Mf Montemor

List of Publications by Citations

251 papers	12,146 citations	62 h-index	101 g-index
266 ext. papers	13,747 ext. citations	5.7 avg, IF	6.92 L-index

#	Paper	IF	Citations
251	Functional and smart coatings for corrosion protection: A review of recent advances. *Surface and Coatings Technology*, **2014**, 258, 17-37	4.4	634
250	Nanostructured sol–gel coatings doped with cerium nitrate as pre-treatments for AA2024-T3. *Electrochimica Acta*, **2005**, 51, 208-217	6.7	439
249	Chloride-induced corrosion on reinforcing steel: from the fundamentals to the monitoring techniques. *Cement and Concrete Composites*, **2003**, 25, 491-502	8.6	310
248	High effective organic corrosion inhibitors for 2024 aluminium alloy. *Electrochimica Acta*, **2007**, 52, 7231-7247	6.7	247
247	Corrosion protective properties of nanostructured sol–gel hybrid coatings to AA2024-T3. *Surface and Coatings Technology*, **2006**, 200, 3084-3094	4.4	230
246	Capacitance behaviour of passive films on ferritic and austenitic stainless steel. *Corrosion Science*, **2005**, 47, 581-591	6.8	226
245	Evaluation of self-healing ability in protective coatings modified with combinations of layered double hydroxides and cerium molibdate nanocontainers filled with corrosion inhibitors. *Electrochimica Acta*, **2012**, 60, 31-40	6.7	222
244	Novel hybrid sol–gel coatings for corrosion protection of AZ31B magnesium alloy. *Electrochimica Acta*, **2008**, 53, 4773-4783	6.7	214
243	Zn–Al layered double hydroxides as chloride nanotraps in active protective coatings. *Corrosion Science*, **2012**, 55, 1-4	6.8	201
242	Chemical composition and corrosion protection of silane films modified with CeO2 nanoparticles. *Electrochimica Acta*, **2009**, 54, 5179-5189	6.7	201
241	Silanes and rare earth salts as chromate replacers for pre-treatments on galvanised steel. *Electrochimica Acta*, **2004**, 49, 2927-2935	6.7	195
240	Electrochemical assessment of the self-healing properties of Ce-doped silane solutions for the pre-treatment of galvanised steel substrates. *Progress in Organic Coatings*, **2005**, 54, 276-284	4.8	195
239	Electrochemical study of modified bis-[triethoxysilylpropyl] tetrasulfide silane films applied on the AZ31 Mg alloy. *Electrochimica Acta*, **2007**, 52, 7486-7495	6.7	181
238	Characterization of rare-earth conversion films formed on the AZ31 magnesium alloy and its relation with corrosion protection. *Applied Surface Science*, **2007**, 253, 6922-6931	6.7	170
237	Semiconducting properties of thermally grown oxide films on AISI 304 stainless steel. *Corrosion Science*, **2000**, 42, 687-702	6.8	168
236	The passive behaviour of AISI 316 in alkaline media and the effect of pH: A combined electrochemical and analytical study. *Electrochimica Acta*, **2010**, 55, 6174-6181	6.7	167
235	Oxide nanoparticle reservoirs for storage and prolonged release of the corrosion inhibitors. *Electrochemistry Communications*, **2005**, 7, 836-840	5.1	163

234	Hydroxyapatite microparticles as feedback-active reservoirs of corrosion inhibitors. *ACS Applied Materials & Interfaces*, **2010**, 2, 3011-22	9.5	162
233	Chemical composition and electronic structure of the oxide films formed on 316L stainless steel and nickel based alloys in high temperature aqueous environments. *Corrosion Science*, **2000**, 42, 1635-1650	6.8	162
232	Metal Oxide and Hydroxide-Based Aqueous Supercapacitors: From Charge Storage Mechanisms and Functional Electrode Engineering to Need-Tailored Devices. *Advanced Science*, **2019**, 6, 1801797	13.6	160
231	SMART protective ability of water based epoxy coatings loaded with CaCO3 microbeads impregnated with corrosion inhibitors applied on AA2024 substrates. *Electrochimica Acta*, **2012**, 83, 439-447	6.7	151
230	The use of pre-treatments based on doped silane solutions for improved corrosion resistance of galvanised steel substrates. *Surface and Coatings Technology*, **2006**, 200, 4240-4250	4.4	136
229	Hybrid epoxy-silane coatings for improved corrosion protection of Mg alloy. *Corrosion Science*, **2013**, 67, 82-90	6.8	134
228	The electrochemical behaviour of stainless steel AISI 304 in alkaline solutions with different pH in the presence of chlorides. *Electrochimica Acta*, **2011**, 56, 5280-5289	6.7	134
227	Cerium salt activated nanoparticles as fillers for silane films: Evaluation of the corrosion inhibition performance on galvanised steel substrates. *Electrochimica Acta*, **2007**, 52, 6976-6987	6.7	126
226	The corrosion resistance of hot dip galvanised steel and AA2024-T3 pre-treated with bis-[triethoxysilylpropyl] tetrasulfide solutions doped with Ce(NO3)3. *Corrosion Science*, **2006**, 48, 3740-3758	6.8	123
225	Corrosion resistance of a composite polymeric coating applied on biodegradable AZ31 magnesium alloy. *Acta Biomaterialia*, **2013**, 9, 8660-70	10.8	116
224	TiOx self-assembled networks prepared by templating approach as nanostructured reservoirs for self-healing anticorrosion pre-treatments. *Electrochemistry Communications*, **2006**, 8, 421-428	5.1	112
223	Analytical characterization of silane films modified with cerium activated nanoparticles and its relation with the corrosion protection of galvanised steel substrates. *Progress in Organic Coatings*, **2008**, 63, 330-337	4.8	108
222	Influence of incorporated Mo and Nb on the Mott-Schottky behaviour of anodic films formed on AISI 304L. *Corrosion Science*, **2010**, 52, 2813-2818	6.8	107
221	Effect of fly ash on concrete reinforcement corrosion studied by EIS. *Cement and Concrete Composites*, **2000**, 22, 175-185	8.6	105
220	Composition and behaviour of cerium films on galvanised steel. *Progress in Organic Coatings*, **2001**, 43, 274-281	4.8	104
219	The role of Mo in the chemical composition and semiconductive behaviour of oxide films formed on stainless steels. *Corrosion Science*, **1999**, 41, 17-34	6.8	104
218	Composition and corrosion behaviour of galvanised steel treated with rare-earth salts: the effect of the cation. *Progress in Organic Coatings*, **2002**, 44, 111-120	4.8	103
217	Study of passive films formed on mild steel in alkaline media by the application of anodic potentials. *Materials Chemistry and Physics*, **2009**, 114, 962-972	4.4	102

