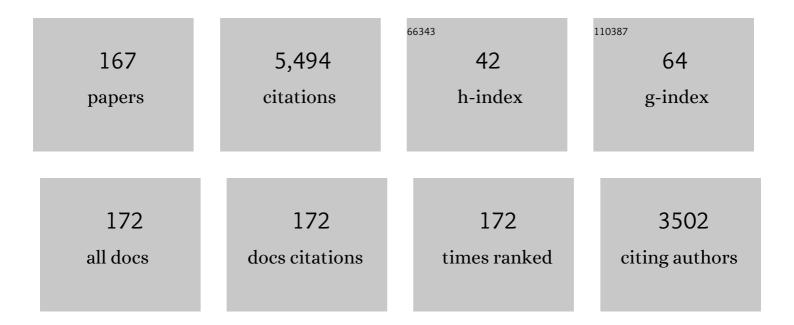
Ricardo M Souto

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Origins of pitting corrosion. Corrosion Engineering Science and Technology, 2004, 39, 25-30.	1.4	307
2	Electrochemical and structural properties of a polyurethane coating on steel substrates for corrosion protection. Corrosion Science, 2007, 49, 3514-3526.	6.6	181
3	The effect of temperature on the nucleation of corrosion pits on titanium in Ringer's physiological solution. Biomaterials, 2005, 26, 245-256.	11.4	174
4	Use of SVET and SECM to study the galvanic corrosion of an iron–zinc cell. Corrosion Science, 2007, 49, 726-739.	6.6	167
5	Degradation characteristics of hydroxyapatite coatings on orthopaedic TiAlV in simulated physiological media investigated by electrochemical impedance spectroscopy. Biomaterials, 2003, 24, 4213-4221.	11.4	162
6	Imaging metastable pits on austenitic stainless steel in situ at the open-circuit corrosion potential. Electrochemistry Communications, 2004, 6, 637-642.	4.7	126
7	Observations of localised instability of passive titanium in chloride solution. Electrochimica Acta, 1995, 40, 1881-1888.	5.2	112
8	Imaging concentration profiles of redox-active species in open-circuit corrosion processes with the scanning electrochemical microscope. Electrochemistry Communications, 2004, 6, 1212-1215.	4.7	96
9	Investigating corrosion processes in the micrometric range: A SVET study of the galvanic corrosion of zinc coupled with iron. Corrosion Science, 2007, 49, 4568-4580.	6.6	96
10	Inhibition of the pitting corrosion of 304 stainless steel in 0.5 M hydrochloric acid solution by heptamolybdate ions. Corrosion Science, 2015, 90, 522-528.	6.6	96
11	Metastable beta Ti-Nb-Mo alloys with improved corrosion resistance in saline solution. Electrochimica Acta, 2014, 137, 280-289.	5.2	92
12	Examination of organic coatings on metallic substrates by scanning electrochemical microscopy in feedback mode: Revealing the early stages of coating breakdown in corrosive environments. Corrosion Science, 2010, 52, 748-753.	6.6	88
13	Electrochemical characteristics of steel coated with TiN and TiAlN coatings. Corrosion Science, 2000, 42, 2201-2211.	6.6	86
14	Damage to paint coatings caused by electrolyte immersion as observed in situ by scanning electrochemical microscopy. Corrosion Science, 2004, 46, 2621-2628.	6.6	81
15	Electrochemical behaviour of copper in aqueous moderate alkaline media, containing sodium carbonate and bicarbonate, and sodium perchlorate. Electrochimica Acta, 1990, 35, 1337-1343.	5.2	77
16	In situ monitoring of electroactive species by using the scanning electrochemical microscope. Application to the investigation of degradation processes at defective coated metals. Corrosion Science, 2005, 47, 3312-3323.	6.6	77
17	Electrochemical characterization of ZrTi alloys for biomedical applications. Electrochimica Acta, 2013, 88, 447-456.	5.2	77
18	Uses of scanning electrochemical microscopy for the characterization of thin inhibitor films on reactive metals: The protection of copper surfaces by benzotriazole. Electrochimica Acta, 2010, 55, 8791-8800.	5.2	67

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19	Application of the scanning electrochemical microscope to the examination of organic coatings on metallic substrates. Progress in Organic Coatings, 2005, 53, 177-182.	3.9	66
20	Investigation of the electrochemical behaviour of TiMo alloys in simulated physiological solutions. Electrochimica Acta, 2013, 113, 470-480.	5.2	65
21	Propolis as a green corrosion inhibitor for bronze in weakly acidic solution. Applied Surface Science, 2017, 426, 1100-1112.	6.1	65
22	Spatially resolved measurement of electrochemical activity and pH distributions in corrosion processes by scanning electrochemical microscopy using antimony microelectrode tips. Electrochimica Acta, 2011, 56, 8846-8850.	5.2	64
