JoÃ£o Tedim

List of Publications by Year in descending order

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104 papers	4,830 citations	101543 36 h-index	98798 67 g-index
108 all docs	108 docs citations	108 times ranked	3091 citing authors

#	Article	IF	Citations
1	â€œSmartâ€•coatings for active corrosion protection based on multi-functional micro and nanocontainers. Electrochimica Acta, 2012, 82, 314-323.	5.2	340
2	Enhancement of Active Corrosion Protection via Combination of Inhibitor-Loaded Nanocontainers. ACS Applied Materials & Interfaces, 2010, 2, 1528-1535.	8.0	302
3	Novel Inorganic Host Layered Double Hydroxides Intercalated with Guest Organic Inhibitors for Anticorrosion Applications. ACS Applied Materials & Interfaces, 2009, 1, 2353-2362.	8.0	277
4	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.	5.2	263
5	Znâ€“Al layered double hydroxides as chloride nanotraps in active protective coatings. Corrosion Science, 2012, 55, 1-4.	6.6	242
6	Silica nanocontainers for active corrosion protection. Nanoscale, 2012, 4, 1287.	5.6	205
7	Nanostructured LDH-container layer with active protection functionality. Journal of Materials Chemistry, 2011, 21, 15464.	6.7	174
8	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
9	Influence of preparation conditions of Layered Double Hydroxide conversion films on corrosion protection. Electrochimica Acta, 2014, 117, 164-171.	5.2	134
10	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.	3.9	116
11	Corrosion protection of AA2024 by solâ€“gel coatings modified with MBT-loaded polyurea microcapsules. Chemical Engineering Journal, 2016, 283, 1108-1117.	12.7	103
12	Corrosion protection of AA2024-T3 by LDH conversion films. Analysis of SVET results. Electrochimica Acta, 2016, 210, 215-224.	5.2	96
13	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.	2.9	90
14	Polyelectrolyte-modified layered double hydroxide nanocontainers as vehicles for combined inhibitors. RSC Advances, 2015, 5, 39916-39929.	3.6	82
15	Sealing of tartaric sulfuric (TSA) anodized AA2024 with nanostructured LDH layers. RSC Advances, 2016, 6, 13942-13952.	3.6	76
16	A novel bilayer system comprising LDH conversion layer and sol-gel coating for active corrosion protection of AA2024. Corrosion Science, 2018, 143, 299-313.	6.6	76
17	Chitosan as a smart coating for corrosion protection of aluminum alloy 2024: A review. Progress in Organic Coatings, 2015, 89, 348-356.	3.9	75
18	Environmental behaviour and ecotoxicity of cationic surfactants towards marine organisms. Journal of Hazardous Materials, 2020, 392, 122299.	12.4	74

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19	Nanocontainer-based corrosion sensing coating. Nanotechnology, 2013, 24, 415502.	2.6	70
20	Incorporation of biocides in nanocapsules for protective coatings used in maritime applications. Chemical Engineering Journal, 2015, 270, 150-157.	12.7	68
21	PEO Coatings with Active Protection Based on In-Situ Formed LDH-Nanocontainers. Journal of the Electrochemical Society, 2017, 164, C36-C45.	2.9	67
22	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.	9.4	66
23	Layered double hydroxides (LDHs) as functional materials for the corrosion protection of aluminum alloys: A review. Applied Materials Today, 2020, 21, 100857.	4.3	65
24	Anion exchange in Znâ€“Al layered double hydroxides: In situ X-ray diffraction study. Chemical Physics Letters, 2010, 495, 73-76.	2.6	63
25	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.	2.8	60
26	Functionalized chitosan-based coatings for active corrosion protection. Surface and Coatings Technology, 2013, 226, 51-59.	4.8	59
27	Chitosan as a Smart Coating for Controlled Release of Corrosion Inhibitor 2-Mercaptobenzothiazole. ECS Electrochemistry Letters, 2013, 2, C19-C22.	1.9	59
28	Active sensing coating for early detection of corrosion processes. RSC Advances, 2014, 4, 17780.	3.6	56
29	Synergetic active corrosion protection of AA2024-T3 by 2D- anionic and 3D-cationic nanocontainers loaded with Ce and mercaptobenzothiazole. Corrosion Science, 2018, 135, 35-45.	6.6	55
30	Comparative X-ray diffraction and infrared spectroscopy study of Znâ€“Al layered double hydroxides: Vanadate vs nitrate. Chemical Physics, 2012, 397, 102-108.	1.9	51
31	Improving the functionality and performance of AA2024 corrosion sensing coatings with nanocontainers. Chemical Engineering Journal, 2018, 341, 526-538.	12.7	51
32	Elucidating Structureâ€“Property Relationships in Aluminum Alloy Corrosion Inhibitors by Machine Learning. Journal of Physical Chemistry C, 2020, 124, 5624-5635.	3.1	46
33	Third-Order Nonlinear Optical Properties of DA-salen-Type Nickel(II) and Copper(II) Complexes. European Journal of Inorganic Chemistry, 2006, 2006, 3425-3433.	2.0	45
34	A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings. Critical Reviews in Solid State and Materials Sciences, 2022, 47, 309-355.	12.3	45
35	Cerium molybdate nanowires for active corrosion protection of aluminium alloys. Corrosion Science, 2012, 58, 41-51.	6.6	44
36	Efficacy and Ecotoxicity of Novel Anti-Fouling Nanomaterials in Target and Non-Target Marine Species. Marine Biotechnology, 2017, 19, 164-174.	2.4	41

