J M C Mol

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8047854/publications.pdf

Version: 2024-02-01

219 papers 7,858 citations

41258 49 h-index 76769 74 g-index

221 all docs

221 docs citations

times ranked

221

4957 citing authors

#	Article	IF	CITATIONS
1	Experimental insights into anodic oxidation of hexafluoropropylene oxide dimer acid (GenX) on boron-doped diamond anodes. Chemosphere, 2022, 288, 132417.	4.2	14
2	Extrusion-based additive manufacturing of Mg-Zn alloy scaffolds. Journal of Magnesium and Alloys, 2022, 10, 2491-2509.	5 . 5	14
3	Acceleration of corrosion of 304 stainless steel by outward extracellular electron transfer of Pseudomonas aeruginosa biofilm. Corrosion Science, 2022, 199, 110159.	3.0	36
4	Smart protective coatings with selfâ€sensing and active corrosion protection dual functionality from pH-sensitive calcium carbonate microcontainers. Corrosion Science, 2022, 200, 110254.	3.0	23
5	Microstructure, mechanical, and corrosion properties of Zr1-xCrxBy diboride alloy thin films grown by hybrid high power impulse/DC magnetron co-sputtering. Applied Surface Science, 2022, 591, 153164.	3.1	3
6	Poly(2-ethyl-2-oxazoline) coating of additively manufactured biodegradable porous iron. Materials Science and Engineering C, 2022, 133, 112617.	3.8	7
7	Direct microbial electron uptake as a mechanism for stainless steel corrosion in aerobic environments. Water Research, 2022, 219, 118553.	5. 3	63
8	Additive manufacturing of bioactive and biodegradable porous iron-akermanite composites for bone regeneration. Acta Biomaterialia, 2022, 148, 355-373.	4.1	19
9	The effect of riboflavin on the microbiologically influenced corrosion of pure iron by Shewanella oneidensis MR-1. Bioelectrochemistry, 2022, 147, 108173.	2.4	19
10	Evaluation of the formation and protectiveness of a lithium-based conversion layer using electrochemical noise. Electrochimica Acta, 2022, 426, 140733.	2.6	8
11	(Digital Presentation) Initial High-Temperature Oxidation Behavior of Iron Binary Alloys in Air. ECS Meeting Abstracts, 2022, MA2022-01, 996-996.	0.0	O
12	Long-term deterioration of lubricant-infused nanoporous anodic aluminium oxide surface immersed in NaCl solution. Journal of Materials Science and Technology, 2021, 64, 57-65.	5.6	14
13	Simplistic correlations between molecular electronic properties and inhibition efficiencies: Do they really exist?. Corrosion Science, 2021, 179, 108856.	3.0	86
14	Extrusion-based 3D printed biodegradable porous iron. Acta Biomaterialia, 2021, 121, 741-756.	4.1	52
15	Multifunctional ZrB2-rich Zr1-xCrxBy thin films with enhanced mechanical, oxidation, and corrosion properties. Vacuum, 2021, 185, 109990.	1.6	21
16	Exploring water and ion transport process at silicone/copper interfaces using in-situ electrochemical and Kelvin probe approaches. Journal of Materials Science and Technology, 2021, 64, 203-213.	5.6	2
17	Microstructural degradation during the storage of biomass pellets. Communications Materials, 2021, 2, .	2.9	16
18	Dual-action self-healing protective coatings with photothermal responsive corrosion inhibitor nanocontainers. Chemical Engineering Journal, 2021, 404, 127118.	6.6	122