23	Visualization of local degradation processes in coated metals by means of scanning electrochemical microscopy in the redox competition mode. Electrochimica Acta, 2010, 55, 4488-4494.	5.2	63
24	Resistance of metallic substrates protected by an organic coating containing glass flakes. Progress in Organic Coatings, 2010, 68, 240-243.	3.9	59
25	Pitting corrosion inhibition of 304 stainless steel in NaCl solution by three newly synthesized carboxylic Schiff bases. Corrosion Science, 2019, 160, 108130.	6.6	59
26	A preliminary investigation into the microscopic depassivation of passive titanium implant materials in vitro. Journal of Materials Science: Materials in Medicine, 1996, 7, 337-343.	3.6	55
27	Resistance of metallic substrates protected by an organic coating containing aluminum powder. Progress in Organic Coatings, 2003, 46, 317-323.	3.9	54
28	Potentiometric scanning electrochemical microscopy for the local characterization of the electrochemical behaviour of magnesium-based materials. Electrochimica Acta, 2013, 87, 283-293.	5.2	51
29	Evaluation of the corrosion performance of coil-coated steel sheet as studied by scanning electrochemical microscopy. Corrosion Science, 2008, 50, 1637-1643.	6.6	50
30	Scanning microelectrochemical characterization of the anti-corrosion performance of inhibitor films formed by 2-mercaptobenzimidazole on copper. Progress in Organic Coatings, 2012, 74, 526-533.	3.9	50
31	Development of Mg ²⁺ Ion-Selective Microelectrodes for Potentiometric Scanning Electrochemical Microscopy Monitoring of Galvanic Corrosion Processes. Journal of the Electrochemical Society, 2013, 160, C451-C459.	2.9	49
32	On the catalytic effect of thiourea on the electrochemical reduction of cadmium(II) ions at the DME from aqueous 1 M KF solutions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1986, 201, 33-45.	0.1	48
33	Investigation of the corrosion resistance characteristics of pigments in alkyd coatings on steel. Progress in Organic Coatings, 2001, 43, 282-285.	3.9	48
34	Electrochemical characteristics of bioresorbable binary MgCa alloys in Ringer's solution: Revealing the impact of local pH distributions during in-vitro dissolution. Materials Science and Engineering C, 2016, 60, 402-410.	7.3	48
35	Fluoride removal from natural volcanic underground water by an electrocoagulation process: Parametric and cost evaluations. Journal of Environmental Management, 2019, 246, 472-483.	7.8	48
36	SECM Imaging of Interfacial Processes in Defective Organic Coatings Applied on Metallic Substrates Using Oxygen as Redox Mediator. Electroanalysis, 2009, 21, 2640-2646.	2.9	47

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37	Spatially-resolved imaging of concentration distributions on corroding magnesium-based materials exposed to aqueous environments by SECM. Electrochemistry Communications, 2013, 26, 25-28.	4.7	47
38	Kinetics of copper passivation and pitting corrosion in Na2SO4 containing dilute NaOH aqueous solution. Electrochimica Acta, 1994, 39, 2619-2628.	5.2	46
39	Characterization of coating systems by scanning electrochemical microscopy: Surface topology and blistering. Progress in Organic Coatings, 2009, 65, 435-439.	3.9	46
40	Scanning electrochemical microscopy for the investigation of localized degradation processes in coated metals. Progress in Organic Coatings, 2010, 69, 110-117.	3.9	45
41	A novel microelectrochemical strategy for the study of corrosion inhibitors employing the scanning vibrating electrode technique and dual potentiometric/amperometric operation in scanning electrochemical microscopy: Application to the study of the cathodic inhibition by benzotriazole of the galvanic corrosion of copper coupled to iron. Electrochimica Acta. 2011, 58, 707-716.	5.2	44
42	Multiscale electrochemical analysis of the corrosion control of bronze in simulated acid rain by horse-chestnut (Aesculus hippocastanum L.) extract as green inhibitor. Corrosion Science, 2020, 165, 108381.	6.6	41
