

Yaiza Gonzalez-Garcia

List of Publications by Year in descending order

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44
papers

2,472
citations

201674

27
h-index

254184

43
g-index

44
all docs

44
docs citations

44
times ranked

1913
citing authors

#	ARTICLE	IF	CITATIONS
1	Additively manufactured biodegradable porous iron. <i>Acta Biomaterialia</i> , 2018, 77, 380-393.	8.3	185
2	Electrochemical and structural properties of a polyurethane coating on steel substrates for corrosion protection. <i>Corrosion Science</i> , 2007, 49, 3514-3526.	6.6	181
3	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
4	Self-healing anticorrosive organic coating based on an encapsulated water reactive silyl ester: Synthesis and proof of concept. <i>Progress in Organic Coatings</i> , 2011, 70, 142-149.	3.9	166
5	Imaging metastable pits on austenitic stainless steel in situ at the open-circuit corrosion potential. <i>Electrochemistry Communications</i> , 2004, 6, 637-642.	4.7	126
6	Inhibitor-loaded conducting polymer capsules for active corrosion protection of coating defects. <i>Corrosion Science</i> , 2016, 112, 138-149.	6.6	123
7	Imaging concentration profiles of redox-active species in open-circuit corrosion processes with the scanning electrochemical microscope. <i>Electrochemistry Communications</i> , 2004, 6, 1212-1215.	4.7	96
8	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
9	SECM study of defect repair in self-healing polymer coatings on metals. <i>Electrochemistry Communications</i> , 2011, 13, 169-173.	4.7	89
10	Examination of organic coatings on metallic substrates by scanning electrochemical microscopy in feedback mode: Revealing the early stages of coating breakdown in corrosive environments. <i>Corrosion Science</i> , 2010, 52, 748-753.	6.6	88
11	Scanning electrochemical microscopy to study the effect of crystallographic orientation on the electrochemical activity of pure copper. <i>Electrochimica Acta</i> , 2014, 116, 89-96.	5.2	87
12	Damage to paint coatings caused by electrolyte immersion as observed in situ by scanning electrochemical microscopy. <i>Corrosion Science</i> , 2004, 46, 2621-2628.	6.6	81
13	pH responsive Ce(III) loaded polyaniline nanofibers for self-healing corrosion protection of AA2024-T3. <i>Progress in Organic Coatings</i> , 2016, 99, 197-209.	3.9	81
14	Effect of surface roughness and chemistry on the adhesion and durability of a steel-epoxy adhesive interface. <i>International Journal of Adhesion and Adhesives</i> , 2020, 96, 102450.	2.9	68
15	Internal failure of anode materials for lithium batteries – A critical review. <i>Green Energy and Environment</i> , 2020, 5, 22-36.	8.7	67
16	Application of the scanning electrochemical microscope to the examination of organic coatings on metallic substrates. <i>Progress in Organic Coatings</i> , 2005, 53, 177-182.	3.9	66
17	A combined mechanical, microscopic and local electrochemical evaluation of self-healing properties of shape-memory polyurethane coatings. <i>Electrochimica Acta</i> , 2011, 56, 9619-9626.	5.2	65
18	A closer look at constituent induced localised corrosion in Al-Cu-Mg alloys. <i>Corrosion Science</i> , 2016, 113, 160-171.	6.6	61

