Herman Terryn

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8444774/publications.pdf

Version: 2024-02-01

543	15,957	15466 65	42291 92
papers	citations	h-index	g-index

552	552	552	11686
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Corrosion behaviour of different tempers of AA7075 aluminium alloy. Electrochimica Acta, 2004, 49, 2851-2862.	2.6	282
3	Formation of a cerium-based conversion coating on AA2024: relationship with the microstructure. Surface and Coatings Technology, 2004, 176, 365-381.	2.2	234
4	Effect of inclusions modified by rare earth elements (Ce, La) on localized marine corrosion in Q460NH weathering steel. Corrosion Science, 2017, 129, 82-90.	3.0	197
5	Influence of the anodizing temperature on the porosity and the mechanical properties of the porous anodic oxide film. Surface and Coatings Technology, 2007, 201, 7310-7317.	2.2	192
6	Electrochemical characterisation of aluminium AA7075-T6 and solution heat treated AA7075 using a micro-capillary cell. Electrochimica Acta, 2003, 48, 3239-3247.	2.6	163
7	Effect of solution heat treatment on galvanic coupling between intermetallics and matrix in AA7075-T6. Corrosion Science, 2003, 45, 1733-1746.	3.0	158
8	Interaction of Anhydride and Carboxylic Acid Compounds with Aluminum Oxide Surfaces Studied Using Infrared Reflection Absorption Spectroscopy. Langmuir, 2004, 20, 6308-6317.	1.6	155
9	Effect of bath concentration and curing time on the structure of non-functional thin organosilane layers on aluminium. Electrochimica Acta, 2003, 48, 1245-1255.	2.6	154
10	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
11	Role of Al2O3 inclusions on the localized corrosion of Q460NH weathering steel in marine environment. Corrosion Science, 2018, 138, 96-104.	3.0	146
12	The role of crystal diversity in understanding mass transfer in nanoporous materials. Nature Materials, 2016, 15, 401-406.	13.3	142
13	A Generalized Electrochemical Aggregative Growth Mechanism. Journal of the American Chemical Society, 2013, 135, 11550-11561.	6.6	140
14	Correlation between hydroxyl fraction and O/Al atomic ratio as determined from XPS spectra of aluminium oxide layers. Surface and Interface Analysis, 2004, 36, 81-88.	0.8	137
15	Acidâ^'Base Characterization of Aluminum Oxide Surfaces with XPS. Journal of Physical Chemistry B, 2004, 108, 6017-6024.	1.2	137
16	XPS study of the atmospheric corrosion of copper alloys of archaeological interest. Surface and Interface Analysis, 2004, 36, 876-879.	0.8	130
17	Electrochemical synthesis of thin HKUST-1 layers on copper mesh. Microporous and Mesoporous Materials, 2012, 158, 209-213.	2.2	126
18	Comparison of the morphology and corrosion performance of Cr(VI)- and Cr(III)-based conversion coatings on zinc. Surface and Coatings Technology, 2005, 199, 92-104.	2.2	124

#	Article	IF	Citations
19	Inhibitor-loaded conducting polymer capsules for active corrosion protection of coating defects. Corrosion Science, 2016, 112, 138-149.	3.0	123
20	Dual-action self-healing protective coatings with photothermal responsive corrosion inhibitor nanocontainers. Chemical Engineering Journal, 2021, 404, 127118.	6.6	122
21	Colour properties of barrier anodic oxide films on aluminium and titanium studied with total reflectance and spectroscopic ellipsometry. Surface and Coatings Technology, 2004, 185, 303-310.	2.2	120
22	SKPFM and SEM study of the deposition mechanism of Zr/Ti based pre-treatment on AA6016 aluminum alloy. Surface and Coatings Technology, 2007, 201, 7668-7685.	2.2	120
23	New Insights into the Early Stages of Nanoparticle Electrodeposition. Journal of Physical Chemistry C, 2012, 116, 2322-2329.	1.5	118
24	Influence of substrate microstructure on the growth of anodic oxide layers. Electrochimica Acta, 2004, 49, 1127-1140.	2.6	114
25	Influence of the Iron Oxide Acidâ"Base Properties on the Chemisorption of Model Epoxy Compounds Studied by XPS. Journal of Physical Chemistry C, 2007, 111, 13177-13184.	1.5	108
26	A Shape-Recovery Polymer Coating for the Corrosion Protection of Metallic Surfaces. ACS Applied Materials & Interfaces, 2015, 7, 175-183.	4.0	106
27	A transmission electron microscopy study of hard anodic oxide layers on AlSi(Cu) alloys. Electrochimica Acta, 2004, 49, 3169-3177.	2.6	101
28	A Review on Anodizing of Aerospace Aluminum Alloys for Corrosion Protection. Coatings, 2020, 10, 1106.	1.2	100
29	SECM study of defect repair in self-healing polymer coatings on metals. Electrochemistry Communications, 2011, 13, 169-173.	2.3	89
30	Study of the Self-Assembling of n-Octylphosphonic Acid Layers on Aluminum Oxide. Langmuir, 2008, 24, 13450-13456.	1.6	88
31	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
32	A Close-up of the Effect of Iron Oxide Type on the Interfacial Interaction between Epoxy and Carbon Steel: Combined Molecular Dynamics Simulations and Quantum Mechanics. Journal of Physical Chemistry C, 2016, 120, 11014-11026.	1.5	87
33	Determination of the thickness of thin silane films on aluminium surfaces by means of spectroscopic ellipsometry. Thin Solid Films, 2001, 384, 37-45.	0.8	86
34	Improving the adhesion between epoxy coatings and aluminium substrates. Progress in Organic Coatings, 2004, 51, 339-350.	1.9	86
35	Investigation of the barrier properties of silanes on cold rolled steel. Electrochimica Acta, 2004, 49, 2997-3004.	2.6	86
36	Silane coating of metal substrates: Complementary use of electrochemical, optical and thermal analysis for the evaluation of film properties. Progress in Organic Coatings, 2007, 59, 224-229.	1.9	86

#	Article	IF	Citations
37	Characterization of chromate conversion coatings on zinc using XPS and SKPFM. Surface and Coatings Technology, 2005, 197, 168-176.	2.2	84
38	Transversal Load Sensing With Fiber Bragg Gratings in Microstructured Optical Fibers. IEEE Photonics Technology Letters, 2009, 21, 6-8.	1.3	83
39	Interaction of Ester Functional Groups with Aluminum Oxide Surfaces Studied Using Infrared Reflection Absorption Spectroscopy. Langmuir, 2004, 20, 6318-6326.	1.6	82
40	Initiation and growth of modified Zr-based conversion coatings on multi-metal surfaces. Surface and Coatings Technology, 2013, 236, 284-289.	2.2	82
41	In situ electrochromic efficiency of a nickel oxide thin film: origin of electrochemical process and electrochromic degradation. Journal of Materials Chemistry C, 2018, 6, 646-653.	2.7	82
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	Investigation of the self-healing properties of shape memory polyurethane coatings with the â€˜odd random phase multisineâ€™ electrochemical impedance spectroscopy. Electrochimica Acta, 2010, 55, 6195-6203.	2.6	81
44	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
45	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
46	Electronic properties of thermally formed thin iron oxide films. Electrochimica Acta, 2007, 52, 7617-7625.	2.6	76
47	Unravelling the Chemical Influence of Water on the PMMA/Aluminum Oxide Hybrid Interface In Situ. Scientific Reports, 2017, 7, 13341.	1.6	76
48	Investigation of anodic aluminium oxide layers by electrochemical impedance spectroscopy. Journal of Applied Electrochemistry, 1990, 20, 798-803.	1.5	75
49	Composition and thickness of non-functional organosilane films coated on aluminium studied by means of infra-red spectroscopic ellipsometry. Thin Solid Films, 2003, 441, 76-84.	0.8	75
50	Ageing of aluminium oxide surfaces and their subsequent reactivity towards bonding with organic functional groups. Applied Surface Science, 2004, 235, 465-474.	3.1	75
51	Comprehensive Study of the Electrodeposition of Nickel Nanostructures from Deep Eutectic Solvents: Self-Limiting Growth by Electrolysis of Residual Water. Journal of Physical Chemistry C, 2017, 121, 9337-9347.	1.5	75
52	On the importance of irreversibility of corrosion inhibitors for active coating protection of AA2024-T3. Corrosion Science, 2018, 140, 272-285.	3.0	75
53	XPS investigations on cesium uranates: mixed valency behaviour of uranium. Journal of Nuclear Materials, 2000, 277, 28-36.	1.3	73
54	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

#	ARTICLE	IF	CITATIONS
55	Dealloying-driven local corrosion by intermetallic constituent particles and dispersoids in aerospace aluminium alloys. Corrosion Science, 2020, 177, 108947.	3.0	73
56	Corrosion protection properties and interfacial adhesion mechanism of an epoxy/polyamide coating applied on the steel surface decorated with cerium oxide nanofilm: Complementary experimental, molecular dynamics (MD) and first principle quantum mechanics (QM) simulation methods. Applied Surface Science, 2017, 419, 650-669.	3.1	69
57	Study of initiation and development of local burning phenomena during anodizing of aluminium under controlled convection. Electrochimica Acta, 2008, 54, 270-279.	2.6	68
58	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
59	Stability, Assembly, and Particle/Solvent Interactions of Pd Nanoparticles Electrodeposited from a Deep Eutectic Solvent. Journal of Physical Chemistry C, 2013, 117, 14381-14389.	1.5	68
60	Shape memory composite (SMC) self-healing coatings for corrosion protection. Progress in Organic Coatings, 2016, 97, 261-268.	1.9	68
61	Inhibitor evaluation in different simulated concrete pore solution for the protection of steel rebars. Construction and Building Materials, 2016, 124, 887-896.	3.2	68
62	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
63	Study of the effect of different aluminium surface pretreatments on the deposition of thin non-functional silane coatings. Surface and Interface Analysis, 2004, 36, 681-684.	0.8	66
64	Chromate Conversion Coating on Aluminum Alloys. Journal of the Electrochemical Society, 2004, 151, B59.	1.3	65
65	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
66	IRSE study on effect of thermal curing on the chemistry and thickness of organosilane films coated on aluminium. Applied Surface Science, 2003, 211, 259-269.	3.1	64
67	Micro-Raman spectroscopy for the study of corrosion products on copper alloys: setting up of a reference database and studying works of art. Journal of Raman Spectroscopy, 2004, 35, 732-738.	1.2	64
68	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
69	A closer look at constituent induced localised corrosion in Al-Cu-Mg alloys. Corrosion Science, 2016, 113, 160-171.	3.0	61
70	Tunable nanoporous silicon oxide templates by swift heavy ion tracks technology. Nanotechnology, 2016, 27, 115305.	1.3	61
71	Water Adsorption and Dissociation on Polycrystalline Copper Oxides: Effects of Environmental Contamination and Experimental Protocol. Journal of Physical Chemistry B, 2018, 122, 1000-1008.	1.2	61
72	In-situ nanoscopic observations of dealloying-driven local corrosion from surface initiation to in-depth propagation. Corrosion Science, 2020, 177, 108912.	3.0	61

