry: a focus on anodic hydrogen evolution on Al and Mg. Faraday Discussions, 2015, 180, 11-33.	1.6	76
43	Localized corrosion behavior of a single-phase non-equimolar high entropy alloy. Electrochimica Acta, 2019, 306, 71-84.	2.6	75
44	Gravimetric Method for Hydrogen Evolution Measurements on Dissolving Magnesium. Journal of the Electrochemical Society, 2015, 162, C693-C701.	1.3	74
45	The pH Dependence of Magnesium Dissolution and Hydrogen Evolution during Anodic Polarization. Journal of the Electrochemical Society, 2015, 162, C333-C339.	1.3	71
46	Accelerated precipitation and growth of phases in an Al-Zn-Mg-Cu alloy processed by surface abrasion. Acta Materialia, 2017, 131, 233-245.	3.8	71
47	Investigating the Real Time Dissolution of Mg Using Online Analysis by ICP-MS. Journal of the Electrochemical Society, 2014, 161, C115-C119.	1.3	70
48	Ready for the road. Nature Materials, 2015, 14, 1189-1190.	13.3	70
49	Localized Corrosion: Passive Film Breakdown vs. Pit Growth Stability: Part IV. The Role of Salt Film in Pit Growth: A Mathematical Framework. Journal of the Electrochemical Society, 2019, 166, C115-C124.	1.3	68
50	Electrochemical Techniques in Corrosion: Status, Limitations, and Needs. Journal of ASTM International, 2008, 5, 1-27.	0.2	67
51	A study of the mechanisms of corrosion inhibition of AA2024-T3 by vanadates using the split cell technique. Electrochimica Acta, 2007, 52, 4032-4042.	2.6	66
52	Crevice Corrosion Repassivation of Alloy 22 in Aggressive Environments. Corrosion, 2008, 64, 836-844.	0.5	66
53	Localized Corrosion Growth Kinetics in AA2024 Alloys. Journal of the Electrochemical Society, 2002, 149, B510.	1.3	64
54	Aqueous passivation of multi-principal element alloy Ni38Fe20Cr22Mn10Co10: Unexpected high Cr enrichment within the passive film. Acta Materialia, 2020, 198, 121-133.	3.8	64

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55	Investigation of Filiform Corrosion of Epoxy-Coated 1045 Carbon Steel by Scanning Kelvin Probe Force Microscopy. Journal of the Electrochemical Society, 2004, 151, B105.	1.3	63
56	Effect of applied tensile stress on intergranular corrosion of AA2024-T3. Corrosion Science, 2004, 46, 405-425.	3.0	63
57	Degradation and deactivation of Sn catalyst used for CO2 reduction as function of overpotential. Electrochimica Acta, 2014, 133, 188-196.	2.6	62
58	Reaction Paths of Thiosulfate during Corrosion of Carbon Steel in Acidified Brines. Journal of the Electrochemical Society, 2012, 159, C195-C204.	1.3	61
59	Self-accelerated corrosion of nuclear waste forms at material interfaces. Nature Materials, 2020, 19, 310-316.	13.3	61
60	Galvanic corrosion of a welded joint in 3Cr low alloy pipeline steel. Corrosion Science, 2016, 111, 391-403.	3.0	59
61	Localized corrosion: Passive film breakdown vs. Pit growth stability, Part VI: Pit dissolution kinetics of different alloys and a model for pitting and repassivation potentials. Corrosion Science, 2021, 182, 109277.	3.0	59
62	Controlling the corrosion resistance of multi-principal element alloys. Scripta Materialia, 2020, 188, 96-101.	2.6	58
63	Corrosion of Thin Film Magnetic Disk: Galvanic Effects of the Carbon Overcoat. Journal of the Electrochemical Society, 1989, 136, 42-46.	1.3	56
64	Corrosion Inhibition of AA2024-T3 By Sodium Silicate. Electrochimica Acta, 2014, 130, 9-21.	2.6	55
65	Inhibition of Al Alloy Corrosion by Chromates. Electrochemical Society Interface, 2001, 10, 34-38.	0.3	55
66	The effect of temper on the first breakdown in AA7075. Corrosion Science, 2007, 49, 3089-3111.	3.0	54
67	Pit Growth Study in Al Alloys by the Foil Penetration Technique. Journal of the Electrochemical Society, 2000, 147, 140.	1.3	53
68	Active Corrosion Inhibition of AA2024-T3 by Trivalent Chrome Process Treatment. Corrosion, 2012, 68, 045002-1-045002-10.	0.5	53
69	Recent Advances in Corrosion Science Applicable To Disposal of High-Level Nuclear Waste. Chemical Reviews, 2021, 121, 12327-12383.	23.0	52
