# M G Ferreira

List of Publications by Year
in descending order

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|---|---|---|---|
| 332 papers | 22,655 citations | 4942 84 h-index | 10708 138 g-index |
| 339 all docs | 339 docs citations | 339 times ranked | 10032 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Layer-by-Layer Assembled Nanocontainers for Self-Healing Corrosion Protection. Advanced Materials, 2006, 18, 1672-1678. | 11.1 | 653 |
| 2 | Anticorrosion Coatings with Self-Healing Effect Based on Nanocontainers Impregnated with Corrosion Inhibitor. Chemistry of Materials, 2007, 19, 402-411. | 3.2 | 556 |
| 3 | Nanostructured solâ€“gel coatings doped with cerium nitrate as pre-treatments for AA2024-T3. Electrochimica Acta, 2005, 51, 208-217. | 2.6 | 498 |
| 4 | Active protection coatings with layered double hydroxide nanocontainers of corrosion inhibitor. Corrosion Science, 2010, 52, 602-611. | 3.0 | 456 |
| 5 | Solâ€“gel coatings for corrosion protection of metals. Journal of Materials Chemistry, 2005, 15, 5099. | 6.7 | 454 |
| 6 | Chloride-induced corrosion on reinforcing steel: from the fundamentals to the monitoring techniques. Cement and Concrete Composites, 2003, 25, 491-502. | 4.6 | 398 |
| 7 | Active Anticorrosion Coatings with Halloysite Nanocontainers. Journal of Physical Chemistry C, 2008, 112, 958-964. | 1.5 | 340 |
| 8 | â€œSmartâ€•coatings for active corrosion protection based on multi-functional micro and nanocontainers. Electrochimica Acta, 2012, 82, 314-323. | 2.6 | 340 |
| 9 | Triazole and thiazole derivatives as corrosion inhibitors for AA2024 aluminium alloy. Corrosion Science, 2005, 47, 3368-3383. | 3.0 | 324 |
| 10 | Mechanism of Corrosion Inhibition of AA2024 by Rare-Earth Compounds. Journal of Physical Chemistry B, 2006, 110, 5515-5528. | 1.2 | 315 |
| 11 | Enhancement of Active Corrosion Protection via Combination of Inhibitor-Loaded Nanocontainers. ACS Applied Materials & Interfaces, 2010, 2, 1528-1535. | 4.0 | 302 |
| 12 | High effective organic corrosion inhibitors for 2024 aluminium alloy. Electrochimica Acta, 2007, 52, 7231-7247. | 2.6 | 287 |
| 13 | Nanoporous titania interlayer as reservoir of corrosion inhibitors for coatings with self-healing ability. Progress in Organic Coatings, 2007, 58, 127-135. | 1.9 | 280 |
| 14 | Semiconducting Properties of Passive Films Formed on Stainless Steels: Influence of the Alloying Elements. Journal of the Electrochemical Society, 1998, 145, 3821-3829. | 1.3 | 277 |
| 15 | Novel Inorganic Host Layered Double Hydroxides Intercalated with Guest Organic Inhibitors for Anticorrosion Applications. ACS Applied Materials & Interfaces, 2009, 1, 2353-2362. | 4.0 | 277 |
| 16 | Study of Passive Films Formed on AISI 304 Stainless Steel by Impedance Measurements and Photoelectrochemistry. Journal of the Electrochemical Society, 1990, 137, 82-87. | 1.3 | 268 |
| 17 | Role of intermetallic phases in localized corrosion of AA5083. Electrochimica Acta, 2007, 52, 7651-7659. | 2.6 | 267 |
| 18 | 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. | 2.6 | 263 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Corrosion protective properties of nanostructured solâ€“gel hybrid coatings to AA2024-T3. Surface and Coatings Technology, 2006, 200, 3084-3094. | 2.2 | 253 |
| 20 | Novel hybrid solâ€“gel coatings for corrosion protection of AZ31B magnesium alloy. Electrochimica Acta, 2008, 53, 4773-4783. | 2.6 | 253 |
| 21 | Chemical composition and corrosion protection of silane films modified with CeO2 nanoparticles. Electrochimica Acta, 2009, 54, 5179-5189. | 2.6 | 245 |