#	Article	IF	Citations
73	A Review on Adhesively Bonded Aluminium Joints in the Automotive Industry. Metals, 2020, 10, 730.	1.0	61
74	TFAA chemical derivatization and XPS. Analysis of OH and NHx polymers. Surface and Interface Analysis, 2009, 41, 421-429.	0.8	60
75	Effect of neighboring grains on the microscopic corrosion behavior of a grain in polycrystalline copper. Corrosion Science, 2013, 67, 179-183.	3.0	60
76	Micro Raman spectroscopy used for the study of corrosion products on copper alloys: study of the chemical composition of artificial patinas used for restoration purposes. Analyst, The, 2005, 130, 550.	1.7	58
77	Characterization of thin water-based silane pre-treatments on aluminium with the incorporation of nano-dispersed CeO2 particles. Surface and Coatings Technology, 2010, 205, 603-613.	2.2	58
78	Self-healing property characterization of reversible thermoset coatings. Journal of Thermal Analysis and Calorimetry, 2011, 105, 805-809.	2.0	58
79	The Role of Nanocluster Aggregation, Coalescence, and Recrystallization in the Electrochemical Deposition of Platinum Nanostructures. Chemistry of Materials, 2014, 26, 2396-2406.	3.2	58
80	Electrodeposition of Ag nanoparticles onto carbon coated TEM gridsA direct approach to study early stages of nucleation. Electrochemistry Communications, 2010, 12, 1706-1709.	2.3	57
81	Cut-edge corrosion study on painted aluminum rich metallic coated steel by scanning vibrating electrode and micro-potentiometric techniques. Electrochimica Acta, 2012, 61, 107-117.	2.6	57
82	Texture comparison between room temperature rolled and cryogenically rolled pure copper. Acta Materialia, 2015, 95, 224-235.	3.8	57
83	Detailed characterisation of the flow resistance of commercial sub-2Î¼m reversed-phase columns. Journal of Chromatography A, 2008, 1178, 108-117.	1.8	56
84	Late antique glass distribution and consumption in Cyprus: a chemical study. Journal of Archaeological Science, 2015, 61, 213-222.	1.2	55
85	Towards a better understanding of localised corrosion induced by typical non-metallic inclusions in low-alloy steels. Corrosion Science, 2021, 179, 109150.	3.0	55
86	Study of the Composition of Zirconium based Chromium free Conversion Layers on Aluminium. Transactions of the Institute of Metal Finishing, 1995, 73, 91-95.	0.6	53
87	Characterisation of conversion layers on aluminium by means of electrochemical impedance spectroscopy. Electrochimica Acta, 1995, 40, 479-486.	2.6	53
88	Influence of Local Heat Development on Film Thickness for Anodizing Aluminum in Sulfuric Acid. Journal of the Electrochemical Society, 2003, 150, B158.	1.3	53
89	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
90	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

#	Article	IF	Citations
91	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
92	On controlling the anodic electrochemical film deposition of HKUST-1 metalâ€“organic frameworks. Microporous and Mesoporous Materials, 2016, 224, 302-310.	2.2	52
93	Cathodic delamination of polyurethane films on oxide covered steel â€“ Combined adhesion and interface electrochemical studies. Corrosion Science, 2009, 51, 1664-1670.	3.0	51
94	Optical properties of thin iron oxide films on steel. Surface and Interface Analysis, 2006, 38, 489-493.	0.8	50
95	Atmospheric corrosion modeling. Corrosion Reviews, 2014, 32, 73-100.	1.0	50
96	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
97	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
98	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
99	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
100	An integrated modeling approach for atmospheric corrosion in presence of a varying electrolyte film. Electrochimica Acta, 2016, 187, 714-723.	2.6	48
101	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
102	Atomistic Insight into the Electrochemical Double Layer of Choline Chlorideâ€“Urea Deep Eutectic Solvents: Clustered Interfacial Structuring. Journal of Physical Chemistry Letters, 2018, 9, 6296-6304.	2.1	48
103	Comparison between the influence of applied electrode and electrolyte temperatures on porous anodizing of aluminium. Electrochimica Acta, 2010, 55, 3957-3965.	2.6	47
104	Durable lubricant-infused anodic aluminum oxide surfaces with high-aspect-ratio nanochannels. Chemical Engineering Journal, 2019, 368, 138-147.	6.6	47
105	Role of Surface Oxide Properties on the Aluminum/Epoxy Interfacial Bonding. Journal of Physical Chemistry C, 2013, 117, 4480-4487.	1.5	46
106	A Green, Simple Chemical Route for the Synthesis of Pure Nanocalcite Crystals. Crystal Growth and Design, 2015, 15, 573-580.	1.4	45
107	Reviewing machine learning of corrosion prediction in a data-oriented perspective. Npj Materials Degradation, 2022, 6, .	2.6	45
108	Development of an optical model for steady state porous anodic films on aluminium formed in phosphoric acid. Thin Solid Films, 1998, 320, 241-252.	0.8	44

#	Article	IF	Citations
109	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
110	Effect of Anodic Aluminum Oxide Chemistry on Adhesive Bonding of Epoxy. Journal of Physical Chemistry C, 2016, 120, 19670-19677.	1.5	44
111	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
112	Hydrogen chloride removal from hydrogen gas by adsorption on hydrated ion-exchanged zeolites. Chemical Engineering Journal, 2020, 381, 122512.	6.6	44
113	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
114	Influence of water content and applied potential on the electrodeposition of Ni coatings from deep eutectic solvents. Electrochimica Acta, 2019, 319, 690-704.	2.6	43
115	N-Doped TiO₂ Photocatalyst Coatings Synthesized by a Cold Atmospheric Plasma. Langmuir, 2019, 35, 7161-7168.	1.6	43
116	Highly Robust MOF Polymeric Beads with a Controllable Size for Molecular Separations. ACS Applied Materials & Interfaces, 2019, 11, 13694-13703.	4.0	43
117	Odd random phase multisine EIS for organic coating analysis. Progress in Organic Coatings, 2010, 69, 215-218.	1.9	42
118	Iron speciation in soda-lime-silica glass: a comparison of XANES and UV-vis-NIR spectroscopy. Journal of Analytical Atomic Spectrometry, 2015, 30, 1552-1561.	1.6	42
119	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
120	New insights into the mechanism of localised corrosion induced by TiN-containing inclusions in high strength low alloy steel. Journal of Materials Science and Technology, 2022, 124, 141-149.	5.6	42
121	Fabrication and Chromatographic Performance of Porous-Shell Pillar-Array Columns. Analytical Chemistry, 2010, 82, 7208-7217.	3.2	41
122	Bragg Grating Inscription in GeO -Doped Microstructured Optical Fibers. Journal of Lightwave Technology, 2010, 28, 1459-1467.	2.7	41
123	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
124	Double Perovskite Sr₂FeMoO₆ Films Prepared by Electrophoretic Deposition. ACS Applied Materials & Interfaces, 2014, 6, 19201-19206.	4.0	41
125	Geometry influence on corrosion in dynamic thin film electrolytes. Electrochimica Acta, 2016, 209, 149-158.	2.6	40
126	Chromate Conversion Coating on Aluminum Alloys. Journal of the Electrochemical Society, 2004, 151, B370.	1.3	39

#	Article	IF	Citations
127	Influence of the surface pre-treatment prior to the film synthesis, on the corrosion protection of iron with polypyrrole films. Electrochimica Acta, 2006, 51, 1695-1703.	2.6	39
128	Electrodeposition of Znâ€“Co and Znâ€“Coâ€“Fe alloys from acidic chloride electrolytes. Surface and Coatings Technology, 2007, 202, 84-90.	2.2	39
129	Scanning Kelvin Probe Study of (Oxyhydr)oxide Surface of Aluminum Alloy. Journal of Physical Chemistry C, 2012, 116, 1805-1811.	1.5	39
130	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
131	Use of optical methods to characterize thin silane films coated on aluminium. Surface and Interface Analysis, 2002, 34, 25-29.	0.8	38
132	Using Raman spectroscopy as a tool for the detection of iron in glass. Journal of Raman Spectroscopy, 2011, 42, 1789-1795.	1.2	38
133	Characterization of various aluminium oxide layers by means of spectroscopic ellipsometry. Applied Physics A: Solids and Surfaces, 1992, 54, 72-78.	1.4	37
134	Control Over the Pressure Sensitivity of Bragg Grating-Based Sensors in Highly Birefringent Microstructured Optical Fibers. IEEE Photonics Technology Letters, 2012, 24, 527-529.	1.3	37
135	Mechanism of corrosion protection of hot-dip aluminiumâ€“silicon coatings on steel studied by electrochemical depth profiling. Corrosion Science, 2013, 76, 325-336.	3.0	37
136	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
137	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
138	Kinetic plot and particle size distribution analysis to discuss the performance limits of sub-2Î¼m and supra-2Î¼m particle columns. Journal of Chromatography A, 2008, 1204, 1-10.	1.8	36
139	Comparison between wet deposition and plasma deposition of silane coatings on aluminium. Progress in Organic Coatings, 2010, 69, 126-132.	1.9	36
140	Atomic force microscopyâ€“based study of self-healing coatings based on reversible polymer network systems. Journal of Intelligent Material Systems and Structures, 2014, 25, 40-46.	1.4	36
141	In Situ Scanning Tunneling Microscopy Study of Grain-Dependent Corrosion on Microcrystalline Copper. Journal of Physical Chemistry C, 2014, 118, 25421-25428.	1.5	36
142	An in situ study of zirconium-based conversion treatment on zinc surfaces. Applied Surface Science, 2015, 356, 837-843.	3.1	36
143	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
144	Review on modelling of corrosion under droplet electrolyte for predicting atmospheric corrosion rate. Journal of Materials Science and Technology, 2021, 62, 254-267.	5.6	36