#	Article	IF	Citations
19	Extrusion-based 3D printed magnesium scaffolds with multifunctional MgF ₂ and MgF ₂ –CaP coatings. Biomaterials Science, 2021, 9, 7159-7182.	2.6	16
20	Editors' Choice—Dealloying-Driven Cerium Precipitation on Intermetallic Particles in Aerospace Aluminium Alloys. Journal of the Electrochemical Society, 2021, 168, 041505.	1.3	16
21	Study Of Mercaptobenzimidazoles As Inhibitors For Copper Corrosion: Down to the Molecular Scale. Journal of the Electrochemical Society, 2021, 168, 051504.	1.3	18
22	A Study of the Effect of Ligand-Metal Interactions on the Electrodeposition of Chromium from Trivalent Chromium Electrolytes. ECS Meeting Abstracts, 2021, MA2021-01, 941-941.	0.0	0
23	Adaptive bidirectional extracellular electron transfer during accelerated microbiologically influenced corrosion of stainless steel. Communications Materials, 2021, 2, .	2.9	46
24	Mechanisms of Li Leaching from a LiCO3 Based Primer / Topcoat Paint System. Microscopy and Microanalysis, 2021, 27, 3054-3056.	0.2	0
25	Extrusion-based 3D printing of ex situ-alloyed highly biodegradable MRI-friendly porous iron-manganese scaffolds. Acta Biomaterialia, 2021, 134, 774-790.	4.1	20
26	Hybrid sol-gel coatings applied on anodized AA2024-T3 for active corrosion protection. Surface and Coatings Technology, 2021, 419, 127251.	2.2	30
27	Nanoscopic and in-situ cross-sectional observations of Li-based conversion coating formation using liquid-phase TEM. Npj Materials Degradation, 2021, 5, .	2.6	11
28	Optimization of intrinsic self-healing silicone coatings by benzotriazole loaded mesoporous silica. Surface and Coatings Technology, 2021, 421, 127388.	2.2	22
29	Laterally-resolved formation mechanism of a lithium-based conversion layer at the matrix and intermetallic particles in aerospace aluminium alloys. Corrosion Science, 2021, 190, 109651.	3.0	12
30	Li leaching from Li carbonate-primer: Transport pathway development from the scribe edge of a primer/topcoat system. Progress in Organic Coatings, 2021, 158, 106284.	1.9	3
31	Scrutinizing the importance of surface chemistry versus surface roughness for aluminium / sol-gel film adhesion. Surfaces and Interfaces, 2021, 26, 101417.	1.5	6
32	Challenges to electrochemical evaluation of nanometric sandwiched thin specimens using liquid cells designed for application in liquid-phase TEM corrosion studies. Corrosion Science, 2021, 192, 109864.	3.0	6
33	Effect of surface roughness and chemistry on the adhesion and durability of a steel-epoxy adhesive interface. International Journal of Adhesion and Adhesives, 2020, 96, 102450.	1.4	68
34	Effect of simulated brazing on the microstructure and corrosion behavior of twin roll cast AA3003. Materials and Corrosion - Werkstoffe Und Korrosion, 2020, 71, 60-69.	0.8	4
35	Nanorods grown by copper anodizing in sodium carbonate. Journal of Electroanalytical Chemistry, 2020, 857, 113628.	1.9	14
36	Additively manufactured biodegradable porous zinc. Acta Biomaterialia, 2020, 101, 609-623.	4.1	95

#	Article	IF	CITATIONS
37	Application of In Situ Liquid Cell Transmission Electron Microscopy in Corrosion Studies: A Critical Review of Challenges and Achievements. Corrosion, 2020, 76, 4-17.	0.5	22
38	Chemisorption of polyester coatings on zirconium-based conversion coated multi-metal substrates and their stability in aqueous environment. Applied Surface Science, 2020, 508, 144771.	3.1	27
39	Dealloying-driven local corrosion by intermetallic constituent particles and dispersoids in aerospace aluminium alloys. Corrosion Science, 2020, 177, 108947.	3.0	73
40	In-situ nanoscopic observations of dealloying-driven local corrosion from surface initiation to in-depth propagation. Corrosion Science, 2020, 177, 108912.	3.0	61
41	Self-Organized Anodic Oxides on Titanium Alloys Prepared from Glycol- and Glycerol-Based Electrolytes. Materials, 2020, 13, 4743.	1.3	19
42	Towards understanding and prediction of atmospheric corrosion of an Fe/Cu corrosion sensor via machine learning. Corrosion Science, 2020, 170, 108697.	3.0	82
43	The effect of time evolution and timing of the electrochemical data recording of corrosion inhibitor protection of hot-dip galvanized steel. Corrosion Science, 2020, 173, 108780.	3.0	26
44	Studying Chemisorption at Metal–Polymer Interfaces by Complementary Use of Attenuated Total Reflection–Fourier Transform Infrared Spectroscopy (ATR-FTIR) in the Kretschmann Geometry and Visible–Infrared Sum-Frequency Generation Spectroscopy (SFG). Journal of Physical Chemistry C, 2020, 124, 7127-7138.	1.5	18
45	Effect of organic additives in fluoacid-based Ti and Zr-treatments for galvanized steel on the stability of a polymer coated interface. Progress in Organic Coatings, 2020, 146, 105738.	1.9	5
46	Cross-sectional characterization of the conversion layer formed on AA2024-T3 by a lithium-leaching coating. Applied Surface Science, 2020, 512, 145665.	3.1	15
47	Effect of zirconium-based conversion treatments of zinc, aluminium and magnesium on the chemisorption of ester-functionalized molecules. Applied Surface Science, 2020, 508, 145199.	3.1	16
48	On the importance of time-resolved electrochemical evaluation in corrosion inhibitor-screening studies. Npj Materials Degradation, 2020, 4, .	2.6	18
49	ATR-FTIR in Kretschmann configuration integrated with electrochemical cell as in situ interfacial sensitive tool to study corrosion inhibitors for magnesium substrates. Electrochimica Acta, 2020, 345, 136166.	2.6	37
50	The Effect of Environmental Conditions on the Degradation Behavior of Biomass Pellets. Polymers, 2020, 12, 970.	2.0	21
51	Effect of Ligand-Complex Interactions on the Electrodeposition of Mixed Chromium Metal-Carbide-Oxides from Trivalent Chromium Electrolytes. ECS Meeting Abstracts, 2020, MA2020-01, 1161-1161.	0.0	0
52	The Effect of Pre-Treatment on Corrosion Properties, Surface Chemistry and Interfacial Properties of Sol-Gel Coating on Aluminium and Aluminium Alloys. ECS Meeting Abstracts, 2020, MA2020-01, 994-994.	0.0	0
53	(Invited) In-Situ Liquid Phase TEM Studies of Corrosion Initiation in Aluminium Alloys. ECS Meeting Abstracts, 2020, MA2020-02, 1292-1292.	0.0	1
54	An in situ spectro-electrochemical monitoring of aqueous effects on polymer/metal oxide interfaces. Journal of Electroanalytical Chemistry, 2019, 848, 113311.	1.9	20