70	Pitting Corrosion of Very Clean Type 304 Stainless Steel. Corrosion, 2014, 70, 146-155.	0.5	50
71	Evaluation of Coated Al Alloy Using the Breakpoint Frequency Method. Electrochimica Acta, 2016, 187, 605-615.	2.6	50
72	Understanding the enhanced rates of hydrogen evolution on dissolving magnesium. Electrochemistry Communications, 2019, 104, 106482.	2.3	48

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73	In-situ observation of intergranular stress corrosion cracking in AA2024-T3 under constant load conditions. Corrosion Science, 2007, 49, 139-148.	3.0	47
74	Analysis of Ag Corrosion Products. Journal of the Electrochemical Society, 2013, 160, C345-C355.	1.3	47
75	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings on Al Alloys: Kinetics of Release. Journal of the Electrochemical Society, 2003, 150, B83.	1.3	46
76	Electrochemical metrics for corrosion resistant alloys. Scientific Data, 2021, 8, 58.	2.4	46
77	Computational design and initial corrosion assessment of a series of non-equimolar high entropy alloys. Scripta Materialia, 2019, 172, 12-16.	2.6	44
78	Effects of surface roughness, texture and polymer degradation on cathodic delamination of epoxy coated steel samples. Corrosion Science, 2013, 67, 152-160.	3.0	43
79	Localized corrosion at nm-scale hardening precipitates in Al-Cu-Li alloys. Acta Materialia, 2020, 189, 204-213.	3.8	43
80	Influence of plastic deformation on hydrogen transport in 2 Cr-1Mo steel. Scripta Metallurgica, 1982, 16, 455-459.	1.2	41
81	Pitting in Aluminum Thin Films: Supersaturation and Effects of Dichromate Ions. Journal of the Electrochemical Society, 1998, 145, 2834-2840.	1.3	41
82	Hydrogen Evolution During Anodic Polarization of Mg Alloyed with Li, Ca, or Fe. Corrosion, 2015, 71, 224-233.	0.5	41
83	Quantitative study of exfoliation corrosion: Exfoliation of slices in humidity technique. Corrosion Science, 2007, 49, 920-938.	3.0	38
84	Galvanic Test Panels for Accelerated Corrosion Testing of Coated Al Alloys: Part 2â€"Measurement of Galvanic Interaction. Corrosion, 2014, 70, 95-106.	0.5	38
85	The role of the beta-Mg17Al12 phase on the anomalous hydrogen evolution and anodic dissolution of AZ magnesium alloys. Corrosion Science, 2020, 165, 108384.	3.0	38
86	Anomalous hydrogen evolution on AZ31, AZ61 and AZ91 magnesium alloys in unbuffered sodium chloride solution. Corrosion Science, 2019, 146, 163-171.	3.0	37
87	Localized Corrosion Behavior of Non-Equiatomic NiFeCrMnCo Multi-Principal Element Alloys. Electrochimica Acta, 2020, 354, 136749.	2.6	36
88	The Influence of Dichromate Ions on Aluminum Dissolution Kinetics in Artificial Crevice Electrode Cells. Journal of the Electrochemical Society, 1999, 146, 4095-4100.	1.3	35
89	Characterization of chromate conversion coating on AA7075-T6 aluminum alloy. Surface and Interface Analysis, 2004, 36, 30-42.	0.8	35
90	A kinetic model explaining the enhanced rates of hydrogen evolution on anodically polarized magnesium in aqueous environments. Electrochemistry Communications, 2017, 84, 36-39.	2.3	35

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91	Hydrogen Permeation and Corrosion Fatigue Crack Growth Rates of X65 Pipeline Steel Exposed to Acid Brines Containing Thiosulfate or Hydrogen Sulfide. Corrosion, 2012, 68, 1015-1028.	0.5	34
92	Galvanic Test Panels for Accelerated Corrosion Testing of Coated Al Alloys: Part 1â€"Concept. Corrosion, 2013, 69, 1240-1246.	0.5	34
93	Measurement of adhesion strengths between various milk products on glass surfaces using contact angle measurement and atomic force microscopy. Journal of Food Engineering, 2009, 92, 305-311.	2.7	33
94	Corrosion of an Alâ€"Mgâ€"Si alloy under MgCl2 solution droplets. Corrosion Science, 2011, 53, 2142-2151.	3.0	33
95	Corrosion Behavior of Carbon Steel in Acidified, Thiosulfate-Containing Brines. Corrosion, 2012, 68, 872-884.	0.5	33
