

Xiaorong Zhou

List of Publications by Year in descending order

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192
papers

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41258

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times ranked

4353
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#	ARTICLE	IF	CITATIONS
1	Grain refining mechanism in the Al/Al ₂ O ₃ -Ti-B system. <i>Acta Materialia</i> , 2015, 84, 292-304.	3.8	421
2	Corrosion of AA2024-T3 Part II: Co-operative corrosion. <i>Corrosion Science</i> , 2011, 53, 27-39.	3.0	169
3	Release of silver and copper nanoparticles from polyethylene nanocomposites and their penetration into <i>Listeria monocytogenes</i> . <i>Materials Science and Engineering C</i> , 2014, 40, 24-31.	3.8	159
4	Quantification of oxide film thickness at the surface of aluminium using XPS. <i>Surface and Interface Analysis</i> , 2002, 34, 485-489.	0.8	147
5	Observations of intergranular corrosion in AA2024-T351: The influence of grain stored energy. <i>Corrosion Science</i> , 2012, 61, 35-44.	3.0	136
6	Film formation and detachment during anodizing of Al-Mg alloys. <i>Corrosion Science</i> , 1999, 41, 1599-1613.	3.0	126
7	Localised corrosion in AA 2099-T83 aluminium-lithium alloy: The role of grain orientation. <i>Corrosion Science</i> , 2016, 107, 41-48.	3.0	120
8	Investigation of dealloying of S phase (Al ₂ CuMg) in AA 2024-T3 aluminium alloy using high resolution 2D and 3D electron imaging. <i>Corrosion Science</i> , 2016, 103, 157-164.	3.0	119
9	Copper enrichment in Al-Cu alloys due to electropolishing and anodic oxidation. <i>Thin Solid Films</i> , 1997, 293, 327-332.	0.8	118
10	Corrosion behaviour of friction stir welded AA7108 T79 aluminium alloy. <i>Corrosion Science</i> , 2006, 48, 887-897.	3.0	118
11	Corrosion of AA2024-T3 Part III: Propagation. <i>Corrosion Science</i> , 2011, 53, 40-50.	3.0	111
12	Study of localized corrosion in AA2024 aluminium alloy using electron tomography. <i>Corrosion Science</i> , 2012, 58, 299-306.	3.0	111
13	Mechanism for Zr poisoning of Al-Ti-B based grain refiners. <i>Acta Materialia</i> , 2019, 164, 428-439.	3.8	105
14	Distribution of intermetallics in an AA 2099-T8 aluminium alloy extrusion. <i>Materials Chemistry and Physics</i> , 2011, 126, 46-53.	2.0	102
15	Localized corrosion in AA2099-T83 aluminium-lithium alloy: The role of intermetallic particles. <i>Materials Chemistry and Physics</i> , 2015, 161, 201-210.	2.0	99
16	Investigation of the de-alloying behaviour of δ_1 -phase (Al ₂ Cu) in AA2024-T351 aluminium alloy. <i>Corrosion Science</i> , 2016, 108, 85-93.	3.0	98
17	The importance of surface treatment to the anodic oxidation behaviour of Al-Cu alloys. <i>Corrosion Science</i> , 1996, 38, 1033-1042.	3.0	97
18	The influence of grain structure on the corrosion behaviour of 2A97-T3 Al-Cu-Li alloy. <i>Corrosion Science</i> , 2017, 116, 14-21.	3.0	97

