Marta Mohedano

List of Publications by Year in descending order

79 papers	4,011 citations	93792 39 h-index	139680 61 g-index
80 all docs	80 docs citations	80 times ranked	2624 citing authors

#	Article	IF	Citations
1	Electrochemical Surface Treatments for Mg Alloys. , 2022, , 87-112.		1
2	Quasi-in vivo corrosion behavior of AZ31B Mg alloy with hybrid MWCNTs-PEO/PCL based coatings. Journal of Magnesium and Alloys, 2022, 10, 3217-3233.	5.5	19
3	Development and screening of (Ca-P-Si-F)-PEO coatings for biodegradability control of Mg-Zn-Ca alloys. Journal of Magnesium and Alloys, 2022, 10, 2220-2237.	5.5	13
4	Biotribology and biocorrosion of MWCNTs-reinforced PEO coating on AZ31B Mg alloy. Surfaces and Interfaces, 2021, 22, 100850.	1.5	16
5	Design and Multidimensional Screening of Flash-PEO Coatings for Mg in Comparison to Commercial Chromium(VI) Conversion Coating. Metals, 2021, 11, 337.	1.0	6
6	Ca-based sealing of plasma electrolytic oxidation coatings on AZ91 Mg alloy. Surface and Coatings Technology, 2021, 417, 127220.	2.2	13
7	Hybrid functionalized coatings on Metallic Biomaterials for Tissue Engineering. Surface and Coatings Technology, 2021, 422, 127508.	2.2	26
8	Electrochemical response in biological media of plasma electrolytic oxidation treated additively manufactured Ti6Al4V alloy. Materials Proceedings, 2021, 6, .	0.2	0
9	Degradation Rate Control of MgxZnyCa Alloys by PEO Coatings. , 2021, 6, .		0
10	PEO coating with Ce-sealing for corrosion protection of LPSO Mgâ€“Yâ€“Zn alloy. Surface and Coatings Technology, 2020, 383, 125253.	2.2	28
11	Calcium Doped Flash-PEO Coatings for Corrosion Protection of Mg Alloy. Metals, 2020, 10, 916.	1.0	17
12	Flash-PEO coatings loaded with corrosion inhibitors on AA2024. Surface and Coatings Technology, 2020, 402, 126317.	2.2	22
13	PLA deposition on surface treated magnesium alloy: Adhesion, toughness and corrosion behaviour. Surface and Coatings Technology, 2020, 388, 125593.	2.2	30
14	Mgâ€“1Znâ€“1Ca alloy for biomedical applications. Influence of the secondary phases on the mechanical and corrosion behaviour. Journal of Alloys and Compounds, 2020, 831, 154735.	2.8	35
15	Effect of Heat Treatment on the Corrosion Behavior of Mg-10Gd Alloy in 0.5% NaCl Solution. Frontiers in Materials, 2020, 7, .	1.2	11
16	PEO coatings design for Mg-Ca alloy for cardiovascular stent and bone regeneration applications. Materials Science and Engineering C, 2019, 105, 110026.	3.8	52
17	Degradation Behaviour of Mg0.6Ca and Mg0.6Ca2Ag Alloys with Bioactive Plasma Electrolytic Oxidation Coatings. Coatings, 2019, 9, 383.	1.2	14
18	Role of Ca on the corrosion resistance of Mgâ€“9Al and Mgâ€“9Alâ€“0.5Mn alloys. Journal of Alloys and Compounds, 2019, 811, 151992.	2.8	30

