

# Carmen MarÃ-a Abreu

## List of Publications by Year in descending order

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Version: 2024-02-01

42  
papers

1,178  
citations

516561

16  
h-index

377752

34  
g-index

42  
all docs

42  
docs citations

42  
times ranked

972  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical behaviour of zinc-rich epoxy paints in 3% NaCl solution. <i>Electrochimica Acta</i> , 1996, 41, 2405-2415.	2.6	176
2	The effect of Ni in the electrochemical properties of oxide layers grown on stainless steels. <i>Electrochimica Acta</i> , 2006, 51, 2991-3000.	2.6	119
3	Comparative study of passive films of different stainless steels developed on alkaline medium. <i>Electrochimica Acta</i> , 2004, 49, 3049-3056.	2.6	115
4	High frequency impedance spectroscopy study of passive films formed on AISI 316 stainless steel in alkaline medium. <i>Journal of Electroanalytical Chemistry</i> , 2004, 572, 335-345.	1.9	110
5	Long-term behaviour of AISI 304L passive layer in chloride containing medium. <i>Electrochimica Acta</i> , 2006, 51, 1881-1890.	2.6	86
6	A New Approach to the Determination of the Cathodic Protection Period in Zinc-Rich Paints. <i>Corrosion</i> , 1999, 55, 1173-1181.	0.5	74
7	Galvanic coupling between carbon steel and austenitic stainless steel in alkaline media. <i>Electrochimica Acta</i> , 2002, 47, 2271-2279.	2.6	65
8	Wear and corrosion performance of two different tempers (T6 and T73) of AA7075 aluminium alloy after nitrogen implantation. <i>Applied Surface Science</i> , 2015, 327, 51-61.	3.1	45
9	Viability of epoxy-siloxane hybrid coatings for preventing steel corrosion. <i>Progress in Organic Coatings</i> , 2016, 92, 29-43.	1.9	40
10	Electrochemical behaviour of an AISI 304L stainless steel implanted with nitrogen. <i>Electrochimica Acta</i> , 2008, 53, 6000-6007.	2.6	35
11	Effect of nitrogen and molybdenum ion implantation in the tribological behavior of AA7075 aluminum alloy. <i>Wear</i> , 2012, 276-277, 53-60.	1.5	34
12	Influence of molybdenum ion implantation on the localized corrosion resistance of a high strength aluminium alloy. <i>Corrosion Science</i> , 2012, 54, 143-152.	3.0	31
13	Characterisation of the electrochemical behaviour of cerium implanted stainless steels. <i>Electrochimica Acta</i> , 2002, 47, 2215-2222.	2.6	28
14	Friction stir processing strategies to develop a surface composite layer on AA6061-T6. <i>Materials and Manufacturing Processes</i> , 2018, 33, 1133-1140.	2.7	25
15	Modifications of the stainless steels passive film induced by cerium implantation. <i>Surface and Coatings Technology</i> , 2002, 158-159, 582-587.	2.2	23
16	Influence of chromium and cerium implantation in the electrochemical development of passive layers on AISI 304L. <i>Electrochimica Acta</i> , 2004, 49, 3057-3065.	2.6	19
17	An XPS study on the influence of nitrogen implantation on the passive layers developed on different tempers of AA7075 aluminum alloy. <i>Surface and Interface Analysis</i> , 2010, 42, 592-596.	0.8	15
18	Electrochemical study of the surface metal matrix composite developed on AA 2024-T351 by the friction stir process. <i>Corrosion Engineering Science and Technology</i> , 2019, 54, 715-725.	0.7	14