#	Article	IF	Citations
145	Cathodic inhibition and anomalous electrodeposition of Znâ€“Co alloys. Electrochimica Acta, 2007, 52, 5444-5452.	2.6	35
146	The formation and characterisation of ultra-thin films containing Ag nanoparticles. Journal of Materials Chemistry, 2008, 18, 199-206.	6.7	35
147	The kinetic analysis of isothermal curing reaction of an epoxy resin-glassflake nanocomposite. Thermochimica Acta, 2012, 549, 81-86.	1.2	35
148	Evaluation of the Yasuda parameter for the atmospheric plasma deposition of allyl methacrylate. RSC Advances, 2015, 5, 27449-27457.	1.7	35
149	Growth mechanisms of spatially separated copper dendrites in pores of a SiO₂ template. Philosophical Magazine, 2017, 97, 2268-2283.	0.7	35
150	The electrograining of aluminium in hydrochloric acidâ€”II. Formation of ETCH products. Corrosion Science, 1991, 32, 1173-1188.	3.0	34
151	Quantitative chemical composition of thin films with infrared spectroscopic ellipsometry: application to hydrated oxide films on aluminium. Surface and Interface Analysis, 2003, 35, 387-394.	0.8	34
152	Silane solution stability and film morphology of water-based bis-1,2-(triethoxysilyl)ethane for thin-film deposition on aluminium. Progress in Organic Coatings, 2008, 63, 38-42.	1.9	34
153	Ni-rich spinels and platinum group element nuggets condensed from a Late Archaean impact vapour cloud. Earth and Planetary Science Letters, 2013, 376, 87-98.	1.8	34
154	In situ scanning tunneling microscopy study of the intergranular corrosion of copper. Electrochemistry Communications, 2014, 41, 1-4.	2.3	34
155	The electrograining of aluminium in hydrochloric acidâ€”I. Morphological appearance. Corrosion Science, 1991, 32, 1159-1172.	3.0	33
156	Study of copper nitrate-based patinas. Journal of Raman Spectroscopy, 2006, 37, 1211-1220.	1.2	33
157	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
158	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
159	Cobalt absorption bands for the differentiation of historical Na and Ca/K rich glass. Surface and Interface Analysis, 2012, 44, 219-226.	0.8	33
160	Nanostructured porous polymer monolithic columns for capillary liquid chromatography of peptides. Journal of Chromatography A, 2014, 1374, 171-179.	1.8	33
161	Chromate Conversion Coating on Aluminum Alloys. Journal of the Electrochemical Society, 2004, 151, B359.	1.3	32
162	In Situ Study of Buried Metalâ€“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

#	Article	IF	Citations
163	Synthesis and texturization processes of (super)-hydrophobic fluorinated surfaces by atmospheric plasma. Journal of Materials Research, 2015, 30, 3177-3191.	1.2	32
164	Interface strength and degradation of adhesively bonded porous aluminum oxides. Npj Materials Degradation, 2017, 1, .	2.6	32
165	AC electrograining of aluminium. Transactions of the Institute of Metal Finishing, 1988, 66, 116-121.	0.6	31
166	Use of spectroscopic ellipsometry to study Zr/Ti films on Al. Surface and Interface Analysis, 2002, 34, 677-680.	0.8	31
167	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
168	Design of a microfluidic device for comprehensive spatial twoâ€dimensional liquid chromatography. Journal of Separation Science, 2015, 38, 1123-1129.	1.3	31
169	A Multiple-Action Self-Healing Coating. Frontiers in Materials, 2016, 2, .	1.2	30
170	Corrosion resistance of Znâ€“Coâ€“Fe alloy coatings on high strength steel. Surface and Coatings Technology, 2009, 203, 1415-1422.	2.2	29
171	A XANES study of chromophores: the case of black glass. Analytical Methods, 2014, 6, 2662-2671.	1.3	29
172	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
173	Study of the formation of chromate conversion coatings on Alclad 2024 aluminum alloy using spectroscopic ellipsometry. Thin Solid Films, 2002, 410, 76-85.	0.8	28
174	Influence of heat transfer on anodic oxidation of aluminium. Journal of Applied Electrochemistry, 2002, 32, 73-83.	1.5	28
175	Electrochemical investigation of rolled-in subsurface layers in commercially pure aluminium alloys with the micro-capillary cell technique. Surface and Coatings Technology, 2007, 201, 4553-4560.	2.2	28
176	Irradiation of human insulin in aqueous solution, first step towards radiosterilization. International Journal of Pharmaceutics, 2007, 343, 4-11.	2.6	28
177	Towards the understanding of plasma polymer film behaviour in ethanol: A multi-technique investigation. Progress in Organic Coatings, 2011, 70, 134-141.	1.9	28
178	High spatial resolution geochemistry and textural characteristics of â€˜microtektiteâ€™ glass spherules in proximal Cretaceousâ€“Paleogene sections: Insights into glass alteration patterns and precursor melt lithologies. Geochimica Et Cosmochimica Acta, 2015, 152, 1-38.	1.6	28
179	Active corrosion protection of various aluminium alloys by lithiumâ€leaching coatings. Surface and Interface Analysis, 2019, 51, 1276-1287.	0.8	28
180	A study of the mechanism of A.C. electrolytic graining of aluminium in hydrochloric and nitric acid. Corrosion Science, 1993, 35, 231-238.	3.0	27

#	Article	IF	Citations
181	Optical properties of magnetron-sputtered and rolled aluminum. Journal of Applied Physics, 2005, 98, 083505.	1.1	27
182	Interface Dipoles Observed after Adsorption of Model Compounds on Iron Oxide Films: Effect of Organic Functionality and Oxide Surface Chemistry. Journal of Physical Chemistry C, 2008, 112, 12951-12957.	1.5	27
183	Effect of the presence of an ordered micro-pillar array on the formation of silica monoliths. Journal of Chromatography A, 2009, 1216, 7360-7367.	1.8	27
184	Plasma polymerization of C4Cl6 and C2H2Cl4 at atmospheric pressure. Polymer, 2013, 54, 4085-4092.	1.8	27
185	The Impact of Double Bonds in the APPECVD of Acrylate-Like Precursors. Plasma Processes and Polymers, 2013, 10, 857-863.	1.6	27
186	Surface Characterization of Atmospheric Pressure Plasmaâ€Deposited Allyl Methacrylate and Acrylic Acid Based Coatings. Plasma Processes and Polymers, 2013, 10, 564-571.	1.6	27
187	Local passivation of metals at grain boundaries: In situ scanning tunneling microscopy study on copper. Corrosion Science, 2016, 111, 659-666.	3.0	27
188	On the Control and Effect of Water Content during the Electrodeposition of Ni Nanostructures from Deep Eutectic Solvents. Journal of Physical Chemistry C, 2018, 122, 23129-23142.	1.5	27
189	Dual Role of Lithium on the Structure and Self-Healing Ability of PMMA-Silica Coatings on AA7075 Alloy. ACS Applied Materials & Interfaces, 2019, 11, 40629-40641.	4.0	27
190	The chemical throwing power of lithium-based inhibitors from organic coatings on AA2024-T3. Corrosion Science, 2019, 150, 194-206.	3.0	27
191	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
192	Study of the interaction of hydrolysed silane solutions with pre-treated aluminium substrates. Surface and Interface Analysis, 2006, 38, 172-175.	0.8	26
193	Optical spectroscopy as a rapid and low-cost tool for the first-line analysis of glass artefacts: a step-by-step plan for Roman green glass. Journal of Archaeological Science, 2011, 38, 2387-2398.	1.2	26
194	Evaluation of curing kinetic parameters of an epoxy/polyaminoamide/nano-glassflake system by non-isothermal differential scanning calorimetry. Thermochimica Acta, 2012, 533, 10-15.	1.2	26
195	Fatigue of Ti6Al4V Structural Health Monitoring Systems Produced by Selective Laser Melting. Materials, 2016, 9, 106.	1.3	26
196	Photocatalytic TiO2 thin films synthesized by the post-discharge of an RF atmospheric plasma torch. Surface and Coatings Technology, 2016, 289, 172-178.	2.2	26
197	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
198	Characterization of aluminium surface treatments with electrochemical impedance spectroscopy and spectroscopic ellipsometry. Electrochimica Acta, 1993, 38, 2103-2109.	2.6	25

#	Article	IF	Citations
199	Optical properties of heavily boron-doped nanocrystalline diamond films studied by spectroscopic ellipsometry. Applied Physics Letters, 2008, 93, 131910.	1.5	25
200	Control of the electrode temperature for electrochemical studies: A new approach illustrated on porous anodizing of aluminium. Electrochemistry Communications, 2009, 11, 2292-2295.	2.3	25
201	Study of local Na+ and Clâ’ distributions during the cut-edge corrosion of aluminum rich metal-coated steel by scanning vibrating electrode and micro-potentiometric techniques. Electrochimica Acta, 2013, 102, 319-327.	2.6	25
202	Influence of Carbide Morphology and Microstructure on the Kinetics of Superficial Decarburization of C-Mn Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 123-133.	1.1	25
203	Chromatographic Properties of Minimal Aspect Ratio Monolithic Silica Columns. Analytical Chemistry, 2017, 89, 10948-10956.	3.2	25
204	Modelling of hydrogen permeation experiments in iron alloys: Characterization of the accessible parameters â€“ Part I â€“ The entry side. Electrochimica Acta, 2018, 262, 57-65.	2.6	25
205	Changes in epoxy-coated aluminium due to exposure to water. Progress in Organic Coatings, 2004, 51, 351-364.	1.9	24
206	Electropolishing of Copper in H[sub 3]PO[sub 4]. Journal of the Electrochemical Society, 2007, 154, C175.	1.3	24
207	Influence of pretreatments and aging on the adhesion performance of epoxy-coated aluminum. Surface and Coatings Technology, 2013, 215, 260-265.	2.2	24
208	Deposition of photocatalytic anatase titanium dioxide films by atmospheric dielectric barrier discharge. Surface and Coatings Technology, 2017, 310, 173-179.	2.2	24
209	Odd Random Phase Electrochemical Impedance Spectroscopy to Study the Corrosion Behavior of Hot Dip Zn and Zn-Alloy Coated Steel Wires in Sodium Chloride Solution. Journal of the Electrochemical Society, 2018, 165, C246-C257.	1.3	24
210	The use of impedance spectroscopy and optical reflection spectroscopy to study modified aluminium surfaces. Electrochimica Acta, 1996, 41, 1155-1161.	2.6	23
211	Investigation of Cr(III) Based Conversion Coatings On Electrogalvanised Steel. Surface Engineering, 2004, 20, 244-250.	1.1	23
212	Optical and thermoelectric characterizations of electroplated n-Bi2(Te0.9Se0.1)3. Journal of Physics and Chemistry of Solids, 2007, 68, 1902-1907.	1.9	23
213	Potentiodynamic EIS investigation of the 2-methyl-5-mercapto-1,3,4-thiadiazole adsorption on copper. Electrochimica Acta, 2008, 53, 7451-7459.	2.6	23
214	SiOxNy thin films with variable refraction index: Microstructural, chemical and mechanical properties. Applied Surface Science, 2010, 256, 4548-4553.	3.1	23
215	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
216	On the morphology of Si/SiO2/Ni nanostructures with swift heavy ion tracks in silicon oxide. Journal of Surface Investigation, 2014, 8, 805-813.	0.1	23

