

Xiaogang Li

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2038660/publications.pdf>

Version: 2024-02-01

475
papers

24,259
citations

8755

75
h-index

13379

130
g-index

480
all docs

480
docs citations

480
times ranked

15883
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-Atom Pt as Co-Catalyst for Enhanced Photocatalytic H ₂ Evolution. <i>Advanced Materials</i> , 2016, 28, 2427-2431.	21.0	1,156
2	Exclusive Ni ⁴⁺ Sites Realize Near-Unity CO Selectivity for Electrochemical CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2017, 139, 14889-14892.	13.7	725
3	The cost of corrosion in China. <i>Npj Materials Degradation</i> , 2017, 1, .	5.8	652
4	Materials science: Share corrosion data. <i>Nature</i> , 2015, 527, 441-442.	27.8	557
5	Self-healing mechanisms in smart protective coatings: A review. <i>Corrosion Science</i> , 2018, 144, 74-88.	6.6	543
6	Dual-action smart coatings with a self-healing superhydrophobic surface and anti-corrosion properties. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2355-2364.	10.3	413
7	Passivity of 316L stainless steel in borate buffer solution studied by Mott-Schottky analysis, atomic absorption spectrometry and X-ray photoelectron spectroscopy. <i>Corrosion Science</i> , 2010, 52, 3646-3653.	6.6	333
8	Anaerobic microbiologically influenced corrosion mechanisms interpreted using bioenergetics and bioelectrochemistry: A review. <i>Journal of Materials Science and Technology</i> , 2018, 34, 1713-1718.	10.7	326
9	Superhydrophobic surfaces for corrosion protection: a review of recent progresses and future directions. <i>Journal of Coatings Technology Research</i> , 2016, 13, 11-29.	2.5	296
10	Surface Immobilization of Transition Metal Ions on Nitrogen-Doped Graphene Realizing High-Efficient and Selective CO ₂ Reduction. <i>Advanced Materials</i> , 2018, 30, e1706617.	21.0	276
11	Mechanical properties and corrosion behavior of selective laser melted 316L stainless steel after different heat treatment processes. <i>Journal of Materials Science and Technology</i> , 2019, 35, 1499-1507.	10.7	267
12	Bio-functional and anti-corrosive 3D printing 316L stainless steel fabricated by selective laser melting. <i>Materials and Design</i> , 2018, 152, 88-101.	7.0	258
13	Influence of temperature on the electrochemical and passivation behavior of 2507 super duplex stainless steel in simulated desulfurized flue gas condensates. <i>Corrosion Science</i> , 2017, 118, 31-48.	6.6	257
14	Heat treatment effect on the microstructure and corrosion behavior of 316L stainless steel fabricated by selective laser melting for proton exchange membrane fuel cells. <i>Electrochimica Acta</i> , 2018, 276, 293-303.	5.2	257
15	High power rechargeable magnesium/iodine battery chemistry. <i>Nature Communications</i> , 2017, 8, 14083.	12.8	251
16	Recent advances on environmental corrosion behavior and mechanism of high-entropy alloys. <i>Journal of Materials Science and Technology</i> , 2021, 80, 217-233.	10.7	250
17	A Rechargeable Al/S Battery with an Ionic-Liquid Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9898-9901.	13.8	215
18	Passivation behavior and surface chemistry of 2507 super duplex stainless steel in artificial seawater: Influence of dissolved oxygen and pH. <i>Corrosion Science</i> , 2019, 150, 218-234.	6.6	212

#	ARTICLE	IF	CITATIONS
19	Superior corrosion resistance and self-healable epoxy coating pigmented with silanized trianiline-intercalated graphene. Carbon, 2019, 142, 164-176.	10.3	204
20	Effect of inclusions modified by rare earth elements (Ce, La) on localized marine corrosion in Q460NH weathering steel. Corrosion Science, 2017, 129, 82-90.	6.6	197
21	Comparison of barrier properties for a superhydrophobic epoxy coating under different simulated corrosion environments. Corrosion Science, 2016, 103, 230-241.	6.6	189
22	Superhydrophobic oligoaniline-containing electroactive silica coating as pre-process coating for corrosion protection of carbon steel. Chemical Engineering Journal, 2018, 348, 940-951.	12.7	186
23	A Universal Organic Cathode for Ultrafast Lithium and Multivalent Metal Batteries. Angewandte Chemie - International Edition, 2018, 57, 7146-7150.	13.8	177
24	Molecular co-catalyst accelerating hole transfer for enhanced photocatalytic H ₂ evolution. Nature Communications, 2015, 6, 8647.	12.8	172
25	Passivation and electrochemical behavior of 316L stainless steel in chlorinated simulated concrete pore solution. Applied Surface Science, 2017, 400, 38-48.	6.1	171
26	Corrosion of metallic materials fabricated by selective laser melting. Npj Materials Degradation, 2019, 3, .	5.8	158
27	Triple-Action Self-Healing Protective Coatings Based on Shape Memory Polymers Containing Dual-Function Microspheres. ACS Applied Materials & Interfaces, 2018, 10, 23369-23379.	8.0	152
28	The enhancement of microstructure on the passive and pitting behaviors of selective laser melting 316L SS in simulated body fluid. Applied Surface Science, 2019, 467-468, 193-205.	6.1	152
29	Reversible S ⁰ /MgS ₂ Redox Chemistry in a MgTFSI ₂ /MgCl ₂ /DME Electrolyte for Rechargeable Mg/S Batteries. Angewandte Chemie - International Edition, 2017, 56, 13526-13530.	13.8	149
30	Role of Al ₂ O ₃ inclusions on the localized corrosion of Q460NH weathering steel in marine environment. Corrosion Science, 2018, 138, 96-104.	6.6	146
31	Improvement of anticorrosion ability of epoxy matrix in simulate marine environment by filled with superhydrophobic POSS-GO nanosheets. Journal of Hazardous Materials, 2019, 364, 244-255.	12.4	143
32	The passivity of selective laser melted 316L stainless steel. Applied Surface Science, 2020, 504, 144495.	6.1	139
33	Accelerated corrosion of 2205 duplex stainless steel caused by marine aerobic Pseudomonas aeruginosa biofilm. Bioelectrochemistry, 2017, 113, 1-8.	4.6	138
34	Atmospheric corrosion of field-exposed AZ31 magnesium in a tropical marine environment. Corrosion Science, 2013, 76, 243-256.	6.6	137
35	Effect of Nb on the hydrogen-induced cracking of high-strength low-alloy steel. Corrosion Science, 2018, 139, 83-96.	6.6	125
36	Graphene/Sulfur Hybrid Nanosheets from a Space-Confined Reaction for High-Performance Lithium-Sulfur Batteries. Advanced Materials, 2015, 27, 5936-5942.	21.0	124

#	ARTICLE	IF	CITATIONS
37	Effect of Cr on the passive film formation mechanism of steel rebar in saturated calcium hydroxide solution. <i>Applied Surface Science</i> , 2016, 389, 1182-1191.	6.1	124
38	Influence of carbon on the corrosion behaviour of interstitial equiatomic CoCrFeMnNi high-entropy alloys in a chlorinated concrete solution. <i>Corrosion Science</i> , 2020, 163, 108287.	6.6	123
39	Thermodynamics and Kinetics of Sulfur Cathode during Discharge in MgTFSI ₂ "DME Electrolyte. <i>Advanced Materials</i> , 2018, 30, 1704313.	21.0	122
40	Dual-action self-healing protective coatings with photothermal responsive corrosion inhibitor nanocontainers. <i>Chemical Engineering Journal</i> , 2021, 404, 127118.	12.7	122
41	Aging of ethylene "propylene" diene monomer (EPDM) in artificial weathering environment. <i>Polymer Degradation and Stability</i> , 2007, 92, 1841-1846.	5.8	118
42	In situ Raman spectroscopy study of corrosion products on the surface of carbon steel in solution containing Cl ⁻ and SO ₄ ²⁻ . <i>Engineering Failure Analysis</i> , 2011, 18, 1981-1989.	4.0	116
43	Effect of plastic deformation on the electrochemical and stress corrosion cracking behavior of X70 steel in near-neutral pH environment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 677, 259-273.	5.6	116
44	Effect of cold deformation on the corrosion behaviour of UNS S31803 duplex stainless steel in simulated concrete pore solution. <i>Corrosion Science</i> , 2017, 124, 178-192.	6.6	116
45	A strong and ductile medium-entropy alloy resists hydrogen embrittlement and corrosion. <i>Nature Communications</i> , 2020, 11, 3081.	12.8	116
46	Investigation of microbiologically influenced corrosion of high nitrogen nickel-free stainless steel by <i>Pseudomonas aeruginosa</i> . <i>Corrosion Science</i> , 2016, 111, 811-821.	6.6	110
47	Benefit of the corrosion product film formed on a new weathering steel containing 3% nickel under marine atmosphere in Maldives. <i>Corrosion Science</i> , 2020, 165, 108416.	6.6	110
48	POSS-tetraaniline modified graphene for active corrosion protection of epoxy-based organic coating. <i>Chemical Engineering Journal</i> , 2020, 383, 123160.	12.7	109
49	Reducing Mg Anode Overpotential via Ion Conductive Surface Layer Formation by Iodine Additive. <i>Advanced Energy Materials</i> , 2018, 8, 1701728.	19.5	107
50	Electrochemical characterization and stress corrosion cracking of E690 high strength steel in wet-dry cyclic marine environments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 710, 318-328.	5.6	106
51	Effect of cathodic potentials on the SCC behavior of E690 steel in simulated seawater. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 642, 22-31.	5.6	105
52	Optimizing the nickel content in weathering steels to enhance their corrosion resistance in acidic atmospheres. <i>Corrosion Science</i> , 2017, 115, 135-142.	6.6	105
53	Insight into the product film formed on Ni-advanced weathering steel in a tropical marine atmosphere. <i>Applied Surface Science</i> , 2018, 436, 80-89.	6.1	105
54	Plasmon-mediated photothermal and superhydrophobic TiN-PTFE film for anti-icing/deicing applications. <i>Composites Science and Technology</i> , 2019, 181, 107696.	7.8	105

