

Alda Mª Simões

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6057630/publications.pdf>

Version: 2024-02-01

78
papers

5,578
citations

71102

41
h-index

76900

74
g-index

81
all docs

81
docs citations

81
times ranked

3109
citing authors

#	ARTICLE	IF	CITATIONS
1	Chloride-induced corrosion on reinforcing steel: from the fundamentals to the monitoring techniques. <i>Cement and Concrete Composites</i> , 2003, 25, 491-502.	10.7	398
2	Capacitance behaviour of passive films on ferritic and austenitic stainless steel. <i>Corrosion Science</i> , 2005, 47, 581-591.	6.6	288
3	Semiconducting Properties of Passive Films Formed on Stainless Steels: Influence of the Alloying Elements. <i>Journal of the Electrochemical Society</i> , 1998, 145, 3821-3829.	2.9	277
4	Study of Passive Films Formed on AISI 304 Stainless Steel by Impedance Measurements and Photoelectrochemistry. <i>Journal of the Electrochemical Society</i> , 1990, 137, 82-87.	2.9	268
5	Silanes and rare earth salts as chromate replacers for pre-treatments on galvanised steel. <i>Electrochimica Acta</i> , 2004, 49, 2927-2935.	5.2	211
6	Characterization of rare-earth conversion films formed on the AZ31 magnesium alloy and its relation with corrosion protection. <i>Applied Surface Science</i> , 2007, 253, 6922-6931.	6.1	190
7	Use of SVET and SECM to study the galvanic corrosion of an iron-zinc cell. <i>Corrosion Science</i> , 2007, 49, 726-739.	6.6	167
8	Corrosion inhibition by chromate and phosphate extracts for iron substrates studied by EIS and SVET. <i>Corrosion Science</i> , 2006, 48, 1500-1512.	6.6	158
9	Chemical Composition of Passive Films on AISI 304 Stainless Steel. <i>Journal of the Electrochemical Society</i> , 1994, 141, 3347-3356.	2.9	147
10	The role of Mo in the chemical composition and semiconductive behaviour of oxide films formed on stainless steels. <i>Corrosion Science</i> , 1999, 41, 17-34.	6.6	142
11	Effect of fly ash on concrete reinforcement corrosion studied by EIS. <i>Cement and Concrete Composites</i> , 2000, 22, 175-185.	10.7	137
12	Electrochemical and analytical investigation of passive films formed on stainless steels in alkaline media. <i>Cement and Concrete Composites</i> , 2012, 34, 1075-1081.	10.7	131
13	Influence of the temperature of film formation on the electronic structure of oxide films formed on 304 stainless steel. <i>Electrochimica Acta</i> , 2001, 46, 3767-3776.	5.2	126
14	Electrochemical behaviour of a Mg-rich primer in the protection of Al alloys. <i>Corrosion Science</i> , 2006, 48, 1292-1306.	6.6	121
15	An impedance model for the estimation of water absorption in organic coatings. Part I: A linear dielectric mixture equation. <i>Corrosion Science</i> , 2003, 45, 1631-1646.	6.6	119
16	Composition and corrosion behaviour of galvanised steel treated with rare-earth salts: the effect of the cation. <i>Progress in Organic Coatings</i> , 2002, 44, 111-120.	3.9	115
17	Composition and behaviour of cerium films on galvanised steel. <i>Progress in Organic Coatings</i> , 2001, 43, 274-281.	3.9	111
18	SVET and SECM imaging of cathodic protection of aluminium by a Mg-rich coating. <i>Corrosion Science</i> , 2007, 49, 3838-3849.	6.6	111