#	Article	IF	Citations
19	LDH Post-Treatment of Flash PEO Coatings. Coatings, 2019, 9, 354.	1.2	15
20	Bioactive multi-elemental PEO-coatings on titanium for dental implant applications. Materials Science and Engineering C, 2019, 97, 738-752.	3.8	63
21	Incorporation of halloysite nanotubes into forsterite surface layer during plasma electrolytic oxidation of AM50 Mg alloy. Electrochimica Acta, 2019, 299, 772-788.	2.6	45
22	Corrosion behaviour of as-cast ZK40 with CaO and Y additions. Transactions of Nonferrous Metals Society of China, 2018, 28, 427-439.	1.7	13
23	In vitro and in vivo evaluation of PEO-modified titanium for bone implant applications. Surface and Coatings Technology, 2018, 347, 358-368.	2.2	45
24	Tailoring of antibacterial and osteogenic properties of Ti6Al4V by plasma electrolytic oxidation. Applied Surface Science, 2018, 454, 157-172.	3.1	74
25	Influence of sealing post-treatments on the corrosion resistance of PEO coated AZ91 magnesium alloy. Applied Surface Science, 2018, 433, 653-667.	3.1	105
26	Role of particle type and concentration on characteristics of PEO coatings on AM50 magnesium alloy. Surface and Coatings Technology, 2018, 334, 328-335.	2.2	50
27	Plasma Electrolytic Oxidation (PEO) of Metals and Alloys. , 2018, , 423-438.		24
28	PEO Coatings with Active Protection Based on In-Situ Formed LDH-Nanocontainers. Journal of the Electrochemical Society, 2017, 164, C36-C45.	1.3	67
29	Bioactive plasma electrolytic oxidation coatings on Mg-Ca alloy to control degradation behaviour. Surface and Coatings Technology, 2017, 315, 454-467.	2.2	87
30	Active protective PEO coatings on AA2024: Role of voltage on in-situ LDH growth. Materials and Design, 2017, 120, 36-46.	3.3	97
31	Corrosion of Mg-9Al alloy with minor alloying elements (Mn, Nd, Ca, Y and Sn). Materials and Design, 2017, 130, 48-58.	3.3	92
32	Characterization and corrosion behavior of binary Mg-Ga alloys. Materials Characterization, 2017, 128, 85-99.	1.9	50
33	Hierarchically organized Liâ€“Al-LDH nano-flakes: a low-temperature approach to seal porous anodic oxide on aluminum alloys. RSC Advances, 2017, 7, 35357-35367.	1.7	34
34	Recent advances in energy efficient PEO processing of aluminium alloys. Transactions of Nonferrous Metals Society of China, 2017, 27, 1439-1454.	1.7	71
35	Corrosion and wear of PEO coated AZ91/SiC composites. Surface and Coatings Technology, 2017, 309, 1023-1032.	2.2	47
36	As cast microstructures on the mechanical and corrosion behaviour of ZK40 modified with Gd and Nd additions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 238-247.	2.6	31

#	Article	IF	Citations
37	Role of Phase Composition of PEO Coatings on AA2024 for In-Situ LDH Growth. Coatings, 2017, 7, 190.	1.2	22
38	PEO of rheocast A356 Al alloy: energy efficiency and corrosion properties. Surface and Interface Analysis, 2016, 48, 953-959.	0.8	17
39	Role of PEO coatings in long-term biodegradation of a Mg alloy. Applied Surface Science, 2016, 389, 810-823.	3.1	54
40	Plasma electrolytic oxidation coatings with particle additions â€“ A review. Surface and Coatings Technology, 2016, 307, 1165-1182.	2.2	408
41	Influence of surface pre-treatment on the deposition and corrosion properties of hydrophobic coatings on a magnesium alloy. Corrosion Science, 2016, 112, 483-494.	3.0	52
42	In vitro corrosion performance of PEO coated Ti and Ti6Al4V used for dental and orthopaedic implants. Surface and Coatings Technology, 2016, 307, 1255-1264.	2.2	49
43	Influence of electrical parameters on particle uptake during plasma electrolytic oxidation processing of AM50 Mg alloy. Surface and Coatings Technology, 2016, 289, 179-185.	2.2	46
44	Characterization and wear behaviour of PEO coatings on 6082-T6 aluminium alloy with incorporated Î±-Al2O3 particles. Surface and Coatings Technology, 2015, 269, 64-73.	2.2	88
45	Cerium-based sealing of PEO coated AM50 magnesium alloy. Surface and Coatings Technology, 2015, 269, 145-154.	2.2	80
46	Enhanced Corrosion Resistance of AZ91 Alloy Produced by Semisolid Metal Processing. Journal of the Electrochemical Society, 2015, 162, C180-C188.	1.3	25
47	Silicate-based Plasma Electrolytic Oxidation (PEO) coatings with incorporated CeO2 particles on AM50 magnesium alloy. Materials and Design, 2015, 86, 735-744.	3.3	99
48	PEO of pre-anodized Alâ€“Si alloys: Corrosion properties and influence of sealings. Applied Surface Science, 2015, 346, 57-67.	3.1	79
49	Role of alloyed Nd in the microstructure and atmospheric corrosion of as-cast magnesium alloy AZ91. Corrosion Science, 2015, 97, 38-48.	3.0	81
50	Albumin loaded PEO coatings on Ti â€” Potential as drug eluting systems. Surface and Coatings Technology, 2015, 283, 44-51.	2.2	21
51	Microstructure and corrosion behaviour of A356 aluminium alloy modified with Nd. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 535-541.	0.8	22
52	Degradation behavior of PEO coating on AM50 magnesium alloy produced from electrolytes with clay particle addition. Surface and Coatings Technology, 2015, 269, 155-169.	2.2	90
53	Oxidation behaviour of AM50 magnesium alloy containing lanthanide elements. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 582-592.	0.8	5
54	Metal release from ceramic coatings for dental implants. Dental Materials, 2014, 30, e28-e40.	1.6	67