#	ARTICLE	IF	CITATIONS
55	Assembly of graphene aerogels into the 3D biomass-derived carbon frameworks on conductive substrates for flexible supercapacitors. <i>Carbon</i> , 2017, 111, 658-666.	10.3	104
56	Stress corrosion cracking of X80 pipeline steel in simulated alkaline soil solution. <i>Materials & Design</i> , 2009, 30, 1712-1717.	5.1	102
57	Corrosion behavior of Cr modified HRB400 steel rebar in simulated concrete pore solution. <i>Construction and Building Materials</i> , 2015, 93, 884-890.	7.2	100
58	Existence of Solid Electrolyte Interphase in Mg Batteries: Mg/S Chemistry as an Example. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14767-14776.	8.0	99
59	Superhydrophobic carbon nanotubes/epoxy nanocomposite coating by facile one-step spraying. <i>Surface and Coatings Technology</i> , 2018, 341, 15-23.	4.8	99
60	A durable and photothermal superhydrophobic coating with entwined CNTs-SiO ₂ hybrids for anti-icing applications. <i>Chemical Engineering Journal</i> , 2021, 423, 130238.	12.7	98
61	Electrochemical investigation and ab initio computation of passive film properties on copper in anaerobic sulphide solutions. <i>Corrosion Science</i> , 2017, 116, 34-43.	6.6	97
62	A comparative study of primary and secondary passive films formed on AM355 stainless steel in 0.1 M NaOH. <i>Applied Surface Science</i> , 2018, 427, 763-773.	6.1	96
63	Characterization of electrochemical and passive behaviour of Alloy 59 in acid solution. <i>Electrochimica Acta</i> , 2014, 135, 412-419.	5.2	95
64	Three-dimensional porous graphene-encapsulated CNT@SnO ₂ composite for high-performance lithium and sodium storage. <i>Electrochimica Acta</i> , 2017, 230, 212-221.	5.2	94
65	Corrosion fatigue crack initiation and initial propagation mechanism of E690 steel in simulated seawater. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 708, 181-192.	5.6	94
66	Corrosion of pure magnesium under thin electrolyte layers. <i>Electrochimica Acta</i> , 2008, 53, 7921-7931.	5.2	92
67	Porous ZnMn ₂ O ₄ nanospheres: Facile synthesis through microemulsion method and excellent performance as anode of lithium ion battery. <i>Journal of Power Sources</i> , 2016, 312, 137-145.	7.8	92
68	Fundamental understanding on the effect of Cr on corrosion resistance of weathering steel in simulated tropical marine atmosphere. <i>Corrosion Science</i> , 2021, 186, 109427.	6.6	91
69	Enhanced resistance of 2205 Cu-bearing duplex stainless steel towards microbiologically influenced corrosion by marine aerobic <i>Pseudomonas aeruginosa</i> biofilms. <i>Journal of Materials Science and Technology</i> , 2018, 34, 1325-1336.	10.7	90
70	Effect of AC current density on stress corrosion cracking behavior of X80 pipeline steel in high pH carbonate/bicarbonate solution. <i>Electrochimica Acta</i> , 2014, 117, 351-359.	5.2	89
71	Evolution of rust layers on carbon steel and weathering steel in high humidity and heat marine atmospheric corrosion. <i>Journal of Materials Science and Technology</i> , 2020, 39, 190-199.	10.7	89
72	Distinguishing two different microbiologically influenced corrosion (MIC) mechanisms using an electron mediator and hydrogen evolution detection. <i>Corrosion Science</i> , 2020, 177, 108993.	6.6	86

#	ARTICLE	IF	CITATIONS
73	Influence of sulfides on the passivation behavior of titanium alloy TA2 in simulated seawater environments. <i>Applied Surface Science</i> , 2018, 458, 198-209.	6.1	83
74	Towards understanding and prediction of atmospheric corrosion of an Fe/Cu corrosion sensor via machine learning. <i>Corrosion Science</i> , 2020, 170, 108697.	6.6	82
75	Microbiologically Influenced Corrosion of 2707 Hyper-Duplex Stainless Steel by Marine <i>Pseudomonas aeruginosa</i> Biofilm. <i>Scientific Reports</i> , 2016, 6, 20190.	3.3	80
76	Investigation of oxide film formation on 316L stainless steel in high-temperature aqueous environments. <i>Electrochimica Acta</i> , 2011, 56, 5860-5865.	5.2	78
77	Corrosion behavior of low-Cr steel rebars in alkaline solutions with different pH in the presence of chlorides. <i>Journal of Electroanalytical Chemistry</i> , 2017, 803, 40-50.	3.8	78
78	Influence of different heat-affected zone microstructures on the stress corrosion behavior and mechanism of high-strength low-alloy steel in a sulfurated marine atmosphere. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 759, 124-141.	5.6	77
79	Evolution in microstructure, wear, corrosion, and tribocorrosion behavior of Mo-containing high-entropy alloy coatings fabricated by laser cladding. <i>Corrosion Science</i> , 2021, 191, 109727.	6.6	77
80	Superior resistance to hydrogen damage for selective laser melted 316L stainless steel in a proton exchange membrane fuel cell environment. <i>Corrosion Science</i> , 2020, 166, 108425.	6.6	76
81	Dual role of nanosized NbC precipitates in hydrogen embrittlement susceptibility of lath martensitic steel. <i>Corrosion Science</i> , 2020, 164, 108345.	6.6	75
82	Effect of microcrystallization on pitting corrosion of pure aluminium. <i>Corrosion Science</i> , 2009, 51, 2151-2157.	6.6	74
83	Stress-assisted microbiologically influenced corrosion mechanism of 2205 duplex stainless steel caused by sulfate-reducing bacteria. <i>Corrosion Science</i> , 2020, 173, 108746.	6.6	74
84	A study for corrosion behavior of a new-type weathering steel used in harsh marine environment. <i>Construction and Building Materials</i> , 2020, 259, 119760.	7.2	73
85	Biomass derivative/graphene aerogels for binder-free supercapacitors. <i>Energy Storage Materials</i> , 2016, 3, 113-122.	18.0	72
86	Anisotropic response in mechanical and corrosion properties of hastelloy X fabricated by selective laser melting. <i>Construction and Building Materials</i> , 2019, 221, 720-729.	7.2	72
87	Synergy of Cu and Sb to enhance the resistance of 3%Ni weathering steel to marine atmospheric corrosion. <i>Corrosion Science</i> , 2021, 183, 109353.	6.6	72
88	Hydrotreating of crude 2-ethylhexanol over Ni/Al ₂ O ₃ catalysts: Surface Ni species-catalytic activity correlation. <i>Applied Catalysis A: General</i> , 2009, 368, 105-112.	4.3	71
89	Effect of AC on stress corrosion cracking behavior and mechanism of X80 pipeline steel in carbonate/bicarbonate solution. <i>Corrosion Science</i> , 2014, 87, 224-232.	6.6	71
90	Interaction between austenite-ferrite phases on passive performance of 2205 duplex stainless steel. <i>Journal of Materials Science and Technology</i> , 2018, 34, 2140-2148.	10.7	71

#	ARTICLE	IF	CITATIONS
91	Effect of cold deformation on the electrochemical behaviour of 304L stainless steel in contaminated sulfuric acid environment. <i>Applied Surface Science</i> , 2017, 425, 628-638.	6.1	70
92	Improving the resistance of high-strength steel to SCC in a SO ₂ -polluted marine atmosphere through Nb and Sb microalloying. <i>Corrosion Science</i> , 2020, 170, 108693.	6.6	70
93	A new understanding of the effect of Cr on the corrosion resistance evolution of weathering steel based on big data technology. <i>Journal of Materials Science and Technology</i> , 2022, 104, 67-80.	10.7	70
94	Shape memory composite (SMC) self-healing coatings for corrosion protection. <i>Progress in Organic Coatings</i> , 2016, 97, 261-268.	3.9	68
95	Electrochemical and passivation behavior investigation of ferritic stainless steel in alkaline environment. <i>Construction and Building Materials</i> , 2015, 96, 502-507.	7.2	67
96	Comparative study on the stress corrosion cracking of X70 pipeline steel in simulated shallow and deep sea environments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 685, 145-153.	5.6	67
97	Effect of Mo on interaction between α/β phases of duplex stainless steel. <i>Electrochimica Acta</i> , 2018, 267, 255-268.	5.2	67
98	Laboratory investigation of microbiologically influenced corrosion of Q235 carbon steel by halophilic archaea <i>Natronorubrum tibetense</i> . <i>Corrosion Science</i> , 2018, 145, 151-161.	6.6	67
99	Electrochemical behavior and compositions of passive films formed on the constituent phases of duplex stainless steel without coupling. <i>Electrochemistry Communications</i> , 2015, 57, 56-60.	4.7	66
100	Hetero-deformation-induced stress in additively manufactured 316L stainless steel. <i>Materials Research Letters</i> , 2020, 8, 390-397.	8.7	66
101	Hierarchical porous reduced graphene oxide/SnO ₂ networks as highly stable anodes for lithium-ion batteries. <i>Electrochimica Acta</i> , 2016, 207, 9-15.	5.2	65
102	Effect of carbonation on the electrochemical behavior of corrosion resistance low alloy steel rebars in cement extract solution. <i>Construction and Building Materials</i> , 2017, 130, 193-201.	7.2	65
103	Influence of the aging time on the microstructure and electrochemical behaviour of a 15-5PH ultra-high strength stainless steel. <i>Corrosion Science</i> , 2018, 139, 185-196.	6.6	65
104	A Rechargeable Al/S Battery with an Ionic-Liquid Electrolyte. <i>Angewandte Chemie</i> , 2016, 128, 10052-10055.	2.0	64
105	Effect of TiC content on the mechanical and corrosion properties of Inconel 718 alloy fabricated by a high-throughput dual-feed laser metal deposition system. <i>Journal of Alloys and Compounds</i> , 2019, 803, 637-648.	5.5	64
106	The effect of δ -Ni ₃ Ti precipitates and reversed austenite on the passive film stability of nickel-rich Custom 465 steel. <i>Corrosion Science</i> , 2019, 154, 178-190.	6.6	64
107	Electrochemical migration, whisker formation, and corrosion behavior of printed circuit board under wet H ₂ S environment. <i>Electrochimica Acta</i> , 2013, 114, 363-371.	5.2	61
108	Sulfur supported by carbon nanotubes and coated with polyaniline: Preparation and performance as cathode of lithium-sulfur cell. <i>Electrochimica Acta</i> , 2015, 166, 93-99.	5.2	61

#	ARTICLE	IF	CITATIONS
109	Effect of Microstructures on Corrosion Behavior of Nickel Coatings: (II) Competitive Effect of Grain Size and Twins Density on Corrosion Behavior. <i>Journal of Materials Science and Technology</i> , 2016, 32, 465-469.	10.7	60
110	High-throughput fabrication of nickel-based alloys with different Nb contents via a dual-feed additive manufacturing system: Effect of Nb content on microstructural and mechanical properties. <i>Journal of Alloys and Compounds</i> , 2019, 785, 826-837.	5.5	60
111	About metastable cellular structure in additively manufactured austenitic stainless steels. <i>Additive Manufacturing</i> , 2021, 38, 101804.	3.0	59
112	Reversible S^{0}/MgS Redox Chemistry in a $MgTFSI_2/MgCl_2/DME$ Electrolyte for Rechargeable Mg/S Batteries. <i>Angewandte Chemie</i> , 2017, 129, 13711-13715.	2.0	58
113	Tribocorrosion behaviors of multilayer PVD DLC coated 304L stainless steel in seawater. <i>Diamond and Related Materials</i> , 2017, 79, 70-78.	3.9	58
114	The corrosion behavior and film properties of Al-containing high-entropy alloys in acidic solutions. <i>Applied Surface Science</i> , 2021, 560, 149854.	6.1	58
115	Effects of dissolved oxygen on electrochemical and semiconductor properties of 316L stainless steel. <i>Journal of Nuclear Materials</i> , 2010, 407, 171-177.	2.7	57
116	Extracellular Electron Transfer Is a Bottleneck in the Microbiologically Influenced Corrosion of C1018 Carbon Steel by the Biofilm of Sulfate-Reducing Bacterium <i>Desulfovibrio vulgaris</i> . <i>PLoS ONE</i> , 2015, 10, e0136183.	2.5	57
117	Ageing behavior of acrylic polyurethane varnish coating in artificial weathering environments. <i>Progress in Organic Coatings</i> , 2009, 65, 504-509.	3.9	56
118	Scanning electrochemical microscopy study on the electrochemical behavior of CrN film formed on 304 stainless steel by magnetron sputtering. <i>Electrochimica Acta</i> , 2013, 114, 233-241.	5.2	56
119	The beneficial galvanic effect of the constituent phases in 2205 duplex stainless steel on the passive films formed in a 3.5% NaCl solution. <i>Corrosion Science</i> , 2018, 134, 122-130.	6.6	55
120	Enhancing the corrosion resistance of selective laser melted 15-5PH martensite stainless steel via heat treatment. <i>Corrosion Science</i> , 2020, 166, 108427.	6.6	55
121	Towards a better understanding of localised corrosion induced by typical non-metallic inclusions in low-alloy steels. <i>Corrosion Science</i> , 2021, 179, 109150.	6.6	55
122	The effect of nanosized NbC precipitates on electrochemical corrosion behavior of high-strength low-alloy steel in 3.5%NaCl solution. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 22175-22184.	7.1	54
123	Characterization of corrosion products formed on the surface of carbon steel by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 76-79.	2.5	53
124	Corrosion effect of <i>Bacillus cereus</i> on X80 pipeline steel in a Beijing soil environment. <i>Bioelectrochemistry</i> , 2018, 121, 18-26.	4.6	53
125	Long-term corrosion monitoring of carbon steels and environmental correlation analysis via the random forest method. <i>Npj Materials Degradation</i> , 2022, 6, .	5.8	53
126	Influence of pH on the passivation behaviour of 904L stainless steel bipolar plates for proton exchange membrane fuel cells. <i>Journal of Alloys and Compounds</i> , 2016, 686, 216-226.	5.5	52