#	ARTICLE	IF	CITATIONS
19	Corrosion behaviour of rebars in fly ash mortar exposed to carbon dioxide and chlorides. Cement and Concrete Composites, 2002, 24, 45-53.	10.7	108
20	Comparative electrochemical studies of zinc chromate and zinc phosphate as corrosion inhibitors for zinc. Progress in Organic Coatings, 2005, 52, 339-350.	3.9	101
21	Development of a thin ceramic-graphene nanolaminate coating for corrosion protection of stainless steel. Corrosion Science, 2016, 105, 161-169.	6.6	100
22	Composition and corrosion resistance of cerium conversion films on the AZ31 magnesium alloy and its relation to the salt anion. Applied Surface Science, 2008, 254, 1806-1814.	6.1	99
23	E.I.S. evaluation of attached and free polymer films. Progress in Organic Coatings, 2000, 38, 1-7.	3.9	96
24	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
25	Multiprobe chloride sensor for in situ monitoring of reinforced concrete structures. Cement and Concrete Composites, 2006, 28, 233-236.	10.7	96
26	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
27	The electronic properties of sputtered chromium and iron oxide films. Corrosion Science, 2004, 46, 1479-1499.	6.6	95
28	Comparison of testing solutions on the protection of Al-alloys using a Mg-rich primer. Corrosion Science, 2006, 48, 2226-2240.	6.6	85
29	Assessment of the corrosion protection of aluminium substrates by a Mg-rich primer: EIS, SVET and SECM study. Progress in Organic Coatings, 2008, 63, 260-266.	3.9	79
30	The use of multiple electrochemical techniques to characterize Mg-rich primers for Al alloys. Progress in Organic Coatings, 2007, 59, 172-178.	3.9	78
31	Chemical composition and semiconducting behaviour of stainless steel passive films in contact with artificial seawater. Corrosion Science, 1998, 40, 481-494.	6.6	76
32	Analytical Characterization of the Passive Film Formed on Steel in Solutions Simulating the Concrete Interstitial Electrolyte. Corrosion, 1998, 54, 347-353.	1.1	76
33	The corrosion performance of organosilane based pre-treatments for coatings on galvanised steel. Progress in Organic Coatings, 2000, 38, 17-26.	3.9	74
34	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
35	Assessment of water uptake in coil coatings by capacitance measurements. Progress in Organic Coatings, 2003, 46, 55-61.	3.9	64
36	Electrochemical behaviour of thermally treated Cr-oxide films deposited on stainless steel. Corrosion Science, 2002, 44, 451-465.	6.6	63

#	ARTICLE	IF	CITATIONS
37	Corrosion inhibition at galvanized steel cut edges by phosphate pigments. <i>Electrochimica Acta</i> , 2009, 54, 3857-3865.	5.2	62
38	Semiconducting properties of oxide and passive films formed on AISI 304 stainless steel and Alloy 600. <i>Journal of the Brazilian Chemical Society</i> , 2002, 13, 433.	0.6	56
39	The role of Ce(III)-enriched zeolites on the corrosion protection of AA2024-T3. <i>Electrochimica Acta</i> , 2013, 112, 549-556.	5.2	51
40	An impedance model for the estimation of water absorption in organic coatings. Part II: A complex equation of mixture. <i>Corrosion Science</i> , 2003, 45, 1647-1660.	6.6	47
41	Influence of temperature on the properties of passive films formed on AISI 304 stainless steel. <i>Electrochimica Acta</i> , 1991, 36, 315-320.	5.2	42
42	Effect of uniaxial strain on the protective properties of coil-coatings. <i>Progress in Organic Coatings</i> , 2003, 46, 220-227.	3.9	38
43	Water sorption in freestanding PVC films by capacitance measurements. <i>Progress in Organic Coatings</i> , 2003, 46, 130-134.	3.9	38
44	Electrochemistry and surface analysis of the effect of benzotriazole on the cut edge corrosion of galvanized steel. <i>Electrochimica Acta</i> , 2010, 55, 5523-5531.	5.2	35
45	Electronic structure of iridium oxide films formed in neutral phosphate buffer solution. <i>Journal of Electroanalytical Chemistry</i> , 1998, 441, 5-12.	3.8	34
46	Studying phosphate corrosion inhibition at the cut edge of coil coated galvanized steel using the SVET and EIS. <i>Progress in Organic Coatings</i> , 2010, 69, 219-224.	3.9	32
47	SECM imaging of the cut edge corrosion of galvanized steel as a function of pH. <i>Electrochimica Acta</i> , 2015, 153, 238-245.	5.2	30
48	Electrochemical characterisation of oxide films formed on Ti-6Al-4V alloy implanted with Ir for bioengineering applications. <i>Electrochimica Acta</i> , 1998, 43, 203-211.	5.2	26
49	Crevice corrosion studies on stainless steel using electrochemical noise measurements. <i>Corrosion Engineering Science and Technology</i> , 1987, 22, 21-25.	0.3	25
50	Application of scanning electrode techniques for the evaluation of iron-zinc corrosion in nearly neutral chloride solutions. <i>Corrosion Science</i> , 2016, 104, 123-131.	6.6	24
51	EIS and SVET assessment of corrosion resistance of thin Zn-55% Al-rich primers: Effect of immersion and of controlled deformation. <i>Electrochimica Acta</i> , 2014, 148, 153-163.	5.2	23
52	An environmentally acceptable primer for galvanized steel: Formulation and evaluation by SVET. <i>Corrosion Science</i> , 2011, 53, 464-472.	6.6	22
53	The assessment of the electrochemical behaviour of flyash-containing concrete by impedance spectroscopy. <i>Corrosion Science</i> , 1993, 35, 1571-1578.	6.6	21
54	Use of Ionic Liquids for the Electrochemical Characterization of Water Transport in Organic Coatings. <i>Electrochemical and Solid-State Letters</i> , 2005, 8, B60.	2.2	21