#	Article	IF	Citations
55	Energy-efficient PEO process of aluminium alloys. Materials Letters, 2014, 127, 13-16.	1.3	71
56	The Preparation and Corrosion Performance of Self-Assembled Monolayers of Stearic Acid and MgO Layer on Pure Magnesium. Materials Transactions, 2014, 55, 1337-1343.	0.4	13
57	Galvanic corrosion of rare earth modified AM50 and AZ91D magnesium alloys coupled to steel and aluminium alloys. Revista De Metalurgia, 2014, 50, e002.	0.1	3
58	Stability of plasma electrolytic oxidation coating on titanium in artificial saliva. Journal of Materials Science: Materials in Medicine, 2013, 24, 37-51.	1.7	41
59	Pitting corrosion of rheocast A356 aluminium alloy in 3.5wt.% NaCl solution. Corrosion Science, 2013, 73, 342-355.	3.0	168
60	Bioactive plasma electrolytic oxidation coatingsâ€"The role of the composition, microstructure, and electrochemical stability. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101, 1524-1537.	1.6	39
61	Salt spray corrosion behaviour of new Mgâ€"Al alloys containing Nd or Gd. Corrosion Engineering Science and Technology, 2013, 48, 183-193.	0.7	17
62	Influence of Gd on the Corrosion Behavior of AM50 and AZ91D Magnesium Alloys. Corrosion, 2012, 68, 398-410.	0.5	24
63	Electrochemical corrosion behaviour of Mgâ€"Al alloys with thermal spray Al/SiCp composite coatings. Welding International, 2012, 26, 448-458.	0.3	2
64	Assessment of duplex coating combining plasma electrolytic oxidation and polymer layer on AZ31 magnesium alloy. Surface and Coatings Technology, 2012, 206, 4692-4703.	2.2	106
65	Effect of Nd on the corrosion behaviour of AM50 and AZ91D magnesium alloys in 3.5 wt.% NaCl solution. Corrosion Science, 2012, 55, 301-312.	3.0	187
66	Corrosion behaviour of AZ91D and AM50 magnesium alloys with Nd and Gd additions in humid environments. Corrosion Science, 2012, 55, 351-362.	3.0	112
67	Oxidation Behavior of AZ91D Magnesium Alloy Containing Nd or Gd. Oxidation of Metals, 2011, 76, 433-450.	1.0	25
68	Corrosion of Magnesium-Aluminum Alloys with Al-11Si/SiC Thermal Spray Composite Coatings in Chloride Solution. Journal of Thermal Spray Technology, 2011, 20, 569-579.	1.6	18
69	Corrosion behaviour of Mg/Al alloys in high humidity atmospheres. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 326-334.	0.8	34
70	Al/SiC thermal spray coatings for corrosion protection of Mgâ€"Al alloys in humid and saline environments. Surface and Coatings Technology, 2010, 204, 2767-2774.	2.2	69
71	Influence of chloride ion concentration and temperature on the corrosion of Mgâ€"Al alloys in salt fog. Corrosion Science, 2010, 52, 1696-1704.	3.0	141
72	Corrosion behaviour of a magnesium matrix composite with a silicate plasma electrolytic oxidation coating. Corrosion Science, 2010, 52, 3738-3749.	3.0	67

#	Article	IF	Citations
73	Comportamiento a la corrosiÃ³n electroquÃmica de aleaciones MgAl con recubrimientos de materiales compuestos Al/SiCp mediante proyecciÃ³n tÃ©rmica. Revista De Metalurgia, 2010, 46, 129-142.	0.1	1
74	Corrosion behaviour of Mgâ€“Al alloys with Alâ€“11Si thermal spray coatings. Materials and Corrosion - Werkstoffe Und Korrosion, 2009, 60, 939-948.	0.8	10
75	Corrosion behaviour of Mg/Al alloys with composite coatings. Surface and Coatings Technology, 2009, 203, 1252-1263.	2.2	56
76	Corrosion protection of Mg/Al alloys by thermal sprayed aluminium coatings. Applied Surface Science, 2009, 255, 6968-6977.	3.1	82
77	Corrosion behaviour of siliconâ€“carbide-particle reinforced AZ92 magnesium alloy. Corrosion Science, 2009, 51, 841-849.	3.0	60
78	Corrosion Behavior of Mg-Al Alloys with Aluminum Thermal Spray Coatings in Humid and Saline Environments. Corrosion, 2009, 65, 817-830.	0.5	8
79	Powder Metallurgical Synthesis of Biodegradable Mg-Hydroxyapatite Composites for Biomedical Applications. Materials Science Forum, 0, 828-829, 165-171.	0.3	8