#	ARTICLE	IF	CITATIONS
127	The effect of hydrogen on stress corrosion behavior of X65 steel welded joint in simulated deep sea environment. <i>Ocean Engineering</i> , 2016, 114, 216-223.	4.3	52
128	Effects of cathodic polarization on corrosion fatigue life of E690 steel in simulated seawater. <i>International Journal of Fatigue</i> , 2018, 110, 105-114.	5.7	52
129	Insight into the mechanism of alloying elements (Sn, Be) effect on copper corrosion during long-term degradation in harsh marine environment. <i>Applied Surface Science</i> , 2018, 455, 543-553.	6.1	52
130	Effect of grain size and crystallographic orientation on the corrosion behaviors of low alloy steel. <i>Journal of Alloys and Compounds</i> , 2021, 857, 158258.	5.5	52
131	Effects of Applied Magnetic Field on Corrosion of Beryllium Copper in NaCl Solution. <i>Journal of Materials Science and Technology</i> , 2010, 26, 355-361.	10.7	51
132	Passivation Behavior and Surface Chemistry of 2507 Super Duplex Stainless Steel in Acidified Artificial Seawater Containing Thiosulfate. <i>Journal of the Electrochemical Society</i> , 2017, 164, C856-C868.	2.9	51
133	A Universal Organic Cathode for Ultrafast Lithium and Multivalent Metal Batteries. <i>Angewandte Chemie</i> , 2018, 130, 7264-7268.	2.0	51
134	Electrochemical corrosion behavior of nickel coating with high density nano-scale twins (NT) in solution with Cl ⁻ . <i>Electrochimica Acta</i> , 2009, 54, 1578-1583.	5.2	50
135	Aging behavior and mechanism of ethylene-propylene-diene monomer (EPDM) rubber in fluorescent UV/condensation weathering environment. <i>Polymer Degradation and Stability</i> , 2009, 94, 339-343.	5.8	50
136	Effect of Surface Microstructures on Hydrophobicity and Barrier Property of Anticorrosive Coatings Prepared by Soft Lithography. <i>Advances in Materials Science and Engineering</i> , 2014, 2014, 1-7.	1.8	50
137	Metallic mesocrystal nanosheets of vanadium nitride for high-performance all-solid-state pseudocapacitors. <i>Nano Research</i> , 2015, 8, 193-200.	10.4	50
138	Sulfur loaded in micropore-rich carbon aerogel as cathode of lithium-sulfur battery with improved cyclic stability. <i>Journal of Power Sources</i> , 2016, 334, 23-30.	7.8	50
139	Comparative study of the SCC behavior of E690 steel and simulated HAZ microstructures in a SO ₂ -polluted marine atmosphere. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 650, 93-101.	5.6	50
140	Effect of Cr content on the passivation behavior of Cr alloy steel in a CO ₂ aqueous environment containing silty sand. <i>Corrosion Science</i> , 2020, 168, 108591.	6.6	50
141	Computational simulation of metastable pitting of stainless steel. <i>Electrochimica Acta</i> , 2009, 54, 6389-6395.	5.2	49
142	Three-dimensional porous carbon-coated graphene composite as high-stable and long-life anode for sodium-ion batteries. <i>Chemical Engineering Journal</i> , 2017, 316, 645-654.	12.7	49
143	Corrosion behaviour of AM60 magnesium alloys containing Ce or La under thin electrolyte layers. Part 2: Corrosion product and characterization. <i>Corrosion Science</i> , 2010, 52, 639-650.	6.6	48
144	Influence of rare earth metals on mechanisms of localised corrosion induced by inclusions in Zr-Ti deoxidised low alloy steel. <i>Corrosion Science</i> , 2020, 166, 108463.	6.6	48

#	ARTICLE	IF	CITATIONS
145	Sulfur loaded in curved graphene and coated with conductive polyaniline: preparation and performance as a cathode for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18098-18104.	10.3	47
146	Effect of Microstructures on Corrosion Behavior of Nickel Coatings: (I) Abnormal Grain Size Effect on Corrosion Behavior. <i>Journal of Materials Science and Technology</i> , 2015, 31, 1186-1192.	10.7	47
147	Effect of carbon nanotubes on the corrosion resistance of water-borne acrylic coatings. <i>Progress in Organic Coatings</i> , 2017, 110, 182-186.	3.9	47
148	Atmospheric Corrosion Behavior and Mechanism of a Ni-Advanced Weathering Steel in Simulated Tropical Marine Environment. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 6075-6086.	2.5	47
149	Durable lubricant-infused anodic aluminum oxide surfaces with high-aspect-ratio nanochannels. <i>Chemical Engineering Journal</i> , 2019, 368, 138-147.	12.7	47
150	Thermal degradation mechanism of dodecylbenzene sulfonic acid- hydrochloric acid co-doped polyaniline. <i>Polymer Degradation and Stability</i> , 2009, 94, 1788-1794.	5.8	46
151	The passive behaviour of ferritic stainless steel containing alloyed tin in acidic media. <i>RSC Advances</i> , 2016, 6, 9940-9949.	3.6	46
152	Field experiment of stress corrosion cracking behavior of high strength pipeline steels in typical soil environments. <i>Construction and Building Materials</i> , 2017, 148, 131-139.	7.2	46
153	Surface monitoring for pitting evolution into uniform corrosion on Cu-Ni-Zn ternary alloy in alkaline chloride solution: ex-situ LCM and in-situ SECM. <i>Applied Surface Science</i> , 2018, 440, 245-257.	6.1	46
154	Comparative study of the stress corrosion behavior of a multiuse bainite steel in the simulated tropical marine atmosphere and seawater environments. <i>Construction and Building Materials</i> , 2020, 239, 117903.	7.2	46
155	Self-healing corrosion protective coatings based on micro/nanocarriers: A review. <i>Corrosion Communications</i> , 2021, 1, 18-25.	6.0	46
156	Adaptive bidirectional extracellular electron transfer during accelerated microbiologically influenced corrosion of stainless steel. <i>Communications Materials</i> , 2021, 2, .	6.9	46
157	Effect of cold deformation on corrosion behavior of selective laser melted 316L stainless steel bipolar plates in a simulated environment for proton exchange membrane fuel cells. <i>Corrosion Science</i> , 2022, 201, 110257.	6.6	46
158	The role of chromium content in the long-term atmospheric corrosion process. <i>Npj Materials Degradation</i> , 2020, 4, .	5.8	45
159	High nitrogen-containing cotton derived 3D porous carbon frameworks for high-performance supercapacitors. <i>Scientific Reports</i> , 2015, 5, 15388.	3.3	44
160	Synthesis of a duplex Ni-P-YSZ/Ni-P nanocomposite coating and investigation of its performance. <i>Surface and Coatings Technology</i> , 2017, 311, 70-79.	4.8	44
161	Surface-adsorbed ions on TiO ₂ nanosheets for selective photocatalytic CO ₂ reduction. <i>Nano Research</i> , 2018, 11, 3362-3370.	10.4	44
162	Prediction and Knowledge Mining of Outdoor Atmospheric Corrosion Rates of Low Alloy Steels Based on the Random Forests Approach. <i>Metals</i> , 2019, 9, 383.	2.3	44

#	ARTICLE	IF	CITATIONS
163	Zn-Al-NO ₂ layered double hydroxide as a controlled-release corrosion inhibitor for steel reinforcements. <i>Materials Letters</i> , 2019, 236, 517-520.	2.6	44
164	Review Corrosion-Resistant High-Entropy Alloy Coatings: A Review. <i>Journal of the Electrochemical Society</i> , 2021, 168, 111502.	2.9	44
165	Corrosion Behavior of Field-Exposed Zinc in a Tropical Marine Atmosphere. <i>Corrosion</i> , 2014, 70, 731-748.	1.1	43
166	Corrosion behavior of nickel-containing weathering steel in simulated marine atmospheric environment. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2014, 65, 1033-1037.	1.5	43
167	Effect of stress on electrochemical characteristics of pre-cracked ultrahigh strength stainless steel in acid sodium sulphate solution. <i>Corrosion Science</i> , 2014, 89, 137-145.	6.6	43
168	The mechanism of stress corrosion cracking of Alloy 690TT in a caustic solution containing lead. <i>Corrosion Science</i> , 2017, 128, 154-163.	6.6	42
169	Improving atmospheric corrosion prediction through key environmental factor identification by random forest-based model. <i>Corrosion Science</i> , 2021, 178, 109084.	6.6	42
170	New insights into the mechanism of localised corrosion induced by TiN-containing inclusions in high strength low alloy steel. <i>Journal of Materials Science and Technology</i> , 2022, 124, 141-149.	10.7	42
171	Stress corrosion cracking behavior and mechanism of Fe-Mn-Al-C-Ni high specific strength steel in the marine atmospheric environment. <i>Corrosion Science</i> , 2021, 191, 109760.	6.6	40
172	Influence of nano-scale twins (NT) structure on passive film formed on nickel. <i>Electrochimica Acta</i> , 2010, 55, 2575-2581.	5.2	39
173	Sulfur encapsulated in porous carbon nanospheres and coated with conductive polyaniline as cathode of lithium-sulfur battery. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 153-161.	2.5	39
174	Distinct beneficial effect of Sn on the corrosion resistance of Cr-Mo low alloy steel. <i>Journal of Materials Science and Technology</i> , 2021, 81, 175-189.	10.7	39
175	A study of rust layer of low alloy structural steel containing 0.1 % Sb in atmospheric environment of the Yellow Sea in China. <i>Corrosion Science</i> , 2021, 188, 109549.	6.6	39
176	UV aging characterization of epoxy varnish coated steel upon exposure to artificial weathering environment. <i>Materials & Design</i> , 2009, 30, 1542-1547.	5.1	38
177	Confined Porous Graphene/SnO ₂ Frameworks within Polyaniline-Derived Carbon as Highly Stable Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 13410-13417.	8.0	38
178	Motion Behavior of Nonmetallic Inclusions at the Interface of Steel and Slag. Part I: Model Development, Validation, and Preliminary Analysis. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016, 47, 1882-1892.	2.1	38
179	Effect of pH and hydrogen on the stress corrosion cracking behavior of duplex stainless steel in marine atmosphere environment. <i>Ocean Engineering</i> , 2017, 146, 311-323.	4.3	38
180	Characteristics of hydrogen embrittlement in high-pH stress corrosion cracking of X100 pipeline steel in carbonate/ bicarbonate solution. <i>Construction and Building Materials</i> , 2020, 263, 120124.	7.2	38