96	Cathodic delamination of polyurethane/multiwalled carbon nanotube composite coatings from steel substrates. Progress in Organic Coatings, 2016, 99, 55-60.	1.9	32
97	Effect of Roughness and Surface Topography on Adhesion of PVB to AA2024-T3 using the Blister Test. Surface and Coatings Technology, 2013, 236, 531-539.	2.2	31
98	On the evidence for univalent Mg. Journal of Electroanalytical Chemistry, 2015, 737, 123-128.	1.9	31
99	The Evolution of Anodic Hydrogen on High Purity Magnesium in Acidic Buffer Solution. Corrosion, 2017, 73, 482-493.	0.5	31
100	Cathodic degradation mechanisms of pure Sn electrocatalyst in a nitrogen atmosphere. Journal of Applied Electrochemistry, 2012, 42, 21-29.	1.5	29
101	Effect of chloride on stress corrosion cracking susceptibility of carbon steel in simulated fuel grade ethanol. Electrochimica Acta, 2013, 104, 255-266.	2.6	29
102	Effect of Surface Pretreatment on Galvanic Attack of Coated Al Alloy Panels. Corrosion, 2015, 71, 771-783.	0.5	29
103	Localised corrosion: general discussion. Faraday Discussions, 2015, 180, 381-414.	1.6	29
104	Kinetics of sharp intergranular corrosion fissures in AA7178. Corrosion Science, 2007, 49, 858-876.	3.0	28
105	Investigation of Surface Morphology, Wear Resistance, and Adhesiveness of AA6061-T6 Treated in a Hexafluorozirconic Acid-Based Solution. Corrosion, 2013, 69, 259-267.	0.5	28
106	Effect of Major Intermetallic Particles on Localized Corrosion of AA2060-T8. Corrosion, 2019, 75, 29-41.	0.5	28
107	Statistical model for intergranular corrosion growth kinetics. Corrosion Science, 2003, 45, 353-370.	3.0	27
108	Behavior of Magnesium-Rich Primers on AA2024-T3. Corrosion, 2011, 67, 055001-1-055001-15.	0.5	27

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109	Atmospheric corrosion of Cu by UV, ozone and NaCl. Corrosion Engineering Science and Technology, 2013, 48, 461-468.	0.7	27
110	Effect of chloride concentration and temperature on growth of 1D Pit. Journal of Solid State Electrochemistry, 2015, 19, 3439-3447.	1.2	27
111	Atmospheric pitting corrosion of AA7075-T6 under evaporating droplets with and without inhibitors. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 351-361.	0.8	25
112	Progress in Understanding the Origins of Excellent Corrosion Resistance in Metallic Alloys: From Binary Polycrystalline Alloys to Metallic Glasses and High Entropy Alloys. Corrosion, 2020, 76, 485-499.	0.5	25
113	Adhesion and adhesion degradation of a pressure sensitive tape on carbon steel. Progress in Organic Coatings, 2010, 69, 57-62.	1.9	23
114	Coating and interface degradation of coated steel, Part 1: Field exposure. Electrochimica Acta, 2014, 133, 30-39.	2.6	22
115	Evaluation of Nitrate and Nitrite Reduction Kinetics Related to Liquid-Air-Interface Corrosion. Electrochimica Acta, 2014, 117, 299-309.	2.6	22
116	Effect of Hexafluorozirconic Acid Pretreatment on Cathodic Delamination of Epoxy Coatings from Steel Substrates. Corrosion, 2015, 71, 277-284.	0.5	22
117	Humidity Effects on Pitting of Ground Stainless Steel Exposed to Sea Salt Particles. Journal of the Electrochemical Society, 2019, 166, C3477-C3487.	1.3	22
118	Microstructure evolution in abrasion-induced surface layer on an Alâ€“Znâ€“Mgâ€“Cu alloy. Materials Characterization, 2014, 98, 18-25.	1.9	21
119	Composition and corrosion protection of hexafluorozirconic acid treatment on steel. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 1215-1222.	0.8	21
120	2015 W.R. Whitney Award Lecture:The Effects of Microstructure and Composition on Al Alloy Corrosion. Corrosion, 2015, 71, 1308-1320.	0.5	21
121	CrLVV Auger emission and photoreduction of hexavalent Cr oxides. Surface Science, 1991, 250, 139-146.	0.8	20
122	Effect of Oxygen on Ethanol Stress Corrosion Cracking Susceptibility: Part 1â€”Electrochemical Response and Cracking-Susceptible Potential Region. Corrosion, 2013, 69, 768-780.	0.5	20