| 22 | Znâ€“Al layered double hydroxides as chloride nanotraps in active protective coatings. Corrosion Science, 2012, 55, 1-4. | 3.0 | 242 |
| 23 | 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. | 2.6 | 220 |
| 24 | 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. | 1.9 | 218 |
| 25 | 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. | 2.6 | 213 |
| 26 | Silanes and rare earth salts as chromate replacers for pre-treatments on galvanised steel. Electrochimica Acta, 2004, 49, 2927-2935. | 2.6 | 211 |
| 27 | Electrochemical study of modified bis-[triethoxysilylpropyl] tetrasulfide silane films applied on the AZ31 Mg alloy. Electrochimica Acta, 2007, 52, 7486-7495. | 2.6 | 208 |
| 28 | Silica nanocontainers for active corrosion protection. Nanoscale, 2012, 4, 1287. | 2.8 | 205 |
| 29 | Semiconducting properties of thermally grown oxide films on AISI 304 stainless steel. Corrosion Science, 2000, 42, 687-702. | 3.0 | 202 |
| 30 | 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. | 3.0 | 191 |
| 31 | Hydroxyapatite Microparticles as Feedback-Active Reservoirs of Corrosion Inhibitors. ACS Applied Materials & Interfaces, 2010, 2, 3011-3022. | 4.0 | 187 |
| 32 | Electrochemical study of inhibitor-containing organicâ€“inorganic hybrid coatings on AA2024. Corrosion Science, 2009, 51, 1012-1021. | 3.0 | 186 |
| 33 | Influence of inhibitor addition on the corrosion protection performance of solâ€“gel coatings on AA2024. Progress in Organic Coatings, 2008, 63, 352-361. | 1.9 | 181 |
| 34 | Oxide nanoparticle reservoirs for storage and prolonged release of the corrosion inhibitors. Electrochemistry Communications, 2005, 7, 836-840. | 2.3 | 177 |
| 35 | Nanostructured LDH-container layer with active protection functionality. Journal of Materials Chemistry, 2011, 21, 15464. | 6.7 | 174 |
| 36 | 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. | 2.2 | 167 |

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|---|---|---|---|
| 37 | Use of SVET and SECM to study the galvanic corrosion of an ironâ€“zinc cell. Corrosion Science, 2007, 49, 726-739. | 3.0 | 167 |
| 38 | Hybrid epoxyâ€“silane coatings for improved corrosion protection of Mg alloy. Corrosion Science, 2013, 67, 82-90. | 3.0 | 162 |
| 39 | Solâ€“gel coatings modified with zeolite fillers for active corrosion protection of AA2024. Corrosion Science, 2012, 62, 153-162. | 3.0 | 159 |
| 40 | Corrosion inhibition by chromate and phosphate extracts for iron substrates studied by EIS and SVET. Corrosion Science, 2006, 48, 1500-1512. | 3.0 | 158 |
| 41 | Influence of incorporated Mo and Nb on the Mottâ€“Schottky behaviour of anodic films formed on AISI 304L. Corrosion Science, 2010, 52, 2813-2818. | 3.0 | 156 |
| 42 | 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. | 3.0 | 155 |
| 43 | Inhibitor-doped solâ€“gel coatings for corrosion protection of magnesium alloy AZ31. Surface and Coatings Technology, 2010, 204, 1479-1486. | 2.2 | 155 |
| 44 | Chemical Composition of Passive Films on AISI 304 Stainless Steel. Journal of the Electrochemical Society, 1994, 141, 3347-3356. | 1.3 | 147 |
| 45 | 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. | 2.6 | 147 |
| 46 | Complex anticorrosion coating for ZK30 magnesium alloy. Electrochimica Acta, 2009, 55, 131-141. | 2.6 | 145 |
| 47 | The role of Mo in the chemical composition and semiconductive behaviour of oxide films formed on stainless steels. Corrosion Science, 1999, 41, 17-34. | 3.0 | 142 |
| 48 | Smart coating based on double stimuli-responsive microcapsules containing linseed oil and benzotriazole for active corrosion protection. Corrosion Science, 2018, 130, 56-63. | 3.0 | 140 |