#	ARTICLE	IF	CITATIONS
181	Prediction of polycarbonate degradation in natural atmospheric environment of China based on BP-ANN model with screened environmental factors. <i>Chemical Engineering Journal</i> , 2020, 399, 125878.	12.7	38
182	Highly stable GeO _x @C core-shell fibrous anodes for improved capacity in lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19907-19912.	10.3	37
183	A DFT study of the adsorption of O ₂ and H ₂ O on Al(111) surfaces. <i>RSC Advances</i> , 2016, 6, 56303-56312.	3.6	37
184	Tin nanoparticles embedded in porous N-doped graphene-like carbon network as high-performance anode material for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017, 699, 730-737.	5.5	36
185	The Combined Effect of Chemical and Structural Factors on Pitting Corrosion Induced by MnS-(Cr, Tj ETQq1 1 0.784314 rgBI /Overl	1.1	36
186	Acceleration of corrosion of 304 stainless steel by outward extracellular electron transfer of <i>Pseudomonas aeruginosa</i> biofilm. <i>Corrosion Science</i> , 2022, 199, 110159.	6.6	36
187	Effect of alternating current on stress corrosion cracking behavior and mechanism of X80 pipeline steel in near-neutral solution. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 38, 458-465.	4.4	35
188	In-situ investigation of the semiconductive properties and protective role of Cu ₂ O layer formed on copper in a borate buffer solution. <i>Journal of Electroanalytical Chemistry</i> , 2018, 809, 52-58.	3.8	35
189	Effect of applied potentials on stress corrosion cracking of X70 pipeline steel in alkali solution. <i>Materials & Design</i> , 2009, 30, 2259-2263.	5.1	34
190	Field corrosion characterization of soil corrosion of X70 pipeline steel in a red clay soil. <i>Progress in Natural Science: Materials International</i> , 2015, 25, 242-250.	4.4	34
191	Effect of temperature and Cl ⁻ concentration on pitting of 2205 duplex stainless steel. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2011, 26, 641-647.	1.0	33
192	Corrosion resistances of passive films on low-Cr steel and carbon steel in simulated concrete pore solution. <i>Surface and Interface Analysis</i> , 2016, 48, 981-989.	1.8	33
193	Bias design of amorphous/nanocrystalline Cr Al Si N films for remarkable anti-corrosion and anti-wear performances in seawater. <i>Tribology International</i> , 2018, 121, 410-419.	5.9	33
194	Effect of cathodic polarisation on stress corrosion cracking behaviour of a Ni(Fe, Al)-maraging steel in artificial seawater. <i>Corrosion Science</i> , 2021, 179, 109176.	6.6	33
195	Promotion Effects of Copper and Lanthanum Oxides on Nickel/Gamma-Alumina Catalyst in the Hydrotreating of Crude 2-Ethylhexanol. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17787-17794.	3.1	32
196	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.	4.7	32
197	Direct evidence of passive film growth on 316 stainless steel in alkaline solution. <i>Materials Characterization</i> , 2017, 131, 168-174.	4.4	32
198	XPS investigations on the corrosion mechanism of V(IV) conversion coatings on hot-dip galvanized steel. <i>Corrosion Science</i> , 2018, 139, 163-171.	6.6	32

#	ARTICLE	IF	CITATIONS
199	Effect of SO ₂ content on SCC behavior of E690 high-strength steel in SO ₂ -polluted marine atmosphere. <i>Ocean Engineering</i> , 2018, 164, 256-262.	4.3	32
200	Cr-modified low alloy steel reinforcement embedded in mortar for two years: Corrosion result of marine field test. <i>Cement and Concrete Composites</i> , 2019, 97, 190-201.	10.7	32
201	Understanding environmental impacts on initial atmospheric corrosion based on corrosion monitoring sensors. <i>Journal of Materials Science and Technology</i> , 2021, 64, 214-221.	10.7	32
202	Relationship between electrochemical characteristics and SCC of X70 pipeline steel in an acidic soil simulated solution. <i>Acta Metallurgica Sinica (English Letters)</i> , 2009, 22, 58-64.	2.9	31
203	Evaluation of aging behavior of polypropylene in natural environment by principal component analysis. <i>Polymer Testing</i> , 2014, 33, 131-137.	4.8	31
204	Effect of negative half-wave alternating current on stress corrosion cracking behavior and mechanism of X80 pipeline steel in near-neutral solution. <i>Construction and Building Materials</i> , 2017, 154, 580-589.	7.2	31
205	Electrochemical measurements and atomistic simulations of Cl ⁻ -induced passivity breakdown on a Cu ₂ O film. <i>Corrosion Science</i> , 2018, 136, 119-128.	6.6	31
206	Effect of phytic acid on the microstructure and corrosion resistance of Ni coating. <i>Electrochimica Acta</i> , 2010, 55, 5990-5995.	5.2	30
207	Corrosion Behavior of Field-Exposed 7A04 Aluminum Alloy in the Xisha Tropical Marine Atmosphere. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 2885-2897.	2.5	30
208	Anti-corrosion properties of oligoaniline modified silica hybrid coatings for low-carbon steel. <i>Synthetic Metals</i> , 2018, 235, 61-70.	3.9	30
209	Effect of prior austenite grain boundaries on corrosion fatigue behaviors of E690 high strength low alloy steel in simulated marine atmosphere. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 773, 138884.	5.6	30
210	Comparative study on corrosion fatigue behaviour of high strength low alloy steel and simulated HAZ microstructures in a simulated marine atmosphere. <i>International Journal of Fatigue</i> , 2020, 137, 105666.	5.7	30
211	Optimization of Mo on the corrosion resistance of Cr-advanced weathering steel designed for tropical marine atmosphere. <i>Construction and Building Materials</i> , 2021, 302, 124346.	7.2	30
212	Effect of annealing temperatures on microstructural evolution and corrosion behavior of Ti-Mo titanium alloy in hydrochloric acid. <i>Corrosion Science</i> , 2022, 197, 110079.	6.6	30
213	Corrosion mechanism of corrosion-resistant steel developed for bottom plate of cargo oil tanks. <i>Acta Metallurgica Sinica (English Letters)</i> , 2013, 26, 257-264.	2.9	29
214	Electrochemical Behavior and Nonlinear Mott-Schottky Characterization of a Stainless Steel Passive Film. <i>Analytical Letters</i> , 2014, 47, 1162-1181.	1.8	29
215	The corrosion behavior of PCB-ImAg in industry polluted marine atmosphere environment. <i>Materials and Design</i> , 2017, 115, 404-414.	7.0	29
216	Failure mechanism transition of hydrogen embrittlement in AISI 304 K-TIG weld metal under tensile loading. <i>Corrosion Science</i> , 2018, 130, 241-251.	6.6	29

#	ARTICLE	IF	CITATIONS
217	Modeling for corrosion fatigue crack initiation life based on corrosion kinetics and equivalent initial flaw size theory. <i>Corrosion Science</i> , 2018, 142, 277-283.	6.6	29
218	Understanding the effect of niobium on hydrogen-induced blistering in pipeline steel: A combined experimental and theoretical study. <i>Corrosion Science</i> , 2019, 159, 108142.	6.6	29
219	Electrochemical characteristic and stress corrosion behavior of API X70 high-strength pipeline steel under a simulated disbonded coating in an artificial seawater environment. <i>Journal of Electroanalytical Chemistry</i> , 2019, 845, 92-105.	3.8	29
220	d-Cysteine functionalised silver nanoparticles surface with a "disperse-then-kill" antibacterial synergy. <i>Chemical Engineering Journal</i> , 2020, 381, 122662.	12.7	29
221	Initial microzonal corrosion mechanism of inclusions associated with the precipitated (Ti, Nb)N phase of Sb-containing weathering steel. <i>Corrosion Science</i> , 2020, 163, 108232.	6.6	29
222	Effects of the Addition of Cu and Ni on the Corrosion Behavior of Weathering Steels in Corrosive Industrial Environments. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 2531-2541.	2.5	29
223	Saline-responsive triple-action self-healing coating for intelligent corrosion control. <i>Materials and Design</i> , 2022, 214, 110381.	7.0	29
224	Effect of Nanosized NbC Precipitates on Hydrogen Diffusion in X80 Pipeline Steel. <i>Materials</i> , 2017, 10, 721.	2.9	28
225	Failure Mechanisms of the Coating/Metal Interface in Waterborne Coatings: The Effect of Bonding. <i>Materials</i> , 2017, 10, 397.	2.9	28
226	Effect of Zinc Phosphate on the Corrosion Behavior of Waterborne Acrylic Coating/Metal Interface. <i>Materials</i> , 2017, 10, 654.	2.9	28
227	Enhanced silver loaded antibacterial titanium implant coating with novel hierarchical effect. <i>Journal of Biomaterials Applications</i> , 2018, 32, 1289-1299.	2.4	28
228	Crack growth behaviour of E690 steel in artificial seawater with various pH values. <i>Corrosion Science</i> , 2020, 164, 108336.	6.6	28
229	Surface degradation of ethylene-propylene diene monomer (EPDM) containing 5-ethylidene-2-norbornene (ENB) as diene in artificial weathering environment. <i>Polymer Degradation and Stability</i> , 2008, 93, 692-699.	5.8	27
230	Preparation and performance of a composite polyimide/poly(vinylidene fluoride-co-hexafluoroisopropylidene) (PVDF-HFP) film. <i>Journal of Membrane Science</i> , 2015, 21, 1937-1943.	2.4	27
231	Electrochemical Migration Behavior of Copper-Clad Laminate and Electroless Nickel/Immersion Gold Printed Circuit Boards under Thin Electrolyte Layers. <i>Materials</i> , 2017, 10, 137.	2.9	27
232	Corrosion and SCC initiation behavior of low-alloy high-strength steels microalloyed with Nb and Sb in a simulated polluted marine atmosphere. <i>Journal of Materials Research and Technology</i> , 2020, 9, 12976-12995.	5.8	27
233	Study of biofilm-influenced corrosion on X80 pipeline steel by a nitrate-reducing bacterium, <i>Bacillus cereus</i> , in artificial Beijing soil. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 197, 111356.	5.0	27
234	Study on corrosion behavior of β -Sn and intermetallic compounds phases in SAC305 alloy by in-situ EC-AFM and first-principles calculation. <i>Corrosion Science</i> , 2021, 181, 109244.	6.6	27