#	Article	IF	Citations
55	Self-healing epoxy nanocomposite coatings based on dual-encapsulation of nano-carbon hollow spheres with film-forming resin and curing agent. Composites Part B: Engineering, 2019, 175, 107087.	5.9	57
56	Active corrosion protection of various aluminium alloys by lithiumâ€leaching coatings. Surface and Interface Analysis, 2019, 51, 1276-1287.	0.8	28
57	Characterization of the passive layer on ferrite and austenite phases of super duplex stainless steel. Applied Surface Science, 2019, 496, 143634.	3.1	25
58	A Complementary Electrochemical Approach for Time-Resolved Evaluation of Corrosion Inhibitor Performance. Journal of the Electrochemical Society, 2019, 166, C3220-C3232.	1.3	13
59	Probing the formation and degradation of chemical interactions from model molecule/metal oxide to buried polymer/metal oxide interfaces. Npj Materials Degradation, 2019, 3, .	2.6	44
60	Li leaching from Lithium Carbonate-primer: An emerging perspective of transport pathway development. Progress in Organic Coatings, 2019, 134, 103-118.	1.9	15
61	Mechanical and Corrosion Protection Properties of a Smart Composite Epoxy Coating with Dual-Encapsulated Epoxy/Polyamine in Carbon Nanospheres. Industrial & Engineering Chemistry Research, 2019, 58, 3033-3046.	1.8	55
62	Improved corrosion protection of titanium implant material by crystallographic texturing of Sr doped calcium phosphate electrodeposits. Thin Solid Films, 2019, 675, 115-121.	0.8	10
63	Durable lubricant-infused anodic aluminum oxide surfaces with high-aspect-ratio nanochannels. Chemical Engineering Journal, 2019, 368, 138-147.	6.6	47
64	The chemical throwing power of lithium-based inhibitors from organic coatings on AA2024-T3. Corrosion Science, 2019, 150, 194-206.	3.0	27
65	Influence of surface pretreatment on phosphate conversion coating on AZ91 Mg alloy. Surface and Coatings Technology, 2019, 359, 414-425.	2.2	42
66	The Role of Lithium Salt Concentration in the Active Corrosion Protection of Aluminium Alloys. ECS Meeting Abstracts, 2019, , .	0.0	0
67	Compositional study of a corrosion protective layer formed by leachable lithium salts in a coating defect on AA2024-T3 aluminium alloys. Progress in Organic Coatings, 2018, 119, 65-75.	1.9	37
68	Mechanism of Passive Layer Formation on AA2024-T3 from Alkaline Lithium Carbonate Solutions in the Presence of Sodium Chloride. Journal of the Electrochemical Society, 2018, 165, C60-C70.	1.3	39
69	Fabrication of copper nanowires via electrodeposition in anodic aluminum oxide templates formed by combined hard anodizing and electrochemical barrier layer thinning. Journal of Electroanalytical Chemistry, 2018, 809, 59-66.	1.9	31
70	Enhanced corrosion protection of mild steel by the synergetic effect of zinc aluminum polyphosphate and 2-mercaptobenzimidazole inhibitors incorporated in epoxy-polyamide coatings. Corrosion Science, 2018, 138, 372-379.	3.0	69
71	Biodegradation and mechanical behavior of an advanced bioceramic-containing Mg matrix composite synthesized through in-situ solid-state oxidation. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 80, 209-221.	1.5	8
72	Additively manufactured biodegradable porous magnesium. Acta Biomaterialia, 2018, 67, 378-392.	4.1	273