| 49 | Self-healing protective coatings with â€œgreenâ€•chitosan based pre-layer reservoir of corrosion inhibitor. Journal of Materials Chemistry, 2011, 21, 4805. | 6.7 | 134 |
| 50 | Influence of preparation conditions of Layered Double Hydroxide conversion films on corrosion protection. Electrochimica Acta, 2014, 117, 164-171. | 2.6 | 134 |
| 51 | Electrochemical and analytical investigation of passive films formed on stainless steels in alkaline media. Cement and Concrete Composites, 2012, 34, 1075-1081. | 4.6 | 131 |
| 52 | Influence of the temperature of film formation on the electronic structure of oxide films formed on 304 stainless steel. Electrochimica Acta, 2001, 46, 3767-3776. | 2.6 | 126 |
| 53 | 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. | 1.9 | 124 |
| 54 | On the application of electrochemical impedance spectroscopy to study the self-healing properties of protective coatings. Electrochemistry Communications, 2007, 9, 2622-2628. | 2.3 | 123 |

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|---|---|---|---|
| 55 | The synergistic combination of bis-silane and CeO2Â·ZrO2 nanoparticles on the electrochemical behaviour of galvanised steel in NaCl solutions. Electrochimica Acta, 2008, 53, 5913-5922. | 2.6 | 120 |
| 56 | Anodising of Al 2024-T3 in a modified sulphuric acid/boric acid bath for aeronautical applications. Corrosion Science, 2003, 45, 149-160. | 3.0 | 119 |
| 57 | Monitoring local spatial distribution of Mg2+, pH and ionic currents. Electrochemistry Communications, 2008, 10, 259-262. | 2.3 | 118 |
| 58 | Localized electrochemical study of corrosion inhibition in microdefects on coated AZ31 magnesium alloy. Electrochimica Acta, 2010, 55, 5401-5406. | 2.6 | 117 |
| 59 | TiOx self-assembled networks prepared by templating approach as nanostructured reservoirs for self-healing anticorrosion pre-treatments. Electrochemistry Communications, 2006, 8, 421-428. | 2.3 | 116 |
| 60 | Chitosan-based self-healing protective coatings doped with cerium nitrate for corrosion protection of aluminum alloy 2024. Progress in Organic Coatings, 2012, 75, 8-13. | 1.9 | 116 |
| 61 | 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. | 1.9 | 115 |
| 62 | Solâ€Gel/Polyelectrolyte Active Corrosion Protection System. Advanced Functional Materials, 2008, 18, 3137-3147. | 7.8 | 115 |
| 63 | Composition and behaviour of cerium films on galvanised steel. Progress in Organic Coatings, 2001, 43, 274-281. | 1.9 | 111 |
| 64 | The combined use of scanning vibrating electrode technique and micro-potentiometry to assess the self-repair processes in defects on â€œsmartâ€•coatings applied to galvanized steel. Electrochimica Acta, 2011, 56, 4475-4488. | 2.6 | 111 |
| 65 | 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. | 1.9 | 109 |
| 66 | Corrosion behaviour of rebars in fly ash mortar exposed to carbon dioxide and chlorides. Cement and Concrete Composites, 2002, 24, 45-53. | 4.6 | 108 |
| 67 | The corrosion resistance of hot dip galvanized steel pretreated with Bis-functional silanes modified with microsilica. Surface and Coatings Technology, 2006, 200, 2875-2885. | 2.2 | 103 |
| 68 | Corrosion protection of AA2024 by solâ€“gel coatings modified with MBT-loaded polyurea microcapsules. Chemical Engineering Journal, 2016, 283, 1108-1117. | 6.6 | 103 |
| 69 | Comparative electrochemical studies of zinc chromate and zinc phosphate as corrosion inhibitors for zinc. Progress in Organic Coatings, 2005, 52, 339-350. | 1.9 | 101 |
