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List of Publications by Year
in descending order

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342 papers	20,123 citations	7069 78 h-index	17546 121 g-index
359 all docs	359 docs citations	359 times ranked	6989 citing authors

#	Article	IF	Citations
1	Ionic liquids as green and sustainable corrosion inhibitors for metals and alloys: An overview. Journal of Molecular Liquids, 2017, 233, 403-414.	2.3	431
2	Inhibitory action of Phyllanthus amarus extracts on the corrosion of mild steel in acidic media. Corrosion Science, 2008, 50, 2310-2317.	3.0	419
3	Adsorption Behavior of Glucosamine-Based, Pyrimidine-Fused Heterocycles as Green Corrosion Inhibitors for Mild Steel: Experimental and Theoretical Studies. Journal of Physical Chemistry C, 2016, 120, 11598-11611.	1.5	401
4	Some Quinoxalin-6-yl Derivatives as Corrosion Inhibitors for Mild Steel in Hydrochloric Acid: Experimental and Theoretical Studies. Journal of Physical Chemistry C, 2015, 119, 16004-16019.	1.5	381
5	Organic corrosion inhibitors for industrial cleaning of ferrous and non-ferrous metals in acidic solutions: A review. Journal of Molecular Liquids, 2018, 256, 565-573.	2.3	379
6	An overview on plant extracts as environmental sustainable and green corrosion inhibitors for metals and alloys in aggressive corrosive media. Journal of Molecular Liquids, 2018, 266, 577-590.	2.3	363
7	Quantum chemical studies on the corrosion inhibition of some sulphonamides on mild steel in acidic medium. Corrosion Science, 2009, 51, 35-47.	3.0	318
8	Inhibition of mild steel corrosion in acidic medium using synthetic and naturally occurring polymers and synergistic halide additives. Corrosion Science, 2008, 50, 1998-2006.	3.0	277
9	Substituents effect on corrosion inhibition performance of organic compounds in aggressive ionic solutions: A review. Journal of Molecular Liquids, 2018, 251, 100-118.	2.3	276
10	Electrochemical, Theoretical, and Surface Morphological Studies of Corrosion Inhibition Effect of Green Naphthyridine Derivatives on Mild Steel in Hydrochloric Acid. Journal of Physical Chemistry C, 2016, 120, 3408-3419.	1.5	270
11	Experimental, quantum chemical and Monte Carlo simulation studies on the corrosion inhibition of some alkyl imidazolium ionic liquids containing tetrafluoroborate anion on mild steel in acidic medium. Journal of Molecular Liquids, 2015, 211, 105-118.	2.3	240
12	Molecular dynamics and Monte Carlo simulations as powerful tools for study of interfacial adsorption behavior of corrosion inhibitors in aqueous phase: A review. Journal of Molecular Liquids, 2018, 260, 99-120.	2.3	240
13	Gum arabic as a potential corrosion inhibitor for aluminium in alkaline medium and its adsorption characteristics. Anti-Corrosion Methods and Materials, 2006, 53, 277-282.	0.6	207
14	Adsorption and Quantum Chemical Studies on the Inhibition Potentials of Some Thiosemicarbazides for the Corrosion of Mild Steel in Acidic Medium. International Journal of Molecular Sciences, 2010, 11, 2473-2498.	1.8	205
15	Evaluation of the inhibitory effect of methylene blue dye on the corrosion of aluminium in hydrochloric acid. Materials Chemistry and Physics, 2004, 87, 394-401.	2.0	197
16	Experimental and Quantum Chemical Studies of Some Bis(trifluoromethyl-sulfonyl) Imide Imidazolium-Based Ionic Liquids as Corrosion Inhibitors for Mild Steel in Hydrochloric Acid Solution. Industrial & Engineering Chemistry Research, 2012, 51, 13282-13299.	1.8	188
17	Synergistic effect of halide ions on the corrosion inhibition of aluminium in H2SO4 using 2-acetylphenothiazine. Materials Chemistry and Physics, 2003, 79, 58-70.	2.0	186
