

# João Tedim

## List of Publications by Year in descending order

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104  
papers

4,830  
citations

101496

36  
h-index

98753

67  
g-index

108  
all docs

108  
docs citations

108  
times ranked

3091  
citing authors

#	ARTICLE	IF	CITATIONS
1	Smart coatings for active corrosion protection based on multi-functional micro and nanocontainers. <i>Electrochimica Acta</i> , 2012, 82, 314-323.	2.6	340
2	Enhancement of Active Corrosion Protection via Combination of Inhibitor-Loaded Nanocontainers. <i>ACS Applied Materials &amp; Interfaces</i> , 2010, 2, 1528-1535.	4.0	302
3	Novel Inorganic Host Layered Double Hydroxides Intercalated with Guest Organic Inhibitors for Anticorrosion Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2009, 1, 2353-2362.	4.0	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. <i>Electrochimica Acta</i> , 2012, 60, 31-40.	2.6	263
5	Zn-Al layered double hydroxides as chloride nanotraps in active protective coatings. <i>Corrosion Science</i> , 2012, 55, 1-4.	3.0	242
6	Silica nanocontainers for active corrosion protection. <i>Nanoscale</i> , 2012, 4, 1287.	2.8	205
7	Nanostructured LDH-container layer with active protection functionality. <i>Journal of Materials Chemistry</i> , 2011, 21, 15464.	6.7	174
8	Self-healing protective coatings with green-chitosan based pre-layer reservoir of corrosion inhibitor. <i>Journal of Materials Chemistry</i> , 2011, 21, 4805.	6.7	134
9	Influence of preparation conditions of Layered Double Hydroxide conversion films on corrosion protection. <i>Electrochimica Acta</i> , 2014, 117, 164-171.	2.6	134
10	Chitosan-based self-healing protective coatings doped with cerium nitrate for corrosion protection of aluminum alloy 2024. <i>Progress in Organic Coatings</i> , 2012, 75, 8-13.	1.9	116
11	Corrosion protection of AA2024 by sol-gel coatings modified with MBT-loaded polyurea microcapsules. <i>Chemical Engineering Journal</i> , 2016, 283, 1108-1117.	6.6	103
12	Corrosion protection of AA2024-T3 by LDH conversion films. Analysis of SVET results. <i>Electrochimica Acta</i> , 2016, 210, 215-224.	2.6	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. <i>Journal of Solid State Chemistry</i> , 2016, 233, 158-165.	1.4	90
14	Polyelectrolyte-modified layered double hydroxide nanocontainers as vehicles for combined inhibitors. <i>RSC Advances</i> , 2015, 5, 39916-39929.	1.7	82
15	Sealing of tartaric sulfuric (TSA) anodized AA2024 with nanostructured LDH layers. <i>RSC Advances</i> , 2016, 6, 13942-13952.	1.7	76
16	A novel bilayer system comprising LDH conversion layer and sol-gel coating for active corrosion protection of AA2024. <i>Corrosion Science</i> , 2018, 143, 299-313.	3.0	76
17	Chitosan as a smart coating for corrosion protection of aluminum alloy 2024: A review. <i>Progress in Organic Coatings</i> , 2015, 89, 348-356.	1.9	75
18	Environmental behaviour and ecotoxicity of cationic surfactants towards marine organisms. <i>Journal of Hazardous Materials</i> , 2020, 392, 122299.	6.5	74