| 70 | A comparative study on the corrosion resistance of AA2024-T3 substrates pre-treated with different silane solutions. Progress in Organic Coatings, 2005, 54, 322-331. | 1.9 | 99 |
| 71 | 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. | 3.1 | 99 |
| 72 | 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. | 2.6 | 98 |

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|---|---|---|---|
| 73 | Ranking high-quality paint systems using EIS. Part I: intact coatings. Corrosion Science, 2003, 45, 123-138. | 3.0 | 98 |
| 74 | Highlights during the development of electrochemical engineering. Chemical Engineering Research and Design, 2013, 91, 1998-2020. | 2.7 | 97 |
| 75 | Active protective PEO coatings on AA2024: Role of voltage on in-situ LDH growth. Materials and Design, 2017, 120, 36-46. | 3.3 | 97 |
| 76 | E.I.S. evaluation of attached and free polymer films. Progress in Organic Coatings, 2000, 38, 1-7. | 1.9 | 96 |
| 77 | Multiprobe chloride sensor for in situ monitoring of reinforced concrete structures. Cement and Concrete Composites, 2006, 28, 233-236. | 4.6 | 96 |
| 78 | Corrosion protection of AA2024-T3 by LDH conversion films. Analysis of SVET results. Electrochimica Acta, 2016, 210, 215-224. | 2.6 | 96 |
| 79 | The electronic properties of sputtered chromium and iron oxide films. Corrosion Science, 2004, 46, 1479-1499. | 3.0 | 95 |
| 80 | High-density antimicrobial peptide coating with broad activity and low cytotoxicity against human cells. Acta Biomaterialia, 2016, 33, 64-77. | 4.1 | 93 |
| 81 | Plasma anodized ZE41 magnesium alloy sealed with hybrid epoxy-silane coating. Corrosion Science, 2013, 73, 300-308. | 3.0 | 90 |
| 82 | Interlayer intercalation and arrangement of 2-mercaptobenzothiazolate and 1,2,3-benzotriazolate anions in layered double hydroxides: In situ X-ray diffraction study. Journal of Solid State Chemistry, 2016, 233, 158-165. | 1.4 | 90 |
| 83 | Electrochemical behaviour of amino alcohol-based inhibitors used to control corrosion of reinforcing steel. Electrochimica Acta, 2004, 49, 2753-2760. | 2.6 | 87 |
| 84 | Analytical characterisation and corrosion behaviour of bis-[triethoxysilylpropyl]tetrasulphide pre-treated AA2024-T3. Corrosion Science, 2005, 47, 869-881. | 3.0 | 87 |
| 85 | Reviewâ€"On the Application of the Scanning Vibrating Electrode Technique (SVET) to Corrosion Research. Journal of the Electrochemical Society, 2017, 164, C973-C990. | 1.3 | 87 |
| 86 | An electrochemical and analytical assessment on the early corrosion behaviour of galvanised steel pretreated with aminosilanes. Surface and Coatings Technology, 2005, 192, 284-290. | 2.2 | 86 |
| 87 | Electrodeposition and characterization of polypyrrole films on aluminium alloy 6061-T6. Electrochimica Acta, 2008, 53, 4754-4763. | 2.6 | 86 |
| 88 | Active corrosion protection coating for a ZE41 magnesium alloy created by combining PEO and solâ€"gel techniques. RSC Advances, 2016, 6, 12553-12560. | 1.7 | 84 |
| 89 | Laser alloying of aluminium alloys with chromium. Surface and Coatings Technology, 1995, 70, 221-229. | 2.2 | 83 |
| 90 | Polyelectrolyte-modified layered double hydroxide nanocontainers as vehicles for combined inhibitors. RSC Advances, 2015, 5, 39916-39929. | 1.7 | 82 |

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|---|---|---|---|
| 91 | Active corrosion protection of AA2024 by solâ€“gel coatings with cerium molybdate nanowires. Electrochimica Acta, 2013, 112, 236-246. | 2.6 | 78 |
| 92 | Localized corrosion of laser surface melted 2024-T351 aluminium alloy. Surface and Coatings Technology, 1996, 81, 290-296. | 2.2 | 76 |