43	Resistance to corrosion of galvanized steel covered with an epoxy-polyamide primer coating. Progress in Organic Coatings, 2001, 41, 167-170.	3.9	39
44	Scanning electrochemical microscopy for the investigation of localized degradation processes in coated metals: Effect of oxygen. Corrosion Science, 2011, 53, 1910-1915.	6.6	39
45	Comparative EIS study of different Zn-based intermediate metallic layers in coil-coated steels. Corrosion Science, 2006, 48, 1182-1192.	6.6	38
46	In Situ Scanning Electrochemical Microscopy (SECM) Detection of Metal Dissolution during Zinc Corrosion by Means of Mercury Sphere ap Microelectrode Tips. Chemistry - A European Journal, 2012, 18, 230-236.	3.3	38
47	Application of ACâ€SECM in Corrosion Science: Local Visualisation of Inhibitor Films on Active Metals for Corrosion Protection. Chemistry - A European Journal, 2011, 17, 905-911.	3.3	37
48	Effect of acidic fluoride solution on the corrosion resistance of ZrTi alloys for dental implant application. Corrosion Science, 2014, 87, 334-343.	6.6	37
49	Possibilities and Limitations of Scanning Electrochemical Microscopy of Mg and Mg Alloys. Corrosion, 2015, 71, 171-183.	1.1	37
50	Inhibitive effect of sodium (E)-4-(4-nitrobenzylideneamino)benzoate on the corrosion of some metals in sodium chloride solution. Applied Surface Science, 2018, 447, 852-865.	6.1	37
51	The kinetics of pitting corrosion of copper in alkaline solutions containing sodium perchlorate. Electrochimica Acta, 1992, 37, 1437-1443.	5.2	36
52	Scanning electrochemical microscopy for the investigation of corrosion processes: Measurement of Zn2+ spatial distribution with ion selective microelectrodes. Electrochimica Acta, 2012, 59, 398-403.	5.2	36
53	Resolution of the apparent experimental discrepancies observed between SVET and SECM for the characterization of galvanic corrosion reactions. Electrochemistry Communications, 2013, 27, 50-53.	4.7	36
54	Scanning microelectrochemical characterization of the effect of polarization on the localized corrosion of 304 stainless steel in chloride solution. Journal of Electroanalytical Chemistry, 2014, 728, 148-157.	3.8	35

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55	Scanning electrochemical microscopy characterization of sol-gel coatings applied on AA2024-T3 substrate for corrosion protection. Corrosion Science, 2016, 111, 625-636.	6.6	35
56	Imaging the Origins of Coating Degradation and Blistering Caused by Electrolyte Immersion Assisted by SECM. Electroanalysis, 2009, 21, 2569-2574.	2.9	32
57	Multiscale electrochemical analysis of the corrosion of titanium and nitinol for implant applications. Electrochimica Acta, 2016, 203, 366-378.	5.2	31
58	SECM imaging of the cut edge corrosion of galvanized steel as a function of pH. Electrochimica Acta, 2015, 153, 238-245.	5.2	30
59	Corrosion behavior of new quaternary ZrNbTiAl alloys in simulated physiological solution using electrochemical techniques and surface analysis methods. Electrochimica Acta, 2017, 248, 368-375.	5.2	30
60	Electrochemical characterization of ZrTi alloys for biomedical applications. Part 2: The effect of thermal oxidation. Electrochimica Acta, 2013, 106, 432-439.	5.2	29
61	Some experiments regarding the corrosion inhibition of copper by benzotriazole and potassium ethyl xanthate. Journal of Electroanalytical Chemistry, 1996, 411, 161-165.	3.8	28
62	Scanning electrochemical microscopy studies for the characterization of localized corrosion reactions at cut edges of coil-coated steel. Journal of Solid State Electrochemistry, 2014, 18, 2983-2992.	2.5	28
63	Characterisation of localised corrosion processes using scanning electrochemical impedance microscopy. Electrochemistry Communications, 2014, 44, 38-41.	4.7	28
64	Imaging Local Surface Reactivity on Stainless Steels 304 and 316 in Acid Chloride Solution using Scanning Electrochemical Microscopy and the Scanning Vibrating Electrode Technique. Electrochimica Acta, 2014, 134, 167-175.	5.2	28