#	ARTICLE	IF	CITATIONS
235	Effect of pH value on stress corrosion cracking of X70 pipeline steel in acidic soil environment. <i>Acta Metallurgica Sinica (English Letters)</i> , 2013, 26, 489-496.	2.9	26
236	Surface failure analysis of a field-exposed copper-clad plate in a marine environment with industrial pollution. <i>Applied Surface Science</i> , 2017, 399, 608-616.	6.1	26
237	Recent Advances in Scanning Electrochemical Microscopy for Biological Applications. <i>Materials</i> , 2018, 11, 1389.	2.9	26
238	The effect of nickel on corrosion behaviour of high-strength low alloy steel rebar in simulated concrete pore solution. <i>Construction and Building Materials</i> , 2020, 246, 118462.	7.2	26
239	Accelerating effect of catalase on microbiologically influenced corrosion of 304 stainless steel by the halophilic archaeon <i>Natronorubrum tibetense</i> . <i>Corrosion Science</i> , 2021, 178, 109057.	6.6	26
240	Effect of hydrogen charging on SCC of 2205 duplex stainless steel with varying microstructures in simulated deep-sea environment. <i>Corrosion Science</i> , 2022, 196, 110026.	6.6	26
241	Role of CO ₂ in the initial stage of atmospheric corrosion of AZ91 magnesium alloy in the presence of NaCl. <i>Rare Metals</i> , 2006, 25, 190-196.	7.1	25
242	Effects of mould on electrochemical migration behaviour of immersion silver finished printed circuit board. <i>Bioelectrochemistry</i> , 2018, 119, 203-210.	4.6	25
243	Hardness, microstructure and texture of friction surfaced 17-4PH precipitation hardening stainless steel coatings with and without subsequent aging. <i>Surface and Coatings Technology</i> , 2020, 402, 126302.	4.8	25
244	Hydrotreating of crude 2-ethylhexanol over Ni/Al ₂ O ₃ catalysts: Influence of the Ni oxide dispersion on the active sites. <i>Applied Catalysis A: General</i> , 2010, 383, 112-118.	4.3	24
245	Surface analysis of silver-plated circuit boards in a salt-spray environment. <i>Journal of Alloys and Compounds</i> , 2016, 688, 301-312.	5.5	24
246	Study on the Hydrogen Embrittlement of Aermet100 Using Hydrogen Permeation and SSRT Techniques. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 4046-4057.	2.2	24
247	Plasma-modified C-doped Co ₃ O ₄ nanosheets for the oxygen evolution reaction designed by Butler-Volmer and first-principle calculations. <i>Journal of Materials Chemistry A</i> , 2019, 7, 4581-4595.	10.3	24
248	Failure analysis of a 304 stainless steel heat exchanger in liquid sulfur recovery units. <i>Engineering Failure Analysis</i> , 2020, 116, 104729.	4.0	24
249	Computational simulation and efficient evaluation on corrosion inhibitors for electrochemical etching on aluminum foil. <i>Corrosion Science</i> , 2021, 187, 109492.	6.6	24
250	Properties of passive film formed on 316L / 2205 stainless steel by Mott-Schottky theory and constant current polarization method. <i>Science Bulletin</i> , 2009, 54, 2239-2246.	1.7	23
251	Nano-scale oxidation of copper in aqueous solution. <i>Electrochemistry Communications</i> , 2013, 26, 21-24.	4.7	23
252	Effect of Strength and Microstructure on Stress Corrosion Cracking Behavior and Mechanism of X80 Pipeline Steel in High pH Carbonate/Bicarbonate Solution. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 1358-1365.	2.5	23

#	ARTICLE	IF	CITATIONS
253	Effect of Sulfide Concentration on Copper Corrosion in Anoxic Chloride-Containing Solutions. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 1741-1750.	2.5	23
254	Oxygen-induced degradation of the electronic properties of thin-layer InSe. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 2238-2250.	2.8	23
255	Size matching effect between anion vacancies and halide ions in passive film breakdown on copper. <i>Electrochimica Acta</i> , 2018, 292, 817-827.	5.2	23
256	Effects of Nb on stress corrosion cracking of high-strength low-alloy steel in simulated seawater. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 27962-27973.	7.1	23
257	Multi-action self-healing coatings with simultaneous recovery of corrosion resistance and adhesion strength. <i>Journal of Materials Science and Technology</i> , 2022, 101, 18-27.	10.7	23
258	Smart protective coatings with self-sensing and active corrosion protection dual functionality from pH-sensitive calcium carbonate microcontainers. <i>Corrosion Science</i> , 2022, 200, 110254.	6.6	23
259	Stress corrosion cracking of ultrahigh strength martensite steel Cr9Ni5MoCo14 in 3.5% NaCl solution. <i>Aerospace Science and Technology</i> , 2014, 36, 125-131.	4.8	22
260	Effects of Carbon Content and Microstructure on Corrosion Property of New Developed Steels in Acidic Salt Solutions. <i>Acta Metallurgica Sinica (English Letters)</i> , 2014, 27, 115-123.	2.9	22
261	Surface failure mechanism of PCB-ENIG in typical outdoor atmospheric environments. <i>Materials Research Bulletin</i> , 2017, 91, 179-188.	5.2	22
262	Effect of alternating current and <i>Bacillus cereus</i> on the stress corrosion behavior and mechanism of X80 steel in a Beijing soil solution. <i>Bioelectrochemistry</i> , 2019, 127, 49-58.	4.6	22
263	Integrated computation of corrosion: Modelling, simulation and applications. <i>Corrosion Communications</i> , 2021, 2, 8-23.	6.0	22
264	Selective Catalytic Reduction of NO by Ammonia on V2O5/TiO2 Catalyst Prepared by Sol-gel Method. <i>Catalysis Letters</i> , 2009, 130, 235-238.	2.6	21
265	The influence of different metallic counterparts on the tribological performance of nc-CrC/GLC in seawater. <i>Surface and Coatings Technology</i> , 2017, 325, 689-696.	4.8	21
266	Effect of Manufacturing Parameters on the Mechanical and Corrosion Behavior of Selective Laser-Melted 15%PH Stainless Steel. <i>Steel Research International</i> , 2020, 91, 1900447.	1.8	21
267	Effect of grain ultra-refinement on microstructure, tensile property, and corrosion behavior of low alloy steel. <i>Materials Characterization</i> , 2021, 179, 111385.	4.4	21
268	Surface degradation of unsaturated polyester resin in Xe artificial weathering environment. <i>Materials & Design</i> , 2010, 31, 4457-4460.	5.1	20
269	Preparation and characterization of pH-controlled-release intelligent corrosion inhibitor. <i>Materials Letters</i> , 2014, 116, 318-321.	2.6	20
270	Atmospheric corrosion behaviour of pure Al 1060 in tropical marine environment. <i>Corrosion Engineering Science and Technology</i> , 2015, 50, 438-448.	1.4	20

#	ARTICLE	IF	CITATIONS
271	In Situ Formation of Decavanadate-Intercalated Layered Double Hydroxide Films on AA2024 and their Anti-Corrosive Properties when Combined with Hybrid Sol Gel Films. <i>Materials</i> , 2017, 10, 426.	2.9	20
272	Effect of interlayer design on friction and wear behaviors of CrAlSiN coating under high load in seawater. <i>RSC Advances</i> , 2018, 8, 5596-5607.	3.6	20
273	Effect of chloride concentration on passive film properties on copper. <i>Corrosion Engineering Science and Technology</i> , 2018, 53, 122-130.	1.4	20
274	The Corrosion Behavior of AZ91D Magnesium Alloy in Simulated Haze Aqueous Solution. <i>Materials</i> , 2018, 11, 970.	2.9	20
275	Effect of grain size and its uniformity on corrosion resistance of rolled 316L stainless steel by EBSD and TEM. <i>Materials Today Communications</i> , 2020, 25, 101429.	1.9	20
276	Corrosion characteristics of Q690qE high-strength bridge steel in simulated coastal industrial environment and its influence on mechanical and corrosion fatigue behaviors. <i>Construction and Building Materials</i> , 2022, 341, 127830.	7.2	20
277	Preparation and characterization of anticorrosion Ormosil sol-gel coatings for aluminum alloy. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 72, 8-20.	2.4	19
278	A photoelectrochemical sensor for lead ion through electrodeposition of PbS nanoparticles onto TiO ₂ nanotubes. <i>Journal of Electroanalytical Chemistry</i> , 2015, 759, 51-54.	3.8	19
279	Investigation on mechanical, corrosion resistance and antibacterial properties of Cu-bearing 2205 duplex stainless steel by solution treatment. <i>RSC Advances</i> , 2016, 6, 112738-112747.	3.6	19
280	Erosion-corrosion behavior of 2205 duplex stainless steel in wet gas environments. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 35, 928-934.	4.4	19
281	The effect of hydrogen on the evolution of intergranular cracking: a cross-scale study using first-principles and cohesive finite element methods. <i>RSC Advances</i> , 2016, 6, 27282-27292.	3.6	19
282	Surface etching induced ultrathin sandwich structure realizing enhanced photocatalytic activity. <i>Science China Chemistry</i> , 2018, 61, 1572-1580.	8.2	19
283	Surface characterization of the commercially pure titanium after hydrogen charging and its electrochemical characteristics in artificial seawater. <i>Journal of Electroanalytical Chemistry</i> , 2018, 822, 23-32.	3.8	19
284	Corrosion fatigue behavior of Fe-16Mn-0.6C-1.68Al twinning-induced plasticity steel in simulated seawater. <i>Corrosion Science</i> , 2021, 182, 109282.	6.6	19
285	Hydrogen induced microstructure evolution and cracking mechanism in a metastable dual-phase high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 819, 141490.	5.6	19
286	Comparative study on the stress corrosion cracking of a new Ni-advanced high strength steel prepared by TMCP, direct quenching, and quenching & tempering. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 825, 141854.	5.6	19
287	Preparation and evaluation of intelligent corrosion inhibitor based on photo-crosslinked pH-sensitive hydrogels. <i>Materials Letters</i> , 2015, 160, 480-483.	2.6	18
288	Machine learning assistance for electrochemical curve simulation of corrosion and its application. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2020, 71, 474-484.	1.5	18