#	Article	IF	Citations
73	Advanced (In Situ) Surface Analysis of Organic Coating/Metal Oxide Interactions for Corrosion Protection of Passivated Metals., 2018, , 1-17.		2
74	Fluoride-Induced Interfacial Adhesion Loss of Nanoporous Anodic Aluminum Oxide Templates in Aerospace Structures. ACS Applied Nano Materials, 2018, 1, 6139-6149.	2.4	6
75	Wavelet Transform Modulus Maxima and Holder Exponents Combined with Transient Detection for the Differentiation of Pitting Corrosion Using Electrochemical Noise. Corrosion, 2018, 74, 1001-1010.	0.5	6
76	In Situ Methanol Adsorption on Aluminum Oxide Monitored by a Combined ORP-EIS and ATR-FTIR Kretschmann Setup. Journal of Physical Chemistry C, 2018, 122, 21963-21973.	1.5	6
77	On the importance of irreversibility of corrosion inhibitors for active coating protection of AA2024-T3. Corrosion Science, 2018, 140, 272-285.	3.0	75
78	Triple-Action Self-Healing Protective Coatings Based on Shape Memory Polymers Containing Dual-Function Microspheres. ACS Applied Materials & Interfaces, 2018, 10, 23369-23379.	4.0	152
79	Additively manufactured biodegradable porous iron. Acta Biomaterialia, 2018, 77, 380-393.	4.1	185
80	The use of odd random phase electrochemical impedance spectroscopy to study lithium-based corrosion inhibition by active protective coatings. Electrochimica Acta, 2018, 278, 363-373.	2.6	29
81	Fabrication and characterization of graphene-based carbon hollow spheres for encapsulation of organic corrosion inhibitors. Chemical Engineering Journal, 2018, 352, 909-922.	6.6	97
82	The influence of a Zr-based conversion treatment on interfacial bonding strength and stability of epoxy coated carbon steel. Progress in Organic Coatings, 2017, 105, 29-36.	1.9	42
83	Improved Corrosion Resistance of Aluminum Brazing Sheet by a Post-Brazing Heat Treatment. Corrosion, 2017, 73, 379-393.	0.5	9
84	Advanced bredigite-containing magnesium-matrix composites for biodegradable bone implant applications. Materials Science and Engineering C, 2017, 79, 647-660.	3.8	39
85	Electrochemical Evaluation of Corrosion Inhibiting Layers Formed in a Defect from Lithium-Leaching Organic Coatings. Journal of the Electrochemical Society, 2017, 164, C396-C406.	1.3	50
86	Towards Cr(VI)-free anodization of aluminum alloys for aerospace adhesive bonding applications: A review. Frontiers of Chemical Science and Engineering, 2017, 11, 465-482.	2.3	49
87	In Situ Characterization of the Initial Effect of Water on Molecular Interactions at the Interface of Organic/Inorganic Hybrid Systems. Scientific Reports, 2017, 7, 45123.	1.6	36
88	Morphology and photoluminescence of nanostructured oxides grown by copper passivation in aqueous potassium hydroxide solution. Materials Letters, 2017, 198, 89-92.	1.3	16
89	Adhesive Bonding and Corrosion Performance Investigated as a Function of Aluminum Oxide Chemistry and Adhesives. Corrosion, 2017, 73, 903-914.	0.5	13
90	Dual-action smart coatings with a self-healing superhydrophobic surface and anti-corrosion properties. Journal of Materials Chemistry A, 2017, 5, 2355-2364.	5. 2	413

#	Article	IF	CITATIONS
91	Unravelling the Chemical Influence of Water on the PMMA/Aluminum Oxide Hybrid Interface In Situ. Scientific Reports, 2017, 7, 13341.	1.6	76
92	Particle induced gamma and X-ray emission spectroscopies of lithium based alloy coatings. Nuclear Instruments & Methods in Physics Research B, 2017, 404, 167-172.	0.6	10
93	Interface strength and degradation of adhesively bonded porous aluminum oxides. Npj Materials Degradation, 2017, 1 , .	2.6	32
94	Zirconium-based conversion film formation on zinc, aluminium and magnesium oxides and their interactions with functionalized molecules. Applied Surface Science, 2017, 423, 817-828.	3.1	48
95	The effect of two types of modified Mg-Al hydrotalcites on reinforcement corrosion in cement mortar. Cement and Concrete Research, 2017, 100, 186-202.	4.6	36
96	Particle Characterisation and Depletion of Li2CO3 Inhibitor in a Polyurethane Coating. Coatings, 2017, 7, 106.	1.2	14
97	pH-Responsive Nanostructured Polyaniline Capsules for Self-Healing Corrosion Protection: The Influence of Capsule Concentration. Scientia Iranica, 2017, .	0.3	2
98	Use of Local Electrochemical Methods (SECM, EC-STM) and AFM to Differentiate Microstructural Effects (EBSD) on Very Pure Copper. Corrosion Science and Technology, 2017, 16, 1-7.	0.2	2
99	An investigation of the corrosion inhibitive layers generated from lithium oxalateâ€containing organic coating on AA2024â€₹3 aluminium alloy. Surface and Interface Analysis, 2016, 48, 798-803.	0.8	23
100	The role of acidâ€base properties in the interactions across the oxideâ€primer interface in aerospace applications. Surface and Interface Analysis, 2016, 48, 712-720.	0.8	14
101	Potentiodynamic anodizing of aluminum alloys in Cr(VI)â€free electrolytes. Surface and Interface Analysis, 2016, 48, 946-952.	0.8	16
102	The effect of conversion bath convection on the formation of Zrâ€based thinâ€film coatings on multiâ€metal surfaces. Materials and Corrosion - Werkstoffe Und Korrosion, 2016, 67, 361-367.	0.8	12
103	Inhibitor-loaded conducting polymer capsules for active corrosion protection of coating defects. Corrosion Science, 2016, 112, 138-149.	3.0	123
104	Shape memory composite (SMC) self-healing coatings for corrosion protection. Progress in Organic Coatings, 2016, 97, 261-268.	1.9	68
105	Combined Corrosion and Wear of Aluminium Alloy 7075-T6. Journal of Bio- and Tribo-Corrosion, 2016, 2, 1.	1.2	27
106	Lithium salts as leachable corrosion inhibitors and potential replacement for hexavalent chromium in organic coatings for the protection of aluminum alloys. Journal of Coatings Technology Research, 2016, 13, 557-566.	1.2	61
107	Effect of Anodic Aluminum Oxide Chemistry on Adhesive Bonding of Epoxy. Journal of Physical Chemistry C, 2016, 120, 19670-19677.	1.5	44
108	A Novel Approach for the Evaluation of Under Deposit Corrosion in Marine Environments Using Combined Analysis by Electrochemical Impedance Spectroscopy and Electrochemical Noise. Electrochimica Acta, 2016, 217, 226-241.	2.6	74

