

Anthony

List of Publications by Year in descending order

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131
papers

6,598
citations

47006

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132
all docs

132
docs citations

132
times ranked

4090
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparison of weak molecular adsorption of organic molecules on clean copper and platinum surfaces. Surface Science, 1984, 140, 227-248.	1.9	312
2	Corrosion of AA2024-T3 Part I: Localised corrosion of isolated IM particles. Corrosion Science, 2011, 53, 17-26.	6.6	312
3	A spectroscopic study of the adsorption and reactions of methanol, formaldehyde and methyl formate on clean and oxygenated Cu(110) surfaces. Surface Science, 1985, 155, 366-386.	1.9	230
4	The role of hydrogen peroxide in the deposition of cerium-based conversion coatings. Applied Surface Science, 2006, 253, 1770-1780.	6.1	211
5	Designing green, self-healing coatings for metal protection. NPC Asia Materials, 2010, 2, 143-151.	7.9	190
6	Stable pit formation on AA2024-T3 in a NaCl environment. Corrosion Science, 2010, 52, 90-103.	6.6	181
7	How complex is the microstructure of AA2024-T3?. Corrosion Science, 2009, 51, 1565-1568.	6.6	170
8	Corrosion of AA2024-T3 Part II: Co-operative corrosion. Corrosion Science, 2011, 53, 27-39.	6.6	169
9	Self-healing anticorrosive organic coating based on an encapsulated water reactive silyl ester: Synthesis and proof of concept. Progress in Organic Coatings, 2011, 70, 142-149.	3.9	166
10	The electrochemical performance of LSM/zirconia- γ -yttria interface as a function of a-site non-stoichiometry and cathodic current treatment. Solid State Ionics, 1999, 121, 1-10.	2.7	160
11	Observations of intergranular corrosion in AA2024-T351: The influence of grain stored energy. Corrosion Science, 2012, 61, 35-44.	6.6	136
12	The effect of inhibitor structure on the corrosion of AA2024 and AA7075. Corrosion Science, 2011, 53, 2184-2190.	6.6	119
13	Corrosion of AA2024-T3 Part III: Propagation. Corrosion Science, 2011, 53, 40-50.	6.6	111
14	Study of localized corrosion in AA2024 aluminium alloy using electron tomography. Corrosion Science, 2012, 58, 299-306.	6.6	111
15	Using high throughput experimental data and in silico models to discover alternatives to toxic chromate corrosion inhibitors. Corrosion Science, 2016, 106, 229-235.	6.6	101
16	A rapid screening multi-electrode method for the evaluation of corrosion inhibitors. Electrochimica Acta, 2009, 54, 3402-3411.	5.2	97
17	Reducing ZnO nanoparticle cytotoxicity by surface modification. Nanoscale, 2014, 6, 5791-5798.	5.6	95
18	Unravelling the corrosion inhibition mechanisms of bi-functional inhibitors by EIS and SEM-EDS. Corrosion Science, 2013, 69, 346-358.	6.6	93