18	Experimental, quantum chemical and Monte Carlo simulation studies of 3,5-disubstituted-4-amino-1,2,4-triazoles as corrosion inhibitors on mild steel in acidic medium. Journal of Molecular Liquids, 2016, 218, 281-293.	2.3	176

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19	Choline based ionic liquids as sustainable corrosion inhibitors on mild steel surface in acidic medium: Gravimetric, electrochemical, surface morphology, DFT and Monte Carlo simulation studies. Applied Surface Science, 2018, 457, 134-149.	3.1	173
20	The synergistic effect of polyacrylamide and iodide ions on the corrosion inhibition of mild steel in H2SO4. Materials Chemistry and Physics, 2007, 106, 387-393.	2.0	162
21	Metronidazole as environmentally safe corrosion inhibitor for mild steel in 0.5M HCl: Experimental and theoretical investigation. Journal of Environmental Chemical Engineering, 2013, 1, 431-439.	3.3	158
22	2,4-Diamino-5-(phenylthio)-5H-chromeno [2,3-b] pyridine-3-carbonitriles as green and effective corrosion inhibitors: gravimetric, electrochemical, surface morphology and theoretical studies. RSC Advances, 2016, 6, 53933-53948.	1.7	155
23	Quantum chemical studies of some rhodanine azosulpha drugs as corrosion inhibitors for mild steel in acidic medium. International Journal of Quantum Chemistry, 2010, 110, 1003-1018.	1.0	154
24	Effect of molecular structure on the efficiency of amides and thiosemicarbazones used for corrosion inhibition of mild steel in hydrochloric acid. Materials Chemistry and Physics, 1999, 60, 79-90.	2.0	153
25	Corrosion inhibitors for ferrous and non-ferrous metals and alloys in ionic sodium chloride solutions: A review. Journal of Molecular Liquids, 2017, 248, 927-942.	2.3	151
26	Corrosion inhibition performance of newly synthesized 5-alkoxymethyl-8-hydroxyquinoline derivatives for carbon steel in 1 M HCl solution: experimental, DFT and Monte Carlo simulation studies. Physical Chemistry Chemical Physics, 2018, 20, 20167-20187.	1.3	150
27	5-(Phenylthio)-3H-pyrrole-4-carbonitriles as effective corrosion inhibitors for mild steel in 1 M HCl: Experimental and theoretical investigation. Journal of Molecular Liquids, 2015, 212, 209-218.	2.3	149
28	<scp>I</scp>-Proline-promoted synthesis of 2-amino-4-arylquinoline-3-carbonitriles as sustainable corrosion inhibitors for mild steel in 1 M HCl: experimental and computational studies. RSC Advances, 2015, 5, 85417-85430.	1.7	146
29	Experimental and theoretical studies on some selected ionic liquids with different cations/anions as corrosion inhibitors for mild steel in acidic medium. Journal of the Taiwan Institute of Chemical Engineers, 2016, 64, 252-268.	2.7	145
30	Aqueous phase environmental friendly organic corrosion inhibitors derived from one step multicomponent reactions: A review. Journal of Molecular Liquids, 2019, 275, 18-40.	2.3	145
31	Epoxy resins as anticorrosive polymeric materials: A review. Reactive and Functional Polymers, 2020, 156, 104741.	2.0	144
32	Adsorption and corrosion inhibition properties of N-{n-[1-R-5-(quinoxalin-6-yl)-4,5-dihydropyrazol-3-yl]phenyl}methanesulfonamides on mild steel in 1 M HCl: experimental and theoretical studies. RSC Advances, 2016, 6, 86782-86797.	1.7	141
33	Challenges and advantages of using plant extract as inhibitors in modern corrosion inhibition systems: Recent advancements. Journal of Molecular Liquids, 2021, 321, 114666.	2.3	140
34	New pyrimidine derivatives as efficient organic inhibitors on mild steel corrosion in acidic medium: Electrochemical, SEM, EDX, AFM and DFT studies. Journal of Molecular Liquids, 2015, 211, 135-145.	2.3	139
35	The Inhibition of aluminium corrosion in hydrochloric acid solution by exudate gum from Raphia hookeri. Desalination, 2009, 247, 561-572.	4.0	135