#	Article	IF	Citations
217	Laser ablation- and plasma etching-based patterning of graphene on silicon-on-insulator waveguides. Optics Express, 2015, 23, 26639.	1.7	23
218	An investigation of the corrosion inhibitive layers generated from lithium oxalateâ€containing organic coating on AA2024â€T3 aluminium alloy. Surface and Interface Analysis, 2016, 48, 798-803.	0.8	23
219	Supported Silver Nanoparticle and Near-Interface Solution Dynamics in a Deep Eutectic Solvent. Journal of Physical Chemistry C, 2016, 120, 1534-1545.	1.5	23
220	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
221	Spectroscopic ellipsometry characterization of anodic films on aluminium correlated with transmission electron microscopy and Auger electron spectroscopy. Surface and Interface Analysis, 1992, 19, 445-449.	0.8	22
222	Characterization of different conversion coatings on aluminium with spectroscopic ellipsometry. Thin Solid Films, 1993, 233, 58-62.	0.8	22
223	Study of the phosphating treatment of aluminium surfaces: role of the activating process. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1998, 136, 89-96.	2.3	22
224	Influence of alloying elements on the corrosion resistance of rolled zinc sheet. Corrosion Science, 2006, 48, 1483-1499.	3.0	22
225	An infrared spectroscopic study of sodium silicate adsorption on porous anodic alumina. Surface and Interface Analysis, 2013, 45, 1098-1104.	0.8	22
226	Superhydrophobic Breakdown of Nanostructured Surfaces Characterized in Situ Using ATRâ€“FTIR. Langmuir, 2017, 33, 3601-3609.	1.6	22
227	Comparing Modeled and Experimental Accelerated Corrosion Tests on Steel. Journal of the Electrochemical Society, 2017, 164, C554-C562.	1.3	22
228	On the use of SKPFM for in situ studies of the repassivation of the native oxide film on aluminium in air. Electrochemistry Communications, 2018, 93, 162-165.	2.3	22
229	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
230	Comparison of the A.C. electrograining of aluminium in hydrochloric and nitric acid. Transactions of the Institute of Metal Finishing, 1992, 70, 105-110.	0.6	21
231	Study of the near-surface of hot- and cold-rolled AlMg0.5 aluminium alloy. Surface and Interface Analysis, 2005, 37, 534-543.	0.8	21
232	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
233	Mechanism of formation of silicate thin films on porous anodic alumina. Surface and Coatings Technology, 2011, 205, 5210-5217.	2.2	21
234	Deposition and Characterisation of Plasma Polymerised Allyl Methacrylate Based Coatings. Plasma Processes and Polymers, 2012, 9, 799-807.	1.6	21

#	Article	IF	Citations
235	In-situ ATR-FTIR for dynamic analysis of superhydrophobic breakdown on nanostructured silicon surfaces. Scientific Reports, 2018, 8, 11637.	1.6	21
236	AC-anodising of aluminium: Contribution to electrical and efficiency study. Electrochimica Acta, 2006, 52, 1127-1134.	2.6	20
237	Evidence of covalent bond formation at the silaneâ€“metal interface during plasma polymerization of bis-1,2-(triethoxysilyl)ethane (BTSE) on aluminium. Chemical Physics Letters, 2010, 493, 107-112.	1.2	20
238	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
239	SKP as a tool to study the physicochemical interaction at buried metalâ€“coating interfaces. Surface and Interface Analysis, 2010, 42, 1005-1009.	0.8	20
240	In Situ Study of the Deposition of (Ultra)thin Organic Phosphonic Acid Layers on the Oxide of Aluminum. Langmuir, 2012, 28, 3167-3173.	1.6	20
241	Electrochemical depth profiling of multilayer metallic structures: An aluminum brazing sheet. Electrochimica Acta, 2012, 77, 285-293.	2.6	20
242	Bonding Mechanisms at Buried Interfaces between Carboxylic Polymers and Treated Zinc Surfaces. Journal of Physical Chemistry C, 2013, 117, 2780-2792.	1.5	20
243	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
244	Simulated and measured response of oxygen SECM-measurements in presence of a corrosion process. Electrochimica Acta, 2014, 146, 556-563.	2.6	20
245	Grain boundary passivation studied by in situ scanning tunneling microscopy on microcrystalline copper. Journal of Solid State Electrochemistry, 2015, 19, 3501-3509.	1.2	20
246	Modelling of hydrogen permeation experiments in iron alloys: Characterization of the accessible parameters â€“ Part II â€“ The exit side. Electrochimica Acta, 2018, 262, 153-161.	2.6	20
247	An in situ spectro-electrochemical monitoring of aqueous effects on polymer/metal oxide interfaces. Journal of Electroanalytical Chemistry, 2019, 848, 113311.	1.9	20
248	Effect of Zn on the grain boundary precipitates and resulting alkaline etching of recycled Al-Mg-Si-Cu alloys. Journal of Alloys and Compounds, 2019, 794, 435-442.	2.8	20
249	Role of phosphate, calcium species and hydrogen peroxide on albumin protein adsorption on surface oxide of Ti6Al4V alloy. Materialia, 2021, 15, 100988.	1.3	20
250	A combined XPS/ToF-SIMS approach for the 3D compositional characterization of Zr-based conversion of galvanized steel. Applied Surface Science, 2021, 562, 150166.	3.1	20
251	Toward a quantitative description of the anodic oxide films on aluminum. Electrochemistry Communications, 2001, 3, 737-741.	2.3	19
252	Electrode temperature evolution during anodic oxidation of AlSi(Cu) alloys studied in the wall-jet reactor. Surface and Coatings Technology, 2006, 200, 5343-5353.	2.2	19

#	Article	IF	Citations
253	Influence of uniaxial deformation on the corrosion performance of pre-coated packaging steel. Progress in Organic Coatings, 2007, 60, 335-342.	1.9	19
254	Corrosion study on Al-rich metal-coated steel by odd random phase multisine electrochemical impedance spectroscopy. Electrochimica Acta, 2014, 124, 165-175.	2.6	19
255	Oxygen consumption upon electrochemically polarised zinc. Journal of Applied Electrochemistry, 2014, 44, 747-757.	1.5	19
256	Molybdate-phosphate conversion coatings to protect steel in a simulated concrete pore solution. Surface and Coatings Technology, 2019, 361, 280-291.	2.2	19
257	Effect of Ce(III) and Ce(IV) ions on the structure and active protection of PMMA-silica coatings on AA7075 alloy. Corrosion Science, 2021, 189, 109581.	3.0	19
258	A wall-jet electrode reactor and its application to the study of electrode reaction mechanisms Part I: Design and construction. Journal of Applied Electrochemistry, 1995, 25, 1017.	1.5	18
259	Multinuclear 1D- and 2D-NMR study of the hydrolysis and condensation of bis-1,2-(triethoxysilyl)ethane. Journal of Adhesion Science and Technology, 2004, 18, 765-778.	1.4	18
260	Validation of a fast scanning technique for corrosion inhibitor selection: influence of crossâ€contamination on AA2024â€T3. Surface and Interface Analysis, 2010, 42, 205-210.	0.8	18
261	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
262	Atmospheric Pressure Plasma Technology: a Straightforward Deposition of Antibacterial Coatings. Plasma Processes and Polymers, 2011, 8, 59-69.	1.6	18
263	Raman spectroscopy as a rapid screening method for ancient plain window glass. Journal of Raman Spectroscopy, 2011, 42, 1055-1061.	1.2	18
264	About the Influence of Double Bonds in the APPECVD of Acrylateâ€Like Precursors: A Mass Spectrometry Study of the Plasma Phase. Plasma Processes and Polymers, 2014, 11, 335-344.	1.6	18
265	Role of Si in the Anodizing Behavior of Al-Si Alloys: Additive Manufactured and Cast Al-Si10-Mg. Journal of the Electrochemical Society, 2018, 165, C532-C541.	1.3	18
266	Studying Chemisorption at Metalâ€“Polymer Interfaces by Complementary Use of Attenuated Total Reflectionâ€“Fourier Transform Infrared Spectroscopy (ATR-FTIR) in the Kretschmann Geometry and Visibleâ€“Infrared Sum-Frequency Generation Spectroscopy (SFG). Journal of Physical Chemistry C, 2020, 124, 7127-7138.	1.5	18
267	Nondestructive Optical Characterization of Chemical Conversion Coatings on Aluminum. Journal of the Electrochemical Society, 1998, 145, 2733-2739.	1.3	17
268	Study of the catalyst evolution during annealing preceding the growth of carbon nanotubes by microwave plasma-enhanced chemical vapour deposition. Nanotechnology, 2007, 18, 455602.	1.3	17
269	A combined composition and morphology study of electrodeposited Znâ€“Co and Znâ€“Coâ€“Fe alloy coatings. Surface and Coatings Technology, 2008, 202, 2755-2764.	2.2	17
270	Characterizations of bismuth telluride films from Mottâ€Schottky plot and spectroscopic ellipsometry. Surface and Interface Analysis, 2008, 40, 593-596.	0.8	17