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19	Trivalent chromium conversion coating formation on aluminium. <i>Surface and Coatings Technology</i> , 2015, 280, 317-329.	2.2	95
20	The effect of Al ₈ Mn ₅ intermetallic particles on grain size of as-cast Mg-Al-Zn AZ91D alloy. <i>Intermetallics</i> , 2010, 18, 1683-1689.	1.8	93
21	Corrosion behaviour of 2A97-T6 Al-Cu-Li alloy: The influence of non-uniform precipitation. <i>Corrosion Science</i> , 2018, 132, 1-8.	3.0	93
22	Nanoscale enrichments of substrate elements in the growth of thin oxide films. <i>Corrosion Science</i> , 1997, 39, 731-737.	3.0	91
23	Localized corrosion in AA2024-T351 aluminium alloy: Transition from intergranular corrosion to crystallographic pitting. <i>Materials Characterization</i> , 2017, 130, 230-236.	1.9	90
24	Crystallographic effects on the corrosion of twin roll cast AZ31 Mg alloy sheet. <i>Acta Materialia</i> , 2017, 133, 90-99.	3.8	83
25	The corrosion protection of AA2024-T3 aluminium alloy by leaching of lithium-containing salts from organic coatings. <i>Faraday Discussions</i> , 2015, 180, 511-526.	1.6	81
26	Evidence of oxygen bubbles formed within anodic films on aluminium-copper alloys. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1997, 76, 729-741.	0.8	79
27	The characterisation and performance of Ce(dbp) ₃ -inhibited epoxy coatings. <i>Progress in Organic Coatings</i> , 2011, 70, 91-101.	1.9	77
28	Mobility of copper ions in anodic alumina films. <i>Electrochimica Acta</i> , 1997, 42, 2627-2635.	2.6	74
29	Continuous and discontinuous localized corrosion of a 2xxx aluminium-copper-lithium alloy in sodium chloride solution. <i>Journal of Alloys and Compounds</i> , 2016, 658, 61-70.	2.8	74
30	Precipitation in an AA6111 aluminium alloy and cosmetic corrosion. <i>Acta Materialia</i> , 2007, 55, 353-360.	3.8	71
31	Formation of a Trivalent Chromium Conversion Coating on AA2024-T351 Alloy. <i>Journal of the Electrochemical Society</i> , 2016, 163, C25-C35.	1.3	69
32	Grain-stored energy and the propagation of intergranular corrosion in AA2xxx aluminium alloys. <i>Surface and Interface Analysis</i> , 2013, 45, 1543-1547.	0.8	68
33	Characterisation of magnesium oxide and its interface with δ -Mg in Mg-Al-based alloys. <i>Philosophical Magazine Letters</i> , 2011, 91, 516-529.	0.5	67
34	Corrosion susceptibility of dissimilar friction stir welds of AA5083 and AA6082 alloys. <i>Materials Characterization</i> , 2015, 107, 85-97.	1.9	64
35	Ultrathin single crystal Pt nanowires grown on N-doped carbon nanotubes. <i>Chemical Communications</i> , 2009, , 7048.	2.2	63
36	Discontinuities in the porous anodic film formed on AA2099-T8 aluminium alloy. <i>Corrosion Science</i> , 2011, 53, 4141-4151.	3.0	63

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37	Near-Surface Deformed Layers on Rolled Aluminum Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1373-1385.	1.1	62
38	Corrosion behaviour of AA6082 Al-Mg-Si alloy extrusion: The influence of quench cooling rate. Corrosion Science, 2019, 150, 100-109.	3.0	61
39	The influence of surface treatment on filiform corrosion resistance of painted aluminium alloy sheet. Corrosion Science, 2003, 45, 1767-1777.	3.0	60
40	Residual flaws due to formation of oxygen bubbles in anodic alumina. Corrosion Science, 1999, 41, 1945-1954.	3.0	57
41	Flow patterns in friction stir welds of AA5083 and AA6082 alloys. Materials and Design, 2015, 83, 203-213.	3.3	56
42	Laser welding introduced segregation and its influence on the corrosion behaviour of Al-Cu-Li alloy. Corrosion Science, 2018, 135, 177-191.	3.0	56
43	Effect of iron content on the corrosion of pure magnesium: Critical factor for iron tolerance limit. Corrosion Science, 2018, 139, 421-429.	3.0	56
44	Aligned Heterostructures of Single-Crystalline Tin Nanowires Encapsulated in Amorphous Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 9130-9135.	1.5	55
45	The corrosion behaviour of machined AA7150-T651 aluminium alloy. Corrosion Science, 2017, 126, 265-271.	3.0	55
46	Morphological Development of Oxygen Bubbles in Anodic Alumina. Journal of the Electrochemical Society, 2000, 147, 1747.	1.3	54
47	Strongly enhanced Tb luminescence from titania xerogel solids mesoscopically confined in porous anodic alumina. Applied Physics Letters, 2000, 76, 1006-1008.	1.5	53
48	Effect of traces of silicon on the formation of Fe-rich particles in pure magnesium and the corrosion susceptibility of magnesium. Journal of Alloys and Compounds, 2015, 619, 396-400.	2.8	53
49	Protective Film Formation on AA2024-T3 Aluminum Alloy by Leaching of Lithium Carbonate from an Organic Coating. Journal of the Electrochemical Society, 2016, 163, C45-C53.	1.3	52
50	Corrosion behaviour of AA6082 Al-Mg-Si alloy extrusion: Recrystallized and non-recrystallized structures. Corrosion Science, 2018, 144, 163-171.	3.0	52
51	Corrosion behaviour of mechanically polished AA7075-T6 aluminium alloy. Surface and Interface Analysis, 2010, 42, 185-188.	0.8	51
52	Experimental study on catalytic steam gasification of municipal solid waste for bioenergy production in a combined fixed bed reactor. Biomass and Bioenergy, 2012, 46, 174-180.	2.9	51
53	Corrosion Behavior of Pure Magnesium with Low Iron Content in 3.5 wt% NaCl Solution. Journal of the Electrochemical Society, 2015, 162, C362-C368.	1.3	48
54	Influence of pre- and post-treatments on formation of a trivalent chromium conversion coating on AA2024 alloy. Thin Solid Films, 2016, 616, 270-278.	0.8	47