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37	Functionalised novel gemini surfactants as corrosion inhibitors for mild steel in 50â€¯mM NaCl: Experimental and theoretical insights. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 580, 123699.	4.7	37
38	Correlating structure and ion recognition properties of [Ni(salen)]-based polymer films. Journal of Electroanalytical Chemistry, 2007, 610, 46-56.	3.8	35
39	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.	3.6	34
40	Toxicity of innovative anti-fouling nano-based solutions to marine species. Environmental Science: Nano, 2019, 6, 1418-1429.	4.3	34
41	Antimacrofouling Efficacy of Innovative Inorganic Nanomaterials Loaded with Booster Biocides. Journal of Marine Science and Engineering, 2018, 6, 6.	2.6	32
42	Preparation and characterization of poly[Ni(salen)(crown receptor)]/multi-walled carbon nanotube composite films. Electrochimica Acta, 2008, 53, 6722-6731.	5.2	30
43	Modulating spectroelectrochemical properties of [Ni(salen)] polymeric films at molecular level. Synthetic Metals, 2011, 161, 680-691.	3.9	30
44	Mechanisms of Localized Corrosion Inhibition of AA2024 by Cerium Molybdate Nanowires. Journal of Physical Chemistry C, 2013, 117, 5811-5823.	3.1	30
45	How Density Functional Theory Surface Energies May Explain the Morphology of Particles, Nanosheets, and Conversion Films Based on Layered Double Hydroxides. Journal of Physical Chemistry C, 2017, 121, 2211-2220.	3.1	29
46	Structural and electrochemical characterisation of [Pd(salen)]-type conducting polymer films. Electrochimica Acta, 2010, 55, 7726-7736.	5.2	28
47	Use of ZnAl-Layered Double Hydroxide (LDH) to Extend the Service Life of Reinforced Concrete. Materials, 2020, 13, 1769.	2.9	28
48	A molecular dynamics framework to explore the structure and dynamics of layered double hydroxides. Applied Clay Science, 2018, 163, 164-177.	5.2	27
49	Toxicity of engineered micro- and nanomaterials with antifouling properties to the brine shrimp Artemia salina and embryonic stages of the sea urchin Paracentrotus lividus. Environmental Pollution, 2019, 251, 530-537.	7.5	27
50	Thermal Behavior of Layered Double Hydroxide Znâ€“Alâ€“Pyrovanadate: Composition, Structure Transformations, and Recovering Ability. Journal of Physical Chemistry C, 2013, 117, 4152-4157.	3.1	26
51	Gold nanorods induce early embryonic developmental delay and lethality in zebrafish (Danio) Tj ETQq1 1 0.784314 rgBT /Overlock	2.3	24
52	Benzotriazole encapsulation in spray-dried carboxymethylcellulose microspheres for active corrosion protection of carbon steel. Progress in Organic Coatings, 2020, 138, 105329.	3.9	24
53	Unusual Coordination Environment for Barium Cations in Ion Recognition Conducting Poly[Ni(salen)(receptor)] Films. Langmuir, 2008, 24, 8998-9005.	3.5	23
54	A computational UVâ€“Vis spectroscopic study of the chemical speciation of 2-mercaptobenzothiazole corrosion inhibitor in aqueous solution. Theoretical Chemistry Accounts, 2016, 135, 1.	1.4	23