123	Review of corrosion interactions between different materials relevant to disposal of high-level nuclear waste. Npj Materials Degradation, 2020, 4, .	2.6	20
124	Generalized model for IGC growth in aluminum alloys. Journal of Statistical Planning and Inference, 2007, 137, 2405-2412.	0.4	19
125	Corrosion Behavior of Friction Stir-Processed and Gas Tungsten Arc-Welded Ti-6Al-4V. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2318-2327.	1.1	19
126	Accelerated Atmospheric Corrosion Testing of Ag. Corrosion, 2013, 69, 1060-1072.	0.5	18

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127	Raman Investigation of Anodic Undermining of Coated Steel During Environmental Exposure. Corrosion, 2014, 70, 1219-1229.	0.5	18
128	Effects of Graphene-Based Fillers on Cathodic Delamination and Abrasion Resistance of Cataphoretic Organic Coatings. Coatings, 2020, 10, 602.	1.2	18
129	Communicationâ€"Dissolution and Passivation of a Ni-Cr-Fe-Ru-Mo-W High Entropy Alloy by Elementally Resolved Electrochemistry. Journal of the Electrochemical Society, 2020, 167, 061505.	1.3	18
130	Galvanic Attack of Coated Al Alloy Panels in Laboratory and Field Exposure. Corrosion, 2016, 72, 342-355.	0.5	17
131	Anodic activation of Mg in the presence of In3+ ions in dilute sodium chloride solution. Electrochimica Acta, 2019, 293, 199-210.	2.6	17
132	Corrosion and repassivation of Super 13Cr stainless steel in artificial 1D pit electrodes at elevated temperature. Corrosion Science, 2020, 173, 108754.	3.0	17
133	Corrosion inhibition of AA2024-T3 by a coating containing dual-pH sensitive, corrosion inhibitor loaded microspheres. Corrosion Science, 2021, 192, 109835.	3.0	16
134	Electrochemical Techniques in Corrosion: Status, Limitations, and Needs. Journal of Testing and Evaluation, 2014, 42, 517-538.	0.4	16
135	Effect of Oxygen on Ethanol Stress Corrosion Cracking Susceptibility: Part 2â€"Dissolution-Based Cracking Mechanism. Corrosion, 2013, 69, 851-862.	0.5	15
136	Potentiodynamic polarization study of the corrosion behavior of palladium-silver dental alloys. Journal of Prosthetic Dentistry, 2018, 119, 650-656.	1.1	15
137	Cryo-based structural characterization and growth model of salt film on metal. Corrosion Science, 2020, 174, 108812.	3.0	15
138	Near-field corrosion interactions between glass and corrosion resistant alloys. Npj Materials Degradation, 2020, 4, .	2.6	15
139	Potential Dependent Mn Oxidation and Its Role in Passivation of Ni₃₈Fe₂₀Cr₂₂Mn₁₀Co₁₀Multi-Principal Element Alloy Using Multi-Element Resolved Atomic Emission Spectroelectrochemistry. Journal of the Electrochemical Society, 2021, 168, 051508.	1.3	15
140	Effect of Precipitate Evolution on the Pitting Corrosion of Friction Stir Welded Joints of an Al-Cu Alloy. Corrosion, 2016, 72, 719-731.	0.5	14
141	Statistical modeling and computer simulation of intergranular corrosion growth in AA2024-T3 aluminum alloy. Journal of Statistical Planning and Inference, 2004, 126, 553-568.	0.4	13
142	Potentiostatic Pulse Testing for Assessment of Early Coating Failure. Zeitschrift Fur Physikalische Chemie, 2005, 219, 1519-1537.	1.4	12
143	Corrosion Inhibition of Aluminum Alloy 2024-T3 by Praseodymium Chloride. Corrosion, 2014, 70, 928-941.	0.5	12
144	Coating and Interface Degradation of Coated steel, Part 2: Accelerated Laboratory Tests. Electrochimica Acta, 2014, 136, 442-449.	2.6	12

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145	Corrosion Protection of Galvanized Steel by a Thin Hybrid Coating with Zr-Rich Inorganic Matrix and Organic Polymer Beads. Corrosion, 2017, 73, 339-346.	0.5	12
146	AFM Scratching for Adhesion Studies of Thin Polymer Coatings on Steel. Journal of Adhesion Science and Technology, 2012, 26, 1591-1609.	1.4	11
147	Development of Liquid-Air-Interface Corrosion of Steel in Nitrate Solutions. Corrosion, 2014, 70, 230-246.	0.5	11
148	The use of atomic force microscopy to measure the efficacies of various chemical sanitizers in removing organic matter from glass surfaces. Journal of Food Engineering, 2010, 100, 139-144.	2.7	10