65	Electrochemical behaviour of ZrTi alloys in artificial physiological solution simulating in vitro inflammatory conditions. Applied Surface Science, 2014, 313, 259-266.	6.1	28
66	Electrochemical characterization of pulsed layer deposited hydroxyapatite-zirconia layers on Ti-21Nb-15Ta-6Zr alloy for biomedical application. Applied Surface Science, 2016, 385, 368-378.	6.1	28
67	Design and optimization of an electrocoagulation reactor for fluoride remediation in underground water sources for human consumption. Journal of Water Process Engineering, 2019, 31, 100865.	5.6	28
68	Improved potentiometric SECM imaging of galvanic corrosion reactions. Corrosion Science, 2017, 129, 136-145.	6.6	26
69	In situ investigation of copper corrosion in acidic chloride solution using atomic force—scanning electrochemical microscopy. Electrochimica Acta, 2017, 247, 588-599.	5.2	26
70	Electrochemical impedance spectroscopy investigation of the corrosion at metallic substrates covered by organic coatings. Journal of Adhesion Science and Technology, 2000, 14, 1321-1330.	2.6	25
71	On the use of mercury-coated tips in scanning electrochemical microscopy to investigate galvanic corrosion processes involving zinc and iron. Corrosion Science, 2012, 55, 401-406.	6.6	25
72	Experimental characterization, machine learning analysis and computational modelling of the high effective inhibition of copper corrosion by 5â€(4â€pyridyl)â€1,3,4â€oxadiazoleâ€2â€thiol in saline environment. Electrochimica Acta, 2021, 398, 139282.	5.2	25

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73	Imaging of Concentration Distributions and Hydrogen Evolution on Corroding Magnesium Exposed to Aqueous Environments Using Scanning Electrochemical Microscopy. Electroanalysis, 2016, 28, 2354-2366.	2.9	24
74	SIMULTANEOUS ATOMIC FORCE—SCANNING ELECTROCHEMICAL MICROSCOPY (AFM-SECM) IMAGING OF COPPER DISSOLUTION. Electrochimica Acta, 2016, 201, 320-332.	5.2	24
75	Improvement in Pitting Resistance of Stainless Steel Surfaces by Prior Anodic Treatment in Metasilicate Solution. Journal of the Electrochemical Society, 2004, 151, B537.	2.9	23
76	Electrochemical reactions of benzoic acid on platinum and palladium studied by DEMS. Comparison with benzyl alcohol. Journal of Electroanalytical Chemistry, 2000, 494, 127-135.	3.8	22
77	Hydrodynamic effects on the performance of an electrochemical reactor for destruction of copper cyanide—Part 1: in situ formation of the electrocatalytic film. Chemical Engineering Science, 2005, 60, 523-533.	3.8	22
78	Novel dual microelectrode probe for the simultaneous visualization of local Zn2+ and pH distributions in galvanic corrosion processes. Corrosion Science, 2017, 114, 37-44.	6.6	22
79	DEMS study on the adsorption and reactivity of benzyl alcohol on palladium and platinum. Electrochimica Acta, 1998, 44, 1415-1422.	5.2	21
80	Cathodic delamination of coil coatings produced with different Zn-based intermediate metallic layers. Progress in Organic Coatings, 2005, 53, 63-70.	3.9	21
81	A scanning electrochemical microscopy characterization of the localized corrosion reactions occurring on nitinol in saline solution after anodic polarization. Sensors and Actuators B: Chemical, 2020, 321, 128610.	7.8	21
82	A mechanistic approach to the electroformation of anodic layers on copper and their electroreduction in aqueous solutions containing NaHCO3 and Na2CO3. Electrochimica Acta, 1993, 38, 703-715.	5.2	20
83	Investigation of the electrochemical reactivity of benzyl alcohol at platinum and palladium electrodes. Electrochimica Acta, 2000, 45, 1645-1653.	5.2	20
84	Self-healing processes in coil-coated cladding studied by the scanning vibrating electrode. Electrochimica Acta, 2010, 55, 4551-4557.	5.2	20
85	Spectroscopic Investigation of the Adsorbates of Benzyl Alcohol on Palladium. Langmuir, 2000, 16, 8456-8462.	3.5	19