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55	Active Corrosion Protection by Nanoparticles and Conversion Films of Layered Double Hydroxides. Corrosion, 2014, 70, 436-445.	1.1	22
56	Light-Induced Proton Pumping with a Semiconductor: Vision for Photoproton Lateral Separation and Robust Manipulation. ACS Applied Materials & Interfaces, 2017, 9, 24282-24289.	8.0	22
57	Ni-Fe layered double hydroxides for oxygen evolution Reaction: Impact of Ni/Fe ratio and crystallinity. Materials and Design, 2021, 212, 110188.	7.0	22
58	Effects of a novel anticorrosion engineered nanomaterial on the bivalve Ruditapes philippinarum. Environmental Science: Nano, 2017, 4, 1064-1076.	4.3	21
59	Effect of Surface Treatment on the Performance of LDH Conversion Films. ECS Electrochemistry Letters, 2013, 3, C4-C8.	1.9	20
60	Layered Double Hydroxide Clusters as Precursors of Novel Multifunctional Layers: A Bottom-Up Approach. Coatings, 2019, 9, 328.	2.6	19
61	Antimicrobial activity of 2-mercaptobenzothiazole released from environmentally friendly nanostructured layered double hydroxides. Journal of Applied Microbiology, 2017, 122, 1207-1218.	3.1	18
62	Layered materials as nanocontainers for active corrosion protection: A brief review. Applied Clay Science, 2022, 225, 106537.	5.2	17
63	Solid-State Electrochromic Cells Based on [M(salen)]-Derived Electroactive Polymer Films. Electrochemical and Solid-State Letters, 2010, 13, J114.	2.2	15
64	A novel approach for immobilization of polyhexamethylene biguanide within silica capsules. RSC Advances, 2015, 5, 92656-92663.	3.6	15
65	Chitosan Microspheres as Carriers for pHâ€Indicating Species in Corrosion Sensing. Macromolecular Materials and Engineering, 2020, 305, 1900662.	3.6	14
66	Self-healing nanocoatings for corrosion control. , 2012, , 213-263.		13
67	Gemini Surfactant as a Template Agent for the Synthesis of More Eco-Friendly Silica Nanocapsules. Applied Sciences (Switzerland), 2020, 10, 8085.	2.5	13
68	Smart self-healing coatings for corrosion protection of aluminium alloys. , 2014, , 224-274.		12
69	CORDATA: an open data management web application to select corrosion inhibitors. Npj Materials Degradation, 2022, 6, .	5.8	12
70	Sol-gel template synthesis of mesoporous carbon-doped TiO2 with photocatalytic activity under visible light. Materials Today: Proceedings, 2018, 5, 17422-17430.	1.8	11
71	Can the toxicity of polyethylene microplastics and engineered nanoclays on flatfish (Solea) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 804, 150188.	8.0	11
72	Hexacyanoferrateâ€Intercalated Layered Double Hydroxides as Nanoadditives for the Detection of Earlyâ€Stage Corrosion of Steel: The Revival of Prussian blue. European Journal of Inorganic Chemistry, 2020, 2020, 2063-2073.	2.0	10