149	Corrosion resistance of welds in type 304L stainless steel made with a nickelâ€“copperâ€“ruthenium welding consumable. Corrosion Science, 2010, 52, 2439-2451.	3.0	10
150	Effects of Pretreatments on the Adhesion of Acetoacetate to AA2024-T3 Using the Blister Test. Corrosion, 2014, 70, 483-495.	0.5	10
151	Protection Mechanism of Al-Rich Epoxy Primer on Aluminum Alloy 2024-T3. Corrosion, 2017, 73, 1192-1195.	0.5	10
152	First-Principles Modeling of the Repassivation of Corrosion Resistant Alloys: Part II. Surface Adsorption Isotherms for Alloys and the Chloride Susceptibility Index. Journal of the Electrochemical Society, 2020, 167, 111501.	1.3	10
153	Application of the Chloride Susceptibility Index to Study the Effects of Ni, Cr, Mn and Mo on the Repassivation of Stainless Steels. Journal of the Electrochemical Society, 2020, 167, 131510.	1.3	10
154	Localized Corrosion Resistance of 21% Cr Ferritic Stainless Steel. Corrosion, 2011, 67, 095005-095005-8.	0.5	9
155	Pitting Corrosion of Silica-Coated Type 304 Stainless Steel Under Thin Electrolyte Layers. Corrosion, 2011, 67, 035004-1-035004-10.	0.5	9
156	Solidification Behavior and Weldability of Dissimilar Welds Between a Cr-Free, Ni-Cu Welding Consumable and Type 304L Austenitic Stainless Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1209-1222.	1.1	9
157	Smoothening of niobium by electropolishing. Journal of Applied Electrochemistry, 2013, 43, 829-838.	1.5	9
158	Statistical Modeling of Minimum Intergranular Corrosion Path Length in High-Strength Aluminum Alloy. Technometrics, 2004, 46, 69-75.	1.3	8
159	Assessment of Coating Adhesion Degradation by Atomic Force Microscopy Scratching. Corrosion, 2012, 68, 032501-1-032501-4.	0.5	8
160	Hydrogen evolution on bare Mg surfaces using the scratched electrode technique. Corrosion Science, 2020, 164, 108321.	3.0	8
161	Corrosion interactions between stainless steel and lead vanado-iodoapatite nuclear waste form part I. Npj Materials Degradation, 2020, 4, .	2.6	8
162	Phase Field Modeling of Crystallographic Corrosion Pits. Journal of the Electrochemical Society, 2022, 169, 020557.	1.3	8

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163	Effects of long-term natural aging on the altered surface layer on an Al-Zn-Mg-Cu alloy and on corrosion properties. Electrochimica Acta, 2018, 266, 34-42.	2.6	7
164	Reply to: How much does corrosion of nuclear waste matrices matter. Nature Materials, 2020, 19, 962-963.	13.3	7
165	Corrosion interactions between stainless steel and lead vanado-iodoapatite nuclear waste form part II. Npj Materials Degradation, 2020, 4, .	2.6	7
166	Electrochemical impedance spectroscopy study of corrosion characteristics of palladiumâ€“silver dental alloys. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 1777-1786.	1.6	7
167	WastePD, an innovative center on materials degradation. Npj Materials Degradation, 2017, 1, .	2.6	6
168	Smart coating with dual-pH sensitive, inhibitor-loaded nanofibers for corrosion protection. Npj Materials Degradation, 2021, 5, .	2.6	6
169	Corrosion inhibition of AA2024-T3 by smart polyelectrolyte coacervates responsive to both acidic and alkaline environments. Progress in Organic Coatings, 2020, 146, 105719.	1.9	6
170	Effects of NaCl, SO₂, NH₃, O₃, and ultraviolet light on atmospheric corrosion of Zn. Materials and Corrosion - Werkstoffe Und Korrosion, 2020, 71, 9-20.	0.8	5
171	Technical Note: Electrochemical Testing for Pitting Corrosion Above Ambient Temperatures Using the Syringe Cell. Corrosion, 2021, 77, 1025-1028.	0.5	5
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173	A corrosion study of nickelâ€“copper and nickelâ€“copperâ€“palladium welding filler metals. Materials and Corrosion - Werkstoffe Und Korrosion, 2010, 61, 909-919.	0.8	4
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