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19	Corrosion protection of AA2024-T3 using rare earth diphenyl phosphates. <i>Electrochimica Acta</i> , 2007, 52, 4024-4031.	5.2	92
20	Curve fitting XPS spectra. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1988, 46, 31-42.	1.7	89
21	Unexpected erosion-corrosion behaviour of 316L stainless steel produced by selective laser melting. <i>Corrosion Science</i> , 2019, 155, 67-74.	6.6	89
22	Surface area control during the synthesis and reduction of high area ceria catalyst supports. <i>Applied Catalysis A: General</i> , 1996, 134, 351-362.	4.3	86
23	Two and three-dimensional characterisation of localised corrosion affected by lack-of-fusion pores in 316L stainless steel produced by selective laser melting. <i>Corrosion Science</i> , 2020, 165, 108394.	6.6	84
24	The characterisation of Ce-Mo-based conversion coatings on Al-alloys: Part I. <i>Corrosion Science</i> , 1996, 38, 1957-1976.	6.6	82
25	On the unusual intergranular corrosion resistance of 316L stainless steel additively manufactured by selective laser melting. <i>Corrosion Science</i> , 2019, 161, 108189.	6.6	80
26	Microstructure and corrosion of AA2024. <i>Corrosion Reviews</i> , 2015, 33, 1-30.	2.0	78
27	The characterisation and performance of Ce(dbp)3-inhibited epoxy coatings. <i>Progress in Organic Coatings</i> , 2011, 70, 91-101.	3.9	77
28	Unanticipated drastic decline in pitting corrosion resistance of additively manufactured 316L stainless steel after high-temperature post-processing. <i>Corrosion Science</i> , 2020, 165, 108412.	6.6	77
29	Development of cerium-based conversion coatings on 2024-T3 Al alloy after rare-earth desmutting. <i>Surface and Interface Analysis</i> , 2004, 36, 290-303.	1.8	73
30	The influence of pH on corrosion inhibitor selection for 2024-T3 aluminium alloy assessed by high-throughput multielectrode and potentiodynamic testing. <i>Electrochimica Acta</i> , 2010, 55, 2457-2465.	5.2	73
31	Platinum Group Metals: A Review of Resources, Production and Usage with a Focus on Catalysts. <i>Resources</i> , 2021, 10, 93.	3.5	71
32	Shallow reorientation in the surface dynamics of plasma-treated fluorinated ethylene-propylene polymer. <i>Langmuir</i> , 1991, 7, 2484-2491.	3.5	70
33	Grainâ€stored energy and the propagation of intergranular corrosion in AA2xxx aluminium alloys. <i>Surface and Interface Analysis</i> , 2013, 45, 1543-1547.	1.8	68
34	A study of rare-earth 3-(4-methylbenzoyl)-propanoate compounds as corrosion inhibitors for AS1020 mild steel in NaCl solutions. <i>Corrosion Science</i> , 2018, 145, 199-211.	6.6	65
35	A combinatorial matrix of rare earth chloride mixtures as corrosion inhibitors of AA2024-T3: Optimisation using potentiodynamic polarisation and EIS. <i>Electrochimica Acta</i> , 2012, 67, 95-103.	5.2	64
36	X-Ray Photoelectron Spectroscopic Study of the Wool Fiber Surface. <i>Textile Research Journal</i> , 1986, 56, 457-461.	2.2	63

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37	An XPS study of Ru-promotion for Co/CeO ₂ Fischer-Tropsch catalyst. Applied Surface Science, 1993, 72, 55-65.	6.1	62
38	A closer look at constituent induced localised corrosion in Al-Cu-Mg alloys. Corrosion Science, 2016, 113, 160-171.	6.6	61
39	Ruthenium promotion of fischer-tropsch synthesis over coprecipitated cobalt/ceria catalysts. Applied Catalysis A: General, 1993, 100, 51-67.	4.3	59
40	Segregation in Single-Crystal Fully Stabilized Yttria-Zirconia. Journal of the American Ceramic Society, 1995, 78, 369-378.	3.8	59
41	Chromate leaching from inhibited primers. Progress in Organic Coatings, 2006, 56, 23-32.	3.9	59
42	Applying SEM-Based X-ray Microtomography to Observe Self-Healing in Solvent Encapsulated Thermoplastic Materials. Advanced Engineering Materials, 2010, 12, 228-234.	3.5	59
43	A combined redox-competition and negative-feedback SECM study of self-healing anticorrosive coatings. Electrochemistry Communications, 2011, 13, 1094-1097.	4.7	59
44	The use of cerium and praseodymium mercaptoacetate as thiol-containing inhibitors for AA2024-T3. Corrosion Science, 2014, 81, 45-53.	6.6	54
45	The effects of sintering atmosphere on impurity phase formation and grain boundary resistivity in Y ₂ O ₃ -fully stabilized ZrO ₂ . Journal of the European Ceramic Society, 1992, 10, 115-122.	5.7	53
46	Sheet AA2024-T3: a new investigation of microstructure and composition. Surface and Interface Analysis, 2010, 42, 334-338.	1.8	53
47	Chromate leaching from inhibited primers. Progress in Organic Coatings, 2006, 56, 33-38.	3.9	50
48	Oxide formation on aluminium alloys in boiling deionised water and NaCl, CeCl ₃ and CrCl ₃ solutions. Corrosion Science, 2003, 45, 1103-1124.	6.6	48
49	Corrosion in artificial defects. II. Chromate reactions. Corrosion Science, 2006, 48, 1827-1847.	6.6	46
50	Nanotomography for understanding materials degradation. Scripta Materialia, 2010, 63, 835-838.	5.2	45
51	FIB/SEM study of AA2024 corrosion under a seawater drop: Part I. Corrosion Science, 2011, 53, 1086-1096.	6.6	45
52	High-throughput channel arrays for inhibitor testing: Proof of concept for AA2024-T3. Corrosion Science, 2009, 51, 2279-2290.	6.6	44
53	Co-operative corrosion phenomena. Corrosion Science, 2010, 52, 665-668.	6.6	42
54	A new high-throughput method for corrosion testing. Corrosion Science, 2012, 58, 327-331.	6.6	42