216	Layered Ni(OH)-Co(OH) films prepared by electrodeposition as charge storage electrodes for hybrid supercapacitors. *Scientific Reports*, **2017**, 7, 39980	4.9	99
215	Electrochemical and analytical investigation of passive films formed on stainless steels in alkaline media. *Cement and Concrete Composites*, **2012**, 34, 1075-1081	8.6	97
214	Modification of bis-silane solutions with rare-earth cations for improved corrosion protection of galvanized steel substrates. *Progress in Organic Coatings*, **2006**, 57, 67-77	4.8	96
213	The synergistic combination of bis-silane and CeO2ZrO2 nanoparticles on the electrochemical behaviour of galvanised steel in NaCl solutions. *Electrochimica Acta*, **2008**, 53, 5913-5922	6.7	94
212	Corrosion Behavior of Stainless Steel Rebars Embedded in Concrete: an Electrochemical Impedance Spectroscopy Study. *Electrochimica Acta*, **2014**, 124, 218-224	6.7	93
211	The corrosion resistance of hot dip galvanized steel pretreated with Bis-functional silanes modified with microsilica. *Surface and Coatings Technology*, **2006**, 200, 2875-2885	4.4	93
210	A comparative study on the corrosion resistance of AA2024-T3 substrates pre-treated with different silane solutions: Composition of the films formed. *Progress in Organic Coatings*, **2005**, 54, 322-331	4.8	93
209	Self-healing ceria-modified coating for corrosion protection of AZ31 magnesium alloy. *Corrosion Science*, **2018**, 142, 12-21	6.8	92
208	The combined use of scanning vibrating electrode technique and micro-potentiometry to assess the self-repair processes in defects on smart coatings applied to galvanized steel. *Electrochimica Acta*, **2011**, 56, 4475-4488	6.7	91
207	Electrochemical study of modified non-functional bis-silane layers on Al alloy 2024-T3. *Corrosion Science*, **2008**, 50, 1258-1266	6.8	88
206	Composition and corrosion resistance of cerium conversion films on the AZ31 magnesium alloy and its relation to the salt anion. *Applied Surface Science*, **2008**, 254, 1806-1814	6.7	86
205	Self healing ability of inhibitor-containing nanocapsules loaded in epoxy coatings applied on aluminium 5083 and galvanneal substrates. *Electrochimica Acta*, **2014**, 140, 282-293	6.7	84
204	Analytical characterisation and corrosion behaviour of bis-[triethoxysilylpropyl]tetrasulphide pre-treated AA2024-T3. *Corrosion Science*, **2005**, 47, 869-881	6.8	81
203	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	4.4	80
202	Corrosion behaviour of rebars in fly ash mortar exposed to carbon dioxide and chlorides. *Cement and Concrete Composites*, **2002**, 24, 45-53	8.6	78
201	An electrochemical and analytical assessment on the early corrosion behaviour of galvanised steel pretreated with aminosilanes. *Surface and Coatings Technology*, **2005**, 192, 284-290	4.4	76
200	An electrochemical and analytical approach to the inhibition mechanism of an amino-alcohol-based corrosion inhibitor for reinforced concrete. *Electrochimica Acta*, **2003**, 48, 3509-3518	6.7	75
199	pH-sensitive polymeric particles with increased inhibitor-loading capacity as smart additives for corrosion protective coatings for AA2024. *Electrochimica Acta*, **2014**, 145, 123-131	6.7	71