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55	Crystallographic defects induced localised corrosion in AA2099-T8 aluminium alloy. <i>Corrosion Engineering Science and Technology</i> , 2015, 50, 420-424.	0.7	46
56	Effect of cooling conditions on microstructure and mechanical properties of friction stir welded 7055 aluminium alloy joints. <i>Materials Characterization</i> , 2018, 141, 74-85.	1.9	46
57	Corrosion behavior of anodized Al-Cu-Li alloy: The role of intermetallic particle-introduced film defects. <i>Corrosion Science</i> , 2019, 158, 108110.	3.0	46
58	Enrichment-dependent anodic oxidation of Zinc in Al-Zn Alloys. <i>Corrosion Science</i> , 1996, 38, 1563-1577.	3.0	45
59	Enrichment factors for copper in aluminium alloys following chemical and electrochemical surface treatments. <i>Corrosion Science</i> , 2003, 45, 1539-1544.	3.0	45
60	Nanotomography for understanding materials degradation. <i>Scripta Materialia</i> , 2010, 63, 835-838.	2.6	45
61	Anodic Film Formation on AA 2099-T8 Aluminum Alloy in Tartaric Sulfuric Acid. <i>Journal of the Electrochemical Society</i> , 2011, 158, C17.	1.3	45
62	Grain orientation effects on copper enrichment and oxygen generation during anodizing of an Al-1at.%Cu alloy. <i>Corrosion Science</i> , 2003, 45, 789-797.	3.0	43
63	Investigation of the microstructure and the influence of iron on the formation of Al ₈ Mn ₅ particles in twin roll cast AZ31 magnesium alloy. <i>Journal of Alloys and Compounds</i> , 2015, 628, 195-198.	2.8	43
64	Co-operative corrosion phenomena. <i>Corrosion Science</i> , 2010, 52, 665-668.	3.0	42
65	Structure of the Copper-Enriched Layer Introduced by Anodic Oxidation of Copper-Containing Aluminium Alloy. <i>Electrochimica Acta</i> , 2015, 179, 394-401.	2.6	42
66	Oxygen evolution within barrier oxide films. <i>Corrosion Science</i> , 2002, 44, 2153-2159.	3.0	41
67	Anodic film growth on Al-Li-Cu alloy AA2099-T8. <i>Electrochimica Acta</i> , 2012, 80, 148-159.	2.6	40
68	The Role of Intermetallics on the Corrosion Initiation of Twin Roll Cast AZ31 Mg Alloy. <i>Journal of the Electrochemical Society</i> , 2015, 162, C442-C448.	1.3	40
69	Anodic oxidation of an Al-2 wt% Cu alloy: effect of grain orientation. <i>Corrosion Science</i> , 1999, 41, 1089-1094.	3.0	38
70	A silanol-based nanocomposite coating for protection of AA-2024 aluminium alloy. <i>Electrochimica Acta</i> , 2011, 56, 7586-7595.	2.6	38
71	Influence of thermomechanical treatments on localized corrosion susceptibility and propagation mechanism of AA2099 Al-Li alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 1472-1481.	1.7	38
72	3D imaging by serial block face scanning electron microscopy for materials science using ultramicrotomy. <i>Ultramicroscopy</i> , 2016, 163, 6-18.	0.8	38

