Joao Carlos Salvador Fernandes

List of Publications by Year in descending order

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50 1,932 papers citations

25 43
h-index g-index

51 51 docs citations

51 times ranked 2231 citing authors

#	Article	IF	CITATIONS
1	SVET, SKP and EIS study of the corrosion behaviour of high strength Al and Al–Li alloys used in aircraft fabrication. Corrosion Science, 2014, 84, 30-41.	6.6	170
2	Corrosion behaviour of NiTi alloy. Electrochimica Acta, 2009, 54, 921-926.	5.2	162
3	Corrosion resistance of a composite polymeric coating applied on biodegradable AZ31 magnesium alloy. Acta Biomaterialia, 2013, 9, 8660-8670.	8.3	136
4	Anodising of Al 2024-T3 in a modified sulphuric acid/boric acid bath for aeronautical applications. Corrosion Science, 2003, 45, 149-160.	6.6	119
5	Corrosion mechanisms in titanium oxide-based films produced by anodic treatment. Electrochimica Acta, 2017, 234, 16-27.	5.2	113
6	Anti-corrosion performance of a new silane coating for corrosion protection of AZ31 magnesium alloy in Hank's solution. Surface and Coatings Technology, 2012, 206, 4368-4375.	4.8	103
7	Multiprobe chloride sensor for in situ monitoring of reinforced concrete structures. Cement and Concrete Composites, 2006, 28, 233-236.	10.7	96
8	Electrodeposition and characterization of polypyrrole films on aluminium alloy 6061-T6. Electrochimica Acta, 2008, 53, 4754-4763.	5.2	86
9	Corrosion inhibition at galvanized steel cut edges by phosphate pigments. Electrochimica Acta, 2009, 54, 3857-3865.	5.2	62
10	Capacitance and photoelectrochemical studies for the assessment of anodic oxide films on aluminium. Electrochimica Acta, 2004, 49, 4701-4707.	5.2	60
11	"ln-vitro―corrosion behaviour of the magnesium alloy with Al and Zn (AZ31) protected with a biodegradable polycaprolactone coating loaded with hydroxyapatite and cephalexin. Electrochimica Acta, 2015, 179, 431-440.	5.2	59
12	Biofunctional composite coating architectures based on polycaprolactone and nanohydroxyapatite for controlled corrosion activity and enhanced biocompatibility of magnesium AZ31 alloy. Materials Science and Engineering C, 2015, 48, 434-443.	7. 3	57
13	Passivity breakdown of Al 2024-T3 alloy in chloride solutions: a test of the point defect model. Electrochemistry Communications, 2002, 4, 353-357.	4.7	49
14	Corrosion behaviour of Al/Al3Ti and Al/Al3Zr functionally graded materials produced by centrifugal solid-particle method: Influence of the intermetallics volume fraction. Corrosion Science, 2011, 53, 2058-2065.	6.6	48
15	Polyaniline coatings on aluminium alloy 6061-T6: Electrosynthesis and characterization. Electrochimica Acta, 2010, 55, 3580-3588.	5.2	45
16	Controlled drug release from hydrogels for contact lenses: Drug partitioning and diffusion. International Journal of Pharmaceutics, 2016, 515, 467-475.	5.2	44
17	Impedance spectra for aluminum 7075 during the early stages of immersion in sodium chloride. Corrosion Science, 1993, 34, 2105-2108.	6.6	43
18	Corrosion and corrosion-fatigue synergism on the base metal and nugget zone of the 2524-T3 Al alloy joined by FSW process. Corrosion Science, 2021, 182, 109253.	6.6	35