86	A novel scanning electrochemical microscopy strategy for the investigation of anomalous hydrogen evolution from AZ63 magnesium alloy. Sensors and Actuators B: Chemical, 2020, 308, 127691.	7.8	19
87	Evaluation of in vitro corrosion resistance and in vivo osseointegration properties of a FeMnSiCa alloy as potential degradable implant biomaterial. Materials Science and Engineering C, 2021, 118, 111436.	7.3	19
88	The catalysis of the electrochemical reduction of cadmium ions by chloride ions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1988, 245, 167-189.	0.1	18
89	Sensing electrochemical activity in polymer coated metals during the early stages of coating degradation–Effect of the polarization of the substrate. Electrochimica Acta, 2011, 56, 9596-9601.	5.2	18
90	The effect of electric field on potentiometric Scanning Electrochemical Microscopic imaging. Electrochemistry Communications, 2017, 77, 138-141.	4.7	18

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91	Hydrodynamic effects on the performance of an electrochemical reactor for destruction of copper cyanide. Part 2—reactor kinetics and current efficiencies. Chemical Engineering Science, 2005, 60, 535-543.	3.8	17
92	Development of Solid Contact Micropipette Zn-Ion Selective Electrode for Corrosion Studies. Analytical Letters, 2011, 44, 2876-2886.	1.8	17
93	Investigation of Copper Corrosion Inhibition with Frequencyâ€Dependent Alternatingâ€Current Scanning Electrochemical Microscopy. ChemPlusChem, 2012, 77, 707-712.	2.8	17
94	Direct evidence of early blister formation in polymer-coated metals from exposure to chloride-containing electrolytes by alternating-current scanning electrochemical microscopy. Electrochimica Acta, 2012, 77, 60-64.	5.2	17
95	Multi-barrel electrodes containing an internal micro-reference for the improved visualization of galvanic corrosion processes in magnesium-based materials using potentiometric scanning electrochemical microscopy. Sensors and Actuators B: Chemical, 2019, 296, 126625.	7.8	17
96	Surface chemistry, film morphology, local electrochemical behavior and cytotoxic response of anodized AZ31B magnesium alloy. Journal of Materials Research and Technology, 2020, 9, 14754-14770.	5.8	17
97	Sensing electrochemical activity in polymer-coated metals during the early stages of coating degradation by means of the scanning vibrating electrode technique. Corrosion Science, 2010, 52, 3924-3931.	6.6	16
98	Simultaneous pit generation and visualization of pit topography using combined atomic force–scanning electrochemical microscopy. Electrochemistry Communications, 2015, 51, 15-18.	4.7	16
99	Combined amperometric/potentiometric probes for improved chemical imaging of corroding surfaces using Scanning Electrochemical Microscopy. Electrochimica Acta, 2016, 221, 48-55.	5.2	16
100	Double Barrel Microelectrode Assembly to Prevent Electrical Field Effects in Potentiometric SECM Imaging of Galvanic Corrosion Processes. Journal of the Electrochemical Society, 2018, 165, C270-C277.	2.9	16
101	New Ti-6Al-2Nb-2Ta-1Mo alloy as implant biomaterial: In vitro corrosion and in vivo osseointegration evaluations. Materials Chemistry and Physics, 2020, 240, 122229.	4.0	16
102	Electronic configurations in potentiostats for the correction of ohmic losses. Electroanalysis, 1994, 6, 531-542.	2.9	15
103	Electroless, Electrolytic and Galvanic Copper Deposition with the Scanning Electrochemical Microscope (SECM). Zeitschrift Fur Physikalische Chemie, 2006, 220, 393-406.	2.8	15
104	Investigation of processing effects on the corrosion resistance of Ti20Mo alloy in saline solutions. Corrosion Science, 2015, 98, 170-179.	6.6	15
105	Evaluation of the corrosion protection of steel by anodic processing in metasilicate solution using the scanning vibrating electrode technique. Electrochimica Acta, 2015, 178, 1-10.	5.2	15