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73	Intergranular corrosion of AA6082 Al–Mg–Si alloy extrusion: The influence of trace Cu and grain boundary misorientation. <i>Journal of Alloys and Compounds</i> , 2021, 853, 157228.	2.8	35
74	The effect of surface pretreatment and moisture on the fatigue performance of adhesively-bonded aluminium. <i>Journal of Materials Processing Technology</i> , 2004, 153-154, 359-365.	3.1	34
75	Hierarchical Al ₂ O ₃ Nanobelts and Nanowires: Morphology Control and Growth Mechanism. <i>Crystal Growth and Design</i> , 2009, 9, 4230-4234.	1.4	33
76	Evolution of near-surface deformed layers during hot rolling of AA3104 aluminium alloy. <i>Surface and Interface Analysis</i> , 2010, 42, 180-184.	0.8	33
77	New evidence on the role of catalase in Escherichia coli-mediated biocorrosion. <i>Corrosion Science</i> , 2013, 67, 32-41.	3.0	32
78	An organic coating pigmented with strontium aluminium polyphosphate for corrosion protection of zinc alloy coated steel. <i>Progress in Organic Coatings</i> , 2017, 102, 29-36.	1.9	32
79	The propagation of localized corrosion in Al–Cu–Li alloy. <i>Surface and Interface Analysis</i> , 2016, 48, 745-749.	0.8	31
80	Effect of Anodizing Parameters on Film Morphology and Corrosion Resistance of AA2099 Aluminum-Lithium Alloy. <i>Journal of the Electrochemical Society</i> , 2016, 163, C369-C376.	1.3	31
81	Effect of Ag on cathodic activation and corrosion behaviour of Mg-Mn-Ag alloys. <i>Corrosion Science</i> , 2021, 185, 109408.	3.0	31
82	Heterogeneous Nucleation of α -Al Grain on Primary α -AlFeMnSi Intermetallic Investigated Using 3D SEM Ultramicrotomy and HRTEM. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 3971-3980.	1.1	30
83	Corrosion behaviour of stainless steel–titanium alloy linear friction welded joints: Galvanic coupling. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2015, 66, 111-117.	0.8	30
84	Effect of Iron-Containing Intermetallic Particles on Film Structure and Corrosion Resistance of Anodized AA2099 Alloy. <i>Journal of the Electrochemical Society</i> , 2018, 165, C573-C581.	1.3	30
85	Surface texture formed on AA2099 Al–Li–Cu alloy during alkaline etching. <i>Corrosion Science</i> , 2013, 66, 292-299.	3.0	29
86	Mechanism for Si Poisoning of Al-Ti-B Grain Refiners in Al Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 5743-5757.	1.1	29
87	Comparing Xe ⁺ pFIB and Ga ⁺ FIB for TEM sample preparation of Al alloys: Minimising FIB-induced artefacts. <i>Journal of Microscopy</i> , 2021, 282, 101-112.	0.8	29
88	Mechanism of Mn on inhibiting Fe-caused magnesium corrosion. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 676-685.	5.5	29
89	The valence state of copper in anodic films formed on Al–1at.% Cu alloy. <i>Corrosion Science</i> , 2005, 47, 1299-1306.	3.0	28
90	Influence of volume concentration of active inhibitor on microstructure and leaching behaviour of a model primer. <i>Progress in Organic Coatings</i> , 2017, 102, 71-81.	1.9	28