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19	Nanocontainer-based corrosion sensing coating. <i>Nanotechnology</i> , 2013, 24, 415502.	1.3	70
20	Incorporation of biocides in nanocapsules for protective coatings used in maritime applications. <i>Chemical Engineering Journal</i> , 2015, 270, 150-157.	6.6	68
21	PEO Coatings with Active Protection Based on In-Situ Formed LDH-Nanocontainers. <i>Journal of the Electrochemical Society</i> , 2017, 164, C36-C45.	1.3	67
22	Control of crystallite and particle size in the synthesis of layered double hydroxides: Macromolecular insights and a complementary modeling tool. <i>Journal of Colloid and Interface Science</i> , 2016, 468, 86-94.	5.0	66
23	Layered double hydroxides (LDHs) as functional materials for the corrosion protection of aluminum alloys: A review. <i>Applied Materials Today</i> , 2020, 21, 100857.	2.3	65
24	Anion exchange in Zn-Al layered double hydroxides: In situ X-ray diffraction study. <i>Chemical Physics Letters</i> , 2010, 495, 73-76.	1.2	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. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 6113-6129.	1.3	60
26	Functionalized chitosan-based coatings for active corrosion protection. <i>Surface and Coatings Technology</i> , 2013, 226, 51-59.	2.2	59
27	Chitosan as a Smart Coating for Controlled Release of Corrosion Inhibitor 2-Mercaptobenzothiazole. <i>ECS Electrochemistry Letters</i> , 2013, 2, C19-C22.	1.9	59
28	Active sensing coating for early detection of corrosion processes. <i>RSC Advances</i> , 2014, 4, 17780.	1.7	56
29	Synergetic active corrosion protection of AA2024-T3 by 2D- anionic and 3D-cationic nanocontainers loaded with Ce and mercaptobenzothiazole. <i>Corrosion Science</i> , 2018, 135, 35-45.	3.0	55
30	Comparative X-ray diffraction and infrared spectroscopy study of Zn-Al layered double hydroxides: Vanadate vs nitrate. <i>Chemical Physics</i> , 2012, 397, 102-108.	0.9	51
31	Improving the functionality and performance of AA2024 corrosion sensing coatings with nanocontainers. <i>Chemical Engineering Journal</i> , 2018, 341, 526-538.	6.6	51
32	Elucidating Structure-Property Relationships in Aluminum Alloy Corrosion Inhibitors by Machine Learning. <i>Journal of Physical Chemistry C</i> , 2020, 124, 5624-5635.	1.5	46
33	Third-Order Nonlinear Optical Properties of DA-salen-Type Nickel(II) and Copper(II) Complexes. <i>European Journal of Inorganic Chemistry</i> , 2006, 2006, 3425-3433.	1.0	45
34	A critical review on the production and application of graphene and graphene-based materials in anti-corrosion coatings. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2022, 47, 309-355.	6.8	45
35	Cerium molybdate nanowires for active corrosion protection of aluminium alloys. <i>Corrosion Science</i> , 2012, 58, 41-51.	3.0	44
36	Efficacy and Ecotoxicity of Novel Anti-Fouling Nanomaterials in Target and Non-Target Marine Species. <i>Marine Biotechnology</i> , 2017, 19, 164-174.	1.1	41

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37	Functionalised novel gemini surfactants as corrosion inhibitors for mild steel in 50 mM NaCl: Experimental and theoretical insights. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 580, 123699.	2.3	37
38	Correlating structure and ion recognition properties of [Ni(salen)]-based polymer films. <i>Journal of Electroanalytical Chemistry</i> , 2007, 610, 46-56.	1.9	35
39	Hierarchically organized Li-Al-LDH nano-flakes: a low-temperature approach to seal porous anodic oxide on aluminum alloys. <i>RSC Advances</i> , 2017, 7, 35357-35367.	1.7	34
40	Toxicity of innovative anti-fouling nano-based solutions to marine species. <i>Environmental Science: Nano</i> , 2019, 6, 1418-1429.	2.2	34
41	Antimicrofouling Efficacy of Innovative Inorganic Nanomaterials Loaded with Booster Biocides. <i>Journal of Marine Science and Engineering</i> , 2018, 6, 6.	1.2	32
42	Preparation and characterization of poly[Ni(salen)(crown receptor)]/multi-walled carbon nanotube composite films. <i>Electrochimica Acta</i> , 2008, 53, 6722-6731.	2.6	30
43	Modulating spectroelectrochemical properties of [Ni(salen)] polymeric films at molecular level. <i>Synthetic Metals</i> , 2011, 161, 680-691.	2.1	30
44	Mechanisms of Localized Corrosion Inhibition of AA2024 by Cerium Molybdate Nanowires. <i>Journal of Physical Chemistry C</i> , 2013, 117, 5811-5823.	1.5	30
45	How Density Functional Theory Surface Energies May Explain the Morphology of Particles, Nanosheets, and Conversion Films Based on Layered Double Hydroxides. <i>Journal of Physical Chemistry C</i> , 2017, 121, 2211-2220.	1.5	29
46	Structural and electrochemical characterisation of [Pd(salen)]-type conducting polymer films. <i>Electrochimica Acta</i> , 2010, 55, 7726-7736.	2.6	28
47	Use of ZnAl-Layered Double Hydroxide (LDH) to Extend the Service Life of Reinforced Concrete. <i>Materials</i> , 2020, 13, 1769.	1.3	28
48	A molecular dynamics framework to explore the structure and dynamics of layered double hydroxides. <i>Applied Clay Science</i> , 2018, 163, 164-177.	2.6	27
49	Toxicity of engineered micro- and nanomaterials with antifouling properties to the brine shrimp <i>Artemia salina</i> and embryonic stages of the sea urchin <i>Paracentrotus lividus</i> . <i>Environmental Pollution</i> , 2019, 251, 530-537.	3.7	27
50	Thermal Behavior of Layered Double Hydroxide Zn-Al-Pyovanadate: Composition, Structure Transformations, and Recovering Ability. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4152-4157.	1.5	26
51	Gold nanorods induce early embryonic developmental delay and lethality in zebrafish ( <i>Danio rerio</i> ). <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 1007-1014.	1.1	24
52	Benzotriazole encapsulation in spray-dried carboxymethylcellulose microspheres for active corrosion protection of carbon steel. <i>Progress in Organic Coatings</i> , 2020, 138, 105329.	1.9	24
53	Unusual Coordination Environment for Barium Cations in Ion Recognition Conducting Poly[Ni(salen)(receptor)] Films. <i>Langmuir</i> , 2008, 24, 8998-9005.	1.6	23
54	A computational UV-Vis spectroscopic study of the chemical speciation of 2-mercaptobenzothiazole corrosion inhibitor in aqueous solution. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	0.5	23