#	ARTICLE	IF	CITATIONS
55	Effects of mechanical forming on the corrosion of electrogalvanised steel. Corrosion Science, 2013, 69, 87-96.	6.6	21
56	Simulation of Wet-Dry Cycling of Organic Coatings Using Ionic Liquids. Journal of the Electrochemical Society, 2007, 154, F177.	2.9	17
57	Formability of organic coatings—an electrochemical approach. Electrochimica Acta, 2004, 49, 3947-3955.	5.2	16
58	Ionic liquid enhanced electrochemical characterization of organic coatings. Progress in Organic Coatings, 2008, 63, 250-259.	3.9	15
59	Effect of deep drawing on the performance of coil-coatings assessed by electrochemical techniques. Progress in Organic Coatings, 2009, 65, 295-303.	3.9	15
60	Composition and structure of coloured oxide films on stainless steel formed by triangular current scan and cathodic hardening treatment. Corrosion Science, 2007, 49, 2303-2314.	6.6	13
61	Weathering of coil-coatings: UV radiation and thermal effects. Revista De Metalurgia, 2003, 39, 167-173.	0.5	11
62	Use of SECM to study the electrochemical behavior of DIN 1.4575 superferritic stainless steel aged at 475°C. Materials and Corrosion - Werkstoffe Und Korrosion, 2009, 60, 889-894.	1.5	10
63	The uneven corrosion of deep drawn coil-coatings investigated by EIS. Electrochimica Acta, 2011, 56, 7825-7832.	5.2	10
64	Effect of Ageing on the Formability of Coil Coatings. Materials Science Forum, 1998, 289-292, 247-258.	0.3	6
65	Functionalization of Titanium Alloy Surface by Graphene Nanoplatelets and Metal Oxides: Corrosion Inhibition. Journal of Nanoscience and Nanotechnology, 2015, 15, 6533-6540.	0.9	6
66	Semiconducting Behaviour of Stainless Steel Passive Films in Contact with Artificial Seawater. Materials Science Forum, 1998, 289-292, 887-894.	0.3	5
67	Local Electrochemical Impedance Spectroscopy Investigation of Corrosion Inhibitor Films on Copper. ECS Transactions, 2012, 41, 227-235.	0.5	5
68	Monitoring of corrosion-fatigue degradation of grade R4 steel using an electrochemical-mechanical combined approach. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2509-2519.	3.4	5
69	Carbonation of Flyash-Containing Concrete: Electrochemical Studies. Materials Science Forum, 1995, 192-194, 867-876.	0.3	4
70	A forming limit curve for the corrosion resistance of coil-coatings based on electrochemical measurements. Progress in Organic Coatings, 2015, 80, 156-163.	3.9	4
71	Passivation and Localized Corrosion. , 1991, , 485-520.		4
72	Visualisation of the Galvanic Effects at Welds on Carbon Steel. Journal of the Brazilian Chemical Society, 2015, , .	0.6	3

#	ARTICLE	IF	CITATIONS
73	Use of SECM to compare corrosion resistance of DIN W. Nr. 1.4460 high N and AISI 316L austenitic stainless steels in physiological solutions. Corrosion Engineering Science and Technology, 2011, 46, 599-604.	1.4	2
74	Magnesium-rich primers for chromate-free protective systems on Al 2024 and Al 7075. , 2007, , 63-70.		2
75	Effect of Strain on the Protective Properties of Organic Coatings. Key Engineering Materials, 2002, 230-232, 361-364.	0.4	1
76	Simulation of Wet-Dry Cycling of Organic Coatings using Ionic Liquids. ECS Transactions, 2006, 2, 31-48.	0.5	1
77	A Capacitance Model for the Evaluation of Water Absorption in Organic Coatings. Key Engineering Materials, 2002, 230-232, 369-372.	0.4	0
78	Thermodynamic Simulation of Phosphate Precipitation based on Ion-Selective Microelectrode Measurements. Journal of the Brazilian Chemical Society, 2013, , .	0.6	0