36	Corrosion inhibition of mild steel in 1M HCl by D-glucose derivatives of dihydropyrido [2,3-d:6,5-dâ€²] dipyrimidine-2, 4, 6, 8(1H,3H, 5H,7H)-tetraone. Scientific Reports, 2017, 7, 44432.	1.6	134

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37	5-Arylpyrimido-[4,5-b]quinoline-diones as new and sustainable corrosion inhibitors for mild steel in 1 M HCl: a combined experimental and theoretical approach. RSC Advances, 2016, 6, 15639-15654.	1.7	133
38	Electrochemical and Quantum Chemical Investigation of Some Azine and Thiazine Dyes as Potential Corrosion Inhibitors for Mild Steel in Hydrochloric Acid Solution. Industrial & Engineering Chemistry Research, 2012, 51, 12940-12958.	1.8	132
39	Theoretical studies of some sulphonamides as corrosion inhibitors for mild steel in acidic medium. International Journal of Quantum Chemistry, 2010, 110, 2614-2636.	1.0	131
40	Recent developments in sustainable corrosion inhibitors: design, performance and industrial scale applications. Materials Advances, 2021, 2, 3806-3850.	2.6	129
41	Ecoâ€friendly corrosion inhibitors: the inhibitive action of Delonix Regia extract for the corrosion of aluminium in acidic media. Anti-Corrosion Methods and Materials, 2007, 54, 219-224.	0.6	127
42	Zinc Oxide Nanocomposites of Selected Polymers: Synthesis, Characterization, and Corrosion Inhibition Studies on Mild Steel in HCl Solution. ACS Omega, 2017, 2, 8421-8437.	1.6	125
43	Green synthesis of ZnO nanoparticles using aqueous Brassica oleracea L. var. italica and the photocatalytic activity. Green Chemistry Letters and Reviews, 2019, 12, 444-457.	2.1	125
44	Experimental and computational studies on propanone derivatives of quinoxalin-6-yl-4,5-dihydropyrazole as inhibitors of mild steel corrosion in hydrochloric acid. Journal of Colloid and Interface Science, 2020, 561, 104-116.	5.0	123
45	Gingko biloba fruit extract as an eco-friendly corrosion inhibitor for J55 steel in CO2 saturated 3.5% NaCl solution. Journal of Industrial and Engineering Chemistry, 2015, 24, 219-228.	2.9	122
46	8-Hydroxyquinoline based chitosan derived carbohydrate polymer as biodegradable and sustainable acid corrosion inhibitor for mild steel: Experimental and computational analyses. International Journal of Biological Macromolecules, 2020, 155, 645-655.	3.6	120
47	Electrochemical sensor for the detection of dopamine in real samples using polyaniline/NiO, ZnO, and Fe3O4 nanocomposites on glassy carbon electrode. Journal of Electroanalytical Chemistry, 2018, 818, 236-249.	1.9	119
48	Sulfur and phosphorus heteroatomâ€containing compounds as corrosion inhibitors: An overview. Heteroatom Chemistry, 2018, 29, .	0.4	116
49	Quinoxaline derivatives as corrosion inhibitors for mild steel in hydrochloric acid medium: Electrochemical and quantum chemical studies. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 76, 109-126.	1.3	111
50	Synthesis, characterization and corrosion inhibition studies of N-phenyl-benzamides on the acidic corrosion of mild steel: Experimental and computational studies. Journal of Molecular Liquids, 2018, 251, 317-332.	2.3	111
51	Inhibitive action of Carica papaya extracts on the corrosion of mild steel in acidic media and their adsorption characteristics. Pigment and Resin Technology, 2007, 36, 134-140.	0.5	110
52	3-Amino alkylated indoles as corrosion inhibitors for mild steel in 1M HCl: Experimental and theoretical studies. Journal of Molecular Liquids, 2016, 219, 647-660.	2.3	110
53	Adsorption and Corrosion Inhibition Studies of Some Selected Dyes as Corrosion Inhibitors for Mild Steel in Acidic Medium: Gravimetric, Electrochemical, Quantum Chemical Studies and Synergistic Effect with Iodide Ions. Molecules, 2015, 20, 16004-16029.	1.7	109