#	Article	IF	Citations
271	Influence of SiO2/Na2O ratio and temperature on the mechanism of interaction of soluble sodium silicates with porous anodic alumina. Surface and Coatings Technology, 2011, 206, 1269-1276.	2.2	17
272	Development of an Electrochemical Procedure for Monitoring Hydrogen Sorption/Desorption in Steel. Journal of the Electrochemical Society, 2017, 164, C747-C757.	1.3	17
273	Probing the Metal Oxide/Polymer Molecular Hybrid Interfaces with Nanoscale Resolution Using AFM-IR. Journal of Physical Chemistry C, 2019, 123, 26178-26184.	1.5	17
274	Morphology optimization and assessment of the performance limits of high-porosity nanostructured polymer monolithic capillary columns for proteomics analysis. Analytica Chimica Acta, 2020, 1124, 176-183.	2.6	17
275	Characterization of gold nanoclusters deposited on HOPG by atmospheric plasma treatment. Surface and Interface Analysis, 2008, 40, 566-570.	0.8	16
276	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
277	Potentiodynamic anodizing of aluminum alloys in Cr(VI)â€free electrolytes. Surface and Interface Analysis, 2016, 48, 946-952.	0.8	16
278	Fatigue Performance of Ti-6Al-4V Additively Manufactured Specimens with Integrated Capillaries of an Embedded Structural Health Monitoring System. Materials, 2017, 10, 993.	1.3	16
279	Particulate barium tracing of significant mesopelagic carbon remineralisation in the North Atlantic. Biogeosciences, 2018, 15, 2289-2307.	1.3	16
280	Atmospheric pressure dielectric barrier discharge synthesis of morphology-controllable TiO2 films with enhanced photocatalytic activity. Thin Solid Films, 2018, 664, 90-99.	0.8	16
281	Study of the hydrogen uptake in deformed steel using the microcapillary cell technique. Corrosion Science, 2019, 155, 55-66.	3.0	16
282	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
283	Editorsâ€™ Choiceâ€”Dealloying-Driven Cerium Precipitation on Intermetallic Particles in Aerospace Aluminium Alloys. Journal of the Electrochemical Society, 2021, 168, 041505.	1.3	16
284	Influence of synthesis parameters on morphology and phase composition of porous titania layers prepared via water based chemical solution deposition. Journal of the European Ceramic Society, 2007, 27, 4537-4546.	2.8	15
285	Multipulse electrodeposition of Ag nanoparticles on HOPG monitored by in-situ by Small-Angle X-ray Scattering. Electrochemistry Communications, 2011, 13, 1320-1323.	2.3	15
286	Plasma Polymerization of a Saturated Branched Hydrocarbon. The Case of Heptamethylnonane. Plasma Processes and Polymers, 2013, 10, 51-59.	1.6	15
287	Surface temperature: A key parameter to control the propanethiol plasma polymer chemistry. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	15
288	Investigation of the Ordering of Porous Anodic Alumina Formed by Anodization of Aluminum in Selenic Acid. Journal of the Electrochemical Society, 2015, 162, E166-E172.	1.3	15

#	Article	IF	Citations
289	The corrosion process of sterling silver exposed to a Na2S solution: monitoring and characterizing the complex surface evolution using a multi-analytical approach. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	15
290	Li leaching from Lithium Carbonate-primer: An emerging perspective of transport pathway development. Progress in Organic Coatings, 2019, 134, 103-118.	1.9	15
291	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
292	Mechanism of LDH Direct Growth on Aluminum Alloy Surface: A Kinetic and Morphological Approach. Journal of Physical Chemistry C, 2021, 125, 11687-11701.	1.5	15
293	Influence of austenitisation temperatures during hot stamping on the local electrochemical behaviour of 22MnB5 steel coated with hot-dip Al-Si. Corrosion Science, 2021, 190, 109673.	3.0	15
294	The influence of manganese on the AC electrolytic graining of aluminium. Corrosion Science, 1996, 38, 413-429.	3.0	14
295	Optical and transmission electron microscopical study of the evolution of surface layer on recycled aluminium along the rolling mills. Surface and Coatings Technology, 2007, 201, 4561-4570.	2.2	14
296	XPS study of the assembling morphology of 3-hydroxy-3-phosphono-butiric acid tert-butyl ester on variously pretreated Al surfaces. Progress in Organic Coatings, 2008, 63, 272-281.	1.9	14
297	Early stages during localized corrosion of AA2024 TEM specimens in chloride environment. Surface and Interface Analysis, 2013, 45, 1619-1625.	0.8	14
298	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
299	Aerospace Coatings. Springer Series in Materials Science, 2016, , 315-372.	0.4	14
300	Influence of grain size on the electrochemical behavior of pure copper. Journal of Materials Science, 2017, 52, 1501-1510.	1.7	14
301	Particle Characterisation and Depletion of Li2CO3 Inhibitor in a Polyurethane Coating. Coatings, 2017, 7, 106.	1.2	14
302	Water distribution at the electrified interface of deep eutectic solvents. Nanoscale Advances, 2019, 1, 2847-2856.	2.2	14
303	Nanorods grown by copper anodizing in sodium carbonate. Journal of Electroanalytical Chemistry, 2020, 857, 113628.	1.9	14
304	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
305	EIS study of the influence of aluminium etching on the growth of chromium phosphate conversion layers. Electrochimica Acta, 1998, 43, 1829-1838.	2.6	13
306	Depth profiling of rolled aluminium alloys by means of GDOES. Surface and Interface Analysis, 2004, 36, 833-836.	0.8	13

#	Article	IF	Citations
307	Infrared and Visible Dielectric Function of Electroplated Bi[sub 2Â±x]Te[sub 3Â±x] Films Determined by Spectroscopic Ellipsometry. Journal of the Electrochemical Society, 2005, 152, G772.	1.3	13
308	In situ Raman Spectroscopy and Spectroscopic Ellipsometry Analysis of the Iron/Polypyrrole Interface. Journal of Physical Chemistry C, 2007, 111, 14400-14409.	1.5	13
309	Experimental study and modelling of anodizing of aluminium in a wall-jet electrode set-up in laminar and turbulent regime. Corrosion Science, 2009, 51, 1482-1489.	3.0	13
310	Colour simulation and prediction of complex nano-structured metal oxide films. Surface and Coatings Technology, 2011, 205, 4349-4354.	2.2	13
311	Study of the selfâ€assembling of nâ€octylphosphonic acid layers on aluminum oxide from ethanolic solutions. Surface and Interface Analysis, 2013, 45, 1435-1440.	0.8	13
312	Dynamic, in situ study of self-assembling organic phosphonic acid monolayers from ethanolic solutions on aluminium oxides by means of odd random phase multisine electrochemical impedance spectroscopy. Electrochimica Acta, 2013, 106, 342-350.	2.6	13
313	Monitoring the morphology development of polymer-monolithic stationary phases by thermal analysis. Journal of Separation Science, 2014, 37, 179-186.	1.3	13
314	A Finite Element Simulation of the Electrochemical Growth of a Single Hemispherical Silver Nucleus. Electrochimica Acta, 2016, 197, 307-317.	2.6	13
315	Chemical and physical effect of SiO2 and TiO2 nanoparticles on highly hydrophobic fluorocarbon hybrid coatings synthesized by atmospheric plasma. Surface and Coatings Technology, 2017, 315, 274-282.	2.2	13
316	Adhesive Bonding and Corrosion Performance Investigated as a Function of Aluminum Oxide Chemistry and Adhesives. Corrosion, 2017, 73, 903-914.	0.5	13
317	A Complementary Electrochemical Approach for Time-Resolved Evaluation of Corrosion Inhibitor Performance. Journal of the Electrochemical Society, 2019, 166, C3220-C3232.	1.3	13
318	Corrosion Inhibition of Mild Steel by Cetrimonium trans-4-Hydroxy Cinnamate: Entrapment and Delivery of the Anion Inhibitor through Speciation and Micellar Formation. Journal of Physical Chemistry Letters, 2020, 11, 9886-9892.	2.1	13
319	Nanoscale Elastocapillary Effect Induced by Thin-Liquid-Film Instability. Journal of Physical Chemistry Letters, 2020, 11, 2751-2758.	2.1	13
320	Ion yield enhancement at the organic/inorganic interface in SIMS analysis using Ar-GCIB. Applied Surface Science, 2021, 536, 147716.	3.1	13
321	Effect of hydrogen peroxide on bovine serum albumin adsorption on Ti6Al4V alloy: A scanning Kelvin probe force microscopy study. Applied Surface Science, 2021, 563, 150364.	3.1	13
322	On the structure and chemical composition of chromium based conversion coatings on aluminium: a TOF SIMS study. Journal of Analytical Atomic Spectrometry, 1999, 14, 483-486.	1.6	12
323	Use of in-situ spectroscopic ellipsometry to study aluminium/oxide surface modifications in chloride and sulfuric solutions. Thin Solid Films, 2004, 455-456, 742-746.	0.8	12
324	In-situ characterisation of organosilane film formation on aluminium alloys by electrochemical quartz crystal microbalance and in-situ ellipsometry. Thin Solid Films, 2005, 483, 66-73.	0.8	12

#	Article	IF	Citations
325	Adsorption of some benzohydroxamic acid derivatives on copper oxide: assignment and interpretation of SERS spectra. Journal of Raman Spectroscopy, 2006, 37, 777-788.	1.2	12
326	Effect of surface composition and microstructure of aluminised steel on the formation of a titanium-based conversion layer. Surface and Coatings Technology, 2013, 235, 628-636.	2.2	12
327	Structural dependence of gold deposition by nanoplating in polycrystalline copper. Journal of Materials Science, 2014, 49, 3909-3916.	1.7	12
328	Hydrogen sorption and desorption related properties of Pd-alloys determined by cyclic voltammetry. Journal of Electroanalytical Chemistry, 2014, 734, 53-60.	1.9	12
329	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
330	Development of novel surface treatments for corrosion protection of aluminum: self-repairing coatings. Corrosion Reviews, 2018, 36, 55-64.	1.0	12
331	50 shades of colour: how thickness, iron redox and manganese/antimony contents influence perceived and intrinsic colour in Roman glass. Archaeological and Anthropological Sciences, 2020, 12, 1.	0.7	12
332	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
333	Factor analysis as a tool to deconvolute auger spectra of tungsten nitrides and carbides. Surface and Interface Analysis, 1994, 21, 483-489.	0.8	11
334	Title is missing!. Journal of Applied Electrochemistry, 1998, 28, 387-396.	1.5	11
335	Interpretation of the anodic and cathodic potential variations during the AC-graining of aluminium in hydrochloric acid. Corrosion Science, 2007, 49, 3428-3441.	3.0	11
336	Influence of synthesis conditions on microstructure and phase transformations of annealed Sr₂FeMoO_{6â^'x} nanopowders formed by the citrateâ€“gel method. Beilstein Journal of Nanotechnology, 2016, 7, 1202-1207.	1.5	11
337	TEM and AES investigations of the natural surface nanoâ€oxide layer of an AISI 316L stainless steel microfibre. Journal of Microscopy, 2016, 264, 207-214.	0.8	11
338	Pattern Collapse of High-Aspect-Ratio Silicon Nanostructures - A Parametric Study. Solid State Phenomena, 0, 255, 136-140.	0.3	11
339	Light through glass: The spectrum of Late Antique glass from Cyprus. Journal of Archaeological Science: Reports, 2016, 7, 614-624.	0.2	11
340	A modelling approach on the impact of an oxide layer on the hydrogen permeation through iron membranes in the Devanathan-Stachurski cell. Electrochimica Acta, 2018, 286, 139-147.	2.6	11
341	Morphology and Microstructure Evolution of Gold Nanostructures in the Limited Volume Porous Matrices. Sensors, 2020, 20, 4397.	2.1	11
342	The role of hydrogen bond donor and water content on the electrochemical reduction of Ni²⁺ from solvents â€“ an experimental and modelling study. Physical Chemistry Chemical Physics, 2020, 22, 16125-16135.	1.3	11