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73	Synthesis of ZnO mesoporous powders and their application in dye photodegradation. Materials Today: Proceedings, 2018, 5, 17414-17421.	1.8	9
74	Synthesis and characterization of gordaite, osakaite and simonkolleite by different methods: Comparison, phase interconversion, and potential corrosion protection applications. Journal of Solid State Chemistry, 2020, 291, 121595.	2.9	9
75	Experimental characterisation and modelling of mechanical behaviour of microcapsules. Journal of Materials Science, 2020, 55, 13457-13471.	3.7	9
76	Effects of nanostructure antifouling biocides towards a coral species in the context of global changes. Science of the Total Environment, 2021, 799, 149324.	8.0	9
77	Advanced protective coatings for aeronautical applications. , 2011, , 235-279.		8
78	Ion recognition properties of poly[Cu(3-MeOsalpd)] films. Journal of Solid State Electrochemistry, 2012, 16, 2849-2860.	2.5	8
79	Ultra-high pressure modified cellulosic fibres with antimicrobial properties. Carbohydrate Polymers, 2017, 175, 303-310.	10.2	8
80	Insights into corrosion behaviour of uncoated Mg alloys for biomedical applications in different aqueous media. Journal of Materials Research and Technology, 2021, 13, 1908-1922.	5.8	8
81	Silica-Based Nanocoating Doped by Layered Double Hydroxides to Enhance the Paperboard Barrier Properties. World Journal of Nano Science and Engineering, 2015, 05, 126-139.	0.3	8
82	Rhodamine-loaded TiO2 particles for detection of polymer coating UV degradation. Materials Today: Proceedings, 2020, 20, 320-328.	1.8	7
83	Emerging trends in smart nanocontainers for corrosion applications. , 2020, , 385-398.		7
84	â€œSmartâ€•nanosensors for early detection of corrosion: Environmental behavior and effects on marine organisms. Environmental Pollution, 2022, 302, 118973.	7.5	7
85	Viscoelastic characterization of benzo-crown ether functionalized electroactive films. Physical Chemistry Chemical Physics, 2009, 11, 268-277.	2.8	6
86	Pseudo-crown functionalized copper salen complexes forming electroactive polymers: Rationalization of Ba2+ interaction using XAS and DFT. Journal of Electroanalytical Chemistry, 2013, 688, 308-319.	3.8	6
87	Synthesis and characterization of efficient TiO 2 mesoporous photocatalysts. Materials Today: Proceedings, 2017, 4, 11526-11533.	1.8	6
88	Anticorrosion thin film smart coatings for aluminum alloys. , 2020, , 429-454.		6
89	Unveiling the local structure of 2-mercaptobenzothiazole intercalated in (Zn2Al) layered double hydroxides. Applied Clay Science, 2020, 198, 105842.	5.2	5
90	The Stability and Chloride Entrapping Capacity of ZnAl-NO2 LDH in High-Alkaline/Cementitious Environment. Corrosion and Materials Degradation, 2021, 2, 78-99.	2.4	5

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91	Nanostructured Black Nickel Coating as Replacement for Black Cr(VI) Finish. Applied Sciences (Switzerland), 2021, 11, 3924.	2.5	5
92	Electrosynthesis of Ordered TiO₂ÂNanotubular Layers in Deep Eutectic Solvents and Their Properties. Journal of the Electrochemical Society, 2019, 166, H377-H386.	2.9	4
93	Design of 2-cyclopentenone derivatives with enhanced NF-ÎºB: DNA binding inhibitory properties. Computational and Theoretical Chemistry, 2004, 685, 73-82.	1.5	3
94	Online integrated solution to collect data, generate information and manage events in the human biomonitoring field. International Journal of Hygiene and Environmental Health, 2007, 210, 403-406.	4.3	3
95	Influence of the Operating Conditions on the Release of Corrosion Inhibitors from Spray-Dried Carboxymethylcellulose Microspheres. Applied Sciences (Switzerland), 2022, 12, 1800.	2.5	2
96	On Demand Release of Cerium from an Alginate/Cerium Complex for Corrosion Protection of AISI1020 and AA2024 Substrates. Journal of the Brazilian Chemical Society, 0, , .	0.6	2
97	Modulation of electroactive polymer film dynamics by metal ion complexation and redox switching. Soft Matter, 2009, , .	2.7	1
98	UV-assisted anchoring of gold nanoparticles into TiO2 nanotubes for oxygen electroreduction. Journal of Electroanalytical Chemistry, 2022, 904, 115844.	3.8	1
99	Chitosan Films for Corrosion Protection of Galvanized Steel and Aluminum Alloys. ECS Meeting Abstracts, 2009, , .	0.0	0
100	Corrosion protection by nanostructured coatings. , 2021, , 281-307.		0
101	Multifunction Nanostructured Coatings. ECS Meeting Abstracts, 2015, , .	0.0	0
102	Brittle Coating Layers for Impact Detection in CFRP. , 2016, , 725-733.		0
103	CHARACTERIZATION OF SURFACE SPECIES ON MESOPOROUS TiO₂ PREPARED BY TiC OXIDATION. , 2017, , 311-314.		0
104	Data science framework to select corrosion inhibitors. , 2021, 6, .		0