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91	Influence of near-surface deformed layers on filiform corrosion of AA3104 aluminium alloy. <i>Surface and Interface Analysis</i> , 2013, 45, 1553-1557.	0.8	27
92	Corrosion Behavior of Friction Stir Welded 2A97 Al-Cu-Li alloy. <i>Corrosion</i> , 2017, 73, 988-997.	0.5	27
93	Anodic film formation on Al - Au alloys: enrichment of gold in the alloy and subsequent evolution of oxygen. <i>Journal Physics D: Applied Physics</i> , 1997, 30, 1833-1841.	1.3	26
94	Determination of density and elastic constants of a thin phosphoric acid-anodized oxide film by acoustic microscopy. <i>Journal of the Acoustical Society of America</i> , 1999, 106, 2560-2567.	0.5	25
95	Improving the performance of aerospace alloys. <i>Aircraft Engineering and Aerospace Technology</i> , 2003, 75, 372-379.	0.8	24
96	Enhanced corrosion resistance of AZ31 Mg alloy by one-step formation of PEO/Mg-Al LDH composite coating. <i>Corrosion Communications</i> , 2022, 6, 67-83.	2.7	24
97	The role of crack branching in stress corrosion cracking of aluminium alloys. <i>Corrosion Reviews</i> , 2015, 33, 443-454.	1.0	23
98	An investigation of the corrosion inhibitive layers generated from lithium oxalate-containing organic coating on AA2024-T3 aluminium alloy. <i>Surface and Interface Analysis</i> , 2016, 48, 798-803.	0.8	23
99	Characterization of Localized Corrosion in an Al-Cu-Li Alloy. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 1811-1819.	1.2	23
100	Effect of grain orientation on the morphology, dielectric breakdown and optical behaviour of anodic film formed on Al-2wt%Cu binary alloy. <i>Electrochimica Acta</i> , 2008, 53, 5684-5691.	2.6	22
101	The Impact of Melt-Conditioned Twin-Roll Casting on the Downstream Processing of an AZ31 Magnesium Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 1035-1047.	1.1	22
102	Investigation of dealloying by ultra-high-resolution nanotomography. <i>Surface and Interface Analysis</i> , 2013, 45, 1548-1552.	0.8	22
103	Effect of rapid solidification on the microstructure and corrosion behaviour of Al-Zn-Mg based material. <i>Corrosion Science</i> , 2007, 49, 276-286.	3.0	21
104	Influence of surface pretreatments on the corrosion protection of sol-gel coated AA2024-T3 aluminium alloy. <i>Surface and Interface Analysis</i> , 2013, 45, 1452-1456.	0.8	21
105	Delamination of near-surface layer on cold rolled AlFeSi alloy during sheet forming. <i>Materials Characterization</i> , 2015, 99, 109-117.	1.9	21
106	Correlation between localized plastic deformation and localized corrosion in AA2099 aluminum-lithium alloy. <i>Surface and Interface Analysis</i> , 2016, 48, 838-842.	0.8	21
107	Microstructure and corrosion behaviour of wire arc additive manufactured AA2024 alloy thin wall structure. <i>Corrosion Science</i> , 2021, 186, 109453.	3.0	21
108	Incorporation and mobility of zinc ions in anodic alumina films. <i>Thin Solid Films</i> , 1997, 292, 150-155.	0.8	20

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109	An Examination of the Composition and Microstructure of Coarse Intermetallic Particles in AA2099-T8, Including Li Detection. <i>Microscopy and Microanalysis</i> , 2018, 24, 325-341.	0.2	20
110	Void formation and alloy enrichment during anodizing of aluminium alloys containing cadmium, indium and tin. <i>Corrosion Science</i> , 1998, 40, 2125-2139.	3.0	19
111	Revealing the three dimensional internal structure of aluminium alloys. <i>Surface and Interface Analysis</i> , 2013, 45, 1536-1542.	0.8	19
112	Antibacterial and non-cytotoxic effect of nanocomposites based in polyethylene and copper nanoparticles. <i>Journal of Materials Science: Materials in Medicine</i> , 2015, 26, 129.	1.7	19
113	Morphology, composition and structure of anodic films on Al-Cr alloys. <i>Corrosion Science</i> , 2000, 42, 533-544.	3.0	17
114	Anodizing of AA6063 aluminium alloy profiles: Generation of dark appearance. <i>Surface and Interface Analysis</i> , 2013, 45, 1479-1484.	0.8	17
115	A systematic study of antibacterial silver nanoparticles: efficiency, enhanced permeability, and cytotoxic effects. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	17
116	Study of the Linear Friction Welding Process of Dissimilar Ti-6Al-4V-Stainless Steel Joints. <i>Materials and Manufacturing Processes</i> , 2016, 31, 2115-2122.	2.7	17
117	Interactions of alloying elements during anodizing of dilute Al-Au-Cu and Al-W-Zn alloys and consequences for film growth. <i>Corrosion Science</i> , 1998, 41, 291-304.	3.0	16
118	Microstructural Modification Arising from Alkaline Etching and Its Effect on Anodizing Behavior of Al-Li-Cu Alloy. <i>Journal of the Electrochemical Society</i> , 2013, 160, C111-C118.	1.3	16
119	Localized dissolution initiated at single and clustered intermetallic particles during immersion of Al-Cu-Mg alloy in sodium chloride solution. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 2800-2809.	1.7	16
120	Evolution of Near-Surface Deformed Layers on AA3104 Aluminium Alloy. <i>Materials Science Forum</i> , 0, 765, 358-362.	0.3	15
121	Discoloration of Anodized AA6063 Aluminum Alloy. <i>Journal of the Electrochemical Society</i> , 2014, 161, C312-C320.	1.3	15
122	Near-Surface Microstructure on Twin-Roll Cast 8906 Aluminum Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 2688-2695.	1.1	15
123	PEO coating on Mg-Ag alloy: The incorporation and release of Ag species. <i>Journal of Magnesium and Alloys</i> , 2023, 11, 2182-2195.	5.5	15
124	Magnesium research: scientific challenges. <i>Materials Technology</i> , 2009, 24, 133-136.	1.5	14
125	Effect of microstructure on the corrosion behaviour of extruded heat exchanger aluminium alloys. <i>Surface and Interface Analysis</i> , 2013, 45, 1597-1603.	0.8	14
126	X-Ray Absorption Spectroscopy Study of the Incorporated Copper Species in Anodic Alumina Films Formed on an Al-2 wt % Cu Alloy. <i>Journal of the Electrochemical Society</i> , 2005, 152, B393.	1.3	13