198	Multiprobe chloride sensor for in situ monitoring of reinforced concrete structures. *Cement and Concrete Composites*, **2006**, 28, 233-236	8.6	71
197	Electrochemical study of modified cerium–silane bi-layer on Al alloy 2024-T3. *Corrosion Science*, **2009**, 51, 1238-1250	6.8	70
196	Electrodeposition and characterization of polypyrrole films on aluminium alloy 6061-T6. *Electrochimica Acta*, **2008**, 53, 4754-4763	6.7	70
195	Electrochemical behaviour of amino alcohol-based inhibitors used to control corrosion of reinforcing steel. *Electrochimica Acta*, **2004**, 49, 2753-2760	6.7	70
194	Multifunctional epoxy coatings combining a mixture of traps and inhibitor loaded nanocontainers for corrosion protection of AA2024-T3. *Corrosion Science*, **2014**, 85, 147-159	6.8	69
193	Chemical composition and semiconducting behaviour of stainless steel passive films in contact with artificial seawater. *Corrosion Science*, **1998**, 40, 481-494	6.8	69
192	Silane/TiO2 coating to control the corrosion rate of magnesium alloys in simulated body fluid. *Corrosion Science*, **2016**, 104, 152-161	6.8	68
191	Analytical characterisation and corrosion behaviour of bis-aminosilane coatings modified with carbon nanotubes activated with rare-earth salts applied on AZ31 Magnesium alloy. *Surface and Coatings Technology*, **2008**, 202, 4766-4774	4.4	64
190	Analytical Characterization of the Passive Film Formed on Steel in Solutions Simulating the Concrete Interstitial Electrolyte. *Corrosion*, **1998**, 54, 347-353	1.8	62
189	Electrochemical and analytical study of corrosion inhibition on carbon steel in HCl medium by 1,12-bis(1,2,4-triazolyl)dodecane. *Corrosion Science*, **2005**, 47, 447-459	6.8	61
188	Ni x Co 1-x (OH) 2 nanosheets on carbon nanofoam paper as high areal capacity electrodes for hybrid supercapacitors. *Energy*, **2017**, 126, 208-216	7.9	60
187	Comparison of the synergistic effects of inhibitor mixtures tailored for enhanced corrosion protection of bare and coated AA2024-T3. *Surface and Coatings Technology*, **2016**, 303, 342-351	4.4	59
186	The corrosion performance of organosilane based pre-treatments for coatings on galvanised steel. *Progress in Organic Coatings*, **2000**, 38, 17-26	4.8	59
185	Electrodeposition and characterization of nickel–copper metallic foams for application as electrodes for supercapacitors. *Journal of Applied Electrochemistry*, **2014**, 44, 455-465	2.6	56
184	Corrosion behaviour of reinforcing steel exposed to an amino alcohol based corrosion inhibitor. *Cement and Concrete Composites*, **2005**, 27, 671-678	8.6	55
183	Large-scale synthesis of free-standing N-doped graphene using microwave plasma. *Scientific Reports*, **2018**, 8, 12595	4.9	55
182	The corrosion behaviour of rare-earth containing magnesium alloys in borate buffer solution. *Electrochimica Acta*, **2011**, 56, 1535-1545	6.7	54
181	Galvanic coupling between carbon steel and austenitic stainless steel in alkaline media. *Electrochimica Acta*, **2002**, 47, 2271-2279	6.7	54

180	Quasi-simultaneous measurements of ionic currents by vibrating probe and pH distribution by ion-selective microelectrode. *Electrochemistry Communications*, **2011**, 13, 20-23	5.1	51
179	Epoxy coatings modified with a new cerium phosphate inhibitor for smart corrosion protection of steel. *Corrosion Science*, **2019**, 159, 108128	6.8	49
178	FeOOH and amorphous NiMn hydroxide on carbon nanofoam paper electrodes for hybrid supercapacitors. *Journal of Materials Chemistry A*, **2018**, 6, 2612-2624	13	47
177	Semiconducting properties of oxide and passive films formed on AISI 304 stainless steel and Alloy 600. *Journal of the Brazilian Chemical Society*, **2002**, 13, 433	1.5	47
176	Corrosion inhibition synergies on a model Al-Cu-Mg sample studied by localized scanning electrochemical techniques. *Corrosion Science*, **2016**, 112, 408-417	6.8	45
175	Effect of cerium (IV) ions on the anticorrosion properties of siloxane-poly(methyl methacrylate) based film applied on tin coated steel. *Electrochimica Acta*, **2010**, 55, 5100-5109	6.7	45
174	In-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	6.7	44
173	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, 434-43	8.3	43
172	On the Supercapacitive Behaviour of Anodic Porous WO3-Based Negative Electrodes. *Electrochimica Acta*, **2017**, 232, 192-201	6.7	42
171	Properties enhancement of Ni-P electrodeposited coatings by the incorporation of nanoscale Y2O3 particles. *Applied Surface Science*, **2018**, 457, 956-967	6.7	42
170	Chloride-induced corrosion behavior of reinforcing steel in spent fluid cracking catalyst modified mortars. *Cement and Concrete Research*, **2013**, 47, 1-7	10.3	42
169	Improving the corrosion protection properties of organically modified silicate epoxy coatings by incorporation of organic and inorganic inhibitors. *Progress in Organic Coatings*, **2011**, 72, 653-662	4.8	42
168	Analytical and microscopic characterisation of modified bis-[triethoxysilylpropyl] tetrasulphide silane films on magnesium AZ31 substrates. *Progress in Organic Coatings*, **2007**, 60, 228-237	4.8	42
167	Fabrication of Three-Dimensional Dendritic NiCo Films By Electrodeposition on Stainless Steel Substrates. *Journal of Physical Chemistry C*, **2012**, 116, 22425-22431	3.8	41
166	Characterization and performance evaluation of PtRu electrocatalysts supported on different carbon materials for direct methanol fuel cells. *International Journal of Hydrogen Energy*, **2013**, 38, 910-920	6.7	40
165	Multifunctional self-healing polymeric nanocomposite coatings for corrosion inhibition of steel. *Surface and Coatings Technology*, **2019**, 372, 121-133	4.4	39
164	Electrochemical study of the corrosion inhibition ability of smart coatings applied on AA2024. *Journal of Solid State Electrochemistry*, **2013**, 17, 2183-2192	2.6	39
163	How is the chemical bonding of WSiN sputtered coatings?. *Surface and Coatings Technology*, **2001**, 142-144, 964-970	4.4	39