#	ARTICLE	IF	CITATIONS
289	Insight into TiN inclusion induced pit corrosion of interstitial free steel exposed to aerated NaCl solution. <i>Journal of Materials Research and Technology</i> , 2021, 13, 13-24.	5.8	18
290	Effect of electrochemical hydrogen charging on the mechanical property and corrosion behavior of Ti-3Mo alloy. <i>Corrosion Science</i> , 2022, 200, 110219.	6.6	18
291	Effects of cathodic potential on the local electrochemical environment under a disbanded coating. <i>Journal of Applied Electrochemistry</i> , 2009, 39, 697-704.	2.9	17
292	Pitting corrosion behaviour of AZ31 magnesium in tropical marine atmosphere. <i>Corrosion Engineering Science and Technology</i> , 2014, 49, 363-371.	1.4	17
293	Density functional theory study of SO ₂ -adsorbed Ni(1 1 1) and hydroxylated NiO(1 1 1) surface. <i>Applied Surface Science</i> , 2015, 355, 429-435.	6.1	17
294	Corrosion Behavior and Durability of Low-Alloy Steel Rebars in Marine Environment. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 4967-4979.	2.5	17
295	Effects of lead on oxidation behavior of Alloy 690TT within a high temperature aqueous environment. <i>Applied Surface Science</i> , 2017, 426, 514-526.	6.1	17
296	Correlation between grain boundaries, carbides and stress corrosion cracking of Alloy 690TT in a high temperature caustic solution with lead. <i>Corrosion Science</i> , 2018, 144, 97-106.	6.6	17
297	Long-term corrosion kinetics and mechanism of magnesium alloy AZ31 exposed to a dry tropical desert environment. <i>Corrosion Science</i> , 2020, 163, 108274.	6.6	17
298	Magnetically responsive lubricant-infused porous surfaces with controllable lubricity and durable anti-icing performance. <i>Surface and Coatings Technology</i> , 2021, 406, 126742.	4.8	17
299	High-throughput computing for screening the potential alloying elements of a 7xxx aluminum alloy for increasing the alloy resistance to stress corrosion cracking. <i>Corrosion Science</i> , 2021, 183, 109304.	6.6	17
300	A new study for healing pitting defects of 316L stainless steel based on microarc technology. <i>Corrosion Science</i> , 2021, 187, 109505.	6.6	17
301	Revealing the inner rules of PREN from electronic aspect by first-principles calculations. <i>Corrosion Science</i> , 2021, 189, 109561.	6.6	17
302	CORROSION BEHAVIOR OF 5052 AND 6061 ALUMINUM ALLOYS IN DEEP OCEAN ENVIRONMENT OF SOUTH CHINA SEA. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013, 49, 1219.	0.3	17
303	Effect of artificial weathering on surface properties of unsaturated polyester (UP) resin. <i>Materials Chemistry and Physics</i> , 2010, 121, 193-197.	4.0	16
304	Effect of acetic acid on CO ₂ corrosion of 3Cr low-alloy steel. <i>Materials Chemistry and Physics</i> , 2012, 132, 258-263.	4.0	16
305	The Influence of Aluminum Tripolyphosphate on the Protective Behavior of an Acrylic Water-Based Paint Applied to Rusty Steels. <i>Journal of Chemistry</i> , 2015, 2015, 1-10.	1.9	16
306	Influence of pore defects on the mechanical property and corrosion behavior of SLM 18Ni300 maraging steel. <i>Materials Characterization</i> , 2021, 182, 111514.	4.4	16

#	ARTICLE	IF	CITATIONS
307	Growth behavior of Cu/Al intermetallic compounds in hot-dip aluminized copper. <i>Surface and Interface Analysis</i> , 2009, 41, 361-365.	1.8	15
308	Passivation of Nickel Nanoneedles in Aqueous Solutions. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9073-9077.	3.1	15
309	Microbially Influenced Corrosion of 304 Stainless Steel and Titanium by <i>P. variotii</i> and <i>A. niger</i> in Humid Atmosphere. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 2688-2698.	2.5	15
310	The formation and corrosion behavior of a zirconium-based conversion coating on the aluminum alloy AA6061. <i>Journal of Coatings Technology Research</i> , 2016, 13, 837-850.	2.5	15
311	Failure analysis of leakage caused by perforation in an L415 steel gas pipeline. <i>Case Studies in Engineering Failure Analysis</i> , 2017, 9, 63-70.	1.2	15
312	Effect of iron ion diffusion on the corrosion behavior of carbon steels in soil environment. <i>RSC Advances</i> , 2018, 8, 40544-40553.	3.6	15
313	Revealing bioinorganic interface in microbially influenced corrosion with FIB-SEM/TEM. <i>Corrosion Science</i> , 2020, 173, 108763.	6.6	15
314	Analysis of Corrosion Evolution in Carbon Steel in the Subtropical Atmospheric Environment of Sichuan. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 8014-8022.	2.5	15
315	Electrochemical studies of microbially influenced corrosion of X80 steel by nitrate-reducing <i>Bacillus licheniformis</i> under anaerobic conditions. <i>Journal of Materials Science and Technology</i> , 2022, 118, 208-217.	10.7	15
316	Preparation and characterization of bimodal porous alumina-silica and its application to removal of basic nitrogen compounds from light oil. <i>Journal of Materials Chemistry</i> , 2007, 17, 2233-2240.	6.7	14
317	Evaluation of ethylene-propylene diene monomer (EPDM) aging in UV/condensation environment by principal component analysis (PCA). <i>Materials Letters</i> , 2009, 63, 1647-1649.	2.6	14
318	Electrochemical and Initial Corrosion Behavior of Ultrahigh Strength Steel by Scanning Kelvin Probe. <i>Journal of Materials Engineering and Performance</i> , 2013, 22, 815-822.	2.5	14
319	Co-adsorption of O_2 and H_2O on Al(111) surface: a vdW-DFT study. <i>RSC Advances</i> , 2016, 6, 79836-79843.	3.6	14
320	The role of surface morphology in the barrier properties of epoxy coatings in different corrosion environments. <i>Progress in Organic Coatings</i> , 2017, 104, 199-209.	3.9	14
321	Effects of Niobium on the Mechanical Properties and Corrosion Behavior of Simulated Weld HAZ of HSLA Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 187-197.	2.2	14
322	Understanding of the corrosion protection by V(IV) conversion coatings from a sol-gel perspective. <i>Corrosion Science</i> , 2019, 161, 108196.	6.6	14
323	Simultaneous Thermal Stability and Ultrahigh Sensitivity of Heterojunction SERS Substrates. <i>Nanomaterials</i> , 2019, 9, 830.	4.1	14
324	Vertical galvanic corrosion of pipeline steel in simulated marine thermocline. <i>Ocean Engineering</i> , 2020, 217, 107584.	4.3	14

#	ARTICLE	IF	CITATIONS
325	Corrosion Behaviors of Carbon Steel and Ni-Advanced Weathering Steel Exposed to Tropical Marine Atmosphere. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 6417-6426.	2.5	14
326	EFFECT OF MOLD ON CORROSION BEHAVIOR OF PRINTED CIRCUIT BOARD-COPPER AND ENIG FINISHED. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2012, 48, 687.	0.3	14
327	Corrosion protection of galvanized sheet by maleic anhydride-g-liquid polybutadiene environmental friendly coatings. <i>Progress in Organic Coatings</i> , 2008, 63, 195-200.	3.9	13
328	Atmospheric Corrosion Behavior of 2A12 Aluminum Alloy in a Tropical Marine Environment. <i>Advances in Materials Science and Engineering</i> , 2015, 2015, 1-17.	1.8	13
329	Electrochemical and passivation behavior investigation of ferritic stainless steel in simulated concrete pore media. <i>Data in Brief</i> , 2015, 5, 171-178.	1.0	13
330	The stability of passive film growth on copper in anaerobic sulphide solutions. <i>Corrosion Engineering Science and Technology</i> , 2017, 52, 188-194.	1.4	13
331	Characterization of the Passive Film and Corrosion of Martensitic AM355 Stainless Steel. <i>Analytical Letters</i> , 2017, 50, 1091-1111.	1.8	13
332	Electrochemical and Stress Corrosion Mechanism of Submarine Pipeline in Simulated Seawater in Presence of Different Alternating Current Densities. <i>Materials</i> , 2018, 11, 1074.	2.9	13
333	Data-mining and atmospheric corrosion resistance evaluation of Sn- and Sb-additional low alloy steel based on big data technology. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022, 29, 825-835.	4.9	13
334	Raman and IR spectroscopy study of corrosion products on the surface of the hot-dip galvanized steel with alkaline mud adhesion. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 656-660.	2.5	12
335	Lithium-ion battery remaining useful life prediction based on grey support vector machines. <i>Advances in Mechanical Engineering</i> , 2015, 7, 168781401562232.	1.6	12
336	Influences of HfC particles on microstructure, mechanical properties and ablation resistance at elevated temperature of Mo-15W-HfC alloys. <i>International Journal of Refractory Metals and Hard Materials</i> , 2017, 67, 56-67.	3.8	12
337	A new understanding of the failure of waterborne acrylic coatings. <i>RSC Advances</i> , 2017, 7, 38135-38148.	3.6	12
338	Influence of Rust Permeability on Corrosion of E690 Steel in Industrial and Non-industrial Marine Splash Zones. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 3742-3749.	2.5	12
339	Correlation between the surface aging of acrylic polyurethane coatings and environmental factors. <i>Progress in Organic Coatings</i> , 2019, 132, 362-369.	3.9	12
340	Self-healing effect of damaged coatings via biomineralization by <i>Shewanella putrefaciens</i> . <i>Corrosion Science</i> , 2022, 196, 110067.	6.6	12
341	Electrochemical corrosion behavior of carbon steel with bulk coating holidays. <i>International Journal of Minerals, Metallurgy, and Materials</i> , 2006, 13, 37-43.	0.2	11
342	Effect of deteriorated microstructures on stress corrosion cracking of X70 pipeline steel in acidic soil environment. <i>International Journal of Minerals, Metallurgy, and Materials</i> , 2008, 15, 707-713.	0.2	11

#	ARTICLE	IF	CITATIONS
343	High Pitting Corrosion Resistance of Pure Aluminum with Nanoscale Twins. <i>Journal of the Electrochemical Society</i> , 2009, 156, C240.	2.9	11
344	Degradation evaluation of ethylene- α -propylene- α -diene monomer (EPDM) rubber in artificial weathering environment by principal component analysis. <i>Materials Letters</i> , 2009, 63, 116-117.	2.6	11
345	Effect of pH on Semiconducting Property of Passive Film Formed on Ultra-High-Strength Corrosion-Resistant Steel in Sulfuric Acid Solution. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 4709-4717.	2.2	11
346	Effect of Hydrogen Charging on the Stress Corrosion Behavior of 2205 Duplex Stainless Steel Under 3.5Åwt.% NaCl Thin Electrolyte Layer. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 2837-2846.	2.5	11
347	Alkalescent nanotube films on a titanium-based implant: A novel approach to enhance biocompatibility. <i>Materials Science and Engineering C</i> , 2017, 72, 464-471.	7.3	11
348	Quantitative analysis of the polarization behavior of iron in an aerated acidic solution using SECM. <i>Electrochemistry Communications</i> , 2018, 93, 143-147.	4.7	11
349	Effect of AC Current Density on the Stress Corrosion Cracking Behavior and Mechanism of E690 High-Strength Steel in Simulated Seawater. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 6931-6941.	2.5	11
350	The Correlation Between the Distribution/Size of Carbides and Electrochemical Behavior of 17Cr-1Ni Ferritic-Martensitic Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 388-400.	2.2	11
351	Ni-Fe-MoO ₄ ²⁻ -LDHs/epoxy resin varnish: A composite coating on carbon steel for long-time and active corrosion protection. <i>Progress in Organic Coatings</i> , 2020, 140, 105514.	3.9	11
352	Stress Corrosion Cracking of 2205 Duplex Stainless Steel with Simulated Welding Microstructures in Simulated Sea Environment at Different Depths. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 5476-5489.	2.5	11
353	Effect of Sb on the Corrosion Behavior of Low-Alloy Steels in a Simulated Polluted Marine Atmosphere. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 2648-2657.	2.5	11
354	Mechanical assisted electroless barrel-plating Ni-P coatings on magnesium alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2009, 22, 225-232.	2.9	10
355	Influence of processing parameters on the preparation of CuInS ₂ thin film by one-step electrodeposition as the solar cell absorber. <i>Surface and Coatings Technology</i> , 2012, 212, 55-60.	4.8	10
356	The Coupled Effect of Temperature and Carbonation on the Corrosion of Rebars in the Simulated Concrete Pore Solutions. <i>Journal of Chemistry</i> , 2015, 2015, 1-6.	1.9	10
357	Initial Corrosion Behavior and Mechanism of PCB- α -HASL in Typical Outdoor Environments in China. <i>Journal of Electronic Materials</i> , 2015, 44, 4405-4417.	2.2	10
358	Influence of sea mud state on the anodic behavior of Al-Zn-In-Mg-Ti sacrificial anode. <i>Ocean Engineering</i> , 2017, 136, 11-17.	4.3	10
359	The mechanisms of corrosion inhibition of hot-dip galvanized steel by vanadyl oxalate: A galvanic corrosion investigation supported by XPS. <i>Corrosion Science</i> , 2018, 142, 153-160.	6.6	10
360	Variation of the Corrosion Behavior Prior to Crack Initiation of E690 Steel Fatigued in Simulated Seawater with Various Cyclic Stress Levels. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 4921-4931.	2.5	10