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55	Active Corrosion Protection by Nanoparticles and Conversion Films of Layered Double Hydroxides. <i>Corrosion</i> , 2014, 70, 436-445.	0.5	22
56	Light-Induced Proton Pumping with a Semiconductor: Vision for Photoproton Lateral Separation and Robust Manipulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 24282-24289.	4.0	22
57	Ni-Fe layered double hydroxides for oxygen evolution Reaction: Impact of Ni/Fe ratio and crystallinity. <i>Materials and Design</i> , 2021, 212, 110188.	3.3	22
58	Effects of a novel anticorrosion engineered nanomaterial on the bivalve <i>Ruditapes philippinarum</i> . <i>Environmental Science: Nano</i> , 2017, 4, 1064-1076.	2.2	21
59	Effect of Surface Treatment on the Performance of LDH Conversion Films. <i>ECS Electrochemistry Letters</i> , 2013, 3, C4-C8.	1.9	20
60	Layered Double Hydroxide Clusters as Precursors of Novel Multifunctional Layers: A Bottom-Up Approach. <i>Coatings</i> , 2019, 9, 328.	1.2	19
61	Antimicrobial activity of 2-mercaptobenzothiazole released from environmentally friendly nanostructured layered double hydroxides. <i>Journal of Applied Microbiology</i> , 2017, 122, 1207-1218.	1.4	18
62	Layered materials as nanocontainers for active corrosion protection: A brief review. <i>Applied Clay Science</i> , 2022, 225, 106537.	2.6	17
63	Solid-State Electrochromic Cells Based on [M(salen)]-Derived Electroactive Polymer Films. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, J114.	2.2	15
64	A novel approach for immobilization of polyhexamethylene biguanide within silica capsules. <i>RSC Advances</i> , 2015, 5, 92656-92663.	1.7	15
65	Chitosan Microspheres as Carriers for pH-Indicating Species in Corrosion Sensing. <i>Macromolecular Materials and Engineering</i> , 2020, 305, 1900662.	1.7	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. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8085.	1.3	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. <i>Npj Materials Degradation</i> , 2022, 6, .	2.6	12
70	Sol-gel template synthesis of mesoporous carbon-doped TiO <sub>2</sub> with photocatalytic activity under visible light. <i>Materials Today: Proceedings</i> , 2018, 5, 17422-17430.	0.9	11
71	Can the toxicity of polyethylene microplastics and engineered nanoclays on flatfish ( <i>Solea</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 804, 150188.	3.9	11
72	Hexacyanoferrate-Intercalated Layered Double Hydroxides as Nanoadditives for the Detection of Early-Stage Corrosion of Steel: The Revival of Prussian blue. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 2063-2073.	1.0	10