54	Adsorption, synergistic inhibitive effect and quantum chemical studies of ampicillin (AMP) and halides for the corrosion of mild steel in H2SO4. Journal of Applied Electrochemistry, 2010, 40, 445-456.	1.5	108

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55	Anticorrosion performance of three newly synthesized isatin derivatives on carbon steel in hydrochloric acid pickling environment: Electrochemical, surface and theoretical studies. Journal of Molecular Liquids, 2017, 246, 302-316.	2.3	108
56	Leaves extract ofAnanas sativumas green corrosion inhibitor for aluminium in hydrochloric acid solutions. Green Chemistry Letters and Reviews, 2010, 3, 61-68.	2.1	106
57	Computational simulation and statistical analysis on the relationship between corrosion inhibition efficiency and molecular structure of some hydrazine derivatives in phosphoric acid on mild steel surface. Applied Surface Science, 2019, 491, 707-722.	3.1	106
58	Ecoâ€friendly corrosion inhibitors: inhibitive action of ethanol extracts of Garcinia kola for the corrosion of mild steel in H2SO4 solutions. Pigment and Resin Technology, 2007, 36, 299-305.	0.5	103
59	Corrosion Inhibition of Carbon Steel in HCl Solution by Some Plant Extracts. International Journal of Corrosion, 2012, 2012, 1-20.	0.6	103
60	Electrocatalytic oxidation of Epinephrine and Norepinephrine at metal oxide doped phthalocyanine/MWCNT composite sensor. Scientific Reports, 2016, 6, 26938.	1.6	103
61	Corrosion inhibition of mild steel in acidic media by some organic dyes. Materials Letters, 2005, 59, 2163-2165.	1.3	100
62	Corrosion Inhibition and Adsorption Properties of Methocarbamol on Mild Steel in Acidic Medium. Portugaliae Electrochimica Acta, 2009, 27, 13-22.	0.4	98
63	Experimental, quantum chemical calculations, and molecular dynamic simulations insight into the corrosion inhibition properties of 2-(6-methylpyridin-2-yl)oxazolo[5,4-f][1,10]phenanthroline on mild steel. Research on Chemical Intermediates, 2013, 39, 1927-1948.	1.3	97
64	Aryl sulfonamidomethylphosphonates as new class of green corrosion inhibitors for mild steel in 1M HCl: Electrochemical, surface and quantum chemical investigation. Journal of Molecular Liquids, 2015, 209, 306-319.	2.3	96
65	DGEBAâ€polyaminoamide as effective antiâ€corrosive material for 15CDV6 steel in NaCl medium: Computational and experimental studies. Journal of Applied Polymer Science, 2020, 137, 48402.	1.3	94
66	Waterâ€soluble polymers as corrosion inhibitors. Pigment and Resin Technology, 2006, 35, 346-352.	0.5	93
67	Electrochemical, thermodynamic, surface and theoretical investigation of 2-aminobenzene-1,3-dicarbonitriles as green corrosion inhibitor for aluminum in 0.5M NaOH. Journal of Molecular Liquids, 2015, 209, 767-778.	2.3	93
68	Adsorption, Thermodynamic and Quantum Chemical Studies of 1-hexyl-3-methylimidazolium Based Ionic Liquids as Corrosion Inhibitors for Mild Steel in HCl. Materials, 2015, 8, 3607-3632.	1.3	92
69	Experimental and theoretical studies on the corrosion inhibition of mild steel by some sulphonamides in aqueous HCl. RSC Advances, 2015, 5, 28743-28761.	1.7	92
70	Experimental, density functional theory and molecular dynamics supported adsorption behavior of environmental benign imidazolium based ionic liquids on mild steel surface in acidic medium. Journal of Molecular Liquids, 2019, 273, 1-15.	2.3	92
71	Epoxy pre-polymers as new and effective materials for corrosion inhibition of carbon steel in acidic medium: Computational and experimental studies. Scientific Reports, 2019, 9, 11715.	1.6	90