162	Polyaniline coatings on aluminium alloy 6061-T6: Electrosynthesis and characterization. *Electrochimica Acta*, **2010**, 55, 3580-3588	6.7	38
161	3D nickel foams with controlled morphologies for hydrogen evolution reaction in highly alkaline media. *International Journal of Hydrogen Energy*, **2019**, 44, 1701-1709	6.7	38
160	Tannin: A natural corrosion inhibitor for aluminum alloys. *Progress in Organic Coatings*, **2019**, 135, 368-381	4.8	37
159	Co(OH) 2 /carbon nanofoam composite as electrochemical capacitor electrode operating at 2 V in aqueous medium. *Journal of Power Sources*, **2015**, 288, 234-242	8.9	37
158	Structural evolution, magnetic properties and electrochemical response of MnCo2O4 nanosheet films. *RSC Advances*, **2015**, 5, 27844-27852	3.7	37
157	Influence of pH on Properties of Oxide Films Formed on Type 316L Stainless Steel, Alloy 600, and Alloy 690 in High-Temperature Aqueous Environments. *Corrosion*, **2003**, 59, 11-21	1.8	37
156	Surface evaluation and electrochemical behaviour of doped silane pre-treatments on galvanised steel substrates. *Progress in Organic Coatings*, **2007**, 59, 214-223	4.8	36
155	Copper-cobalt foams as active and stable catalysts for hydrogen release by hydrolysis of sodium borohydride. *International Journal of Hydrogen Energy*, **2016**, 41, 8438-8448	6.7	36
154	Novel smart and self-healing cerium phosphate-based corrosion inhibitor for AZ31 magnesium alloy. *Corrosion Science*, **2020**, 170, 108648	6.8	35
153	Enhancement of the Ni-Co hydroxide response as Energy Storage Material by Electrochemically Reduced Graphene Oxide. *Electrochimica Acta*, **2017**, 240, 323-340	6.7	34
152	Electrochemical and analytical assessment of galvanized steel reinforcement pre-treated with Ce and La salts under alkaline media. *Cement and Concrete Composites*, **2006**, 28, 256-266	8.6	33
151	Assessing concrete carbonation resistance through air permeability measurements. *Construction and Building Materials*, **2015**, 82, 304-309	6.7	32
150	Hydrogen evolution on nanostructured NiCu foams. *RSC Advances*, **2015**, 5, 43456-43461	3.7	32
149	Influence of the addition of SiO2 nanoparticles to a hybrid coating applied on an AZ31 alloy for early corrosion protection. *Surface and Coatings Technology*, **2016**, 303, 372-384	4.4	31
148	Passive behavior of magnesium alloys (MgZr) containing rare-earth elements in alkaline media. *Electrochimica Acta*, **2010**, 55, 2482-2489	6.7	31
147	The early corrosion behaviour of hot dip galvanised steel pre-treated with bis-1,2-(triethoxysilyl)ethane. *Progress in Organic Coatings*, **2004**, 51, 188-194	4.8	31
146	Evolution of the in vitro degradation of ZnMg alloys under simulated physiological conditions. *RSC Advances*, **2017**, 7, 28224-28233	3.7	30
145	Novel healing coatings based on natural-derived polyurethane modified with tannins for corrosion protection of AA2024-T3. *Corrosion Science*, **2020**, 162, 108213	6.8	30

144	Hybrid nickel manganese oxide nanosheet-3D metallic dendrite percolation network electrodes for high-rate electrochemical energy storage. *Nanoscale*, **2015**, 7, 12452-9	7.7	29
143	Coffee-derived activated carbon from second biowaste for supercapacitor applications. *Waste Management*, **2021**, 120, 280-289	8.6	29
142	Morphological changes and electrochemical response of mixed nickel manganese oxides as charge storage electrodes. *Journal of Materials Chemistry A*, **2015**, 3, 10875-10882	13	28
141	A two-step surface treatment, combining anodisation and silanisation, for improved corrosion protection of the Mg alloy WE54. *Progress in Organic Coatings*, **2010**, 69, 143-149	4.8	28
140	Hydrogen bubbling-induced micro/nano porous MnO 2 films prepared by electrodeposition for pseudocapacitor electrodes. *Electrochimica Acta*, **2016**, 202, 166-174	6.7	28
139	Electrodeposited MoOx films as negative electrode materials for redox supercapacitors. *Electrochimica Acta*, **2017**, 225, 19-28	6.7	27
138	Mechanisms of Localized Corrosion Inhibition of AA2024 by Cerium Molybdate Nanowires. *Journal of Physical Chemistry C*, **2013**, 117, 5811-5823	3.8	27
137	The corrosion potential of stainless steel rebars in concrete: Temperature effect. *Corrosion Science*, **2012**, 65, 556-560	6.8	27
136	New Insights into Antibiofilm Effect of a Nanosized ZnO Coating against the Pathogenic Methicillin Resistant Staphylococcus aureus. *ACS Applied Materials & Interfaces*, **2017**, 9, 28157-28167	9.5	26
135	Hybrid coatings with collagen and chitosan for improved bioactivity of Mg alloys. *Surface and Coatings Technology*, **2018**, 341, 103-113	4.4	25
134	Synthesis and properties of polyelectrolyte multilayered microcapsules reinforced smart coatings. *Journal of Materials Science*, **2019**, 54, 12079-12094	4.3	24
133	Corrosion prevention of AA2024-T3 aluminum alloy with a polyaniline/poly(□glycidoxypropyltrimethoxysilane) bi-layer coating: Comparative study with polyaniline mono-layer feature. *Surface and Coatings Technology*, **2018**, 337, 1-11	4.4	24
132	Free-standing N-Graphene as conductive matrix for Ni(OH)2 based supercapacitive electrodes. *Electrochimica Acta*, **2020**, 334, 135592	6.7	24
131	Biobased self-healing polyurethane coating with Zn micro-flakes for corrosion protection of AA7475. *Chemical Engineering Journal*, **2021**, 404, 126478	14.7	24
130	Synthesis and characterisation of NiB/NiPCeO2 duplex composite coatings. *Journal of Applied Electrochemistry*, **2018**, 48, 391-404	2.6	23
129	Localised corrosion assessement of crambe-oil-based polyurethane coatings applied on the ASTM 1200 aluminum alloy. *Corrosion Science*, **2016**, 111, 422-435	6.8	23
128	Parallel nano-assembling of a multifunctional GO/HapNP coating on ultrahigh-purity magnesium for biodegradable implants. *Applied Surface Science*, **2015**, 345, 387-393	6.7	22
127	Cathodic electrodeposition and electrochemical response of manganese oxide pseudocapacitor electrodes. *International Journal of Hydrogen Energy*, **2015**, 40, 16355-16364	6.7	22