106	Corrosion resistance of ZrTi alloys with hydroxyapatite-zirconia-silver layer in simulated physiological solution containing proteins for biomaterial applications. Applied Surface Science, 2016, 389, 1069-1075.	6.1	15
107	SECM study of the pH distribution over Cu samples treated with 2-mercaptobenzothiazole in NaCl solution. Electrochemistry Communications, 2017, 78, 60-63.	4.7	15
108	A study of the electrochemical reactivity of titanium under cathodic polarization by means of combined feedback and redox competition modes of scanning electrochemical microscopy. Sensors and Actuators B: Chemical, 2020, 320, 128339.	7.8	15

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109	Electrochemical behavior of different preparations of plasma-sprayed hydroxyapatite coatings on Ti6Al4V substrate. Journal of Biomedical Materials Research Part B, 2004, 70A, 59-65.	3.1	14
110	Inâ€Situ Monitoring of Pit Nucleation and Growth at an Iron Passive Oxide Layer by using Combined Atomic Force and Scanning Electrochemical Microscopy. ChemElectroChem, 2015, 2, 1847-1856.	3.4	14
111	Osseointegration evaluation of ZrTi alloys with hydroxyapatite-zirconia-silver layer in pig's tibiae. Applied Surface Science, 2019, 487, 127-137.	6.1	14
112	Accelerated tests for the evaluation of the corrosion performance of coil-coated steel sheet: EIS under cathodic polarisation. Progress in Organic Coatings, 2005, 53, 71-76.	3.9	13
113	Evaluation of the Corrosion of AZ31 Magnesium Alloy Used as Sacrificial Anode for Cathodic Protection of Hot-Water Tank Storage Containing Chloride. International Journal of Electrochemical Science, 2018, 13, 29-44.	1.3	13
114	Uses of Scanning Electrochemical Microscopy (SECM) for the Characterization with Spatial and Chemical Resolution of Thin Surface Layers and Coating Systems Applied on Metals: A Review. Coatings, 2022, 12, 637.	2.6	13
115	FTIR Characterization of Surface Interactions of Cyanide and Copper Cyanide with a Platinum Electrode in Alkaline Solution. Journal of Physical Chemistry C, 2011, 115, 3671-3677.	3.1	12
116	Galvanic coupling effects on the corrosion behavior of the 6061 aluminum alloy used in research nuclear reactors. Journal of Nuclear Materials, 2020, 541, 152440.	2.7	12
117	The reaction pathway of the Cd(II) reduction in mixed (0.8 â~' x) M NaClO4 + xM NaF base electrolytes. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 264, 217-234.	0.1	11
118	Characterization of the catalytic films formed on stainless steel anodes employed for the electrochemical treatment of cuprocyanide wastewaters. Journal of Hazardous Materials, 2005, 119, 145-152.	12.4	11
119	Characterization of the Corrosive Action of Mineral Waters from Thermal Sources: A Case Study at Azores Archipelago, Portugal. Water (Switzerland), 2015, 7, 3515-3530.	2.7	11
120	Groundwater Quality Assessment in a Volcanic Mountain Range (South of Gran Canaria Island, Spain). Water (Switzerland), 2019, 11, 754.	2.7	11
121	On the local corrosion behavior of coupled welded zones of the 2098-T351 Al-Cu-Li alloy produced by Friction Stir Welding (FSW): An amperometric and potentiometric microelectrochemical investigation. Electrochimica Acta, 2021, 373, 137910.	5.2	11
122	On the adsorption of cadmium(II) ions on a HMDE from KF + thiourea aqueous solutions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1987, 216, 273-282.	0.1	10
123	Induced reactant adsorption accompanying the reduction of cadmium(II) ions from 1 M KF solutions containing thiourea at elevated concentrations: an ac admittance study. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 264, 195-215.	0.1	10
124	Sensing polymer inhomogeneity in coated metals during the early stages of coating degradation. Progress in Organic Coatings, 2012, 74, 365-370.	3.9	10
125	Pitting corrosion of polycrystalline annealed copper in alkaline sodium perchlorate solutions containing benzotriazole. Journal of Applied Electrochemistry, 1992, 22, 1129-1134.	2.9	9
