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List of Publications by Citations

98 papers	3,687 citations	31 h-index	59 g-index
108 ext. papers	4,223 ext. citations	5.2 avg, IF	5.38 L-index

#	Paper	IF	Citations
98	Smart coatings for active corrosion protection based on multi-functional micro and nanocontainers. *Electrochimica Acta*, **2012**, 82, 314-323	6.7	281
97	Enhancement of active corrosion protection via combination of inhibitor-loaded nanocontainers. *ACS Applied Materials & Interfaces*, **2010**, 2, 1528-35	9.5	266
96	Novel inorganic host layered double hydroxides intercalated with guest organic inhibitors for anticorrosion applications. *ACS Applied Materials & Interfaces*, **2009**, 1, 2353-62	9.5	235
95	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
94	Zn/Al layered double hydroxides as chloride nanotraps in active protective coatings. *Corrosion Science*, **2012**, 55, 1-4	6.8	201
93	Silica nanocontainers for active corrosion protection. *Nanoscale*, **2012**, 4, 1287-98	7.7	170
92	Nanostructured LDH-container layer with active protection functionality. *Journal of Materials Chemistry*, **2011**, 21, 15464		144
91	Self-healing protective coatings with "green" chitosan based pre-layer reservoir of corrosion inhibitor. *Journal of Materials Chemistry*, **2011**, 21, 4805		119
90	Influence of preparation conditions of Layered Double Hydroxide conversion films on corrosion protection. *Electrochimica Acta*, **2014**, 117, 164-171	6.7	106
89	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	4.8	105
88	Corrosion protection of AA2024 by sol–gel coatings modified with MBT-loaded polyurea microcapsules. *Chemical Engineering Journal*, **2016**, 283, 1108-1117	14.7	87
87	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	3.3	70
86	Corrosion protection of AA2024-T3 by LDH conversion films. Analysis of SVET results. *Electrochimica Acta*, **2016**, 210, 215-224	6.7	67
85	Polyelectrolyte-modified layered double hydroxide nanocontainers as vehicles for combined inhibitors. *RSC Advances*, **2015**, 5, 39916-39929	3.7	64
84	Sealing of tartaric sulfuric (TSA) anodized AA2024 with nanostructured LDH layers. *RSC Advances*, **2016**, 6, 13942-13952	3.7	61
83	Chitosan as a smart coating for corrosion protection of aluminum alloy 2024: A review. *Progress in Organic Coatings*, **2015**, 89, 348-356	4.8	59
82	Nanocontainer-based corrosion sensing coating. *Nanotechnology*, **2013**, 24, 415502	3.4	54

81	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	9.3	51
80	Incorporation of biocides in nanocapsules for protective coatings used in maritime applications. *Chemical Engineering Journal*, **2015**, 270, 150-157	14.7	51
79	Chitosan as a Smart Coating for Controlled Release of Corrosion Inhibitor 2-Mercaptobenzothiazole. *ECS Electrochemistry Letters*, **2013**, 2, C19-C22		51
78	Anion exchange in Zn–Al layered double hydroxides: In situ X-ray diffraction study. *Chemical Physics Letters*, **2010**, 495, 73-76	2.5	51
77	PEO Coatings with Active Protection Based on In-Situ Formed LDH-Nanocontainers. *Journal of the Electrochemical Society*, **2017**, 164, C36-C45	3.9	50
76	A novel bilayer system comprising LDH conversion layer and sol-gel coating for active corrosion protection of AA2024. *Corrosion Science*, **2018**, 143, 299-313	6.8	49
75	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	6.8	46
74	Active sensing coating for early detection of corrosion processes. *RSC Advances*, **2014**, 4, 17780	3.7	46
73	Functionalized chitosan-based coatings for active corrosion protection. *Surface and Coatings Technology*, **2013**, 226, 51-59	4.4	46
72	Comparative X-ray diffraction and infrared spectroscopy study of Zn–Al layered double hydroxides: Vanadate vs nitrate. *Chemical Physics*, **2012**, 397, 102-108	2.3	45
71	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	3.6	44
70	Third-Order Nonlinear Optical Properties of DA-salen-Type Nickel(II) and Copper(II) Complexes. *European Journal of Inorganic Chemistry*, **2006**, 2006, 3425-3433	2.3	42
69	Cerium molybdate nanowires for active corrosion protection of aluminium alloys. *Corrosion Science*, **2012**, 58, 41-51	6.8	39
68	Environmental behaviour and ecotoxicity of cationic surfactants towards marine organisms. *Journal of Hazardous Materials*, **2020**, 392, 122299	12.8	37
67	Correlating structure and ion recognition properties of [Ni(salen)]-based polymer films. *Journal of Electroanalytical Chemistry*, **2007**, 610, 46-56	4.1	30
66	Mechanisms of Localized Corrosion Inhibition of AA2024 by Cerium Molybdate Nanowires. *Journal of Physical Chemistry C*, **2013**, 117, 5811-5823	3.8	27
65	Efficacy and Ecotoxicity of Novel Anti-Fouling Nanomaterials in Target and Non-Target Marine Species. *Marine Biotechnology*, **2017**, 19, 164-174	3.4	26
64	Improving the functionality and performance of AA2024 corrosion sensing coatings with nanocontainers. *Chemical Engineering Journal*, **2018**, 341, 526-538	14.7	26