72	Phthalocyanine Doped Metal Oxide Nanoparticles on Multiwalled Carbon Nanotubes Platform for the detection of Dopamine. Scientific Reports, 2017, 7, 43181.	1.6	89

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73	Corrosion inhibition of carbon steel in aggressive acidic media with 1-(2-(4-chlorophenyl)-2-oxoethyl)pyridazinium bromide. Journal of Molecular Liquids, 2015, 211, 1000-1008.	2.3	88
74	Experimental and theoretical investigation of the inhibitory effect of new pyridazine derivatives for the corrosion of mild steel in 1ÂM HCl. Journal of Molecular Structure, 2017, 1136, 127-139.	1.8	87
75	Corrosion Inhibition of Aluminium Using Exudate Gum fromPachylobus edulisin the Presence of Halide Ions in HCl. E-Journal of Chemistry, 2008, 5, 355-364.	0.4	86
76	Gravimetric, Electrochemical, Surface Morphology, DFT, and Monte Carlo Simulation Studies on Three N-Substituted 2-Aminopyridine Derivatives as Corrosion Inhibitors of Mild Steel in Acidic Medium. Journal of Physical Chemistry C, 2018, 122, 11870-11882.	1.5	85
77	Studies of the antiâ€corrosive effect of Raphia hookeri exudate gumâ€halide mixtures for aluminium corrosion in acidic medium. Pigment and Resin Technology, 2008, 37, 173-182.	0.5	84
78	Transition metal nanoparticles in ionic liquids: Synthesis and stabilization. Journal of Molecular Liquids, 2019, 276, 826-849.	2.3	83
79	Adsorption characteristics of Iota-carrageenan and Inulin biopolymers as potential corrosion inhibitors at mild steel/sulphuric acid interface. Journal of Molecular Liquids, 2017, 232, 9-19.	2.3	82
80	Experimental, quantum chemical and molecular dynamic simulations studies on the corrosion inhibition of mild steel by some carbazole derivatives. Scientific Reports, 2017, 7, 2436.	1.6	82
81	Inhibitory action of methyl and phenyl thiosemicarbazone derivatives on the corrosion of mild steel in hydrochloric acid. Materials Chemistry and Physics, 1995, 40, 87-93.	2.0	80
82	Electrochemical and surface studies of some Porphines as corrosion inhibitor for J55 steel in sweet corrosion environment. Applied Surface Science, 2015, 359, 331-339.	3.1	80
83	Electrochemical, thermodynamic and quantum chemical studies of synthesized benzimidazole derivatives as corrosion inhibitors for N80 steel in hydrochloric acid. Journal of Molecular Liquids, 2016, 213, 122-138.	2.3	80
84	Electrochemical determination of serotonin in urine samples based on metal oxide nanoparticles/MWCNT on modified glassy carbon electrode. Sensing and Bio-Sensing Research, 2017, 13, 17-27.	2.2	80
85	Electrochemical, surface and computational studies on the inhibition performance of some newly synthesized 8-hydroxyquinoline derivatives containing benzimidazole moiety against the corrosion of carbon steel in phosphoric acid environment. Journal of Materials Research and Technology, 2020, 9, 727-748.	2.6	80
86	Antimicrobial and Wound Healing Properties of Polyacrylonitrile-Moringa Extract Nanofibers. ACS Omega, 2018, 3, 4791-4797.	1.6	79
87	Corrosion mitigation of J55 steel in 3.5% NaCl solution by a macrocyclic inhibitor. Applied Surface Science, 2015, 356, 341-347.	3.1	78
88	Experimental and quantum chemical studies of functionalized tetrahydropyridines as corrosion inhibitors for mild steel in 1â€¯M hydrochloric acid. Results in Physics, 2018, 9, 1481-1493.	2.0	78
89	Molecular modelling of compounds used for corrosion inhibition studies: a review. Physical Chemistry Chemical Physics, 2021, 23, 19987-20027.	1.3	78
90	Biopolymer from Tragacanth Gum as a Green Corrosion Inhibitor for Carbon Steel in 1 M HCl Solution. ACS Omega, 2017, 2, 3997-4008.	1.6	77

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91	Fabrication of polymer based epoxy resin as effective anti-corrosive coating for steel: Computational modeling reinforced experimental studies. Surfaces and Interfaces, 2020, 18, 100454.	1.5	77