#	Article	IF	Citations
343	Moving Boundary Simulation of Iron-Zinc Sacrificial Corrosion under Dynamic Electrolyte Thickness Based on Real-Time Monitoring Data. Journal of the Electrochemical Society, 2020, 167, 041503.	1.3	11
344	Molecular Characterization of Multiple Bonding Interactions at the Steel Oxideâ€“Aminopropyl triethoxysilane Interface by ToF-SIMS. ACS Omega, 2020, 5, 692-700.	1.6	11
345	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
346	Predicting the effect of droplet geometry and size distribution on atmospheric corrosion. Corrosion Science, 2022, 202, 110308.	3.0	11
347	Spectroscopic Ellipsometry: a Non-destructive Technique for Surface Analysis. Advanced Engineering Materials, 1999, 1, 63-66.	1.6	10
348	The Use of Infrared Spectroscopic Ellipsometry for the Thickness Determination and Molecular Characterization of Thin Films on Aluminum. Journal of the Electrochemical Society, 2001, 148, F12.	1.3	10
349	Electropolishing of aluminium: processing and assessment of visual appearance. Surface and Interface Analysis, 2003, 35, 121-127.	0.8	10
350	Spectroscopic ellipsometric characterization of an aqueous polyacrylic dispersion on steel. Thin Solid Films, 2005, 493, 35-40.	0.8	10
351	Investigation of the (sub)surface of commercially pure rolled aluminium alloys by means of total reflectance, r.f. GDOES, SEM/EDX and FIB/TEM analysis. Surface and Interface Analysis, 2006, 38, 272-276.	0.8	10
352	Quantitative topography characterization of surfaces with asymmetric roughness induced by AC-graining on aluminium. Surface and Coatings Technology, 2006, 201, 918-926.	2.2	10
353	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
354	Predicting reflections of thin coatings. Surface and Coatings Technology, 2009, 204, 551-557.	2.2	10
355	The identification of chromophores in ancient glass by the use of UV-VIS-NIR spectroscopy. , 2010, , .		10
356	A method to detect retained gas during AC electrograining using in-situ small angle X-ray scattering. Electrochemistry Communications, 2010, 12, 717-719.	2.3	10
357	Colour and Chemistry of the Glass Finds in the Roman Villa of Treignes, Belgium. Procedia Chemistry, 2013, 8, 55-64.	0.7	10
358	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
359	Comparison of Electrochemical and Thermal Evaluation of Hydrogen Uptake in Steel Alloys Having Different Microstructures. Journal of the Electrochemical Society, 2018, 165, C787-C793.	1.3	10
360	Numerical interpretation to differentiate hydrogen trapping effects in iron alloys in the Devanathan-Stachurski permeation cell. Corrosion Science, 2019, 154, 231-238.	3.0	10

#	Article	IF	Citations
361	Electrochemical behaviour of 22MnB5 steel coated with hot-dip Al-Si before and after hot-stamping process investigated by means of scanning Kelvin probe microscopy. Corrosion Science, 2020, 174, 108811.	3.0	10
362	Monitoring initial contact of UV-cured organic coatings with aqueous solutions using odd random phase multisine electrochemical impedance spectroscopy. Corrosion Science, 2021, 190, 109713.	3.0	10
363	Influence of Aluminium Pretreatment on the Growth of Porous Oxide Films. Transactions of the Institute of Metal Finishing, 1990, 68, 33-37.	0.6	9
364	Determination of the depth resolution of Auger electron spectroscopy depth profiles of anodic barrier oxide films on differently pretreated aluminium substrates. Surface and Interface Analysis, 1994, 22, 175-180.	0.8	9
365	Feasibility of Fourier Transform Laser Microprobe Mass Spectrometry for the Analysis of Lubricating Emulsions on Rolled Aluminium. Rapid Communications in Mass Spectrometry, 1996, 10, 1351-1360.	0.7	9
366	Non-destructive optical characterisation of chromium conversion layers on aluminium. Thin Solid Films, 1998, 313-314, 727-731.	0.8	9
367	Feasibility study to probe the growth of chromate based conversion on Al by means of rotating ring disc electrode (RRDE) measurements. Electrochimica Acta, 2002, 47, 1925-1934.	2.6	9
368	Understanding the electrochemical, microstructural and morphological changes during hot rolling from a corrosion perspective. Surface and Coatings Technology, 2006, 201, 828-834.	2.2	9
369	Mass Manufacturable 180^{circ}-Bend Single-Mode Fiber Socket Using Hole-Assisted Low Bending Loss Fiber. IEEE Photonics Technology Letters, 2008, 20, 187-189.	1.3	9
370	Silicate-based post-anodic treatment for lithographic application. Surface and Interface Analysis, 2010, 42, 321-327.	0.8	9
371	Optical spectroscopy applied to the analysis of medieval and post-medieval plain flat glass fragments excavated in Belgium. , 2010, , .		9
372	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
373	Numerical characterization of an ultra-high NA coherent fiber bundle part I: modal analysis. Optics Express, 2013, 21, 21991.	1.7	9
374	Studying interfacial bonding at buried polymerâ€“zinc interfaces. Progress in Organic Coatings, 2015, 89, 323-331.	1.9	9
375	Improved Corrosion Resistance of Aluminum Brazing Sheet by a Post-Brazing Heat Treatment. Corrosion, 2017, 73, 379-393.	0.5	9
376	Electrochemical and Surface Characterization Study on the Corrosion Inhibition of Mild Steel 1030 by the Cationic Surfactant Cetrimonium Trans-4-hydroxy-cinnamate. ACS Omega, 2021, 6, 1941-1952.	1.6	9
377	Depth profiling approach to evaluate the influence of hot stamping on the local electrochemical behaviour and galvanic series of hot-dip Al-Si coating on 22MnB5 steel. Corrosion Science, 2021, 185, 109435.	3.0	9
378	A wall jet electrode reactor and its application to the study of electrode reaction mechanisms Part II: A general computational method for the mass transport problems involved. Journal of Applied Electrochemistry, 1995, 25, 1023.	1.5	8

#	Article	IF	Citations
379	Study of the Formation of Zinc Phosphate Layers on AA5754 Aluminium Alloy. Transactions of the Institute of Metal Finishing, 1998, 76, 19-23.	0.6	8
380	Influence of surface pre-treatments on disturbed rolled-in subsurface layers of aluminium alloys. Surface and Coatings Technology, 2006, 201, 2587-2598.	2.2	8
381	Identification of bubble evolution mechanisms during AC electrograining. Electrochemistry Communications, 2010, 12, 156-159.	2.3	8
382	The influence of preâ€treatments of aluminium alloys on bonding of PET coatings. Surface and Interface Analysis, 2010, 42, 316-320.	0.8	8
383	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
384	The potential of UV-VIS-NIR absorption spectroscopy in glass studies. Proceedings of SPIE, 2012, , .	0.8	8
385	Gold nanoplating as a new method for the quantification of the electrochemical activity of grain boundaries in polycrystalline metals. Electrochemistry Communications, 2012, 24, 97-99.	2.3	8
386	Measuring the adsorption of ethanol on aluminium oxides using odd random phase multisine electrochemical impedance spectroscopy. Electrochemistry Communications, 2012, 22, 124-127.	2.3	8
387	Colorando Auro: contribution to the understanding of a medieval recipe to colour gilded silver plates. Applied Physics A: Materials Science and Processing, 2013, 111, 39-46.	1.1	8
388	Incorporation of corrosion inhibitor in plasma polymerized allyl methacrylate coatings and evaluation of its corrosion performance. Surface and Coatings Technology, 2014, 259, 714-724.	2.2	8
389	An in situ study of amine and amide molecular interaction on Fe surfaces. Applied Surface Science, 2015, 354, 242-249.	3.1	8
390	Single-Layer Graphene Synthesis on a Al2O3(0001)/Cu(111) Template Using Chemical Vapor Deposition. ECS Journal of Solid State Science and Technology, 2016, 5, Q3060-Q3066.	0.9	8
391	Study of the influence of the microstructure on the corrosion properties of pure copper. Materials and Corrosion - Werkstoffe Und Korrosion, 2016, 67, 847-856.	0.8	8
392	Australasian microtektites across the Antarctic continent: Evidence from the SÃ¸r Rondane Mountain range (East Antarctica). Geoscience Frontiers, 2021, 12, 101153.	4.3	8
393	Fabrication of a molecularly imprinted monolithic column via the epitope approach for the selective capillary microextraction of neuropeptides in human plasma. Talanta, 2022, 243, 123397.	2.9	8
394	Unraveling the formation mechanism of hybrid Zr conversion coating on advanced high strength stainless steels. Surface and Coatings Technology, 2022, 441, 128567.	2.2	8
395	Non-destructive characterization of chromium phosphate coated aluminium with SE and FTIRS correlated to surface analytical analyses by AES and TEM. Surface and Interface Analysis, 1994, 22, 445-450.	0.8	7
396	AC Electrograining of Aluminium in Hydrochloric and Nitric Acid: a Comparative Study. Transactions of the Institute of Metal Finishing, 2000, 78, 29-34.	0.6	7

#	Article	IF	Citations
397	Thin film analysis of chromium-phosphate conversion coatings on aluminium probed by ToF-SIMS and electron probe x-ray analysis. Surface and Interface Analysis, 2000, 30, 589-591.	0.8	7
398	Effect of Additives on Smut-Layer Formation and Pitting during Aluminum Etching in Hydrochloric Acid. Journal of the Electrochemical Society, 2008, 155, C22.	1.3	7
399	A comparative electrochemical study of commercial and model aluminium alloy (AA5050). Materials and Corrosion - Werkstoffe Und Korrosion, 2009, 60, 399-406.	0.8	7
400	Structure and formation mechanism of rolled-in oxide areas on aluminum lithographic printing sheets. Scripta Materialia, 2013, 68, 233-236.	2.6	7
401	Novel and self-healing anticorrosion coatings using rare earth compounds. , 2014, , 233-266.		7
402	Thermal Properties of Plasma Deposited Methyl Methacrylate Films in an Atmospheric DBD Reactor. Plasma Processes and Polymers, 2015, 12, 260-270.	1.6	7
403	Deposition Kinetics and Thermal Properties of Atmospheric Plasma Deposited Methacrylate-Like Films. Plasma Processes and Polymers, 2016, 13, 521-533.	1.6	7
404	Development of Self-Healing Coatings with Micro Capsules for Corrosion Protection of Metal. ECS Transactions, 2017, 75, 89-99.	0.3	7
405	On the use of instantaneous impedance for post-electrochemical treatment analysis. Electrochemistry Communications, 2018, 93, 187-190.	2.3	7
406	To be purple or not to be purple? How different production parameters influence colour and redox in manganese containing glass. Journal of Archaeological Science: Reports, 2019, 27, 101975.	0.2	7
407	In Situ EC-STM Study and DFT Modeling of the Adsorption of Glycerol on Cu(111) in NaOH Solution. Journal of Physical Chemistry C, 2019, 123, 22228-22238.	1.5	7
408	Corrosion protection of Cu by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, 060902.	0.9	7
409	Chromatographic study of the structural properties of mesoporous silica layers deposited on radially elongated pillars. Journal of Chromatography A, 2019, 1595, 58-65.	1.8	7
410	The enigma of the silver blackening of the 13th century Notre-Dame shrine of Huy (Belgium): a surface analysis approach. Surface and Interface Analysis, 2008, 40, 469-473.	0.8	6
411	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
412	Using optical spectroscopy to characterize the material of a 16thc. stained glass window. , 2012, , .		6
413	In situ study of gas transport through Al(OH)3 gels during AC processing. Electrochimica Acta, 2012, 70, 10-18.	2.6	6
414	Non-destructive 3-dimensional mapping of microcapsules in polymeric coatings by confocal Raman spectroscopy. Progress in Organic Coatings, 2015, 88, 32-38.	1.9	6