| 93 | Chemical composition and semiconducting behaviour of stainless steel passive films in contact with artificial seawater. Corrosion Science, 1998, 40, 481-494. | 3.0 | 76 |
| 94 | Analytical Characterization of the Passive Film Formed on Steel in Solutions Simulating the Concrete Interstitial Electrolyte. Corrosion, 1998, 54, 347-353. | 0.5 | 76 |
| 95 | Sealing of tartaric sulfuric (TSA) anodized AA2024 with nanostructured LDH layers. RSC Advances, 2016, 6, 13942-13952. | 1.7 | 76 |
| 96 | A novel bilayer system comprising LDH conversion layer and sol-gel coating for active corrosion protection of AA2024. Corrosion Science, 2018, 143, 299-313. | 3.0 | 76 |
| 97 | Synergistic corrosion inhibition on galvanically coupled metallic materials. Electrochemistry Communications, 2012, 20, 101-104. | 2.3 | 75 |
| 98 | Chitosan as a smart coating for corrosion protection of aluminum alloy 2024: A review. Progress in Organic Coatings, 2015, 89, 348-356. | 1.9 | 75 |
| 99 | The corrosion performance of organosilane based pre-treatments for coatings on galvanised steel. Progress in Organic Coatings, 2000, 38, 17-26. | 1.9 | 74 |
| 100 | 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. | 3.0 | 74 |
| 101 | Electrochemical Studies of the Passive Film on 316 Stainless Steel in Chloride Media. Journal of the Electrochemical Society, 1985, 132, 760-765. | 1.3 | 73 |
| 102 | Preparation and corrosion protective properties of nanostructured titania-containing hybrid solâ€“gel coatings on AA2024. Progress in Organic Coatings, 2008, 62, 226-235. | 1.9 | 73 |
| 103 | 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. | 2.2 | 72 |
| 104 | Nanocontainer-based corrosion sensing coating. Nanotechnology, 2013, 24, 415502. | 1.3 | 70 |
| 105 | Corrosion behaviour of reinforcing steel exposed to an amino alcohol based corrosion inhibitor. Cement and Concrete Composites, 2005, 27, 671-678. | 4.6 | 68 |
| 106 | Chemical composition and electronic structure of passive films formed on Alloy 600 in acidic solution. Corrosion Science, 2008, 50, 676-686. | 3.0 | 68 |
| 107 | Incorporation of biocides in nanocapsules for protective coatings used in maritime applications. Chemical Engineering Journal, 2015, 270, 150-157. | 6.6 | 68 |
| 108 | Fault-tolerant hybrid epoxy-silane coating for corrosion protection of magnesium alloy AZ31. Progress in Organic Coatings, 2015, 80, 98-105. | 1.9 | 67 |

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|---|---|---|---|
| 109 | PEO Coatings with Active Protection Based on In-Situ Formed LDH-Nanocontainers. Journal of the Electrochemical Society, 2017, 164, C36-C45. | 1.3 | 67 |
| 110 | Control of crystallite and particle size in the synthesis of layered double hydroxides: Macromolecular insights and a complementary modeling tool. Journal of Colloid and Interface Science, 2016, 468, 86-94. | 5.0 | 66 |
| 111 | The corrosion behaviour of rare-earth containing magnesium alloys in borate buffer solution. Electrochimica Acta, 2011, 56, 1535-1545. | 2.6 | 65 |
| 112 | Layered double hydroxides (LDHs) as functional materials for the corrosion protection of aluminum alloys: A review. Applied Materials Today, 2020, 21, 100857. | 2.3 | 65 |
| 113 | A comparative study of co-precipitation and sol-gel synthetic approaches to fabricate cerium-substituted Mg Al layered double hydroxides with luminescence properties. Applied Clay Science, 2017, 143, 175-183. | 2.6 | 64 |
| 114 | Anion exchange in Znâ€“Al layered double hydroxides: In situ X-ray diffraction study. Chemical Physics Letters, 2010, 495, 73-76. | 1.2 | 63 |