#	ARTICLE	IF	CITATIONS
361	Corrosion Acceleration of Printed Circuit Boards With an Immersion Silver Layer Exposed to <i>Bacillus cereus</i> in an Aerobic Medium. <i>Frontiers in Microbiology</i> , 2019, 10, 1493.	3.5	10
362	Effect of silty sand on the pre-passivation behaviour of 1Cr steel in a CO ₂ aqueous environment. <i>Corrosion Engineering Science and Technology</i> , 2020, 55, 205-216.	1.4	10
363	Comparative effect of (111) and (100) crystallographic orientation on the passive behavior of low alloy steels in bicarbonate solution. <i>Applied Surface Science</i> , 2021, 561, 150066.	6.1	10
364	Hydrogen embrittlement of high-strength marine steel as a weld joint in artificial seawater under cathodic polarization. <i>Engineering Failure Analysis</i> , 2022, 134, 106044.	4.0	10
365	Effect of refining grain size on the corrosion behavior of Cr(III) conversion layers on zinc coatings. <i>Scripta Materialia</i> , 2009, 61, 1004-1007.	5.2	9
366	Exfoliation Corrosion Behavior of 2B06 Aluminum Alloy in a Tropical Marine Atmosphere. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 296-306.	2.5	9
367	Method for measuring thermal contact resistance of graphite thin film materials. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 93, 202-207.	5.0	9
368	Double layer water-borne heat insulation coatings containing hollow glass microspheres (HGMs). <i>Pigment and Resin Technology</i> , 2016, 45, 346-353.	0.9	9
369	Indoor accelerated corrosion test and marine field test of corrosion-resistant low-alloy steel rebars. <i>Case Studies in Construction Materials</i> , 2016, 5, 87-99.	1.7	9
370	Initial corrosion behavior of a copper-clad plate in typical outdoor atmospheric environments. <i>Electronic Materials Letters</i> , 2016, 12, 163-170.	2.2	9
371	Passive Film Properties and Electrochemical Behavior of Co-Cr-Mo Stainless Steel in Chloride Solution. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 2237-2243.	2.5	9
372	The micro-solution electrochemical method to evaluate rebar corrosion in reinforced concrete structures. <i>Construction and Building Materials</i> , 2017, 151, 607-614.	7.2	9
373	Role of mold in electrochemical migration of copper-clad laminate and electroless nickel/immersion gold printed circuit boards. <i>Materials Letters</i> , 2018, 210, 283-286.	2.6	9
374	Discontinuous model combined with an atomic mechanism simulates the precipitated ϵ phase effect in intergranular cracking of 7-series aluminum alloys. <i>Computational Materials Science</i> , 2019, 166, 282-292.	3.0	9
375	Improved Stress Corrosion Cracking Resistance of High-Strength Low-Alloy Steel in a Simulated Deep-Sea Environment via Nb Microalloying. <i>Steel Research International</i> , 2021, 92, 2000596.	1.8	9
376	Development and optimization of Ni-advanced weathering steel: A review. <i>Corrosion Communications</i> , 2021, 2, 82-90.	6.0	9
377	Effect of Hydrogen Charging on the Stress Corrosion Cracking Behavior of X70 Steel in Simulated Deep Seawater Environment. <i>Metals</i> , 2022, 12, 334.	2.3	9
378	Corrosion resistance of 316L stainless steel in acetic acid by EIS and Mott-Schottky. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2008, 23, 574-578.	1.0	8

#	ARTICLE	IF	CITATIONS
379	Effect of Al(OH) ₃ Particle Fraction on Mechanical Properties of Particle-Reinforced Composites Using Unsaturated Polyester as Matrix. <i>Journal of Failure Analysis and Prevention</i> , 2010, 10, 515-519.	0.9	8
380	Hydrotreating performance of La-modified Ni/Al ₂ O ₃ catalysts prepared by hydrothermal impregnation method. <i>Kinetics and Catalysis</i> , 2015, 56, 222-225.	1.0	8
381	Evidence of a nanosized copper anodic reaction in an anaerobic sulfide aqueous solution. <i>RSC Advances</i> , 2016, 6, 19937-19943.	3.6	8
382	Corrosion Performance of Carbon Steel in CO ₂ Aqueous Environment Containing Silty Sand with Different Sizes. <i>Acta Metallurgica Sinica (English Letters)</i> , 2017, 30, 1055-1066.	2.9	8
383	Characterization of the Outer Layer Nanostructure in the Electrochemical Response of Stainless Steel in Aqueous Sodium Hydroxide. <i>Analytical Letters</i> , 2018, 51, 1384-1399.	1.8	8
384	Scanning Kelvin Probe Force Microscopy and Density Functional Theory Studies on the Surface Potential of the Intermetallics in AA7075-T6 Alloys. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 4289-4301.	2.5	8
385	Improved catalytic performance and corrosion resistance of selective laser melted 316L SS in a direct methanol fuel cell by surface anodization. <i>Surface and Coatings Technology</i> , 2020, 399, 126172.	4.8	8
386	Electrochemical Behaviour and Surface Analytical of Welded Stainless Steel in the Room Temperature Simulated PWR Water. <i>ISIJ International</i> , 2012, 52, 2266-2272.	1.4	8
387	CORROSION BEHAVIOR OF COPPER ALLOYS IN DEEP OCEAN ENVIRONMENT OF SOUTH CHINA SEA. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013, 49, 1211.	0.3	8
388	Simple sol-gel route to synthesis of mesoporous TiO ₂ . <i>Journal of Sol-Gel Science and Technology</i> , 2009, 51, 1-3.	2.4	7
389	Promotion Effects of La and Ce on Ni/Al ₂ O ₃ Catalysts in Hydrotreating of Crude 2-Ethylhexanol. <i>Catalysis Letters</i> , 2009, 132, 275-280.	2.6	7
390	Effect of the carbon dioxide pressure on the electrochemical behavior of 3Cr low alloyed steel at high temperature. <i>Materials Chemistry and Physics</i> , 2012, 136, 973-979.	4.0	7
391	Evaluation of aging behavior of medium density polyethylene in natural environment by principal component analysis. <i>Journal of Applied Polymer Science</i> , 2012, 125, 19-23.	2.6	7
392	Sensing application in the precursor region of localized corrosion by scanning electrochemical microscopy. <i>RSC Advances</i> , 2014, 4, 56582-56595.	3.6	7
393	Effect of pH and H ₂ S concentration on sulfide stress corrosion cracking (SSCC) of API 2205 duplex stainless steel. <i>International Journal of Materials Research</i> , 2021, 106, 608-613.	0.3	7
394	Galvanic corrosion of magnesium alloy and aluminum alloy by kelvin probe. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016, 31, 204-210.	1.0	7
395	Degradation of the oxide film formed on Alloy 690TT in a high-temperature chloride solution. <i>Applied Surface Science</i> , 2019, 467-468, 1104-1112.	6.1	7
396	Stress corrosion mechanism and susceptibility of X80 steel under a disbonded coating in an acidic soil solution. <i>Journal of Materials Research and Technology</i> , 2021, 14, 533-547.	5.8	7

#	ARTICLE	IF	CITATIONS
397	Exploration of the processing scheme of a novel Ni(Fe, Al)-maraging steel. <i>Journal of Materials Research and Technology</i> , 2021, 10, 225-239.	5.8	7
398	ANODIC ELECTROCHEMICAL BEHAVIOR OF X80 PIPELINE STEEL IN NaHCO ₃ SOLUTION. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2010, 2010, 251-256.	0.3	7
399	Effect of pH on the Corrosion and Repassivation Behavior of TA2 in Simulated Seawater. <i>Materials</i> , 2021, 14, 6764.	2.9	7
400	Extracellular electron transfer routes in microbiologically influenced corrosion of X80 steel by <i>Bacillus licheniformis</i> . <i>Bioelectrochemistry</i> , 2022, 145, 108074.	4.6	7
401	Correlation between artificial and natural weathering tests on polystyrene- <i>b</i> -polybutadiene- <i>b</i> -polystyrene block copolymer. <i>Journal of Applied Polymer Science</i> , 2008, 110, 3820-3825.	2.6	6
402	Composition analysis of the plating on electrolytically treated steel sheets in chromic acid solution. <i>Surface and Coatings Technology</i> , 2008, 202, 1401-1404.	4.8	6
403	The difference in hydrogenation performance between Ni-in-Al ₂ O ₃ and Ni-on-Al ₂ O ₃ for hydrotreating of crude 2-ethylhexanol. <i>Korean Journal of Chemical Engineering</i> , 2010, 27, 55-61.	2.7	6
404	Passive Properties of Magnetron-Sputtered CrN Film on AISI 304 Stainless Steel. <i>Corrosion</i> , 2014, 70, 627-635.	1.1	6
405	Effect of pH Value on the Crack Growth Behavior of X70 Pipeline Steel in the Dilute Bicarbonate Solutions. <i>Materials Transactions</i> , 2015, 56, 777-780.	1.2	6
406	Leaching behaviour and environmental risk assessment of heavy metals from electronic solder in acidified soil. <i>Environmental Science and Pollution Research</i> , 2015, 22, 17683-17690.	5.3	6
407	The electrochemical behavior and characteristic of passive film on 2205 duplex stainless steel under various hydrogen charging conditions. <i>Corrosion</i> , 2015, , .	1.1	6
408	Anodic Dissolution Behavior of the Crack Tip of X70 Pipeline Steel in Near-Neutral pH Environment. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 5468-5476.	2.5	6
409	Microporous corrosion behavior of gold-plated printed circuit boards in an atmospheric environment with high salinity. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 8877-8885.	2.2	6
410	Anti-corrosion performance of aniline trimer-containing sol-gel hybrid coatings for mild steel substrate. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 87, 464-477.	2.4	6
411	First-principles study of the surface reparation of ultrathin InSe with Se-atom vacancies by thiol chemistry. <i>Applied Surface Science</i> , 2019, 475, 487-493.	6.1	6
412	Size dependency between the carbides and durability of X80 steel in acid solid environment. <i>Journal of Electroanalytical Chemistry</i> , 2020, 873, 114506.	3.8	6
413	Investigation of Corrosion Behaviors on an Fe/Cu-Type ACM Sensor under Various Environments. <i>Metals</i> , 2020, 10, 905.	2.3	6
414	Corrosion mechanism of a new-type low-alloy corrosion resistant steel containing Sb used in acid environment. <i>Anti-Corrosion Methods and Materials</i> , 2021, 68, 85-94.	1.5	6