126	Nanostructured p-type Cr/V2O5 thin films with boosted thermoelectric properties. *Journal of Materials Chemistry A*, **2014**, 2, 6456-6462	13	22
125	Deposition of hybrid 3-GPTMS's film on AA2024-T3: Dependence of film morphology and protectiveness performance on coating conditions. *Progress in Organic Coatings*, **2012**, 73, 264-271	4.8	22
124	Redox active materials for metal compound based hybrid electrochemical energy storage: a perspective view. *Applied Surface Science*, **2017**, 422, 492-497	6.7	22
123	Artificial aging route for assessing the potential efficacy of consolidation treatments applied to porous carbonate stones. *Materials and Design*, **2017**, 120, 10-21	8.1	21
122	The role of the suprastoichiometric molybdenum during methanol to formaldehyde oxidation over Mo□e mixed oxides. *Journal of Molecular Catalysis A*, **2015**, 397, 93-98		21
121	Surface studies on acrylic bone cement. *International Journal of Pharmaceutics*, **2004**, 278, 181-6	6.5	21
120	Self-healing ability based on hydrogen bonds in organic coatings for corrosion protection of AA1200. *Corrosion Science*, **2020**, 177, 108984	6.8	21
119	Application of the Mott-Schottky model to select potentials for EIS studies on electrodes for electrochemical charge storage. *Electrochimica Acta*, **2018**, 289, 47-55	6.7	21
118	Electrodeposition and isothermal aging of Co and Mn layers on stainless steel for interconnectors: Initial stages of spinel phase formation. *Journal of Power Sources*, **2014**, 255, 251-259	8.9	20
117	In vitro degradation of ZnO flowered coated Zn-Mg alloys in simulated physiological conditions. *Materials Science and Engineering C*, **2017**, 70, 112-120	8.3	20
116	Quasi-simultaneous Mapping of Local Current Density, pH and Dissolved O2. *Electroanalysis*, **2015**, 27, 2725-2730	3	20
115	Three-dimensional nanostructured Ni□u foams for borohydride oxidation. *Russian Journal of Physical Chemistry A*, **2015**, 89, 2449-2454	0.7	20
114	Influence of Unsupported Concrete Media in Corrosion Assessment for Steel Reinforcing Concrete by Electrochemical Impedance Spectroscopy. *Electrochimica Acta*, **2014**, 124, 52-60	6.7	20
113	Effect of doping by corrosion inhibitors on the morphological properties and the performance against corrosion of polypyrrole electrodeposited on AA6061-T6. *Progress in Organic Coatings*, **2011**, 72, 511-516	4.8	20
112	The assessment of the electrochemical behaviour of flyash-containing concrete by impedance spectroscopy. *Corrosion Science*, **1993**, 35, 1571-1578	6.8	20
111	Nanostructured 3D metallic foams for H2O2 electroreduction. *International Journal of Hydrogen Energy*, **2016**, 41, 14370-14376	6.7	19
110	Electrodeposited reduced-graphene oxide/cobalt oxide electrodes for charge storage applications. *Applied Surface Science*, **2016**, 382, 34-40	6.7	19
109	Influence of apple phytochemicals in ZnO nanoparticles formation, photoluminescence and biocompatibility for biomedical applications. *Materials Science and Engineering C*, **2019**, 101, 76-87	8.3	18

108	Characterisation and electrochemical behaviour of electrodeposited CuFe foams applied as pseudocapacitor electrodes. *Journal of Electroanalytical Chemistry*, **2015**, 737, 85-92	4.1	18
107	Electrodeposition: a versatile, efficient, binder-free and room temperature one-step process to produce MnO2 electrochemical capacitor electrodes. *RSC Advances*, **2017**, 7, 32038-32043	3.7	18
106	One-pot approach to modify nanostructured gold surfaces through in situ dithiocarbamate linkages. *Electrochimica Acta*, **2012**, 83, 311-320	6.7	18
105	Corrosion performance of a two-step pre-treatment for galvanized steel based on lanthanum nitrate and silanes. *Surface and Interface Analysis*, **2004**, 36, 773-776	1.5	18
104	One-step process to form a nickel-based/carbon nanofoam composite supercapacitor electrode using Na2SO4 as an eco-friendly electrolyte. *RSC Advances*, **2016**, 6, 15920-15928	3.7	17
103	Electrochemical study of polyaniline coating electropolymerized onto AA2024-T3 aluminium alloy: Physical properties and anticorrosion performance. *Synthetic Metals*, **2017**, 234, 145-153	3.6	17
102	Autonomous self-healing in epoxy coatings provided by high efficiency isophorone diisocyanate (IPDI) microcapsules for protection of carbon steel. *Progress in Organic Coatings*, **2020**, 139, 105445	4.8	17
101	The corrosion inhibition mechanisms of Ce(III) ions and triethanolamine on graphite–AA2024-T3 galvanic couples revealed by localised electrochemical techniques. *Corrosion Science*, **2019**, 150, 207-217	6.8	17
100	Advanced Carbon-Nickel Sulfide Hybrid Nanostructures: Extending the Limits of Battery-Type Electrodes for Redox-Based Supercapacitor Applications. *ACS Applied Materials & Interfaces*, **2021**, 13, 20559-20572	9.5	16
99	Development of formulations based on TEOS-dicarboxylic acids for consolidation of carbonate stones. *New Journal of Chemistry*, **2016**, 40, 7493-7503	3.6	16
98	Electrochemical response of a high-power asymmetric supercapacitor based on tailored MnOx/Ni foam and carbon cloth in neutral and alkaline electrolytes. *Journal of Energy Storage*, **2019**, 22, 345-353	7.8	15
97	Calcium carbonate particles loaded with triethanolamine and polyethylenimine for enhanced corrosion protection of epoxy coated steel. *Corrosion Science*, **2020**, 167, 108548	6.8	15
96	Unveiling the effect of the electrodes area on the corrosion mechanism of a graphite - AA2024-T3 galvanic couple by localised electrochemistry. *Electrochimica Acta*, **2018**, 277, 9-19	6.7	15
95	Capacitance response in an aqueous electrolyte of Nb2O5 nanochannel layers anodically grown in pure molten o-H3PO4. *Electrochimica Acta*, **2018**, 281, 725-737	6.7	15
94	Cerium phosphate-based inhibitor for smart corrosion protection of WE43 magnesium alloy. *Electrochimica Acta*, **2021**, 365, 137368	6.7	15
93	TEOS-based consolidants for carbonate stones: the role of N1-(3-trimethoxysilylpropyl)diethylenetriamine. *New Journal of Chemistry*, **2017**, 41, 2458-2467	3.6	14
92	Designing and performance evaluation of polyelectrolyte multilayered composite smart coatings. *Progress in Organic Coatings*, **2019**, 137, 105319	4.8	14
91	Non-destructive and on site method to assess the air-permeability in dimension stones and its relationship with other transport-related properties. *Materials and Structures/Materiaux Et Constructions*, **2015**, 48, 3795-3809	3.4	14