#	Article	IF	Citations
109	An integrated approach in the time, frequency and time-frequency domain for the identification of corrosion using electrochemical noise. Electrochimica Acta, 2016, 222, 627-640.	2.6	49
110	A closer look at constituent induced localised corrosion in Al-Cu-Mg alloys. Corrosion Science, 2016, 113, 160-171.	3.0	61
111	Study of the formation of a protective layer in a defect from lithium-leaching organic coatings. Progress in Organic Coatings, 2016, 99, 80-90.	1.9	49
112	Modified hydrotalcites for improved corrosion protection of reinforcing steel in concrete – preparation, characterization, and assessment in alkaline chloride solution. Materials and Corrosion - Werkstoffe Und Korrosion, 2016, 67, 721-738.	0.8	21
113	pH responsive Ce(III) loaded polyaniline nanofibers for self-healing corrosion protection of AA2024-T3. Progress in Organic Coatings, 2016, 99, 197-209.	1.9	81
114	The effect of surface pre-conditioning treatments on the local composition of Zr-based conversion coatings formed on aluminium alloys. Applied Surface Science, 2016, 366, 339-347.	3.1	43
115	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
116	Smart corrosion protection by multi-action self-healing polymeric coatings. , 2016, , 157-181.		1
117	The relationship between spectral and wavelet techniques for noise analysis. Electrochimica Acta, 2016, 202, 277-287.	2.6	50
118	Aerospace Coatings. Springer Series in Materials Science, 2016, , 315-372.	0.4	14
119	Electrochemical Techniques for the Study of Self Healing Coatings. Springer Series in Materials Science, 2016, , 203-240.	0.4	1
120	Active and passive protection of AA2024-T3 by a hybrid inhibitor doped mesoporous sol–gel and top coating system. Surface and Coatings Technology, 2016, 303, 352-361.	2.2	30
121	Friction surface cladding: An exploratory study of a new solid state cladding process. Journal of Materials Processing Technology, 2016, 229, 769-784.	3.1	29
122	Comparison of the synergistic effects of inhibitor mixtures tailored for enhanced corrosion protection of bare and coated AA2024-T3. Surface and Coatings Technology, 2016, 303, 342-351.	2.2	76
123	Monitoring carbon steel behavior under biotic and abiotic conditions. Materials Research Society Symposia Proceedings, 2015, 1768, 15.	0.1	0
124	The corrosion protection of AA2024-T3 aluminium alloy by leaching of lithium-containing salts from organic coatings. Faraday Discussions, 2015, 180, 511-526.	1.6	81
125	Corrosion reduces wet abrasive wear of structural steel. Scripta Materialia, 2015, 107, 92-95.	2.6	13
126	Studying interfacial bonding at buried polymer–zinc interfaces. Progress in Organic Coatings, 2015, 89, 323-331.	1.9	9