#	ARTICLE	IF	CITATIONS
415	Understanding the Effect of Nanosized NbC Precipitates on the Stress Corrosion Cracking of High-Strength Low-Alloy Steel in a Simulated Deep-Sea Environment. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 2159-2173.	2.5	6
416	STRESS CORROSION CRACKING BEHAVIOR AND MECHANISM OF X65 AND X80 PIPELINE STEELS IN HIGH pH SOLUTION. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013, 49, 1590.	0.3	6
417	Phase structure of V ₂ O ₅ /TiO ₂ catalyst and catalytic behavior with removal of NO by ammonia. <i>Catalysis Letters</i> , 2009, 132, 253-258.	2.6	5
418	Characterization and comparison of conducting polyaniline synthesized by three different pathways. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2011, 26, 1068-1072.	1.0	5
419	Analysis of Copper Pitting Failure in Drinking Water Distribution System. <i>Journal of Failure Analysis and Prevention</i> , 2011, 11, 152-157.	0.9	5
420	Localized electrochemical impedance spectroscopy study on the corrosion behavior of Fe-Cr alloy in the solution with Cl ⁻ and SO ₄ ²⁻ . <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2012, 27, 27-32.	1.0	5
421	The influence of <i>Bacillus subtilis</i> on tin-coated copper in an aqueous environment. <i>RSC Advances</i> , 2018, 8, 4671-4679.	3.6	5
422	Systematic Insight into Chloride Concentration, Applied Potential and Time Effect on the Passive Film of Cu-Zn-Ni Ternary Alloy in Alkaline Solution. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 4280-4290.	2.5	5
423	Co-enhancing the Mechanical Property and Corrosion Resistance of Selective Laser Melted High-Strength Stainless Steel via Cryogenic Treatment. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 7052-7062.	2.5	5
424	Unexpected Stress Corrosion Cracking Improvement Achieved by Recrystallized Layer in Al-Zn-Mg Alloy. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 6258-6268.	2.5	5
425	LOCALIZED ELECTROCHEMICAL CHARACTERIZATION OF HIGH STRENGTH ALUMINIUM ALLOY AT THE CRACK TIP IN 3.5%NaCl SOLUTION. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013, 48, 414-419.	0.3	5
426	CORROSION BEHAVIOR OF X80 STEEL IN YINGTAN SOIL SIMULATED SOLUTION UNDER DISBONDED COATING. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2012, 48, 1530.	0.3	5
427	RELATIONSHIP BETWEEN HIGH pH STRESS CORROSION CRACKING MECHANISMS AND APPLIED POTENTIALS OF X80 PIPELINE STEEL. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , 2013, 49, 689.	0.3	5
428	Degradation behaviour of selective laser melted CoCrMo alloys in H ₂ O ₂ -containing chloride solutions. <i>Corrosion Science</i> , 2022, 195, 109981.	6.6	5
429	Predicting research of mechanical gyroscope life based on wavelet support vector. , 2015, , .		4
430	Synthesis of Titanate Nanotubes Under Hydrothermal Conditions and Their Acid Stability. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 8748-8759.	0.9	4
431	Mechanistic studies of atmospheric corrosion behavior of Al and Al-based alloys in a tropical marine environment. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2017, 32, 633-639.	1.0	4
432	Role of Martensite Structural Characteristics on Corrosion Features in Ni-Advanced Dual-Phase Low-Alloy Steels. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021, 34, 802-812.	2.9	4

#	ARTICLE	IF	CITATIONS
433	Simultaneously Improving Mechanical Properties and Stress Corrosion Cracking Resistance of High-Strength Low-Alloy Steel via Finish Rolling within Non-recrystallization Temperature. Acta Metallurgica Sinica (English Letters), 2021, 34, 565-578.	2.9	4
434	Effect of Alternating Magnetic Field on Electrochemical Behavior of 316L and TA2 in Simulated Seawater. Journal of Materials Engineering and Performance, 2021, 30, 9377-9389.	2.5	4
435	Atmospheric Corrosion Modelling with SVM Based Feature Selection. , 2009, , .		3
436	Corrosion of carbon steel under epoxy-varnish coating studied by scanning Kelvin probe. Journal Wuhan University of Technology, Materials Science Edition, 2012, 27, 825-829.	1.0	3
437	A Modelling Study for Predicting Life of Downhole Tubes Considering Service Environmental Parameters and Stress. Materials, 2016, 9, 741.	2.9	3
438	Semi-supervised classification of multiple kernels embedding manifold information. Cluster Computing, 2017, 20, 3417-3426.	5.0	3
439	The Effect of Surface Electronic Structure on the Bioactivity of Neutral Dopant Si, Ge, and Sn on TiO ₂ (110): A DFT Study. Physica Status Solidi (B): Basic Research, 2018, 255, 1700185.	1.5	3
440	Effect of Sn on the corrosion behavior of weathering steel in a simulated tropical marine atmosphere. Anti-Corrosion Methods and Materials, 2020, 67, 129-139.	1.5	3
441	Heat treatment simulation investigation on the mechanical performance of the inter-critical heated affected zone (ICHAZ) in ship plate steel weld joint. Applied Ocean Research, 2020, 101, 102237.	4.1	3
442	Corrosion behaviour of 2205 DSS in the artificial industrial-marine environment. Corrosion Engineering Science and Technology, 2021, 56, 22-34.	1.4	3
443	Inhibition of galvanic corrosion between crystallographic orientations in low alloy steel by grain ultra-refinement. Materials Today Communications, 2022, 31, 103742.	1.9	3
444	Degradation Characterization of Ethylene-Propylene-Diene Monomer (EPDM) Rubber in Artificial Weathering Environment. Journal of Failure Analysis and Prevention, 2010, 10, 240-244.	0.9	2
445	Correlation Between UV/Condensation and Xe Artificial Weathering Tests on Ethylene-Propylene-Diene Monomer Rubber. Journal of Failure Analysis and Prevention, 2011, 11, 282-285.	0.9	2
446	Study on the corrosion behaviours of API X65 steel in wet gas environment containing CO ₂ . Corrosion Engineering Science and Technology, 2017, 52, 317-323.	1.4	2
447	A failure case of P110 steel tubing in CO ₂ flooding well. Anti-Corrosion Methods and Materials, 2020, 67, 453-463.	1.5	2
448	The Passivity of Pure Nickel in Alkaline Solution under Different Temperatures: Electrochemical Verification and First-Principles Calculation. Journal of Materials Engineering and Performance, 2021, 30, 1737-1747.	2.5	2
449	STRESS CORROSION CRACKING AND ITS MECHANISMOF 16Mn STEEL AND HEAT-AFFECTED ZONE INALKALINE SULFIDE SOLUTIONS. Jinshu Xuebao/Acta Metallurgica Sinica, 2013, 49, 881.	0.3	2
450	PREPARATION AND CHARACTERIZATION OF ANTI-CORROSION SELF-HEALING AND HYDROPHOBICCOATING ON ALUMINUM ALLOY. Jinshu Xuebao/Acta Metallurgica Sinica, 2013, 49, 1113.	0.3	2

#	ARTICLE	IF	CITATIONS
451	Stress Corrosion Susceptibility and Electrochemical Characteristic of X80 Under a Disbonded Coating in a Low-pH Soil Solution with Cathodic Protection. Journal of Materials Engineering and Performance, 2022, 31, 2102-2111.	2.5	2
452	Stress corrosion cracking behavior of high-strength mooring-chain steel in the SO ₂ -polluted coastal atmosphere. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1186-1196.	4.9	2
453	Study of microwave Dielectric Resonator Oscillator long term frequency stability. , 2010, , .		1
454	Pitting corrosion of 316L stainless steel under low stress below yield strength. Journal Wuhan University of Technology, Materials Science Edition, 2012, 27, 238-241.	1.0	1
455	Evaluation of Service Life of Polystyrene in Tropical Marine Environment by Principal Component Analysis. Advances in Materials Science and Engineering, 2015, 2015, 1-7.	1.8	1
456	The thermal contact resistance testing method study of thin film materials. , 2015, , .		1
457	Preparation and Corrosion Behaviour of Cerium Based Sol-gel Composite Coatings on AA2024-T4 Aluminum Alloy. Electrochemistry, 2016, 84, 143-150.	1.4	1
458	Preparation and corrosion behavior of cerium (III)-modified and electro-assisted deposited bis-1,2-[triethoxysilyl] ethane film on the aluminum alloy AA2024-T3. Anti-Corrosion Methods and Materials, 2017, 64, 83-91.	1.5	1
459	Life evaluation methods based on laboratory and field degradation data. , 2017, , .		1
460	Reliability assessment of the Missile system based on Bayesian network. , 2017, , .		1
461	Surface characteristics and bioactivity of mussel-inspired coating for implant. Bioinspired, Biomimetic and Nanobiomaterials, 2018, 7, 1-7.	0.9	1
462	Study on the corrosion mechanism of the oxide scale on hot rolled steel in an atmospheric environment. Anti-Corrosion Methods and Materials, 2019, 66, 613-620.	1.5	1
463	Failure analysis of a commercially pure titanium tube in an air conditioner condenser. Anti-Corrosion Methods and Materials, 2021, 68, 269-275.	1.5	1
464	The influence of temperature and dissolved oxygen on the electrochemical nature of Al-Zn-In-Ga galvanic anode. Surface Topography: Metrology and Properties, 2021, 9, 035054.	1.6	1
465	Effect of cathodic potential on stress corrosion cracking behavior of 21Cr2NiMo steel in simulated seawater. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 263-270.	4.9	1
466	A Diffusivities of Point Defects Study of Passive State on 316L and 2205 Stainless Steel. , 2010, , .		0
467	Study of Microwave Dielectric Resonator Oscillator Frequency Degradation Model for Intelligent Maintenance Systems. , 2010, , .		0
468	Corrosion Behavior of X80 and X70 Pipeline Steels in Beijing Soil Environment. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
469	Effects of Lanthanum on the Structure and the Catalytic Performance of Ni/Al ₂ O ₃ Catalysts for the Hydrotreating of Crude 2-Ethylhexanol. International Journal of Chemical Reactor Engineering, 2012, 10, .	1.1	0
470	Weibull component reliability evaluation with masked data. , 2014, , .		0
471	Reliability analysis for multi-component degraded system subject to multiple dependent competing failure process. , 2015, , .		0
472	Construction and Application of a National Data-Sharing Service Network of Material Environmental Corrosion. Data Science Journal, 2007, 6, S913-S925.	1.3	0
473	The Effect of Chloride on Stress Corrosion Cracking of X100 Pipeline Steel in Carbonate/Bicarbonate Solution. Journal of Materials Engineering and Performance, 0, , 1.	2.5	0
474	Focusing on the relationship between the precipitated phases and the pitting corrosion of ZL101A aluminum alloy. Surface Topography: Metrology and Properties, 2021, 9, 045047.	1.6	0
475	Corrosion behavior of typical hot rolled sheets in humid storage environments. Anti-Corrosion Methods and Materials, 2022, ahead-of-print, .	1.5	0