126	The electrochemical faceting of copper in 85% aqueous o-phosphoric acid by using a potential reversal technique. Applied Surface Science, 1994, 81, 387-398.	6.1	9

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127	Laboratory evaluation of corrosion resistance at metallic substrates by an organic coating: delamination effects. Journal of Adhesion Science and Technology, 2004, 18, 455-464.	2.6	9
128	Coil-coated steel: corrosion resistance and adhesion as a function of the composition of the intermediate galvanic layer. Journal of Adhesion Science and Technology, 2005, 19, 1141-1155.	2.6	9
129	In Situ Investigation of the Cytotoxic and Interfacial Characteristics of Titanium When Galvanically Coupled with Magnesium Using Scanning Electrochemical Microscopy. ACS Applied Materials & Interfaces, 2021, 13, 43587-43596.	8.0	9
130	Mapping of Local Corrosion Behavior of Zinc in Substitute Ocean Water at Its Initial Stages by SVET. International Journal of Electrochemical Science, 2016, 11, 5256-5266.	1.3	9
131	Do titanium biomaterials get immediately and entirely repassivated? A perspective. Npj Materials Degradation, 2022, 6, .	5.8	9
132	Use of Amperometric and Potentiometric Probes in Scanning Electrochemical Microscopy for the Spatially-Resolved Monitoring of Severe Localized Corrosion Sites on Aluminum Alloy 2098-T351. Sensors, 2021, 21, 1132.	3.8	8
133	Revealing Structural Effects, Part II: The Influence of Molecular Structure on the Adsorption of Butanol Isomers on Platinum. Chemistry - A European Journal, 2005, 11, 3309-3317.	3.3	7
134	Shortcomings of International Standard ISO 9223 for the Classification, Determination, and Estimation of Atmosphere Corrosivities in Subtropical Archipelagic Conditions—The Case of the Canary Islands (Spain). Metals, 2019, 9, 1105.	2.3	7
135	Fitting procedure based on Differential Evolution to evaluate impedance parameters of metal–coating systems. Engineering Computations, 2019, 36, 2960-2982.	1.4	7
136	New insights on the influence of aluminum on the anomalous hydrogen evolution of anodized magnesium using scanning electrochemical microscopy. Electrochimica Acta, 2021, 391, 138915.	5.2	7
137	Preparation and reproducibility of a thermal silver-silver chloride electrode. Journal of Applied Electrochemistry, 1985, 15, 727-735.	2.9	6
138	Chromate-Free Zinc Conversion Coatings Characterised by Grazing Incidence X-Ray Diffractometry. Mikrochimica Acta, 2000, 133, 137-142.	5.0	6
139	Revealing Structural Effects: Electrochemical Reactions of Butanols on Platinum. Chemistry - A European Journal, 2002, 8, 2134.	3.3	6
140	New opportunities for the study of organic films applied on metals for corrosion protection by means of alternating current scanning electrochemical microscopy. Progress in Organic Coatings, 2012, 74, 371-375.	3.9	6
141	REMOVED: In vitro corrosion resistance and in vivo osseointegration testing of new multifunctional beta-type quaternary TiMoZrTa alloys. Materials Science and Engineering C, 2020, 108, 110485.	7.3	6
142	Development of an Al3+ ion-selective microelectrode for the potentiometric microelectrochemical monitoring of corrosion sites on 2098â^'T351 aluminum alloy surfaces. Electrochimica Acta, 2022, 415, 140260.	5.2	6
143	Local Electrochemical Impedance Spectroscopy Investigation of Corrosion Inhibitor Films on Copper. ECS Transactions, 2012, 41, 227-235.	0.5	5
144	Multiscale Electrochemical Investigation of the Corrosion Resistance of Various Alloys Used in Dental Prostheses. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 1011-1021.	2.1	5

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145	The Influence of Test-Panel Orientation and Exposure Angle on the Corrosion Rate of Carbon Steel. Mathematical Modelling. Metals, 2020, 10, 196.	2.3	5
146	In situ monitoring of the electrochemical reactivity of aluminium alloy AA6060 using the scanning vibrating electrode technique. Journal of Electroanalytical Chemistry, 2014, 732, 74-79.	3.8	4