#	ARTICLE	IF	CITATIONS
19	Ionic liquids improve the anticorrosion performance of Zn-rich coatings. RSC Advances, 2014, 4, 59587-59593.	1.7	12
20	Microstructure and mechanical properties of Al/SiC composite surface layer produced by friction stir processing. Ciência & Tecnologia Dos Materiais, 2017, 29, e82-e86.	0.5	12
21	Evolution of corrosion behavior for AA7075 aluminum alloy implanted with nitrogen. Nuclear Instruments & Methods in Physics Research B, 2019, 442, 1-12.	0.6	11
22	Microstructure and Wear Properties of Surface Composite Layer Produced by Friction Stir Processing (FSP) in AA2024-T351 Aluminum Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2860-2874.	1.1	10
23	Assessing Pretreatment Effect on the Protective Properties of Different Coating Systems Against Marine Corrosion. Corrosion, 2014, 70, 1203-1218.	0.5	8
24	XPS study of passive films generated on AISI 430 ferritic stainless steel implanted with nitrogen and chromium plus nitrogen. Surface and Interface Analysis, 2006, 38, 851-853.	0.8	6
25	Influence of nitrogen implantation on the localized corrosion resistance of different tempers of AA7075 aluminium alloy. Surface and Interface Analysis, 2010, 42, 636-640.	0.8	6
26	Unraveling the Impact of Chloride and Sulfate Ions Collection on Atmospheric Corrosion of Steel. Corrosion, 2013, 69, 1217-1224.	0.5	6
27	Microstructure of the passive layer formed on AA2024-T3 aluminum alloy surface implanted with nitrogen. Surface and Interface Analysis, 2008, 40, 290-293.	0.8	5
28	Passive layers developed on different tempers of AA7075 aluminium alloy after molybdenum implantation. Surface and Interface Analysis, 2012, 44, 1039-1044.	0.8	5
29	Towards the Determination of the Origin of Sulfur Compounds in Marine Zones by Means of the Chloride/Sulfate Ratio: Applications in Atmospheric Corrosion Studies. Journal of the Electrochemical Society, 2016, 163, C316-C323.	1.3	5
30	Comportamiento electroquímico de un acero inoxidable AISI 430 implantado con cerio. Revista De Metalurgia, 2002, 38, 315-325.	0.1	5
31	Effect of chromium and nitrogen co-implantation on the characteristics of the passive layer developed on austenitic and duplex stainless steels. Surface and Interface Analysis, 2008, 40, 294-298.	0.8	4
32	Microstructure of the Passive Layer Formed on Different Austenitic Stainless Steels Implanted with Molybdenum. Defect and Diffusion Forum, 0, 289-292, 175-184.	0.4	4
33	Study of surface corrosion on AA 2017-T4 aluminum alloy by using electrochemical parameters. Surface and Interface Analysis, 2016, 48, 676-679.	0.8	4
34	Characterization of a Historical Cannonball from the Fortress of San Juan De Ulúa Exposed to a Marine Environment. Archaeometry, 2016, 58, 610-623.	0.6	4
35	Estudio comparativo del comportamiento electroquímico del hierro en medio alcalino en presencia de lodos rojos y lodos grises. Efecto del Al <sup>3+</sup> . Revista De Metalurgia, 2009, 45, 5-13.	0.1	4
36	An Inert Ionic Liquid-Based System for Ascertaining Electrolyte Diffusivity in Protective Coatings. Corrosion, 2015, 71, 259-266.	0.5	3

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37	Spent tyre valorisation: new polymer modified asphalts for steel protection in an aggressive marine environment. RSC Advances, 2015, 5, 76057-76064.	1.7	3
38	An Insight on the Influence of Ion Implantation on the Pitting Corrosion Resistance of AISI 430 Stainless Steel. Defect and Diffusion Forum, 0, 289-292, 501-508.	0.4	2
39	Mo implantation in austenitic stainless steels: effect on the corrosion resistance in chloride acidic media. Surface and Interface Analysis, 2010, 42, 621-625.	0.8	2
40	Influencia de distintos medios agresivos en la acción protectora de las pinturas ricas en zinc. Revista De Metalurgia, 1999, 35, 182-189.	0.1	2
41	Effect of surface preparation on the evolution of the passive films formed on AISI 304L. Surface and Interface Analysis, 2006, 38, 259-262.	0.8	1
42	Análisis de las películas pasivas generadas en aceros inoxidables implantados con cromo. Revista De Metalurgia, 2004, 40, 224-229.	0.1	0