90	Durability performance of concrete incorporating spent fluid cracking catalyst. *Cement and Concrete Composites*, **2015**, 55, 308-314	8.6	14
89	Smart composite coatings for corrosion protection of aluminium alloys in aerospace applications **2016**, 85-121		14
88	Ageing effects on the wettability behavior of laser textured silicon. *Applied Surface Science*, **2011**, 257, 2604-2609	6.7	14
87	Nickel-cobalt oxide modified with reduced graphene oxide: Performance and degradation for energy storage applications. *Journal of Power Sources*, **2019**, 419, 12-26	8.9	13
86	Fabrication of electrochemically reduced graphene oxide/cobalt oxide composite for charge storage electrodes. *Journal of Electroanalytical Chemistry*, **2015**, 755, 151-157	4.1	13
85	Oxidation Studies of Cu12Sb3.9Bi0.1S10Se3 Tetrahedrite. *Journal of Electronic Materials*, **2018**, 47, 2880-2889	1.9	13
84	In silico, in vitro and antifungal activity of the surface layers formed on zinc during this biomaterial degradation. *Applied Surface Science*, **2018**, 447, 401-407	6.7	13
83	X-ray photoelectron spectroscopy of alkali germanate glasses. *Surface and Interface Analysis*, **2002**, 34, 324-327	1.5	13
82	Hybrid shell microcapsules containing isophorone diisocyanate with high thermal and chemical stability for autonomous self-healing of epoxy coatings. *Journal of Applied Polymer Science*, **2020**, 137, 48751	2.9	13
81	ELECTROCHEMICAL RESPONSE OF 70Co30Ni HIGHLY BRANCHED 3D-DENDRITIC STRUCTURES FOR CHARGE STORAGE ELECTRODES. *Electrochimica Acta*, **2015**, 167, 13-19	6.7	12
80	Oxidation of sputtered W-based coatings. *Surface and Coatings Technology*, **2000**, 131, 441-447	4.4	12
79	Ag(I) camphorimine complexes with antimicrobial activity towards clinically important bacteria and species of the Candida genus. *PLoS ONE*, **2017**, 12, e0177355	3.7	12
78	Microbiologically influenced corrosion mechanism of 304L stainless steel in treated urban wastewater and protective effect of silane-TiO coating. *Bioelectrochemistry*, **2020**, 132, 107413	5.6	12
77	Effect of AA2024-T3 surface pretreatment on the physicochemical properties and the anticorrosion performance of poly(Eglycidoxypropyltrimethoxysilane) sol-gel coating. *Surface and Interface Analysis*, **2018**, 50, 335-345	1.5	11
76	Bi-layered silane-TiO/collagen coating to control biodegradation and biointegration of Mg alloys. *Materials Science and Engineering C*, **2019**, 94, 126-138	8.3	11
75	Composition and structure of coloured oxide films on stainless steel formed by triangular current scan and cathodic hardening treatment. *Corrosion Science*, **2007**, 49, 2303-2314	6.8	10
74	The influence of copper and chromium on the semiconducting behaviour of passive films formed on weathering steels. *Thin Solid Films*, **2006**, 515, 2167-2172	2.2	10
73	The effect of ethanol on acrylic bone cement. *International Journal of Pharmaceutics*, **2002**, 241, 97-102	6.5	10

