

# Alda Mª Simões

## List of Publications by Year in descending order

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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	Monitoring of corrosion-fatigue degradation of grade R4 steel using an electrochemical-mechanical combined approach. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2019, 42, 2509-2519.	3.4	5
2	Development of a thin ceramic-graphene nanolaminate coating for corrosion protection of stainless steel. <i>Corrosion Science</i> , 2016, 105, 161-169.	6.6	100
3	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
4	Functionalization of Titanium Alloy Surface by Graphene Nanoplatelets and Metal Oxides: Corrosion Inhibition. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 6533-6540.	0.9	6
5	A forming limit curve for the corrosion resistance of coil-coatings based on electrochemical measurements. <i>Progress in Organic Coatings</i> , 2015, 80, 156-163.	3.9	4
6	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
7	Visualisation of the Galvanic Effects at Welds on Carbon Steel. <i>Journal of the Brazilian Chemical Society</i> , 2015, , .	0.6	3
8	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
9	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
10	Effects of mechanical forming on the corrosion of electrogalvanised steel. <i>Corrosion Science</i> , 2013, 69, 87-96.	6.6	21
11	Thermodynamic Simulation of Phosphate Precipitation based on Ion-Selective Microelectrode Measurements. <i>Journal of the Brazilian Chemical Society</i> , 2013, , .	0.6	0
12	Local Electrochemical Impedance Spectroscopy Investigation of Corrosion Inhibitor Films on Copper. <i>ECS Transactions</i> , 2012, 41, 227-235.	0.5	5
13	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
14	An environmentally acceptable primer for galvanized steel: Formulation and evaluation by SVET. <i>Corrosion Science</i> , 2011, 53, 464-472.	6.6	22
15	The uneven corrosion of deep drawn coil-coatings investigated by EIS. <i>Electrochimica Acta</i> , 2011, 56, 7825-7832.	5.2	10
16	Use of SECM to compare corrosion resistance of DIN W. Nr. 1-4460 high N and AISI 316L austenitic stainless steels in physiological solutions. <i>Corrosion Engineering Science and Technology</i> , 2011, 46, 599-604.	1.4	2
17	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
18	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

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19	Effect of deep drawing on the performance of coil-coatings assessed by electrochemical techniques. <i>Progress in Organic Coatings</i> , 2009, 65, 295-303.	3.9	15
20	Use of SECM to study the electrochemical behavior of DIN 1.4575 superferritic stainless steel aged at 475°C. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2009, 60, 889-894.	1.5	10
21	Corrosion inhibition at galvanized steel cut edges by phosphate pigments. <i>Electrochimica Acta</i> , 2009, 54, 3857-3865.	5.2	62
22	Composition and corrosion resistance of cerium conversion films on the AZ31 magnesium alloy and its relation to the salt anion. <i>Applied Surface Science</i> , 2008, 254, 1806-1814.	6.1	99
23	Assessment of the corrosion protection of aluminium substrates by a Mg-rich primer: EIS, SVET and SECM study. <i>Progress in Organic Coatings</i> , 2008, 63, 260-266.	3.9	79
24	Ionic liquid enhanced electrochemical characterization of organic coatings. <i>Progress in Organic Coatings</i> , 2008, 63, 250-259.	3.9	15
25	Simulation of Wet-Dry Cycling of Organic Coatings Using Ionic Liquids. <i>Journal of the Electrochemical Society</i> , 2007, 154, F177.	2.9	17
26	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
27	Composition and structure of coloured oxide films on stainless steel formed by triangular current scan and cathodic hardening treatment. <i>Corrosion Science</i> , 2007, 49, 2303-2314.	6.6	13
28	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
29	Investigating corrosion processes in the micrometric range: A SVET study of the galvanic corrosion of zinc coupled with iron. <i>Corrosion Science</i> , 2007, 49, 4568-4580.	6.6	96
30	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
31	The use of multiple electrochemical techniques to characterize Mg-rich primers for Al alloys. <i>Progress in Organic Coatings</i> , 2007, 59, 172-178.	3.9	78
32	Magnesium-rich primers for chromate-free protective systems on Al 2024 and Al 7075. , 2007, , 63-70.		2
33	Electrochemical behaviour of a Mg-rich primer in the protection of Al alloys. <i>Corrosion Science</i> , 2006, 48, 1292-1306.	6.6	121
34	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
35	Comparison of testing solutions on the protection of Al-alloys using a Mg-rich primer. <i>Corrosion Science</i> , 2006, 48, 2226-2240.	6.6	85
36	Multiprobe chloride sensor for in situ monitoring of reinforced concrete structures. <i>Cement and Concrete Composites</i> , 2006, 28, 233-236.	10.7	96