92	Porphyrins as Corrosion Inhibitors for N80 Steel in 3.5% NaCl Solution: Electrochemical, Quantum Chemical, QSAR and Monte Carlo Simulations Studies. Molecules, 2015, 20, 15122-15146.	1.7	76
93	Anti-corrosive properties of 4-amino-3,5-bis(disubstituted)-1,2,4-triazole derivatives on mild steel corrosion in 2 M H3PO4 solution: Experimental and theoretical studies. Journal of Molecular Liquids, 2016, 216, 874-886.	2.3	76
94	Dissolution of cellulose in ionic liquids and their mixed cosolvents: A review. Sustainable Chemistry and Pharmacy, 2019, 13, 100162.	1.6	76
95	Quantum chemical study of the inhibition of the corrosion of mild steel in H2SO4 by some antibiotics. Journal of Molecular Modeling, 2009, 15, 1085-1092.	0.8	75
96	Corrosion inhibition and adsorption behaviour of Ocimum basilicum extract on aluminium. Pigment and Resin Technology, 2006, 35, 63-70.	0.5	74
97	Effect of halide ions on the corrosion inhibition of aluminium in alkaline medium using polyvinyl alcohol. Journal of Applied Polymer Science, 2007, 103, 2810-2816.	1.3	74
98	Polyethylene glycol and polyvinyl alcohol as corrosion inhibitors for aluminium in acidic medium. Journal of Applied Polymer Science, 2007, 105, 3363-3370.	1.3	74
99	Electrochemical detection of Epinephrine using Polyaniline nanocomposite films doped with TiO 2 and RuO 2 Nanoparticles on Multi-walled Carbon Nanotube. Electrochimica Acta, 2017, 243, 331-348.	2.6	74
100	Hybrid nanocomposite from aniline and CeO2 nanoparticles: Surface protective performance on mild steel in acidic environment. Applied Surface Science, 2015, 330, 207-215.	3.1	73
101	Investigation of the adsorption characteristics of some selected sulphonamide derivatives as corrosion inhibitors at mild steel/hydrochloric acid interface: Experimental, quantum chemical and QSAR studies. Journal of Molecular Liquids, 2016, 215, 763-779.	2.3	73
102	An Exploration about the Interaction of Mild Steel with Hydrochloric Acid in the Presence ofN-(Benzo[d]thiazole-2-yl)-1-phenylethan-1-imines. Journal of Physical Chemistry C, 2019, 123, 22897-22917.	1.5	73
103	Weight Loss, Electrochemical, Quantum Chemical Calculation, and Molecular Dynamics Simulation Studies on 2-(Benzylthio)-1,4,5-triphenyl-1H-imidazole as an Inhibitor for Carbon Steel Corrosion in Hydrochloric Acid. Industrial & Engineering Chemistry Research, 2013, 52, 14315-14327.	1.8	71
104	Non-toxic Schiff bases as efficient corrosion inhibitors for mild steel in 1 M HCl: Electrochemical, AFM, FE-SEM and theoretical studies. Journal of Molecular Liquids, 2018, 250, 88-99.	2.3	71
105	Silver Nanoparticles Mediated by Costus afer Leaf Extract: Synthesis, Antibacterial, Antioxidant and Electrochemical Properties. Molecules, 2017, 22, 701.	1.7	70
106	Effect of halide ions on the corrosion inhibition of mild steel in acidic medium using polyvinyl alcohol. Pigment and Resin Technology, 2006, 35, 284-292.	0.5	69
107	Investigation of adsorption characteristics of N,Nâ€²-[(methylimino)dimethylidyne]di-2,4-xylidine as corrosion inhibitor at mild steel/sulphuric acid interface. Journal of the Taiwan Institute of Chemical Engineers, 2012, 43, 463-472.	2.7	69
108	Experimental and quantum chemical studies of synthesized triazine derivatives as an efficient corrosion inhibitor for N80 steel in acidic medium. Journal of Molecular Liquids, 2015, 212, 151-167.	2.3	69

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109	Microwave and ultrasound irradiations for the synthesis of environmentally sustainable corrosion inhibitors: An overview. Sustainable Chemistry and Pharmacy, 2018, 10, 134-147.	1.6	69