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55	Probing corrosion initiation at interfacial nanostructures of AA2024-T3. Corrosion Science, 2017, 116, 98-109.	6.6	39
56	Grain boundary character distribution in an additively manufactured austenitic stainless steel. Scripta Materialia, 2021, 192, 115-119.	5.2	39
57	Comments on the use of implanted Ar as a binding energy reference. Journal of Electron Spectroscopy and Related Phenomena, 1990, 50, C15-C18.	1.7	38
58	Corrosion in artificial defects. I: Development of corrosion. Corrosion Science, 2006, 48, 1812-1826.	6.6	38
59	Influence of Praseodymium. Electrochemical and Solid-State Letters, 2007, 10, C72.	2.2	38
60	A consistent description of intermetallic particle composition: An analysis of ten batches of AA2024-T3. Surface and Interface Analysis, 2013, 45, 1558-1563.	1.8	38
61	Revelation of Intertwining Organic and Inorganic Fractal Structures in Polymer Coatings. Advanced Materials, 2014, 26, 4504-4508.	21.0	37
62	The use of macroscopic modelling of intermetallic phases in aluminium alloys in the study of ferricyanide accelerated chromate conversion coatings. Corrosion Science, 2002, 44, 1755-1781.	6.6	35
63	Leaching properties of chromate-containing epoxy films using radiotracers, PALS and SEM. Progress in Organic Coatings, 2014, 77, 257-267.	3.9	35
64	Factors influencing the deposition of Ce-based conversion coatings, part I: The role of Al ³⁺ ions. Surface and Coatings Technology, 2009, 203, 2927-2936.	4.8	34
65	FIB/SEM study of AA2024 corrosion under a seawater drop, part II. Corrosion Science, 2012, 55, 116-125.	6.6	34
66	A critical review of corrosion characteristics of additively manufactured stainless steels. International Materials Reviews, 2021, 66, 563-599.	19.3	33
67	The application of multiscale quasi 4D CT to the study of SrCrO ₄ distributions and the development of porous networks in epoxy-based primer coatings. Progress in Organic Coatings, 2014, 77, 1946-1956.	3.9	31
68	Diffusion of dextran at intermediate concentrations. Journal of the Chemical Society Faraday Transactions I, 1982, 78, 1209.	1.0	29
69	Auger and XPS studies of cerium corrosion inhibition on 7075 aluminum alloy. Applications of Surface Science, 1985, 22-23, 236-251.	1.0	29
70	Impurity segregation study at the surface of yttria-zirconia electrolytes by XPS. Solid State Ionics, 1990, 40-41, 312-315.	2.7	29
71	The characterisation of Ce-Mo-based conversion coatings on Al-alloys: Part II. Corrosion Science, 1996, 38, 1977-1990.	6.6	29
72	Durability and Corrosion of Aluminium and Its Alloys: Overview, Property Space, Techniques and Developments. , 0, , .		29