#	Article	IF	Citations
19	Plasma-polymerised coatings used as pre-treatment for aluminium alloys. Surface and Coatings Technology, 2002, 154, 8-13.	4.8	33
20	Studying phosphate corrosion inhibition at the cut edge of coil coated galvanized steel using the SVET and EIS. Progress in Organic Coatings, 2010, 69, 219-224.	3.9	32
21	Novel biosensing device for point-of-care applications with plastic antibodies grown on Au-screen printed electrodes. Sensors and Actuators B: Chemical, 2013, 182, 733-740.	7.8	31
22	Ptâ€"Ru nanoparticles supported on functionalized carbon as electrocatalysts for the methanol oxidation. Electrochimica Acta, 2011, 56, 8509-8518.	5.2	29
23	Study of the sensitisation process of a duplex stainless steel (UNS 1.4462) by means of confocal microscopy and localised electrochemical techniques. Corrosion Science, 2015, 94, 327-341.	6.6	29
24	Improving the corrosion protection of 2524-T3-Al alloy through reactive sputtering Nb2O5 coatings. Applied Surface Science, 2021, 556, 149750.	6.1	29
25	EIS on plasma-polymerised coatings used as pre-treatment for aluminium alloys. Electrochimica Acta, 2002, 47, 2253-2258.	5.2	25
26	Spin valve heads with a corrosion resistant MnRh exchange layer. IEEE Transactions on Magnetics, 1998, 34, 2343-2347.	2.1	24
27	Effect of Localized Corrosion on Fatigue–Crack Growth in 2524-T3 and 2198-T851 Aluminum Alloys Used as Aircraft Materials. Journal of Materials Engineering and Performance, 2018, 27, 1917-1926.	2.5	23
28	Effect of bio-functional MAO layers on the electrochemical behaviour of highly porous Ti. Surface and Coatings Technology, 2020, 386, 125487.	4.8	22
29	Degradation of selective solar absorber surfaces in solar thermal collectors – An EIS study. Solar Energy Materials and Solar Cells, 2017, 160, 149-163.	6.2	21
30	Characterization of Porous Phosphate Coatings Enriched with Magnesium or Zinc on CP Titanium Grade 2 under DC Plasma Electrolytic Oxidation. Metals, 2018, 8, 112.	2.3	17
31	Analysis of the degradation in the Wells turbine blades of the Pico oscillating-water-column wave energy plant. Renewable and Sustainable Energy Reviews, 2019, 115, 109368.	16.4	13
32	Biopolymeric coatings for delivery of antibiotic and controlled degradation of bioresorbable Mg AZ31 alloys. International Journal of Polymeric Materials and Polymeric Biomaterials, 2017, 66, 533-543.	3.4	12
33	Electrochemical properties of oxygen-enriched carbon-based nanomaterials. Journal of Electroanalytical Chemistry, 2020, 873, 114420.	3.8	12
34	Electrochemical impedance studies on pure aluminium in carbonate solution. Journal of Applied Electrochemistry, 1990, 20, 874-876.	2.9	11
35	Determination of Microcystin-LR in waters in the subnanomolar range by sol–gel imprinted polymers on solid contact electrodes. Analyst, The, 2012, 137, 2437.	3.5	11
36	Optical sensors for corrosion detection in airframes. Sensors and Actuators B: Chemical, 2013, 182, 774-781.	7.8	11

#	Article	IF	CITATIONS
37	Corrosion behaviour of reactive sputtering deposition niobium oxide based coating on the 2198-T851 aluminium alloy. Surface and Coatings Technology, 2022, 434, 128197.	4.8	11
38	On the Global and Localised Corrosion Behaviour of the AA2524-T3 Aluminium Alloy Used as Aircraft Fuselage Skin. Materials Research, 2019, 22, .	1.3	10
39	Electrochemical behaviour of chromium-implanted magnesium in hydroxide, chloride and sulphate solutions. Surface and Coatings Technology, 2008, 202, 4086-4093.	4.8	8
40	Effect of carbonate and lithium ions on the corrosion performance of pure aluminium. Electrochimica Acta, 1992, 37, 2659-2661.	5.2	6
41	In vivoassessment of a new multifunctional coating architecture for improved Mg alloy biocompatibility. Biomedical Materials (Bristol), 2016, 11, 045007.	3.3	6
42	Corrosion behaviour of physical vapour deposition aluminium-based coatings on 2024 aluminium alloy. Surface and Coatings Technology, 1992, 52, 289-290.	4.8	4
43	Corrosion behaviour of tungsten-implanted aluminium in carbonate and sulphate solutions. Surface and Coatings Technology, 1992, 56, 75-79.	4.8	3
44	Simulating In Vitro the Bone Healing Potential of a Degradable and Tailored Multifunctional Mg-Based Alloy Platform. Bioengineering, 2022, 9, 255.	3.5	3
45	Corrosion behaviour of physically vapour deposited Al-Zn coatings on 7075 aluminium alloy. Surface and Coatings Technology, 1992, 53, 99-100.	4.8	2
46	The behaviour of ion-implanted tungsten species during anodic oxidation of aluminium. Journal Physics D: Applied Physics, 1998, 31, 2083-2090.	2.8	2
47	8th International Symposium on Electrochemical Impedance Spectroscopy (EIS 2010). Electrochimica Acta, 2011, 56, 7761-7762.	5.2	2
48	Influence of melt treatment of AZ91D alloy on phase morphology and corrosion behaviour in Hank's solution. Corrosion Engineering Science and Technology, 2021, 56, 504-512.	1.4	2
49	Corrosion Behavior of the Friction Stir Welded AZ31 Magnesium Alloy. Microscopy and Microanalysis, 2015, 21, 33-34.	0.4	1
50	Influence of DLC Film Deposition on the Corrosion and Micro-abrasive Wear Tests of the 2524-T3 Al Alloy. Orbital, 2019, 11, .	0.3	0