| 115 | Corrosion behaviour of WC hardmetals with nickel-based binders. Corrosion Science, 2019, 147, 384-393. | 3.0 | 63 |
| 116 | Active self-healing coating for galvanically coupled multi-material assemblies. Electrochemistry Communications, 2014, 41, 51-54. | 2.3 | 62 |
| 117 | Capacitance and photoelectrochemical studies for the assessment of anodic oxide films on aluminium. Electrochimica Acta, 2004, 49, 4701-4707. | 2.6 | 60 |
| 118 | Corrosion inhibition of copper in aqueous chloride solution by 1H-1,2,3-triazole and 1,2,4-triazole and their combinations: electrochemical, Raman and theoretical studies. Physical Chemistry Chemical Physics, 2017, 19, 6113-6129. | 1.3 | 60 |
| 119 | Functionalized chitosan-based coatings for active corrosion protection. Surface and Coatings Technology, 2013, 226, 51-59. | 2.2 | 59 |
| 120 | Chitosan as a Smart Coating for Controlled Release of Corrosion Inhibitor 2-Mercaptobenzothiazole. ECS Electrochemistry Letters, 2013, 2, C19-C22. | 1.9 | 59 |
| 121 | Ranking high-quality paint systems using EIS. Part II: defective coatings. Corrosion Science, 2003, 45, 139-147. | 3.0 | 57 |
| 122 | Cut-edge corrosion study on painted aluminum rich metallic coated steel by scanning vibrating electrode and micro-potentiometric techniques. Electrochimica Acta, 2012, 61, 107-117. | 2.6 | 57 |
| 123 | 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. | 0.6 | 56 |
| 124 | Active sensing coating for early detection of corrosion processes. RSC Advances, 2014, 4, 17780. | 1.7 | 56 |
| 125 | Quasi-simultaneous measurements of ionic currents by vibrating probe and pH distribution by ion-selective microelectrode. Electrochemistry Communications, 2011, 13, 20-23. | 2.3 | 54 |
| 126 | The application of electrochemical measurements to the study and behaviour of zinc-rich coatings. Corrosion Science, 1990, 30, 1135-1147. | 3.0 | 52 |

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|---|---|---|---|
| 127 | Cerium cinnamate as an environmentally benign inhibitor pigment for epoxy coatings on AA 2024-T3. Progress in Organic Coatings, 2014, 77, 765-773. | 1.9 | 52 |
| 128 | Layered double hydroxide based active corrosion protective sealing of plasma electrolytic oxidation/sol-gel composite coating on AA2024. Applied Surface Science, 2019, 494, 829-840. | 3.1 | 52 |
| 129 | Influence of the overlapped area on the corrosion behaviour of laser treated aluminium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 252, 292-300. | 2.6 | 51 |
| 130 | A multi-electrode cell for high-throughput SVET screening of corrosion inhibitors. Corrosion Science, 2010, 52, 3146-3149. | 3.0 | 51 |
| 131 | Effect of functionalized carbon as Pt electrocatalyst support on the methanol oxidation reaction. Applied Catalysis B: Environmental, 2011, 102, 496-504. | 10.8 | 51 |
| 132 | Comparative X-ray diffraction and infrared spectroscopy study of Znâ€“Al layered double hydroxides: Vanadate vs nitrate. Chemical Physics, 2012, 397, 102-108. | 0.9 | 51 |
| 133 | The role of Ce(III)-enriched zeolites on the corrosion protection of AA2024-T3. Electrochimica Acta, 2013, 112, 549-556. | 2.6 | 51 |
| 134 | Corrosion behaviour of WC-10% AISI 304 cemented carbides. Corrosion Science, 2015, 100, 322-331. | 3.0 | 51 |
| 135 | Improving the functionality and performance of AA2024 corrosion sensing coatings with nanocontainers. Chemical Engineering Journal, 2018, 341, 526-538. | 6.6 | 51 |
| 136 | Electrochemical studies of the pitting of austenitic stainless steel. Corrosion Science, 1986, 26, 1009-1026. | 3.0 | 50 |