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73	Characterisation of aluminium alloys after HNO ₃ /HFâ€“NaOHâ€“HNO ₃ /HF pretreatment. Materials Science and Technology, 2001, 17, 1211-1221.	1.6	26
74	A morphological study of filiform corrosive attack on chromated and alkaline-cleaned AA2024-T351 aluminium alloy. Corrosion Science, 2004, 46, 1201-1224.	6.6	26
75	Factors influencing the deposition of Ce-based conversion coatings, Part II: The role of localised reactions. Surface and Coatings Technology, 2009, 203, 2937-2945.	4.8	26
76	Leaching Behavior and Corrosion Inhibition of a Rare Earth Carboxylate Incorporated Epoxy Coating System. ACS Applied Materials & Interfaces, 2019, 11, 36154-36168.	8.0	26
77	A morphological study of filiform corrosive attack on cerated AA2024-T351 aluminium alloy. Corrosion Science, 2005, 47, 107-124.	6.6	25
78	TOWARDS REPLACEMENT OF CHROMATE INHIBITORS BY RARE EARTH SYSTEMS. Corrosion Reviews, 2007, 25, 591-606.	2.0	23
79	Study of deoxidation of 2024-T3 with various acids. Materials Science and Technology, 2001, 17, 1642-1652.	1.6	22
80	Desmutting of aluminium alloy 2024-T3 using rare earth electrolyte. Materials Science and Technology, 1999, 15, 1124-1132.	1.6	21
81	Electron-Beam-Induced Carbon Contamination on Silicon: Characterization Using Raman Spectroscopy and Atomic Force Microscopy. Microscopy and Microanalysis, 2010, 16, 13-20.	0.4	21
82	STM investigation of galena surfaces in air. Surface Science, 1990, 232, L211-L214.	1.9	20
83	An Examination of the Composition and Microstructure of Coarse Intermetallic Particles in AA2099-T8, Including Li Detection. Microscopy and Microanalysis, 2018, 24, 325-341.	0.4	20
84	Moisture sensitive degradation in TiO ₂ -Y ₂ O ₃ -ZrO ₂ . Journal of the European Ceramic Society, 1995, 15, 1125-1134.	5.7	18
85	Surface Chemistry of Supported Chromium Oxide on Lanthanum Carbonate. Journal of Catalysis, 1997, 171, 313-319.	6.2	18
86	AIRLIFE - TOWARDS A FLEET MANAGEMENT TOOL FOR CORROSION DAMAGE. Corrosion Reviews, 2007, 25, 275-294.	2.0	17
87	Non-chromate deoxidation of AA2024-T3: Sodium bromateâ€“nitric acid (20â€“60Â°C). Applied Surface Science, 2008, 254, 3562-3575.	6.1	17
88	Atom Probe Tomography Study of the Nanoscale Heterostructure around an Al ₂₀ Mn ₃ Cu ₂ Dispersoid in Aluminum Alloy 2024. Langmuir, 2014, 30, 14817-14823.	3.5	17
89	The influence of rare earth mercaptoacetate on the initiation of corrosion on AA2024-T3 Part I: Average statistics of each intermetallic composition. Corrosion Science, 2015, 95, 22-39.	6.6	17
90	Using X-ray tomography, PALS and Raman spectroscopy for characterization of inhibitors in epoxy coatings. Progress in Organic Coatings, 2012, 74, 726-733.	3.9	16

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91	Combined nuclear microprobe and TEM study of corrosion pit nucleation by intermetallics in aerospace aluminium alloys. Nuclear Instruments & Methods in Physics Research B, 2005, 231, 457-462.	1.4	15
92	Li leaching from Lithium Carbonate-primer: An emerging perspective of transport pathway development. Progress in Organic Coatings, 2019, 134, 103-118.	3.9	15
93	Role of O ²⁻ , OH ⁻ and anion vacancies in the degradation of Y-TZP in moist environments. Journal of Materials Chemistry, 1994, 4, 257-263.	6.7	14
94	Synthesis and Structure of Valleriite, a Layered Metal Hydroxide/Sulfide Composite. Journal of Solid State Chemistry, 1993, 104, 422-436.	2.9	13
95	SEM and RBS characterization of a cobalt-based conversion coating process on AA2024-T3 and AA7075-T6. Surface and Interface Analysis, 2004, 36, 1585-1591.	1.8	13
96	Comparative study of protection of AA 2024-T3 exposed to rare earth salts solutions. Corrosion Engineering Science and Technology, 2014, 49, 674-687.	1.4	13
97	Defect density associated with constituent particles in AA2024-T3 and its role in corrosion. Surface and Interface Analysis, 2016, 48, 780-788.	1.8	13
98	Characterization of Supported Ruthenium Catalysts Derived from Reaction of Ru ₃ (CO) ₁₂ with Rare Earth Oxides. Journal of Catalysis, 1998, 178, 84-93.	6.2	12
99	Characterization of non-Cr-based deoxidizers on Al alloy 7475-T7651. Surface and Interface Analysis, 2004, 36, 1523-1532.	1.8	12
100	The influence of rare earth mercaptoacetate on the initiation of corrosion on AA2024-T3 Part II: The influence of intermetallic compositions within heavily attacked sites. Corrosion Science, 2015, 95, 40-50.	6.6	11
101	New approach to probing localised corrosion processes over wide length and time scales using integrated multi-scale electrode arrays. Corrosion Science, 2021, 181, 109238.	6.6	11
102	Filiform corrosion imaged beneath protection layers on Al alloys. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 365-369.	1.4	10
103	Non-chromate deoxidation of AA2024-T3 using Fe(III)-HF-HNO ₃ . Surface and Interface Analysis, 2005, 37, 15-23.	1.8	10
104	Particle induced gamma and X-ray emission spectroscopies of lithium based alloy coatings. Nuclear Instruments & Methods in Physics Research B, 2017, 404, 167-172.	1.4	10
105	Role of microstructure in corrosion initiation of a highly-deformed AA2024 wire. Corrosion Science, 2018, 144, 184-197.	6.6	10
106	A critical insight into lack-of-fusion pore structures in additively manufactured stainless steel. Additive Manufacturing, 2021, 38, 101762.	3.0	10
107	TEM and X-Ray Photoelectron Spectroscopic Studies of Wool Fibers after Cuticle Removal. Textile Research Journal, 1988, 58, 640-645.	2.2	9
108	Characterisation of the thermal transformation of hydrous aluminas by XPS and NMR. Materials Letters, 1993, 17, 303-308.	2.6	9