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73	Synthesis of ZnO mesoporous powders and their application in dye photodegradation. <i>Materials Today: Proceedings</i> , 2018, 5, 17414-17421.	0.9	9
74	Synthesis and characterization of gordaite, osakaite and simonkolleite by different methods: Comparison, phase interconversion, and potential corrosion protection applications. <i>Journal of Solid State Chemistry</i> , 2020, 291, 121595.	1.4	9
75	Experimental characterisation and modelling of mechanical behaviour of microcapsules. <i>Journal of Materials Science</i> , 2020, 55, 13457-13471.	1.7	9
76	Effects of nanostructure antifouling biocides towards a coral species in the context of global changes. <i>Science of the Total Environment</i> , 2021, 799, 149324.	3.9	9
77	Advanced protective coatings for aeronautical applications. , 2011, , 235-279.		8
78	Ion recognition properties of poly[Cu(3-MeOsaldp)] films. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 2849-2860.	1.2	8
79	Ultra-high pressure modified cellulosic fibres with antimicrobial properties. <i>Carbohydrate Polymers</i> , 2017, 175, 303-310.	5.1	8
80	Insights into corrosion behaviour of uncoated Mg alloys for biomedical applications in different aqueous media. <i>Journal of Materials Research and Technology</i> , 2021, 13, 1908-1922.	2.6	8
81	Silica-Based Nanocoating Doped by Layered Double Hydroxides to Enhance the Paperboard Barrier Properties. <i>World Journal of Nano Science and Engineering</i> , 2015, 05, 126-139.	0.3	8
82	Rhodamine-loaded TiO <sub>2</sub> particles for detection of polymer coating UV degradation. <i>Materials Today: Proceedings</i> , 2020, 20, 320-328.	0.9	7
83	Emerging trends in smart nanocontainers for corrosion applications. , 2020, , 385-398.		7
84	Smart nanosensors for early detection of corrosion: Environmental behavior and effects on marine organisms. <i>Environmental Pollution</i> , 2022, 302, 118973.	3.7	7
85	Viscoelastic characterization of benzo-crown ether functionalized electroactive films. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 268-277.	1.3	6
86	Pseudo-crown functionalized copper salen complexes forming electroactive polymers: Rationalization of Ba <sup>2+</sup> interaction using XAS and DFT. <i>Journal of Electroanalytical Chemistry</i> , 2013, 688, 308-319.	1.9	6
87	Synthesis and characterization of efficient TiO <sub>2</sub> mesoporous photocatalysts. <i>Materials Today: Proceedings</i> , 2017, 4, 11526-11533.	0.9	6
88	Anticorrosion thin film smart coatings for aluminum alloys. , 2020, , 429-454.		6
89	Unveiling the local structure of 2-mercaptobenzothiazole intercalated in (Zn <sub>2</sub> Al) layered double hydroxides. <i>Applied Clay Science</i> , 2020, 198, 105842.	2.6	5
90	The Stability and Chloride Entrapping Capacity of ZnAl-NO <sub>2</sub> LDH in High-Alkaline/Cementitious Environment. <i>Corrosion and Materials Degradation</i> , 2021, 2, 78-99.	1.0	5

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91	Nanostructured Black Nickel Coating as Replacement for Black Cr(VI) Finish. Applied Sciences (Switzerland), 2021, 11, 3924.	1.3	5
92	Electrosynthesis of Ordered TiO <sub>2</sub> Nanotubular Layers in Deep Eutectic Solvents and Their Properties. Journal of the Electrochemical Society, 2019, 166, H377-H386.	1.3	4
93	Design of 2-cyclopentenone derivatives with enhanced NF- $\kappa$ B: 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.	2.1	3
95	Influence of the Operating Conditions on the Release of Corrosion Inhibitors from Spray-Dried Carboxymethylcellulose Microspheres. Applied Sciences (Switzerland), 2022, 12, 1800.	1.3	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, , .	1.2	1
98	UV-assisted anchoring of gold nanoparticles into TiO <sub>2</sub> nanotubes for oxygen electroreduction. Journal of Electroanalytical Chemistry, 2022, 904, 115844.	1.9	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 TiO <sub>2</sub> PREPARED BY TiC OXIDATION. , 2017, , 311-314.		0
104	Data science framework to select corrosion inhibitors. , 2021, 6, .		0