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127	Study of ageing of adhesive bonds with various surface treatments: Part VI. Dicyandiamide-cured epoxy joints aged at 70Å°C in a water bath. <i>Journal of Adhesion Science and Technology</i> , 2006, 20, 1847-1872.	1.4	13
128	Origin of streaks on anodised aluminium alloy extrusions. <i>Transactions of the Institute of Metal Finishing</i> , 2013, 91, 11-16.	0.6	13
129	Anodizing Behavior of Friction Stir Welded Dissimilar Aluminum Alloys. <i>Journal of the Electrochemical Society</i> , 2015, 162, C657-C665.	1.3	13
130	Effect of Near-Ambient Temperature Changes on the Galvanic Corrosion of an AA2024-T3 and Mild Steel Couple. <i>Journal of the Electrochemical Society</i> , 2015, 162, C42-C46.	1.3	13
131	Microstructure Evolution in the Near-Surface Region During Homogenization of a Twin-Roll Cast AlFeMnSi Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 4268-4275.	1.1	13
132	Machining introduced microstructure modification in aluminium alloys. <i>Journal of Alloys and Compounds</i> , 2018, 757, 233-238.	2.8	13
133	Inter-relationships between alloy composition, passive film composition and pitting behaviour of Al-Mo and Al-Mo-Si metastable alloys. <i>Corrosion Science</i> , 1998, 40, 731-740.	3.0	12
134	Mobility of lithium ions in anodic alumina formed on an Alâ€“Li alloy. <i>Corrosion Science</i> , 2000, 42, 1083-1091.	3.0	12
135	The Influence of Prolonged Natural Aging on the Subsequent Artificial Aging Response of the AA6111 Automotive Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 4380-4393.	1.1	12
136	Microstructural origin of localized corrosion in anodized AA2099â€“T8 aluminiumâ€“lithium alloy. <i>Surface and Interface Analysis</i> , 2016, 48, 739-744.	0.8	12
137	Comparison of the behaviours of chromate and solâ€“gel coatings on aluminium. <i>Surface and Interface Analysis</i> , 2013, 45, 1446-1451.	0.8	10
138	The Impact of Machining on the Corrosion Behaviour of AA7150-T651 Aluminium Alloy. <i>Materials Science Forum</i> , 0, 794-796, 217-222.	0.3	10
139	Surface Functionalization of an Aluminum Alloy to Generate an Antibiofilm Coating Based on Poly(Methyl Methacrylate) and Silver Nanoparticles. <i>Molecules</i> , 2018, 23, 2747.	1.7	10
140	Multi-modal plasma focused ion beam serial section tomography of an organic paint coating. <i>Ultramicroscopy</i> , 2019, 197, 1-10.	0.8	10
141	Precipitation and Corrosion Behaviour of Nano-Structured Near-Surface Layers on an AA6111 Aluminium Alloy. <i>Journal of Physics: Conference Series</i> , 2006, 26, 103-106.	0.3	9
142	FIB-SEM investigation on corrosion propagation of aluminiumâ€“lithium alloy in sodium chloride solution. <i>Corrosion Engineering Science and Technology</i> , 2015, 50, 390-396.	0.7	9
143	Observations on the Early Stages of Corrosion on AA2099-T83. <i>Microscopy and Microanalysis</i> , 2020, 26, 821-836.	0.2	9
144	The behaviour of iron-containing intermetallic particles in aluminium alloys in alkaline solution. <i>Corrosion Science</i> , 2021, 179, 109134.	3.0	9