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109	Structure and Transport in Coatings from Multiscale Computed Tomography of Coatings”New Perspectives for Electrochemical Impedance Spectroscopy Modeling?. <i>Electrochimica Acta</i> , 2016, 202, 243-252.	5.2	9
110	Observations on the Early Stages of Corrosion on AA2099-T83. <i>Microscopy and Microanalysis</i> , 2020, 26, 821-836.	0.4	9
111	The use of macroscopic modelling of intermetallic phases in aluminium alloys in the study of ferricyanide accelerated chromate conversion coatings. <i>Micron</i> , 2001, 32, 777-787.	2.2	8
112	Coatings for corrosion prevention based on rare earths. , 2014, , 186-232.		8
113	Combined influence of Ce(III) and iodide ions for corrosion protection of AA 2024-T3 in acidic to neutral chloride-rich environments: Electrochemical and surface characterization studies. <i>Journal of Rare Earths</i> , 2023, 41, 309-320.	4.8	8
114	Methanol and formaldehyde molecular states on copper surfaces at 300 K?. <i>Surface Science</i> , 1984, 146, L561-L565.	1.9	7
115	Conversion Coatings. , 2018, , 108-114.		7
116	Surface intermediates in the reaction of methanol, formaldehyde and methyl formate on copper (110). <i>Applications of Surface Science</i> , 1985, 22-23, 404-414.	1.0	6
117	Examination of de-coking of promoted (Co, Ni) Mo/ γ -Al ₂ O ₃ catalysts by X-ray photoelectron spectroscopy. <i>Applied Catalysis A: General</i> , 1992, 90, 117-129.	4.3	6
118	Self-healing coatings. , 2015, , 211-241.		6
119	Recent Insights Into Corrosion Initiation at the Nanoscale. , 2018, , 525-551.		5
120	Interfacial phenomena in Y ₂ O ₃ -ZrO ₂ -based ceramics: A surface science perspective. <i>Materials Science Monographs</i> , 1995, , 183-238.	0.0	4
121	Reaction of triruthenium dodecacarbonyl with high-area rare earth oxides. <i>Inorganica Chimica Acta</i> , 1997, 254, 37-41.	2.4	4
122	Hydrogenation of CO over a Ru-promoted Cobalt/Cerium Oxide Catalyst. <i>Studies in Surface Science and Catalysis</i> , 1994, 81, 427-432.	1.5	3
123	The importance of sulfiding temperature of a HDS catalyst in the conversion of unsaturates in a benzene, toluene and xylene (BTX) feed. <i>Applied Catalysis B: Environmental</i> , 1998, 16, 165-175.	20.2	3
124	Corrosion behaviour of AA 1370 strands for wires: Identification of the critical metallurgical parameters. <i>Corrosion Science</i> , 2018, 134, 112-121.	6.6	3
125	Investigation of the Internal Structure of a Modern Seafloor Hydrothermal Chimney With a Combination of EBSD, EPMA, and XRD. <i>Microscopy and Microanalysis</i> , 2020, 26, 793-807.	0.4	3
126	Li leaching from Li carbonate-primer: Transport pathway development from the scribe edge of a primer/topcoat system. <i>Progress in Organic Coatings</i> , 2021, 158, 106284.	3.9	3

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127	Diversity of internal structures in inhibited epoxy primers. AIMS Materials Science, 2015, 2, 379-391.	1.4	3
128	The cost and availability of rare earth-based corrosion inhibitors. , 2014, , 291-305.		2
129	Atom Probe Tomography Studies of the Initiation of Localized Corrosion in Aluminum Alloy 2024. Microscopy and Microanalysis, 2017, 23, 696-697.	0.4	1
130	Self-healing coatings. , 2022, , 217-270.		1
131	Physico-Chemical Characterisation of Protective Coatings and Self Healing Processes. Springer Series in Materials Science, 2016, , 241-298.	0.6	0