63	Layered double hydroxides (LDHs) as functional materials for the corrosion protection of aluminum alloys: A review. *Applied Materials Today*, **2020**, 21, 100857	6.6	26
62	Preparation and characterization of poly[Ni(salen)(crown receptor)]/multi-walled carbon nanotube composite films. *Electrochimica Acta*, **2008**, 53, 6722-6731	6.7	25
61	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	3.8	24
60	Functionalised novel gemini surfactants as corrosion inhibitors for mild steel in 50 mM NaCl: Experimental and theoretical insights. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 580, 123699	5.1	24
59	Thermal Behavior of Layered Double Hydroxide ZnAlPyrovanadate: Composition, Structure Transformations, and Recovering Ability. *Journal of Physical Chemistry C*, **2013**, 117, 4152-4157	3.8	24
58	Hierarchically organized LiAl-LDH nano-flakes: a low-temperature approach to seal porous anodic oxide on aluminum alloys. *RSC Advances*, **2017**, 7, 35357-35367	3.7	24
57	Modulating spectroelectrochemical properties of [Ni(salen)] polymeric films at molecular level. *Synthetic Metals*, **2011**, 161, 680-691	3.6	24
56	Structural and electrochemical characterisation of [Pd(salen)]-type conducting polymer films. *Electrochimica Acta*, **2010**, 55, 7726-7736	6.7	24
55	Light-Induced Proton Pumping with a Semiconductor: Vision for Photoproton Lateral Separation and Robust Manipulation. *ACS Applied Materials & Interfaces*, **2017**, 9, 24282-24289	9.5	20
54	Antimacrofouling Efficacy of Innovative Inorganic Nanomaterials Loaded with Booster Biocides. *Journal of Marine Science and Engineering*, **2018**, 6, 6	2.4	20
53	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	9.3	19
52	Toxicity of innovative anti-fouling nano-based solutions to marine species. *Environmental Science: Nano*, **2019**, 6, 1418-1429	7.1	19
51	Active Corrosion Protection by Nanoparticles and Conversion Films of Layered Double Hydroxides. *Corrosion*, **2014**, 70, 436-445	1.8	19
50	Unusual coordination environment for barium cations in ion recognition conducting poly[Ni(salen)(receptor)] films. *Langmuir*, **2008**, 24, 8998-9005	4	19
49	A molecular dynamics framework to explore the structure and dynamics of layered double hydroxides. *Applied Clay Science*, **2018**, 163, 164-177	5.2	18
48	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*, **2021**, 1-48	10.1	17
47	Effect of Surface Treatment on the Performance of LDH Conversion Films. *ECS Electrochemistry Letters*, **2013**, 3, C4-C8		16
46	Gold nanorods induce early embryonic developmental delay and lethality in zebrafish (Danio rerio). *Journal of Toxicology and Environmental Health - Part A: Current Issues*, **2017**, 80, 672-687	3.2	16

45	Antimicrobial activity of 2-mercaptobenzothiazole released from environmentally friendly nanostructured layered double hydroxides. *Journal of Applied Microbiology*, **2017**, 122, 1207-1218	4.7	14
44	Effects of a novel anticorrosion engineered nanomaterial on the bivalve Ruditapes philippinarum. *Environmental Science: Nano*, **2017**, 4, 1064-1076	7.1	14
43	Elucidating Structure–Property Relationships in Aluminum Alloy Corrosion Inhibitors by Machine Learning. *Journal of Physical Chemistry C*, **2020**, 124, 5624-5635	3.8	14
42	Solid-State Electrochromic Cells Based on [M(salen)]-Derived Electroactive Polymer Films. *Electrochemical and Solid-State Letters*, **2010**, 13, J114		14
41	A computational UV–Vis spectroscopic study of the chemical speciation of 2-mercaptobenzothiazole corrosion inhibitor in aqueous solution. *Theoretical Chemistry Accounts*, **2016**, 135, 1	1.9	14
40	Benzotriazole encapsulation in spray-dried carboxymethylcellulose microspheres for active corrosion protection of carbon steel. *Progress in Organic Coatings*, **2020**, 138, 105329	4.8	13
39	A novel approach for immobilization of polyhexamethylene biguanide within silica capsules. *RSC Advances*, **2015**, 5, 92656-92663	3.7	11
38	Self-healing nanocoatings for corrosion control **2012**, 213-263		11
37	Use of ZnAl-Layered Double Hydroxide (LDH) to Extend the Service Life of Reinforced Concrete. *Materials*, **2020**, 13,	3.5	10
36	Layered Double Hydroxide Clusters as Precursors of Novel Multifunctional Layers: A Bottom-Up Approach. *Coatings*, **2019**, 9, 328	2.9	9
35	Ni-Fe layered double hydroxides for oxygen evolution Reaction: Impact of Ni/Fe ratio and crystallinity. *Materials and Design*, **2021**, 212, 110188	8.1	8
34	Experimental characterisation and modelling of mechanical behaviour of microcapsules. *Journal of Materials Science*, **2020**, 55, 13457-13471	4.3	6
33	Rhodamine-loaded TiO2 particles for detection of polymer coating UV degradation. *Materials Today: Proceedings*, **2020**, 20, 320-328	1.4	6
32	Smart self-healing coatings for corrosion protection of aluminium alloys **2014**, 224-274		6
31	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	4.1	6
30	Ion recognition properties of poly[Cu(3-MeOsalpd)] films. *Journal of Solid State Electrochemistry*, **2012**, 16, 2849-2860	2.6	6
29	Chitosan Microspheres as Carriers for pH-Indicating Species in Corrosion Sensing. *Macromolecular Materials and Engineering*, **2020**, 305, 1900662	3.9	6
28	Sol-gel template synthesis of mesoporous carbon-doped TiO2 with photocatalytic activity under visible light. *Materials Today: Proceedings*, **2018**, 5, 17422-17430	1.4	6