#	Article	IF	Citations
127	Electrodeposition of mixed chromium metal-carbide-oxide coatings from a trivalent chromium-formate electrolyte without a buffering agent. Electrochimica Acta, 2015, 173, 819-826.	2.6	29
128	XPS Analysis of the Surface Chemistry and Interfacial Bonding of Barrier-Type Cr(VI)-Free Anodic Oxides. Journal of Physical Chemistry C, 2015, 119, 19967-19975.	1.5	44
129	Localised corrosion: general discussion. Faraday Discussions, 2015, 180, 381-414.	1.6	29
130	An in situ study of zirconium-based conversion treatment on zinc surfaces. Applied Surface Science, 2015, 356, 837-843.	3.1	36
131	An in situ study of amine and amide molecular interaction on Fe surfaces. Applied Surface Science, 2015, 354, 242-249.	3.1	8
132	Comparative study of protection of AA 2024-T3 exposed to rare earth salts solutions. Corrosion Engineering Science and Technology, 2014, 49, 674-687.	0.7	13
133	Influence of HEPES buffer on the local pH and formation of surface layer during in vitro degradation tests of magnesium in DMEM. Progress in Natural Science: Materials International, 2014, 24, 531-538.	1.8	54
134	Biodegradation of ballast tank coating investigated by impedance spectroscopy and microscopy. Biodegradation, 2014, 25, 67-83.	1.5	4
135	Application of transient analysis using Hilbert spectra of electrochemical noise to the identification of corrosion inhibition. Electrochimica Acta, 2014, 116, 355-365.	2.6	38
136	Scanning electrochemical microscopy to study the effect of crystallographic orientation on the electrochemical activity of pure copper. Electrochimica Acta, 2014, 116, 89-96.	2.6	87
137	Hydrogen sorption and desorption related properties of Pd-alloys determined by cyclic voltammetry. Journal of Electroanalytical Chemistry, 2014, 734, 53-60.	1.9	12
138	The cost and availability of rare earth-based corrosion inhibitors., 2014,, 291-305.		2
139	Influence of surface hydroxyls on the formation of Zr-based conversion coatings on AA6014 aluminum alloy. Surface and Coatings Technology, 2014, 254, 277-283.	2.2	52
140	Novel and self-healing anticorrosion coatings using rare earth compounds., 2014,, 233-266.		7
141	Oxygen consumption upon electrochemically polarised zinc. Journal of Applied Electrochemistry, 2014, 44, 747-757.	1.5	19
142	Simulated and measured response of oxygen SECM-measurements in presence of a corrosion process. Electrochimica Acta, 2014, 146, 556-563.	2.6	20
143	A Critical Appraisal of the Interpretation of Electrochemical Noise for Corrosion Studies. Corrosion, 2014, 70, 971-987.	0.5	62
144	Detection of microbiologically influenced corrosion by electrochemical noise transients. Electrochimica Acta, 2014, 136, 223-232.	2.6	39

#	Article	IF	Citations
145	Unravelling the corrosion inhibition mechanisms of bi-functional inhibitors by EIS and SEM–EDS. Corrosion Science, 2013, 69, 346-358.	3.0	93
146	Ship ballast tanks a review from microbial corrosion and electrochemical point of view. Ocean Engineering, 2013, 70, 188-200.	1.9	53
147	Water uptake in thin nylon 6 films as measured by electrochemical impedance spectroscopy and magnetic resonance imaging. Electrochimica Acta, 2013, 94, 219-228.	2.6	22
148	Influence of pretreatments and aging on the adhesion performance of epoxy-coated aluminum. Surface and Coatings Technology, 2013, 215, 260-265.	2.2	24
149	In Situ Study of Buried Metal–Polymer Interfaces Exposed to an Aqueous Solution by an Integrated ATR-FTIR and Electrochemical Impedance Spectroscopy System. Journal of Physical Chemistry C, 2013, 117, 20826-20832.	1.5	32
150	Aminobenzoate modified MgAl hydrotalcites as a novel smart additive of reinforced concrete for anticorrosion applications. Construction and Building Materials, 2013, 47, 1436-1443.	3.2	53
151	Effects of Surface Treatment and Carboxylic Acid and Anhydride Molecular Dipole Moments on the Volta Potential Values of Zinc Surfaces. Journal of Physical Chemistry C, 2013, 117, 1712-1721.	1.5	9
152	Bonding Mechanisms at Buried Interfaces between Carboxylic Polymers and Treated Zinc Surfaces. Journal of Physical Chemistry C, 2013, 117, 2780-2792.	1.5	20
153	Scanning Kelvin probe force microscopy as a means of predicting the electrochemical characteristics of the surface of a modified AA4xxx/AA3xxx (Al alloys) brazing sheet. Electrochimica Acta, 2013, 88, 330-339.	2.6	41
154	Initiation and growth of modified Zr-based conversion coatings on multi-metal surfaces. Surface and Coatings Technology, 2013, 236, 284-289.	2.2	82
155	Transient analysis through Hilbert spectra of electrochemical noise signals for the identification of localized corrosion of stainless steel. Electrochimica Acta, 2013, 104, 84-93.	2.6	66
156	Quasi in situ analytical TEM to investigate electrochemically induced microstructural changes in alloys: AA2024-T3 as an example. Corrosion Science, 2013, 69, 221-225.	3.0	31
157	A combined electron probe micro analysis and scanning Kelvin probe force microscopy study of a modified AA4xxx/AA3xxx aluminium brazing sheet. Electrochimica Acta, 2013, 104, 48-63.	2.6	20
158	An infrared spectroscopic study of sodium silicate adsorption on porous anodic alumina. Surface and Interface Analysis, 2013, 45, 1098-1104.	0.8	22
159	Role of Surface Oxide Properties on the Aluminum/Epoxy Interfacial Bonding. Journal of Physical Chemistry C, 2013, 117, 4480-4487.	1.5	46
160	Novel time–frequency characterization of electrochemical noise data in corrosion studies using Hilbert spectra. Corrosion Science, 2013, 66, 97-110.	3.0	88
161	In Situ Study of Buried Interfacial Bonding Mechanisms of Carboxylic Polymers on Zn Surfaces. Journal of Physical Chemistry C, 2013, 117, 3374-3382.	1.5	23
162	Enhanced corrosion protection by microstructural control of aluminium brazing sheet. , 2013, , 91-102.		0