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145	Corrosion behaviour of 2A97-T8 Al-Cu-Li alloy extrusion. Journal of Alloys and Compounds, 2022, 898, 162872.	2.8	9
146	Influence of surface treatment on detachment of anodic films from Al-Mg alloys. Corrosion Science, 2001, 43, 2349-2357.	3.0	8
147	Ageing of Adhesive Bonds with Various Surface Treatments, Part 1: Aluminium-Dicyandiamide Cured Epoxy Joints. Journal of Adhesion, 2005, 81, 1157-1181.	1.8	8
148	Ageing of Adhesive Bonds with Various Surface Treatments, Part 3: Aluminium-Dicyandiamide Cured Aluminium Filled Epoxy Joints. Journal of Adhesion, 2005, 81, 1199-1215.	1.8	8
149	Self-Organizing Growth of MgAl ₂ O ₄ Based Heterostructural Nanochains. Journal of Physical Chemistry C, 2008, 112, 10038-10042.	1.5	8
150	Selective Growth of Al_2O_3 and Nanobelts. Journal of Nanomaterials, 2008, 2008, 1-8.	1.5	8
151	Single-Step Fabrication of Metal Nanoparticle Loaded Mesoporous Alumina through Anodizing of a Commercial Aluminum Alloy. Electrochemical and Solid-State Letters, 2012, 15, E4.	2.2	8
152	Effect of prior sputter deposition of pure aluminium on the corrosion behaviour of anodized friction stir weld of dissimilar aluminium alloys. Scripta Materialia, 2016, 123, 126-129.	2.6	8
153	Orthogonal machining introduced microstructure modification in AA7150-T651 aluminium alloy. Materials Characterization, 2017, 123, 91-98.	1.9	8
154	Grain distinct stratified nanolayers in aluminium alloys. Materials Chemistry and Physics, 2017, 188, 109-114.	2.0	8
155	Alkaline etching and desmutting of aluminium alloy: The behaviour of Mg ₂ Si particles. Journal of Alloys and Compounds, 2020, 842, 155834.	2.8	8
156	Effect of low temperature sensitization on the susceptibility to intergranular corrosion in AA5083 aluminum alloy. Materials and Corrosion - Werkstoffe Und Korrosion, 2016, 67, 331-339.	0.8	7
157	Corrosion behaviour of an industrial shot-peened and coated automotive spring steel AISI 9254. Corrosion Engineering Science and Technology, 2018, 53, 564-573.	0.7	7
158	Effect of anodizing conditions on the cell morphology of anodic films on AA2024-T3 alloy. Surface and Interface Analysis, 2019, 51, 1135-1143.	0.8	7
159	Electrodeposition of nickel in air- and water-stable 1-butyl-3-methylimidazolium dibutylphosphate ionic liquid. RSC Advances, 2020, 10, 16576-16583.	1.7	7
160	Direct evidence of the formation of Al ₂ Au nanocrystals at the alloy-film interface of anodized Al-Au alloys. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1998, 77, 267-272.	0.8	6
161	Anodic oxidation of Al-Mg alloys. Corrosion Science, 2002, 44, 2857-2863.	3.0	6
162	On understanding the effect of benzotriazole during barrier-film growth on Al-Cu alloys. Journal of Solid State Electrochemistry, 2003, 7, 442-449.	1.2	6