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37	Simulation of Wet-Dry Cycling of Organic Coatings using Ionic Liquids. ECS Transactions, 2006, 2, 31-48.	0.5	1
38	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
39	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
40	Use of Ionic Liquids for the Electrochemical Characterization of Water Transport in Organic Coatings. Electrochemical and Solid-State Letters, 2005, 8, B60.	2.2	21
41	Capacitance behaviour of passive films on ferritic and austenitic stainless steel. Corrosion Science, 2005, 47, 581-591.	6.6	288
42	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
43	Silanes and rare earth salts as chromate replacers for pre-treatments on galvanised steel. Electrochimica Acta, 2004, 49, 2927-2935.	5.2	211
44	Formability of organic coatings—an electrochemical approach. Electrochimica Acta, 2004, 49, 3947-3955.	5.2	16
45	The electronic properties of sputtered chromium and iron oxide films. Corrosion Science, 2004, 46, 1479-1499.	6.6	95
46	Assessment of water uptake in coil coatings by capacitance measurements. Progress in Organic Coatings, 2003, 46, 55-61.	3.9	64
47	Effect of uniaxial strain on the protective properties of coil-coatings. Progress in Organic Coatings, 2003, 46, 220-227.	3.9	38
48	Water sorption in freestanding PVC films by capacitance measurements. Progress in Organic Coatings, 2003, 46, 130-134.	3.9	38
49	Chloride-induced corrosion on reinforcing steel: from the fundamentals to the monitoring techniques. Cement and Concrete Composites, 2003, 25, 491-502.	10.7	398
50	An impedance model for the estimation of water absorption in organic coatings. Part I: A linear dielectric mixture equation. Corrosion Science, 2003, 45, 1631-1646.	6.6	119
51	An impedance model for the estimation of water absorption in organic coatings. Part II: A complex equation of mixture. Corrosion Science, 2003, 45, 1647-1660.	6.6	47
52	Weathering of coil-coatings: UV radiation and thermal effects. Revista De Metalurgia, 2003, 39, 167-173.	0.5	11
53	A Capacitance Model for the Evaluation of Water Absorption in Organic Coatings. Key Engineering Materials, 2002, 230-232, 369-372.	0.4	0
54	Effect of Strain on the Protective Properties of Organic Coatings. Key Engineering Materials, 2002, 230-232, 361-364.	0.4	1

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55	Electrochemical behaviour of thermally treated Cr-oxide films deposited on stainless steel. <i>Corrosion Science</i> , 2002, 44, 451-465.	6.6	63
56	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
57	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
58	Corrosion behaviour of rebars in fly ash mortar exposed to carbon dioxide and chlorides. <i>Cement and Concrete Composites</i> , 2002, 24, 45-53.	10.7	108
59	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
60	Composition and behaviour of cerium films on galvanised steel. <i>Progress in Organic Coatings</i> , 2001, 43, 274-281.	3.9	111
61	Effect of fly ash on concrete reinforcement corrosion studied by EIS. <i>Cement and Concrete Composites</i> , 2000, 22, 175-185.	10.7	137
62	E.I.S. evaluation of attached and free polymer films. <i>Progress in Organic Coatings</i> , 2000, 38, 1-7.	3.9	96
63	The corrosion performance of organosilane based pre-treatments for coatings on galvanised steel. <i>Progress in Organic Coatings</i> , 2000, 38, 17-26.	3.9	74
64	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
65	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
66	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
67	Chemical composition and semiconducting behaviour of stainless steel passive films in contact with artificial seawater. <i>Corrosion Science</i> , 1998, 40, 481-494.	6.6	76
68	Analytical Characterization of the Passive Film Formed on Steel in Solutions Simulating the Concrete Interstitial Electrolyte. <i>Corrosion</i> , 1998, 54, 347-353.	1.1	76
69	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
70	Semiconducting Behaviour of Stainless Steel Passive Films in Contact with Artificial Seawater. <i>Materials Science Forum</i> , 1998, 289-292, 887-894.	0.3	5
71	Effect of Ageing on the Formability of Coil Coatings. <i>Materials Science Forum</i> , 1998, 289-292, 247-258.	0.3	6
72	Carbonation of Flyash-Containing Concrete: Electrochemical Studies. <i>Materials Science Forum</i> , 1995, 192-194, 867-876.	0.3	4

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73	Chemical Composition of Passive Films on AISI 304 Stainless Steel. Journal of the Electrochemical Society, 1994, 141, 3347-3356.	2.9	147
74	The assessment of the electrochemical behaviour of flyash-containing concrete by impedance spectroscopy. Corrosion Science, 1993, 35, 1571-1578.	6.6	21
75	Influence of temperature on the properties of passive films formed on AISI 304 stainless steel. Electrochimica Acta, 1991, 36, 315-320.	5.2	42
76	Passivation and Localized Corrosion. , 1991, , 485-520.		4
77	Study of Passive Films Formed on AISI 304 Stainless Steel by Impedance Measurements and Photoelectrochemistry. Journal of the Electrochemical Society, 1990, 137, 82-87.	2.9	268
78	Crevice corrosion studies on stainless steel using electrochemical noise measurements. Corrosion Engineering Science and Technology, 1987, 22, 21-25.	0.3	25