72	Characterization of the catalytic films formed on stainless steel anodes employed for the electrochemical treatment of cuprocyanide wastewaters. *Journal of Hazardous Materials*, **2005**, 119, 145-52	12.8	10
71	Polyethylene glycol oligomers as siloxane modificators in consolidation of carbonate stones. *Pure and Applied Chemistry*, **2016**, 88, 1117-1128	2.1	10
70	Alkoxysilane-based sols for consolidation of carbonate stones: Impact of the carbonate medium in the sol-gel processes. *Journal of Cultural Heritage*, **2019**, 37, 63-72	2.9	10
69	Cerium oxide loaded with Gum Arabic as environmentally friendly anti-corrosion additive for protection of coated steel. *Materials and Design*, **2021**, 198, 109361	8.1	10
68	Influence of inhibitor adsorption on readings of microelectrode during SVET measurements. *Electrochimica Acta*, **2019**, 322, 134761	6.7	9
67	Elaboration of γ-glycidoxypropyltrimethoxysilane coating on AA2024-T3 aluminum alloy: Influence of synthesis route on physicochemical and anticorrosion properties. *Progress in Organic Coatings*, **2018**, 121, 1-12	4.8	9
66	Fostering Green Inhibitors for Corrosion Prevention. *Springer Series in Materials Science*, **2016**, 107-137	0.9	9
65	Hydrothermally grown Ni0.7Zn0.3O directly on carbon fiber paper substrate as an electrode material for energy storage applications. *International Journal of Hydrogen Energy*, **2016**, 41, 9876-9884	6.7	9
64	Electrodeposited Manganese Oxide on Tailored 3D Bimetallic Nanofoams for Energy Storage Applications. *Energy Technology*, **2019**, 7, 1801139	3.5	8
63	Influence of GFRP Confinement of Reinforced Concrete Columns on the Corrosion of Reinforcing Steel in a Salt Water Environment. *Journal of Materials in Civil Engineering*, **2015**, 27, 04014107	3	8
62	In vitro corrosion behaviour and anti-Candida spp. activity of Zn coated with ZnO-nanostructured 'Anastacia' flowers. *Journal of Materials Chemistry B*, **2016**, 4, 4754-4761	7.3	8
61	Pseudocapacitive behaviour of FeSx grown on stainless steel up to 1.8 V in aqueous electrolyte. *Journal of Energy Storage*, **2019**, 26, 100949	7.8	8
60	Nanostructured 'Anastacia' flowers for Zn coating by electrodepositing ZnO at room temperature. *Applied Surface Science*, **2015**, 332, 152-158	6.7	8
59	Current transient and in situ AFM studies of initial growth stages of electrochemically deposited nickel cobalt hydroxide nanosheet films. *Physical Chemistry Chemical Physics*, **2016**, 18, 12368-74	3.6	8
58	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	7
57	The potential action of single functionalization treatments and combined treatments for the consolidation of carbonate stones. *Construction and Building Materials*, **2018**, 163, 586-599	6.7	7
56	Versatility of Amide-Functionalized Co(II) and Ni(II) Coordination Polymers: From Thermochromic-Triggered Structural Transformations to Supercapacitors and Electrocatalysts for Water Splitting. *Inorganic Chemistry*, **2020**, 59, 16301-16318	5.1	7
55	Non-destructive corrosion study on a magnesium alloy with mechanical properties tailored for biodegradable cardiovascular stent applications. *Journal of Materials Science and Technology*, **2021**, 66, 128-138	9.1	7

54	Electrochemical performance of MnOx·hH2O@Ni composite foam electrodes for energy storage in KOH media. *Electrochimica Acta*, **2018**, 281, 39-47	6.7	7
53	On the synergistic corrosion inhibition and polymer healing effects of polyolefin coatings modified with Ce-loaded hydroxyapatite particles applied on steel. *Electrochimica Acta*, **2021**, 388, 138648	6.7	7
52	Pseudocapacitive response of hydrothermally grown MoS2 crumpled nanosheet on carbon fiber. *Materials Chemistry and Physics*, **2018**, 216, 413-420	4.4	6
51	Titania Films Obtained by Powerful Pulsed Discharge Oxidation in Phosphoric Acid Electrolytes. *Journal of the Electrochemical Society*, **2014**, 161, D73-D78	3.9	6
50	Smart epoxy coating modified with isophorone diisocyanate microcapsules and cerium organophosphate for multilevel corrosion protection of carbon steel. *Progress in Organic Coatings*, **2020**, 147, 105864	4.8	6
49	Activated Carbons From Winemaking Biowastes for Electrochemical Double-Layer Capacitors. *Frontiers in Chemistry*, **2020**, 8, 686	5	6
48	Transition Metal Foam Electrocatalysts for Hydrogen Evolution Reaction. *ECS Transactions*, **2015**, 64, 9-16	1	5
47	Potential anti-cancer and anti-Candida activity of Zn-derived foams. *Journal of Materials Chemistry B*, **2018**, 6, 2821-2830	7.3	5
46	Tetrahedrites for Low Cost and Sustainable Thermoelectrics. *Solid State Phenomena*, **2016**, 257, 135-138	0.4	5
45	Life cycle assessment of emerging Ni-Co hydroxide charge storage electrodes: impact of graphene oxide and synthesis route.. *RSC Advances*, **2019**, 9, 18853-18862	3.7	5
44	Assessment of the influence of Concrete Modification in the Water Uptake/Evaporation Kinetics by Electrochemical Impedance Spectroscopy. *Electrochimica Acta*, **2017**, 247, 50-62	6.7	5
43	Alkoxysilane-based sols for consolidation of carbonate stones: Proposal of methodology to support the design and development of new consolidants. *Journal of Cultural Heritage*, **2020**, 43, 51-63	2.9	5
42	Tailoring alkoxysilanes with poly(ethylene glycol) as potential consolidants for carbonate stones. *Construction and Building Materials*, **2021**, 289, 123048	6.7	5
41	In vivo assessment of a new multifunctional coating architecture for improved Mg alloy biocompatibility. *Biomedical Materials (Bristol)*, **2016**, 11, 045007	3.5	5
40	In-Situ Localized pH, pNa and Dissolved O2 Measurements During Charge-Discharge of Mixed Ni□o Hydroxide Electrodes. *Journal of the Electrochemical Society*, **2020**, 167, 080511	3.9	5
39	Microstructured ZnO-rod like coating prevents biofilm formation prompted by pathogenic Candida spp.. *Ceramics International*, **2018**, 44, 4467-4472	5.1	5
38	A study on the galvanic corrosion of a sol-gel coated PEO Mg-CFRP couple. *Corrosion Science*, **2021**, 186, 109470	6.8	5
37	Direct electrodeposition of hydrogenated reduced graphene oxide from unsonicated solution and its electrochemical response. *Diamond and Related Materials*, **2020**, 104, 107740	3.5	4