#	ARTICLE	IF	CITATIONS
163	Silica nanotubes decorated with internal periodic rings. <i>Chemical Physics Letters</i> , 2008, 458, 138-142.	1.2	6
164	Visualisation of conductive filler distributions in polymer composites using voltage and energy contrast imaging in SEM. <i>Polymer</i> , 2013, 54, 330-340.	1.8	6
165	Corrosion inhibition of pure aluminium and AA2014 alloy by strontium chromate at low concentration. <i>Surface and Interface Analysis</i> , 2016, 48, 804-808.	0.8	6
166	In-service sensitization of a microstructurally heterogeneous AA5083 alloy. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2016, 67, 378-386.	0.8	6
167	The Influence of Stored Energy on Grain Boundary Chemistry and Intergranular Corrosion Development in AA2024-T3 Alloy. <i>Materials</i> , 2018, 11, 2299.	1.3	6
168	The behaviour of AA5754 and AA5052 aluminium alloys in alkaline etching solution: Similarity and difference. <i>Materials Characterization</i> , 2021, 171, 110768.	1.9	6
169	Influence of Lead on the Microstructure and Corrosion Behavior of Melt-Conditioned, Twin-Roll-Cast AZ91D Magnesium Alloy. <i>Corrosion</i> , 2012, 68, 548-556.	0.5	5
170	Surface treatment of aluminium automotive sheet: Mythology and technology. <i>Surface and Interface Analysis</i> , 2013, 45, 1430-1434.	0.8	5
171	Three Dimensional Imaging of Light Metals Using Serial Block Face Scanning Electron Microscopy (SBFSEM). <i>Materials Science Forum</i> , 2013, 765, 501-505.	0.3	5
172	Galvanic Corrosion between Magnesium Alloys and Steel. <i>Materials Science Forum</i> , 0, 765, 648-652.	0.3	5
173	The influence of room temperature storage on intergranular corrosion susceptibility of AA6082 Al-Mg-Si alloy. <i>Corrosion Communications</i> , 2021, 3, 71-79.	2.7	5
174	Microstructure and Microgalvanic Corrosion of an Extruded Mg-10Gd-2Y-0.5Zr Magnesium Alloy. <i>Materials Science Forum</i> , 0, 765, 683-687.	0.3	4
175	Microstructure and corrosion behaviour of low copper 7xxx aluminium alloy. <i>Surface and Interface Analysis</i> , 2013, 45, 1604-1609.	0.8	4
176	Understanding the galvanic interactions between AA2024T3 and mild steel using the scanning vibrating electrode technique. <i>Materials Chemistry and Physics</i> , 2015, 161, 228-236.	2.0	4
177	A study of interface reaction zone in a SiC fibre/Ti-17 composite. <i>Micron</i> , 2018, 113, 91-98.	1.1	4
178	Electrochemical testing practices of environmentally friendly aerospace coatings for corrosion performance assessment. <i>Surface and Interface Analysis</i> , 2019, 51, 1173-1183.	0.8	4
179	Preparation of the Self-Cleaning and Luminous PVC Membrane Structure Material and its Properties Study. <i>Advanced Materials Research</i> , 0, 332-334, 1931-1936.	0.3	3
180	The behaviour of ion-implanted tungsten species during anodic oxidation of aluminium. <i>Journal Physics D: Applied Physics</i> , 1998, 31, 2083-2090.	1.3	2

#	ARTICLE	IF	CITATIONS
181	EELS study of oxidation state of tungsten in anodic alumina film formed on Al ⁶ 5 at.-%W alloy. Transactions of the Institute of Metal Finishing, 2007, 85, 306-309.	0.6	2
182	Syn-Gas Production from Catalytic Steam Gasification of Municipal Solid Wastes in a Combined Fixed Bed Reactor. , 2010, , .		2
183	Coatings Produced by Anodic Oxidation*. , 2010, , 2503-2518.		2
184	Preparation and Characterization of Nanocrystalline CeO ₂ . Advanced Materials Research, 0, 403-408, 4435-4439.	0.3	2
185	Study of the Metallurgy of a Dissimilar Ti-6Al-4V ⁶ Stainless Steel Linear Fiction Welded Joints. Key Engineering Materials, 2015, 651-653, 1427-1432.	0.4	2
186	On Interfacial Microstructure Evolution in an Isothermally Exposed SiC Fiber-Reinforced Ti-17 Matrix Composite. Microscopy and Microanalysis, 2020, 26, 18-28.	0.2	2
187	Optical cleanliness measurement methods for aluminium sheet surfaces. Surface and Interface Analysis, 2019, 51, 1144-1153.	0.8	1
188	Electron and Photon Based Spatially Resolved Techniques. , 2010, , 1405-1429.		0
189	Relating Grain Misorientation to the Corrosion Behaviour of Low Copper 7xxx Aluminium Alloys. Materials Science Forum, 0, 765, 623-628.	0.3	0
190	Novel Environmentally-Friendly Coatings for Aerospace Alloys. Materials Science Forum, 0, 765, 693-697.	0.3	0
191	Modelling corrosion effect on stiffness of automotive suspension springs. Material Design and Processing Communications, 2019, 1, e25.	0.5	0
192	Investigation of interface debonding behaviour in a unidirectional SiC fibre reinforced Ti-17 composite by a single fibre push-out technique. Journal of Composite Materials, 0, , 002199832110316.	1.2	0