#	Article	IF	Citations
163	Early stages during localized corrosion of AA2024 TEM specimens in chloride environment. Surface and Interface Analysis, 2013, 45, 1619-1625.	0.8	14
164	Novel electrochemical approach to study corrosion mechanism of Al–Au wire–bond pad interconnections. Corrosion Engineering Science and Technology, 2013, 48, 409-417.	0.7	3
165	18 th International Corrosion Congress. Corrosion Engineering Science and Technology, 2012, 47, 161-163.	0.7	0
166	Effects of Zinc Surface Acid-Based Properties on Formation Mechanisms and Interfacial Bonding Properties of Zirconium-Based Conversion Layers. Journal of Physical Chemistry C, 2012, 116, 8426-8436.	1.5	48
167	A new approach to study local corrosion processes on steel surfaces by combining different microscopic techniques. Applied Surface Science, 2012, 258, 8790-8796.	3.1	4
168	A new high-throughput method for corrosion testing. Corrosion Science, 2012, 58, 327-331.	3.0	42
169	The effect of brazing process on microstructure evolution and corrosion performance of a modified AA4XXX/AA3XXX brazing sheet. Corrosion Science, 2012, 58, 242-250.	3.0	33
170	Scanning Kelvin Probe Study of (Oxyhydr)oxide Surface of Aluminum Alloy. Journal of Physical Chemistry C, 2012, 116, 1805-1811.	1.5	39
171	Interactions at polymer/(oxyhydr)oxide/aluminium interfaces studied by Scanning Kelvin Probe. Surface and Interface Analysis, 2012, 44, 1059-1062.	0.8	5
172	A combinatorial matrix of rare earth chloride mixtures as corrosion inhibitors of AA2024-T3: Optimisation using potentiodynamic polarisation and EIS. Electrochimica Acta, 2012, 67, 95-103.	2.6	64
173	Time–frequency methods for trend removal in electrochemical noise data. Electrochimica Acta, 2012, 70, 199-209.	2.6	97
174	Electrochemical depth profiling of multilayer metallic structures: An aluminum brazing sheet. Electrochimica Acta, 2012, 77, 285-293.	2.6	20
175	Tailoring the release of encapsulated corrosion inhibitors from damaged coatings: Controlled release kinetics by overlapping diffusion fronts. Progress in Organic Coatings, 2012, 75, 20-27.	1.9	28
176	Molecular Interactions of Electroadsorbed Carboxylic Acid and Succinic Anhydride Monomers on Zinc Surfaces. Journal of Physical Chemistry C, 2011, 115, 17054-17067.	1.5	33
177	Influence of the surface activation and local pitting susceptibility on the AC-electrograining of aluminium alloys. Corrosion Science, 2011, 53, 930-938.	3.0	8
178	The effect of inhibitor structure on the corrosion of AA2024 and AA7075. Corrosion Science, 2011, 53, 2184-2190.	3.0	119
179	Influence of material related parameters in Sea Water Acidified Accelerated Test, reliability analysis and electrochemical evaluation of the test for aluminum brazing sheet. Corrosion Science, 2011, 53, 3923-3933.	3.0	16
180	The characterisation and performance of Ce(dbp)3-inhibited epoxy coatings. Progress in Organic Coatings, 2011, 70, 91-101.	1.9	77