36	Hybrid nanocontainer-based smart self-healing composite coatings for the protection of metallic assets **2016**, 183-209		4
35	Functional Self-Healing Coatings: A New Trend in Corrosion Protection by Organic Coatings **2018**, 236-249		4
34	Enhancement of mechanical and corrosion resistance properties of electrodeposited Ni-P-TiC composite coatings. *Scientific Reports*, **2021**, 11, 5327	4.9	4
33	Immobilization of His-tagged proteins on NiO foams for recyclable enzymatic reactors. *Applied Surface Science*, **2021**, 537, 147848	6.7	4
32	Consolidating efficacy of diammonium hydrogen phosphate on artificially aged and naturally weathered coarse-grained marble. *Journal of Cultural Heritage*, **2021**, 51, 145-156	2.9	4
31	On the estimation of marbles weathering by thermal action using drilling resistance. *Journal of Building Engineering*, **2021**, 42, 102494	5.2	4
30	Green synthesis of zinc oxide particles with apple-derived compounds and their application as catalysts in the transesterification of methyl benzoates. *Dalton Transactions*, **2020**, 49, 6488-6494	4.3	3
29	N-Graphene-Metal-oxide(sulfide) Hybrid Nanostructures: Single-Step Plasma-Enabled Approach for Energy Storage Applications. *Chemical Engineering Journal*, **2021**, 133153	14.7	3
28	Corrosion issues in joining lightweight materials: A review of the latest achievements. *Physical Sciences Reviews*, **2016**, 1,	1.4	3
27	Corrosion Protection of Magnesium Alloys by Functional Coatings **2018**, 2473-2505		2
26	3. Corrosion issues in joining lightweight materials: A review of the latest achievements **2015**, 53-72		2
25	Studies on the electrochemical growth of (Per)2[Au(mnt)2]. *Langmuir*, **2012**, 28, 4883-8	4	2
24	A Comparative Study of the Corrosion Resistance of Stainless Steels Obtained by Powder Metallurgy Techniques for Application in Dental Prosthesis. *Materials Science Forum*, **2010**, 660-661, 617-622	0.4	2
23	Oxide Film Growth by CSV on AISI 316L: a Combined Electrochemical and Analytical Characterization. *Journal of the Brazilian Chemical Society*, **2013**,	1.5	2
22	Exploring alkaline routes for production of TEOS-based consolidants for carbonate stones using amine catalysts. *New Journal of Chemistry*, **2021**, 45, 3833-3847	3.6	2
21	Saving Raw Materials for Cement Manufacture and Reusing an Untreated Waste from the Petrochemical Industry. *Resources*, **2018**, 7, 56	3.7	2
20	From manganese oxide to manganese sulphide: Synthesis and its effect on electrochemical energy storage performance. *Electrochimica Acta*, **2021**, 389, 138711	6.7	2
19	Effectiveness of Epoxy Coating Modified with Yttrium Oxide Loaded with Imidazole on the Corrosion Protection of Steel. *Nanomaterials*, **2021**, 11,	5.4	2

18	The role of properties on the decay susceptibility and conservation issues of soft limestones: Contribution of An□stone (Portugal). *Journal of Building Engineering*, **2021**, 44, 102997	5.2	2
17	Antagonist biocompatibilities of Zn-based materials functionalized with physiological active metal oxides. *Colloids and Surfaces B: Biointerfaces*, **2020**, 191, 110990	6	1
16	From Bench-Scale to Prototype: Case Study on a Nickel Hydroxide□Activated Carbon Hybrid Energy Storage Device. *Batteries*, **2019**, 5, 65	5.7	1
15	Saturation of hydrogen retention in gallium samples exposed to tokamak ISTTOK plasmas. *Journal of Nuclear Materials*, **2013**, 438, S992-S995	3.3	1
14	Corrosion studies and analytical characterisation of galvanised steel substrates pre-treated with doped silane solutions **2007**, 83-95		1
13	On the growth and mechanical properties of nanostructured cobalt foams by dynamic hydrogen bubble template electrodeposition. *Materials Characterization*, **2020**, 169, 110598	3.9	1
12	Ability of novel consolidants to improve cohesion of carbonate stones: Dependence on pore-shape, aging conditions and treatment procedures. *Journal of Cultural Heritage*, **2022**, 55, 95-106	2.9	1
11	Tailored 3D Foams Decorated with Nanostructured Manganese Oxide for Asymmetric Electrochemical Capacitors. *Journal of the Electrochemical Society*, **2022**, 169, 020511	3.9	0
10	Biomedical potential of 3D Zn and ZnCu foams produced by dynamic hydrogen bubble template. *Applied Surface Science*, **2022**, 580, 152207	6.7	0
9	Steps towards highly-efficient water splitting and oxygen reduction using nanostructured □Ni(OH).. *RSC Advances*, **2022**, 12, 10020-10028	3.7	0
8	Improved corrosion resistance on Mg-2Ca alloy with TiO2 nanoparticles embedded in a polycaprolactone (PCL) coating. *Applied Surface Science Advances*, **2022**, 9, 100257	2.6	0
7	Closure to discussion of □Assessing concrete carbonation resistance through air permeability measurements□[Construction and Building materials 82 (2015)] by Chao Jiang and Xianglim Gu. *Construction and Building Materials*, **2016**, 102, 916-917	6.7	
6	Electrochemical Impedance Spectroscopy study on the absorption and evaporation processes in natural stones. *Electrochimica Acta*, **2017**, 233, 62-70	6.7	
5	Novel Ni Based Duplex Coatings for Anticorrosion Applications. *ECS Transactions*, **2017**, 80, 593-602	1	
4	The effect of cerium nitrate on the corrosion behaviour of electrogalvanised steel substrates, evaluated by XPS and SVET **2007**, 110-118		
3	The efficacy of stone consolidants based on alkoxysilanes: Influence of solvent type **2018**, 13-16		
2	Corrosion Protection of Magnesium Alloys by Functional Coatings **2016**, 1-33		
1	Simulation of the Electrochemical Response of Cobalt Hydroxide Electrodes for Energy Storage. *Batteries*, **2022**, 8, 37	5.7	