#	Article	IF	Citations
415	Self-Healing Coat for Corrosion Resistance of Metal with Micro-Capsules Dispersed. Zairyo To Kankyo/ Corrosion Engineering, 2016, 65, 149-153.	0.0	6
416	The influence of the capillary size and shape on the readings of the electrochemical microcapillary technique: a parametric study by means of the multi-ion modeling. Electrochimica Acta, 2016, 189, 128-136.	2.6	6
417	Deposition of aminosilane coatings on porous Al₂O₃ microspheres by means of dielectric barrier discharges. Plasma Processes and Polymers, 2017, 14, 1600211.	1.6	6
418	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
419	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
420	On the making, mixing and trading of glass from the Roman military fort at Oudenburg (Belgium). Archaeological and Anthropological Sciences, 2019, 11, 2385-2405.	0.7	6
421	Performance of laterally elongated pillar array columns in capillary electrochromatography mode. Electrophoresis, 2020, 41, 1287-1295.	1.3	6
422	The mechanism of thermal oxide film formation on low Cr martensitic stainless steel and its behavior in fluoride-based pickling solution in conversion treatment. Corrosion Science, 2021, 181, 109206.	3.0	6
423	Scrutinizing the importance of surface chemistry versus surface roughness for aluminium / sol-gel film adhesion. Surfaces and Interfaces, 2021, 26, 101417.	1.5	6
424	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
425	Eruption frequency and magnitude in a geothermally active continental rift: The Bora-Baricha-Tullu Moye volcanic complex, Main Ethiopian Rift. Journal of Volcanology and Geothermal Research, 2022, 423, 107471.	0.8	6
426	On the Mechanism of the A.C. Electrolytic Graining of Rolled Aluminium Substrates. Transactions of the Institute of Metal Finishing, 1996, 74, 161-168.	0.6	5
427	Study of corrosion products on Vietnamese archaeological bronzes dating from the DÃ´ng SÃ´n period. Surface and Interface Analysis, 2008, 40, 474-477.	0.8	5
428	Galvanic compatibility of corrosion protective coatings with AA7075 aluminum alloy. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 306-310.	0.8	5
429	Modelling of the porous anodizing of aluminium: Generation of experimental input data and optimization of the considered model. Surface and Coatings Technology, 2011, 205, 4388-4396.	2.2	5
430	Effect of Local Surface Microstructure and Composition on the Electrochemical Behavior of Hot Dip Aluminum-Silicon Coatings on Steel. Corrosion, 2012, 68, 982-993.	0.5	5
431	Interactions at polymer/(oxyhydr)oxide/aluminium interfaces studied by Scanning Kelvin Probe. Surface and Interface Analysis, 2012, 44, 1059-1062.	0.8	5
432	Scanning Kelvin force microscopy study at the cut-edge of aluminum rich metal coated steel. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 16-22.	0.8	5

#	Article	IF	Citations
433	The role of heat treatment and alloying elements on hydrogen uptake in Aermet 100 ultrahigh-strength steel. Journal of Electroanalytical Chemistry, 2015, 739, 130-136.	1.9	5
434	Dimension Reduction for Computational Enhancements in Thin Film Electrochemical Modelling. Journal of the Electrochemical Society, 2016, 163, C873-C882.	1.3	5
435	De Colorando Auro: Experiments and literature study of medieval colouring recipes on gilded plates. Studies in Conservation, 2016, 61, 274-285.	0.6	5
436	Development of Self-Healing Coating with Capsules Containing Healing Agent for Corrosion Protection of Metal. Zairyo To Kankyo/ Corrosion Engineering, 2017, 66, 202-208.	0.0	5
437	An in-situ XANES investigation of the interactions between iron, manganese and antimony in silicate melts. Journal of Non-Crystalline Solids, 2018, 502, 227-235.	1.5	5
438	Study of peak capacities generated by a porous layered radially elongated pillar array column coupled to a nano-LC system. Analyst, The, 2019, 144, 1809-1817.	1.7	5
439	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
440	Assessment of Carbon-Titanium Multilayer Coatings on Aluminum as Bipolar Plates in PEM Fuel Cells. Journal of the Electrochemical Society, 2021, 168, 061503.	1.3	5
441	Adhesion properties of tartaric sulfuric acid anodic films assessed by a fast and quantitative peel tape adhesion test. International Journal of Adhesion and Adhesives, 2022, 116, 103156.	1.4	5
442	A new approach to the use of Auger lineshape effect as a routine technique for characterization of chemical bonding. Applied Surface Science, 1985, 24, 283-286.	3.1	4
443	Characterization of aluminium surface treatments by means of gas adsorption measurements. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1993, 80, 171-179.	2.3	4
444	Feasibility study to probe thin inorganic and organic coatings on aluminium substrates by means of visible and infrared spectroscopic ellipsometry. Surface and Interface Analysis, 2000, 30, 507-513.	0.8	4
445	Chapter 6 X-ray photoelectron and Auger electron spectroscopy. Comprehensive Analytical Chemistry, 2004, 42, 277-312.	0.7	4
446	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
447	Colorando Auro: third century colouring surface treatment of fire gildings. Surface Engineering, 2013, 29, 159-163.	1.1	4
448	Modification of the magnetic properties of Co films grown on MgO (100) by treatment with NaOH solution. Physical Review B, 2014, 90, .	1.1	4
449	In-situ ellipsometric characterization of the growth of porous anisotropic nanocrystalline ZnO layers. Applied Physics Letters, 2015, 106, 101904.	1.5	4
450	Leave no mudstone unturned: Geochemical proxies for provenancing mudstone temper sources in South-Western Cyprus. Journal of Archaeological Science: Reports, 2016, 7, 458-464.	0.2	4

#	Article	IF	Citations
451	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
452	Water permeation in coatings. Journal of Coatings Technology Research, 2020, 17, 1437-1445.	1.2	4
453	Molecular Characterization of Bonding Interactions at the Buried Steel Oxideâ€“Aminopropyl Triethoxysilane Interface Accessed by Ar Cluster Sputtering. Journal of Physical Chemistry C, 2020, 124, 13150-13161.	1.5	4
454	Tarnished silverâ€“copper surfaces reduction using remote helium plasma at atmospheric pressure studied by means of high-resolution synchrotron x-ray photoelectron microscopy. Corrosion Science, 2021, 178, 109074.	3.0	4
455	Investigation of the importance of heat transfer during thin electrolyte formation in atmospheric corrosion using a novel experimental approach. Corrosion Science, 2021, 189, 109542.	3.0	4
456	Unraveling the mechanism of the conversion treatment on Advanced High Strength Stainless Steels (AHSSS). Applied Surface Science, 2022, 572, 151418.	3.1	4
457	New Insights in Nanoelectrodeposition: An Electrochemical Aggregative Growth Mechanism. , 2016, , 1349-1377.		4
458	Operando odd random phase electrochemical impedance spectroscopy for in situ monitoring of the anodizing process. Electrochemistry Communications, 2022, 137, 107268.	2.3	4
459	AES and SIMS investigation of different CuxS/CdS solar cells. Surface and Interface Analysis, 1986, 9, 327-327.	0.8	3
460	AC-Electrochemical Cleaning of Aluminium. Transactions of the Institute of Metal Finishing, 2000, 78, 35-40.	0.6	3
461	Study of the Cryolite Formation during the Zinc Phosphating of Aluminium. Transactions of the Institute of Metal Finishing, 2002, 80, 142-146.	0.6	3
462	Consequences of Hot Rolling of Recycled AA5050 on Filiform Corrosion. Materials Science Forum, 2006, 519-521, 687-692.	0.3	3
463	Drying Effects on Corrosion Properties of Cr(VI)- and Cr(III)- Treated Electrogalvanized Steel. ECS Transactions, 2006, 1, 165-176.	0.3	3
464	Analysis of carrier parameters and bandgap of electroplated Bi₂Te₃ films by infrared spectroscopic ellipsometry. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1190-1193.	0.8	3
465	The potential of Raman spectroscopy in glass studies. , 2012, , .		3
466	Novel electrochemical approach to study corrosion mechanism of Alâ€“Au wireâ€“bond pad interconnections. Corrosion Engineering Science and Technology, 2013, 48, 409-417.	0.7	3
467	Corrosion product identification at the cut edge of aluminum-rich metal-coated steel. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 383-391.	0.8	3
468	Melamineâ€“Formaldehyde Microcapsules: Micro- and Nanostructural Characterization with Electron Microscopy. Microscopy and Microanalysis, 2016, 22, 1222-1232.	0.2	3