| 137 | Analytical and microscopic characterisation of modified bis-[triethoxysilylpropyl] tetrasulphide silane films on magnesium AZ31 substrates. Progress in Organic Coatings, 2007, 60, 228-237. | 1.9 | 50 |
| 138 | Characterization and corrosion behavior of binary Mg-Ga alloys. Materials Characterization, 2017, 128, 85-99. | 1.9 | 50 |
| 139 | Passivity breakdown of Al 2024-T3 alloy in chloride solutions: a test of the point defect model. Electrochemistry Communications, 2002, 4, 353-357. | 2.3 | 49 |
| 140 | Polar and antipolar polymorphs of metastable perovskite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>BiFe</mml:mtext><mml:mrow><mml:mn>0.5</mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>Sc</mml:mtext><mml:mrow><mml:mn>0.5</mml:mn xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>O</mml:mtext><mml:mn>3</mml:mn></mml:msub><mml:mn>0.5</mml:mn> Physical Review B, 2014, 89, . | 3.7 | 49 |
| 141 | Lanthanide Salts as Corrosion Inhibitors for AA5083. Mechanism and Efficiency of Corrosion Inhibition. Journal of the Electrochemical Society, 2008, 155, C169. | 1.3 | 48 |
| 142 | Influence of sol-gel process parameters on the protection properties of solâ€“gel coatings applied on AA2024. Surface and Coatings Technology, 2014, 246, 6-16. | 2.2 | 48 |
| 143 | EQCM studies of the electrodeposition and corrosion of tinâ€“zinc coatings. Electrochimica Acta, 2001, 46, 3835-3840. | 2.6 | 47 |
| 144 | Characterization and performance evaluation of Ptâ€“Ru electrocatalysts supported on different carbon materials for direct methanol fuel cells. International Journal of Hydrogen Energy, 2013, 38, 910-920. | 3.8 | 47 |

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| 145 | Surface evaluation and electrochemical behaviour of doped silane pre-treatments on galvanised steel substrates. Progress in Organic Coatings, 2007, 59, 214-223. | 1.9 | 45 |
| 146 | Polyaniline coatings on aluminium alloy 6061-T6: Electrosynthesis and characterization. Electrochimica Acta, 2010, 55, 3580-3588. | 2.6 | 45 |
| 147 | Cerium molybdate nanowires for active corrosion protection of aluminium alloys. Corrosion Science, 2012, 58, 41-51. | 3.0 | 44 |
| 148 | Localised Measurements of pH and Dissolved Oxygen as Complements to SVET in the Investigation of Corrosion at Defects in Coated Aluminum Alloy. Electroanalysis, 2010, 22, 2009-2016. | 1.5 | 43 |
| 149 | Influence of temperature on the properties of passive films formed on AISI 304 stainless steel. Electrochimica Acta, 1991, 36, 315-320. | 2.6 | 42 |
| 150 | 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. | 0.5 | 42 |
| 151 | Role of intermetallics in corrosion of aluminum alloys. Smart corrosion protection. , 2018, , 425-462. | | 41 |
| 152 | Zn-Al LDH growth on AA2024 and zinc and their intercalation with chloride: Comparison of crystal structure and kinetics. Applied Surface Science, 2020, 501, 144027. | 3.1 | 41 |
| 153 | EIS Study of Amine Cured Epoxy-silica-zirconia Sol-gel Coatings for Corrosion Protection of the Aluminium Alloy EN AW 6063. Portugaliae Electrochimica Acta, 2013, 31, 307-319. | 0.4 | 40 |
| 154 | Passive behavior of magnesium alloys (Mgâ€“Zr) containing rare-earth elements in alkaline media. Electrochimica Acta, 2010, 55, 2482-2489. | 2.6 | 38 |
| 155 | Corrosion behavior of nanocrystalline (Ni70Mo30)90B10 alloys in 0.8 M KOH solution. Corrosion Science, 2003, 45, 1833-1845. | 3.0 | 37 |
| 156 | Micropotentiometric mapping of local distributions of Zn2+ relevant to corrosion studies. Electrochemistry Communications, 2010, 12, 394-397. | 2.3 | 36 |
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