110	Epoxy resins and their zinc composites as novel anti-corrosive materials for copper in 3% sodium chloride solution: Experimental and computational studies. Journal of Molecular Liquids, 2020, 315, 113757.	2.3	69
111	Highly functionalized epoxy macromolecule as an anti-corrosive material for carbon steel: Computational (DFT, MDS), surface (SEM-EDS) and electrochemical (OCP, PDP, EIS) studies. Journal of Molecular Liquids, 2020, 302, 112535.	2.3	69
112	Imidazoles as highly effective heterocyclic corrosion inhibitors for metals and alloys in aqueous electrolytes: A review. Journal of the Taiwan Institute of Chemical Engineers, 2020, 114, 341-358.	2.7	68
113	Molecular structural aspects of organic corrosion inhibitors: Influence of â€“CN and â€“NO2 substituents on designing of potential corrosion inhibitors for aqueous media. Journal of Molecular Liquids, 2020, 316, 113874.	2.3	67
114	Highly durable macromolecular epoxy resin as anticorrosive coating material for carbon steel in 3% NaCl: Computational supported experimental studies. Journal of Applied Polymer Science, 2020, 137, 49003.	1.3	66
115	Synthesis and application of new acetohydrazide derivatives as a corrosion inhibition of mild steel in acidic medium: Insight from electrochemical and theoretical studies. Journal of Molecular Liquids, 2015, 208, 322-332.	2.3	65
116	Pyridine based N-heterocyclic compounds as aqueous phase corrosion inhibitors: A review. Journal of the Taiwan Institute of Chemical Engineers, 2020, 117, 265-277.	2.7	65
117	A Green and Sustainable Approach for Mild Steel Acidic Corrosion Inhibition Using Leaves Extract: Experimental and DFT Studies. Journal of Bio- and Tribo-Corrosion, 2018, 4, 1.	1.2	63
118	Quinoline and its derivatives as corrosion inhibitors: A review. Surfaces and Interfaces, 2020, 21, 100634.	1.5	63
119	Comparative Investigation of Corrosion-Mitigating Behavior of Thiadiazole-Derived Bis-Schiff Bases for Mild Steel in Acid Medium: Experimental, Theoretical, and Surface Study. ACS Omega, 2020, 5, 13503-13520.	1.6	63
120	Rheological, electrochemical, surface, DFT and molecular dynamics simulation studies on the anticorrosive properties of new epoxy monomer compound for steel in 1ÂM HCl solution. RSC Advances, 2019, 9, 4454-4462.	1.7	62
121	Application of new isonicotinamides as a corrosion inhibitor on mild steel in acidic medium: Electrochemical, SEM, EDX, AFM and DFT investigations. Journal of Molecular Liquids, 2015, 212, 686-698.	2.3	60
122	N,Nâ€²-Dialkylcystine Gemini and Monomeric N-Alkyl Cysteine Surfactants as Corrosion Inhibitors on Mild Steel Corrosion in 1 M HCl Solution: A Comparative Study. ACS Omega, 2017, 2, 5691-5707.	1.6	60
123	Density and speed of sound measurements of imidazolium-based ionic liquids with acetonitrile at various temperatures. Journal of Molecular Liquids, 2014, 200, 160-167.	2.3	59
124	Poly (glycine) modified carbon paste electrode for simultaneous determination of catechol and hydroquinone: A voltammetric study. Journal of Electroanalytical Chemistry, 2018, 823, 730-736.	1.9	57
125	Experimental and computational investigations on the anti-corrosive and adsorption behavior of 7-N,Nâ€™-dialkyaminomethyl-8-Hydroxyquinolines on C40E steel surface in acidic medium. Journal of Colloid and Interface Science, 2020, 576, 330-344.	5.0	57
126	Synthesized photo-cross-linking chalcones as novel corrosion inhibitors for mild steel in acidic medium: experimental, quantum chemical and Monte Carlo simulation studies. RSC Advances, 2015, 5, 76675-76688.	1.7	56

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127	Anticorrosive properties of Hexa (3-methoxy propan-1,2-diol) cyclotri-phosphazene compound for carbon steel in 3% NaCl medium: gravimetric, electrochemical, DFT and Monte Carlo simulation studies. Heliyon, 2019, 5, e01340.	1.4	56