#	Article	IF	Citations
469	Electrochemical and Raman analysis of the corrosion products formed over hot dip galvanised steel wires exposed in different environmental sites. Corrosion Engineering Science and Technology, 2020, 55, 562-573.	0.7	3
470	Evaluation of particle and bed integrity of aqueous size-exclusion columns packed with sub-2ÂÂµm particles operated at high pressure. Journal of Chromatography A, 2020, 1621, 461064.	1.8	3
471	On the relationship between the plasma characteristics, the microstructure and the optical properties of reactively sputtered TiO₂ thin films. Journal Physics D: Applied Physics, 2021, 54, 415202.	1.3	3
472	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
473	Surface engineering of aluminium and its alloys. , 1991, , 473-480.		3
474	Revisiting the surface characterization of plasmaâ€modified polymers. Plasma Processes and Polymers, 2022, 19, .	1.6	3
475	Albumin Protein Adsorption on CoCrMo Implant Alloy: Impact on the Corrosion Behaviour at Localized Scale. Journal of the Electrochemical Society, 2022, 169, 031507.	1.3	3
476	Growth mechanism study of silver nanostructures in a limited volume. Materials Chemistry and Physics, 2022, 283, 126016.	2.0	3
477	Growth kinetics and passive behavior of the native oxide film on additively manufactured AlSi10Mg versus the conventional cast alloy. Corrosion Science, 2022, 203, 110352.	3.0	3
478	Unravelling the chemisorption mechanism of epoxy-amine coatings on Zr-based converted galvanized steel by combined static XPS/ToF-SIMS approach. Applied Surface Science, 2022, 599, 153798.	3.1	3
479	Electrochemical reduction of silver thiosulphate and silver thiocyanate complexes. Electrochimica Acta, 1985, 30, 1399-1401.	2.6	2
480	Influence of Heat Transfer on DC-anodizing of Aluminium in Sulphuric Acid. Transactions of the Institute of Metal Finishing, 2003, 81, 48-54.	0.6	2
481	Repassivation of aluminium during the AC-graining process by aluminium hydroxide formation. , 2006, , 173-178.		2
482	In-situ Raman Spectroscopy and Spectroscopic Ellipsometry study of the iron/Polypyrrole interface.. , 2006, , 691-696.		2
483	Use of scanning Kelvin probe force microscopy and microcapillary cell to investigate local corrosion behaviour of 7xxx aluminium alloys. , 2007, , 126-136.		2
484	Measuring and modelling the appearance of coated steel surfaces. Proceedings of SPIE, 2009, , .	0.8	2
485	Towards a reliable characterisation of oxide layers on pure aluminium using high energy resolution FEâ€AES. Surface and Interface Analysis, 2010, 42, 897-901.	0.8	2
486	On the Role of the Crystallographic Grain Characteristics in the Corrosion Behavior of Polycrystalline Copper. Materials Science Forum, 0, 783-786, 1658-1663.	0.3	2

#	Article	IF	Citations
487	Texture comparison between cold rolled and cryogenically rolled pure copper. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012016.	0.3	2
488	An ORPâ€EIS approach to study the gas incorporation into aluminum etch films. Surface and Interface Analysis, 2016, 48, 699-705.	0.8	2
489	Quantitative determination of carbon concentration profiles by GDâ€OES for the study of decarburization in lowâ€carbon steels. Surface and Interface Analysis, 2016, 48, 73-81.	0.8	2
490	The Kinetics of Formation and Decomposition of Austenite in Relation to Carbide Morphology. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 828-840.	1.1	2
491	Advanced (In Situ) Surface Analysis of Organic Coating/Metal Oxide Interactions for Corrosion Protection of Passivated Metals. , 2018, , 1-17.		2
492	Exploring Wetting Dynamics on Superhydrophobic Nanopatterned Surfaces Using ATR-FTIR. Solid State Phenomena, 0, 282, 175-181.	0.3	2
493	Effect of the shear layer on the etching behavior of 6060 aluminum extrusion alloys. Surface and Interface Analysis, 2019, 51, 1251-1259.	0.8	2
494	Effect of Sr Addition to a Modified AA3003 on Microstructural and Corrosion Properties. Journal of the Electrochemical Society, 2021, 168, 021506.	1.3	2
495	pH-Responsive Nanostructured Polyaniline Capsules for Self-Healing Corrosion Protection: The Influence of Capsule Concentration. Scientia Iranica, 2017, .	0.3	2
496	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
497	Unravelling the Fe Effect on the Corrosion of Chromium Coatings: Chemical Composition and Semiconducting Properties. Journal of the Electrochemical Society, 0, , .	1.3	2
498	Preparation of Renewable Thiolâ€Yne â€œClickâ€•Networks Based on Fractionated Lignin for Anticorrosive Protective Film Applications. Macromolecular Chemistry and Physics, 2022, 223, .	1.1	2
499	The Role of Anodising Parameters in the Performance of Bare and Coated Aerospace Anodic Oxide Films. Coatings, 2022, 12, 908.	1.2	2
500	AC-Electrochemical Cleaning Versus AC- Anodising of Aluminium. Transactions of the Institute of Metal Finishing, 2001, 79, 22-26.	0.6	1
501	Use of in-situ spectroscopic ellipsometry to study the behavior of metallic surfaces in different solutions. , 2004, , .		1
502	In situ ellipsometric and electrochemical characterisation of oxide formed on aluminium in acetate buffer. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3953-3957.	0.8	1
503	Properties of Oxide Formed on Aluminium in Aqueous Acetate Buffer. Materials Science Forum, 2006, 519-521, 717-722.	0.3	1
504	Corrosion Protection of Steel by Using ZnCoFe Alloy Coating (Replacement for Cadium Coating). ECS Transactions, 2006, 1, 27-34.	0.3	1

#	Article	IF	Citations
505	Silane films for the pre-treatment of aluminium: film formation mechanism and curing. , 2007, , 1-18.		1
506	The fabrication and characterization of fiber Bragg gratings in highly birefringent photonic crystal fibers for sensing applications. Proceedings of SPIE, 2008, , .	0.8	1
507	New approach in microstructural analysis of a modified AA4XXX/AA3XXX brazing sheet before and after brazing. , 2011, , 69-79.		1
508	Combined EBSD and AFM Study of the Corrosion Behaviour of ETP-Cu. Materials Science Forum, 0, 702-703, 673-676.	0.3	1
509	Lost transparency! Weathering phenomena on the archaeological window glass collection of the Cistercian Abbey of the Dunes - Koksijde (Belgium). , 2012, , .		1
510	Smart corrosion protection by multi-action self-healing polymeric coatings. , 2016, , 157-181.		1
511	On the use of AES data analysis to determine local enrichments of conversion coating elements at intermetallic particles on rolled Al. Surface and Interface Analysis, 2020, 52, 174-184.	0.8	1
512	A dataset of high-resolution synchrotron x-ray photoelectron spectra of tarnished silver-copper surfaces before and after reduction with a remote helium plasma at atmospheric pressure. Data in Brief, 2021, 35, 106872.	0.5	1
513	Effect of Homogenization Temperature and Soaking Time on the Microstructure and Corrosion Properties of a Twin Roll Casted AA3003. Corrosion, 2021, 77, 991-1002.	0.5	1
514	Characterization of oxyde films and conversion layers on aluminium alloys. European Physical Journal Special Topics, 1993, 03, C7-981-C7-985.	0.2	1
515	Experimental study and modelling of heat transfer during anodizing in a wall-jet set-up. WIT Transactions on Engineering Sciences, 2007, , .	0.0	1
516	Consequences of Hot Rolling of Recycled AA5050 on Filiform Corrosion. Materials Science Forum, 0, , 687-692.	0.3	1
517	Evaluation of Different Topologies of Integrated Capillaries in Effective Structural Health Monitoring System Produced by 3D Printing. , 0, , .		1
518	AES study of thermal behaviour of Sb-doped Sn-oxide coatings. Surface and Interface Analysis, 1986, 9, 332-332.	0.8	0
519	On the Interaction of Organic Molecules with Metal Oxide Surfaces. , 2006, , 675-683.		0
520	Localized Corrosion of Chromium Coated Steel. ECS Transactions, 2006, 3, 631-638.	0.3	0
521	Towards a Nano-Scale Electrochemical and Spectroscopic Characterization of Organic Layers on Oxide Surfaces. ECS Transactions, 2006, 3, 3-13.	0.3	0
522	The importance of the near-surface region in the surface pre-treatment of rolled recycled aluminium. , 2007, , 71-82.		0

#	Article	IF	Citations
523	Inhibition of corrosion of zinc by Cr(VI) and Cr(III) treatments. , 2007, , 119-134.		0
524	Highly birefringent holey fibers with zero polarimetric sensitivity to temperature. Proceedings of SPIE, 2008, , .	0.8	0
525	A low loss 180 degrees coupling fiber socket making use of low bending loss hole-assisted fiber. Proceedings of SPIE, 2008, , .	0.8	0
526	Modeling reflection on coated steel surfaces. Proceedings of SPIE, 2008, , .	0.8	0
527	Surface and Bulk Properties of Oxide Films and Their Influence on the Adhesion and Delamination of Organic Coatings. ECS Meeting Abstracts, 2008, , .	0.0	0
528	Modelling the colour of a coated rough-steel surface. Proceedings of SPIE, 2010, , .	0.8	0
529	Enhanced corrosion protection by microstructural control of aluminium brazing sheet. , 2013, , 91-102.		0
530	Influence of the type of alkali metal cation on the interaction of soluble silicates with porous anodic alumina. Surface and Interface Analysis, 2013, 45, 1467-1473.	0.8	0
531	Modal propagation and imaging characteristics of a custom designed coherent fiberbundle for endomicroscopy. Proceedings of SPIE, 2014, , .	0.8	0
532	Monitoring carbon steel behavior under biotic and abiotic conditions. Materials Research Society Symposia Proceedings, 2015, 1768, 15.	0.1	0
533	â€œDe Colorando Auroâ€•medieval colour surface treatment of silver gilded statuettes decorating the Holy Lady Shrine of Huy (13th century, Belgium). Journal of Analytical Atomic Spectrometry, 2015, 30, 677-684.	1.6	0
534	Patterning of graphene on silicon-on-insulator waveguides through laser ablation and plasma etching. , 2016, , .		0
535	Electrophysical Properties of Sr2FeMoO6â€“Î´ Ceramics with Dielectric Shells. NATO Science for Peace and Security Series B: Physics and Biophysics, 2019, , 21-40.	0.2	0
536	VIIIth Aluminium Surface Science and Technology Symposium. Surface and Interface Analysis, 2019, 51, 1125-1125.	0.8	0
537	Mechanisms of Li Leaching from a LiCO3 Based Primer / Topcoat Paint System. Microscopy and Microanalysis, 2021, 27, 3054-3056.	0.2	0
538	Effect of Surface Treatment, Anodisation, and Inhibitors on Corrosion of the Aluminium Alloy AA2024. WIT Transactions on State-of-the-art in Science and Engineering, 2012, , 147-165.	0.0	0
539	New Insights in Nano-electrodeposition: An Electrochemical Aggregative Growth Mechanism. , 2015, , 1-25.		0
540	Supported Nanoparticle Synthesis by Electrochemical Deposition. , 2015, , 1-23.		0

#	Article	IF	Citations
541	Supported Nanoparticle Synthesis by Electrochemical Deposition. , 2016, , 603-631.		0
542	De Colorando Auro: Medieval colouring techniques researched using modern analytical techniques. Techne, 2016, , 120-126.	0.0	0
543	The Hot-Stamping Effect on the Corrosion Properties of the 22MnB5 Steel Coated with Hot-Dip Aluminum-Silicon Assessed by a Salt Spray Test and Raman Spectroscopy. Corrosion, 2022, 78, 339-349.	0.5	0