147	Evaluation of the corrosion resistance of plasma nitrided austenitic stainless steel. International Journal of Materials Research, 2015, 106, 267-274.	0.3	4
148	Electrochemical Investigation of the Corrosion Resistance of Ti20Mo Alloys in Simulated Physiological Solution with Added Proteins for Biomaterial Application. International Journal of Electrochemical Science, 2016, , 6922-6932.	1.3	4
149	Kinetic Passivation Effect of Localized Differential Aeration on Brass. ChemPlusChem, 2016, 81, 49-57.	2.8	4
150	Improvement of the Corrosion Resistance of Biomedical Zr-Ti Alloys Using a Thermal Oxidation Treatment. Metals, 2020, 10, 166.	2.3	4
151	Investigation of anomalous hydrogen evolution from anodized magnesium using a polarization routine for scanning electrochemical microscopy. Journal of Electroanalytical Chemistry, 2021, 895, 115538.	3.8	4
152	Surface finishing effects on the corrosion behavior and electrochemical activity of 2098-T351 aluminum alloy investigated using scanning microelectrochemical techniques. Materials Characterization, 2022, 191, 112130.	4.4	4
153	Investigation of Mg/Al alloy sacrificial anode corrosion with Scanning Electrochemical Microscopy. Periodica Polytechnica: Chemical Engineering, 2013, 57, 11.	1.1	3
154	Electrochemical Studies on the Stability and Corrosion Resistance of Two Austenitic Stainless Steels for Soft Drinks Containers. International Journal of Electrochemical Science, 2017, 12, 5438-5449.	1.3	3
155	Use of alumina sludge arising from an electrocoagulation process as functional mesoporous microcapsules for active corrosion protection of aluminum. Progress in Organic Coatings, 2021, 151, 106044.	3.9	3
156	Contributions of Microelectrochemical Scanning Techniques for the Efficient Detection of Localized Corrosion Processes at the Cut Edges of Polymer-Coated Galvanized Steel. Molecules, 2022, 27, 2167.	3.8	3
157	Electrochemical characterization of alloy segregation in the near-surface deformed layer of welded zones of an Alâ^'Cuâ^'Li alloy using scanning electrochemical microscopy. Electrochimica Acta, 2022, 427, 140873.	5.2	3
158	Electrochemical study of the interaction of thiourea with copper electrodes in alkaline aqueous solution. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2725-2729.	1.7	2
159	Investigating metalâ€inhibitor interaction with EQCM and SVET: 3â€aminoâ€1,2,4â€triazole on Au, Cu and Au–Cu galvanic coupling. Materials and Corrosion - Werkstoffe Und Korrosion, 2018, 69, 115-124.	1.5	2
160	(Invited) Investigation of Early Degradation Processes at Coated Metals by AC-Scanning Electrochemical Microscopy. ECS Transactions, 2012, 41, 29-38.	0.5	1
161	Spectroelectrochemical Behavior of Polycrystalline Gold Electrode Modified by Reverse Micelles. Molecules, 2021, 26, 471.	3.8	1
162	Synthesis and Evaluation of Anionic Schiff Bases As Pitting Corrosion Inhibitor for Stainless Steel 304 in NaCl Solution. ECS Meeting Abstracts, 2019, MA2019-01, 998-998.	0.0	1

#	Article	IF	CITATIONS
163	Kinetic Passivation Effect of Localized Differential Aeration on Brass. ChemPlusChem, 2016, 81, 2-2.	2.8	0
164	New Developments in Scanning Microelectrochemical Techniques: A Highly Sensitive Route to Evaluate Degradation Reactions and Protection Methods with Chemical Selectivity. Applied Mechanics and Materials, 0, 875, 19-23.	0.2	0
165	SVET study of the interaction of 2-mercaptobenzothiazole corrosion inhibitor with Au, Cu and Au–Cu galvanic pair. International Journal of Corrosion and Scale Inhibition, 2017, 6, .	0.6	0
166	Potentiometric Tip Electrodes for Improved Visualization of Galvanic Corrosion Processes Using SECM. ECS Meeting Abstracts, 2019, , .	0.0	0
167	Chemical Imaging of Reactive Surfaces Using Microsensors As Tips in Scanning Electrochemical Microscopy: Applications in Corrosion Research and Protection. ECS Meeting Abstracts, 2019, , .	0.0	0