#	Article	IF	Citations
181	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.	1.9	166
182	A combined redox-competition and negative-feedback SECM study of self-healing anticorrosive coatings. Electrochemistry Communications, 2011, 13, 1094-1097.	2.3	59
183	A combined mechanical, microscopic and local electrochemical evaluation of self-healing properties of shape-memory polyurethane coatings. Electrochimica Acta, 2011, 56, 9619-9626.	2.6	65
184	Electrochemical analysis of the adsorption and desorption behaviors of carboxylic acid and anhydride monomers onto zinc surfaces. Electrochimica Acta, 2011, 56, 9317-9323.	2.6	18
185	SECM study of defect repair in self-healing polymer coatings on metals. Electrochemistry Communications, 2011, 13, 169-173.	2.3	89
186	A comparison of the interfacial bonding properties of carboxylic acid functional groups on zinc and iron substrates. Electrochimica Acta, 2011, 56, 1904-1911.	2.6	68
187	New approach in microstructural analysis of a modified AA4XXX/AA3XXX brazing sheet before and after brazing., 2011,, 69-79.		1
188	Electrochemical and Microstructural Studies in Reinforced Mortar, Modified with Core-Shell Micelles. ECS Transactions, 2010, 25, 79-85.	0.3	4
189	Adhesion at Al-hydroxide-polymer interfaces: Influence of chemistry and evidence for microscopic self-pinning. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5637-5647.	2.6	20
190	The influence of pH on corrosion inhibitor selection for 2024-T3 aluminium alloy assessed by high-throughput multielectrode and potentiodynamic testing. Electrochimica Acta, 2010, 55, 2457-2465.	2.6	73
191	Validation of a fast scanning technique for corrosion inhibitor selection: influence of crossâ€contamination on AA2024â€₹3. Surface and Interface Analysis, 2010, 42, 205-210.	0.8	18
192	An investigation of rare earth chloride mixtures: combinatorial optimisation for AA2024â€ŧ3 corrosion inhibition. Surface and Interface Analysis, 2010, 42, 170-174.	0.8	23
193	The influence of preâ€treatments of aluminium alloys on bonding of PET coatings. Surface and Interface Analysis, 2010, 42, 316-320.	0.8	8
194	Corrosion Performance of Composite Galvanic Coatings with Variable Concentration of Polymeric Nanoaggregates and/or Cr(III) Conversion Layers. ECS Transactions, 2010, 33, 85-92.	0.3	4
195	A Preliminary Study on Cathodic Prevention in Reinforced Mortar. ECS Transactions, 2009, 25, 93-100.	0.3	1
196	Barrier and adhesion properties of anti-corrosion coatings based on surfactant-free latexes from anhydride-containing polymers. Progress in Organic Coatings, 2009, 65, 94-103.	1.9	21
197	A comparative electrochemical study of commercial and model aluminium alloy (AA5050). Materials and Corrosion - Werkstoffe Und Korrosion, 2009, 60, 399-406.	0.8	7
198	Corrosion resistance of Zn–Co–Fe alloy coatings on high strength steel. Surface and Coatings Technology, 2009, 203, 1415-1422.	2.2	29

#	Article	IF	Citations
199	A rapid screening multi-electrode method for the evaluation of corrosion inhibitors. Electrochimica Acta, 2009, 54, 3402-3411.	2.6	97
200	High-throughput channel arrays for inhibitor testing: Proof of concept for AA2024-T3. Corrosion Science, 2009, 51, 2279-2290.	3.0	44
201	Zinc Composite Layers, Incorporating Polymeric Nano-aggregates: Surface Analysis and Electrochemical Behavior ECS Transactions, 2008, 11, 27-35.	0.3	3
202	A combined composition and morphology study of electrodeposited Zn–Co and Zn–Co–Fe alloy coatings. Surface and Coatings Technology, 2008, 202, 2755-2764.	2.2	17
203	A combined TEM and SKPFM investigation of the surface layers on rolled AA5050 aluminium alloy using ultraâ€microtomy. Surface and Interface Analysis, 2008, 40, 1157-1163.	0.8	10
204	Galvanic compatibility of corrosion protective coatings with AA7075 aluminum alloy. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 306-310.	0.8	5
205	The influence of copper content on intergranular corrosion of model AlMgSi(Cu) alloys. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 670-675.	0.8	52
206	SVET study of the corrosion protection of electrodeposited Zn and Znâ€Coâ€Fe alloy coated steels. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 802-810.	0.8	6
207	The Influence of Chemical Pre-treatment and Magnesium Surface Enrichment on Bonding of Succinic Acid Molecules to Aluminium Alloy. Journal of Adhesion Science and Technology, 2008, 22, 1089-1104.	1.4	4
208	Organic coatings for marine and shipping applications. , 2008, , 337-371.		0
209	Electrodeposition of Zn–Co and Zn–Co–Fe alloys from acidic chloride electrolytes. Surface and Coatings Technology, 2007, 202, 84-90.	2.2	39
210	Influence of uniaxial deformation on the corrosion performance of pre-coated packaging steel. Progress in Organic Coatings, 2007, 60, 335-342.	1.9	19
211	Cathodic inhibition and anomalous electrodeposition of Zn–Co alloys. Electrochimica Acta, 2007, 52, 5444-5452.	2.6	35
212	Localized Corrosion of Chromium Coated Steel. ECS Transactions, 2006, 3, 631-638.	0.3	0
213	A morphological study of filiform corrosive attack on cerated AA2024-T351 aluminium alloy. Corrosion Science, 2005, 47, 107-124.	3.0	25
214	An integrated study on the effect of pre- and post-extrusion heat treatments and surface treatment on the filiform corrosion properties of an aluminium extrusion alloy. Corrosion Science, 2005, 47, 2711-2730.	3.0	25
215	A morphological study of filiform corrosive attack on chromated and alkaline-cleaned AA2024-T351 aluminium alloy. Corrosion Science, 2004, 46, 1201-1224.	3.0	26
216	Filiform corrosion imaged beneath protection layers on Al alloys. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 365-369.	0.6	10

#	Article	IF	CITATION
217	The effect of mechanical surface patterning on filiform growth characteristics. Journal of Materials Science, 2002, 37, 2755-2761.	1.7	9
218	A filiform corrosion and potentiodynamic polarisation study of some aluminium alloys. Journal of Materials Science, 2000, 35, 1629-1639.	1.7	42
219	Durability and Corrosion of Aluminium and Its Alloys: Overview, Property Space, Techniques and Developments. , 0, , .		29