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19	A combined redox-competition and negative-feedback SECM study of self-healing anticorrosive coatings. <i>Electrochemistry Communications</i> , 2011, 13, 1094-1097.	4.7	59
20	Evaluation of the corrosion performance of coil-coated steel sheet as studied by scanning electrochemical microscopy. <i>Corrosion Science</i> , 2008, 50, 1637-1643.	6.6	50
21	Electrochemical Evaluation of Corrosion Inhibiting Layers Formed in a Defect from Lithium-Leaching Organic Coatings. <i>Journal of the Electrochemical Society</i> , 2017, 164, C396-C406.	2.9	50
22	Characterization of coating systems by scanning electrochemical microscopy: Surface topology and blistering. <i>Progress in Organic Coatings</i> , 2009, 65, 435-439.	3.9	46
23	Scanning electrochemical microscopy for the investigation of localized degradation processes in coated metals. <i>Progress in Organic Coatings</i> , 2010, 69, 110-117.	3.9	45
24	Scanning electrochemical microscopy for the investigation of localized degradation processes in coated metals: Effect of oxygen. <i>Corrosion Science</i> , 2011, 53, 1910-1915.	6.6	39
25	Mechanism of Passive Layer Formation on AA2024-T3 from Alkaline Lithium Carbonate Solutions in the Presence of Sodium Chloride. <i>Journal of the Electrochemical Society</i> , 2018, 165, C60-C70.	2.9	39
26	In Situ Scanning Electrochemical Microscopy (SECM) Detection of Metal Dissolution during Zinc Corrosion by Means of Mercury Sphere-Cap Microelectrode Tips. <i>Chemistry - A European Journal</i> , 2012, 18, 230-236.	3.3	38
27	Active and passive protection of AA2024-T3 by a hybrid inhibitor doped mesoporous sol-gel and top coating system. <i>Surface and Coatings Technology</i> , 2016, 303, 352-361.	4.8	30
28	On the use of mercury-coated tips in scanning electrochemical microscopy to investigate galvanic corrosion processes involving zinc and iron. <i>Corrosion Science</i> , 2012, 55, 401-406.	6.6	25
29	Molybdate as corrosion inhibitor for hot dip galvanised steel scribed to the substrate: A study based on global and localised electrochemical approaches. <i>Corrosion Science</i> , 2020, 175, 108893.	6.6	21
30	Simulated and measured response of oxygen SECM-measurements in presence of a corrosion process. <i>Electrochimica Acta</i> , 2014, 146, 556-563.	5.2	20
31	Oxygen consumption upon electrochemically polarised zinc. <i>Journal of Applied Electrochemistry</i> , 2014, 44, 747-757.	2.9	19
32	Effect of microstructural defects on passive layer properties of interstitial free (IF) ferritic steels in alkaline environment. <i>Corrosion Science</i> , 2021, 182, 109271.	6.6	18
33	Corrosion resistance of AISI 316L coated with an air-cured hydrogen silsesquioxane based spin-on-glass enamel in chloride environment. <i>Corrosion Science</i> , 2017, 127, 110-119.	6.6	17
34	Study of the electrochemical behaviour of aluminized steel. <i>Surface and Coatings Technology</i> , 2014, 260, 34-38.	4.8	15
35	Influence of inhibitor adsorption on readings of microelectrode during SVET measurements. <i>Electrochimica Acta</i> , 2019, 322, 134761.	5.2	14
36	Coil-coated steel: corrosion resistance and adhesion as a function of the composition of the intermediate galvanic layer. <i>Journal of Adhesion Science and Technology</i> , 2005, 19, 1141-1155.	2.6	9

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37	Corrosion Protection in Chloride Environments of Nanosilica Containing Epoxy Powder Coatings with Defects. <i>Journal of the Electrochemical Society</i> , 2020, 167, 161507.	2.9	9
38	Scanning Kelvin force microscopy study at the cut-edge of aluminum rich metal coated steel. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2015, 66, 16-22.	1.5	5
39	Local changes in the microstructure, mechanical and electrochemical properties of friction stir welded joints from aluminium of varying grain size. <i>Journal of Materials Research and Technology</i> , 2021, 15, 5968-5987.	5.8	3
40	Corrosion and Microstructural Investigation on Additively Manufactured 316L Stainless Steel: Experimental and Statistical Approach. <i>Materials</i> , 2022, 15, 1605.	2.9	3
41	Properties of Passive Films Formed on Ferrite-Martensite and Ferrite-Pearlite Steel Microstructures. <i>Metals</i> , 2021, 11, 594.	2.3	2
42	Use of Local Electrochemical Methods (SECM, EC-STM) and AFM to Differentiate Microstructural Effects (EBSD) on Very Pure Copper. <i>Corrosion Science and Technology</i> , 2017, 16, 1-7.	0.2	2
43	Passive Film Properties of Martensitic Steels in Alkaline Environment: Influence of the Prior Austenite Grain Size. <i>Metals</i> , 2022, 12, 292.	2.3	1
44	Properties and performance of spinâ€³onâ€³glass coatings for the corrosion protection of stainless steels in chloride media. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2018, 69, 1279-1291.	1.5	0