27	Synthesis of ZnO mesoporous powders and their application in dye photodegradation. *Materials Today: Proceedings*, **2018**, 5, 17414-17421	1.4	6
26	Emerging trends in smart nanocontainers for corrosion applications **2020**, 385-398		5
25	Viscoelastic characterization of benzo-crown ether functionalized electroactive films. *Physical Chemistry Chemical Physics*, **2009**, 11, 268-77	3.6	5
24	Gemini Surfactant as a Template Agent for the Synthesis of More Eco-Friendly Silica Nanocapsules. *Applied Sciences (Switzerland)*, **2020**, 10, 8085	2.6	5
23	Hexacyanoferrate-Intercalated Layered Double Hydroxides as Nanoadditives for the Detection of Early-Stage Corrosion of Steel: The Revival of Prussian blue. *European Journal of Inorganic Chemistry*, **2020**, 2020, 2063-2073	2.3	4
22	Ultra-high pressure modified cellulosic fibres with antimicrobial properties. *Carbohydrate Polymers*, **2017**, 175, 303-310	10.3	4
21	Synthesis and characterization of efficient TiO2 mesoporous photocatalysts. *Materials Today: Proceedings*, **2017**, 4, 11526-11533	1.4	4
20	Advanced protective coatings for aeronautical applications **2011**, 235-279		4
19	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	4
18	Anticorrosion thin film smart coatings for aluminum alloys **2020**, 429-454		4
17	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	3.3	4
16	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, 403-6	6.9	3
15	Design of 2-cyclopentenone derivatives with enhanced NF-Β: DNA binding inhibitory properties. *Computational and Theoretical Chemistry*, **2004**, 685, 73-82		3
14	Electrosynthesis of Ordered TiO2 Nanotubular Layers in Deep Eutectic Solvents and Their Properties. *Journal of the Electrochemical Society*, **2019**, 166, H377-H386	3.9	2
13	Unveiling the local structure of 2-mercaptobenzothiazole intercalated in (Zn2Al) layered double hydroxides. *Applied Clay Science*, **2020**, 198, 105842	5.2	2
12	Nanostructured Black Nickel Coating as Replacement for Black Cr(VI) Finish. *Applied Sciences (Switzerland)*, **2021**, 11, 3924	2.6	2
11	Can the toxicity of polyethylene microplastics and engineered nanoclays on flatfish (Solea senegalensis) be influenced by the presence of each other?. *Science of the Total Environment*, **2022**, 804, 150188	10.2	2
10	The Stability and Chloride Entrapping Capacity of ZnAl-NO2 LDH in High-Alkaline/Cementitious Environment. *Corrosion and Materials Degradation*, **2021**, 2, 78-99	2.6	1

List of Publications

9	"Smart" nanosensors for early detection of corrosion: Environmental behavior and effects on marine organisms.. *Environmental Pollution*, **2022**, 118973	9.3	1
8	Layered materials as nanocontainers for active corrosion protection: A brief review. *Applied Clay Science*, **2022**, 225, 106537	5.2	1
7	Influence of the Operating Conditions on the Release of Corrosion Inhibitors from Spray-Dried Carboxymethylcellulose Microspheres. *Applied Sciences (Switzerland)*, **2022**, 12, 1800	2.6	0
6	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	5.5	0
5	Effects of nanostructure antifouling biocides towards a coral species in the context of global changes. *Science of the Total Environment*, **2021**, 799, 149324	10.2	0
4	UV-assisted anchoring of gold nanoparticles into TiO2 nanotubes for oxygen electroreduction. *Journal of Electroanalytical Chemistry*, **2021**, 115844	4.1	
3	Brittle Coating Layers for Impact Detection in CFRP **2016**, 725-733		
2	CHARACTERIZATION OF SURFACE SPECIES ON MESOPOROUS TiO2 PREPARED BY TiC OXIDATION **2017**, 311-314		
1	Corrosion protection by nanostructured coatings **2021**, 281-307		