128	Epoxy coating as effective anti-corrosive polymeric material for aluminum alloys: Formulation, electrochemical and computational approaches. Journal of Molecular Liquids, 2022, 346, 117886.	2.3	55
129	Pyrazole derivatives as environmental benign acid corrosion inhibitors for mild steel: Experimental and computational studies. Journal of Molecular Liquids, 2020, 298, 111943.	2.3	54
130	Computational Modeling: Theoretical Predictive Tools for Designing of Potential Organic Corrosion Inhibitors. Journal of Molecular Structure, 2021, 1236, 130294.	1.8	54
131	Some Phthalocyanine and Naphthalocyanine Derivatives as Corrosion Inhibitors for Aluminium in Acidic Medium: Experimental, Quantum Chemical Calculations, QSAR Studies and Synergistic Effect of Iodide Ions. Molecules, 2015, 20, 15701-15734.	1.7	51
132	Evaluation of anti-corrosion performance of an expired semi synthetic antibiotic cefdinir for mild steel in 1â€¯M HCl medium: An experimental and theoretical study. Results in Physics, 2019, 14, 102383.	2.0	51
133	Recent developments in sustainable corrosion inhibition using ionic liquids: A review. Journal of Molecular Liquids, 2021, 321, 114484.	2.3	51
134	Effect of poly(methyl methacrylate-co-N-vinyl-2-pyrrolidone) polymer on J55 steel corrosion in 3.5% NaCl solution saturated with CO2. Journal of the Taiwan Institute of Chemical Engineers, 2015, 46, 214-222.	2.7	50
135	2-Hydroxy-Nâ€²-((Thiophene-2-yl)methylene)benzohydrazide: Ultrasound-Assisted Synthesis and Corrosion Inhibition Study. ACS Omega, 2018, 3, 4695-4705.	1.6	50
136	Inhibition performance of Glycine max, Cuscuta reflexa and Spirogyra extracts for mild steel dissolution in acidic medium: Density functional theory and experimental studies. Results in Physics, 2018, 10, 665-674.	2.0	49
137	Insights into corrosion inhibition mechanism of mild steel in 1â€‰M HCl solution by quinoxaline derivatives: electrochemical, SEM/EDAX, UV-visible, FT-IR and theoretical approaches. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 611, 125810.	2.3	48
138	Corrosion inhibition and adsorption properties of ethanol extract of Gongronema latifolium on mild steel in H₂SO₄. Pigment and Resin Technology, 2010, 39, 77-83.	0.5	47
139	Morpholine and piperazine based carboxamide derivatives as corrosion inhibitors of mild steel in HCl medium. Journal of Molecular Liquids, 2017, 230, 652-661.	2.3	47
140	Biosynthesis and Photocatalytic Properties of SnO2 Nanoparticles Prepared Using Aqueous Extract of Cauliflower. Journal of Cluster Science, 2017, 28, 1883-1896.	1.7	47
141	Synergistic effect of halide ions on the corrosion inhibition of aluminum in acidic medium by some polymers. Journal of Applied Polymer Science, 2006, 100, 2889-2894.	1.3	46
142	Density and speed of sound of 1-ethyl-3-methylimidazolium ethyl sulphate with acetic or propionic acid at different temperatures. Journal of Molecular Liquids, 2014, 199, 518-523.	2.3	46
143	A Novel Schiff Base of 3-acetyl-4-hydroxy-6-methyl-(2H)pyran-2-one and 2,2'-(ethylenedioxy)diethylamine as Potential Corrosion Inhibitor for Mild Steel in Acidic Medium. Materials, 2015, 8, 2918-2934.	1.3	46
144	Influence of 6-phenyl-3(2H)-pyridazinone and 3-chloro-6-phenylpyrazine on mild steel corrosion in 0.5ÂM HCl medium: Experimental and theoretical studies. Journal of Molecular Structure, 2017, 1149, 549-559.	1.8	46

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145	Adsorption and anticorrosive behavior of aromatic epoxy monomers on carbon steel corrosion in acidic solution: computational studies and sustained experimental studies. RSC Advances, 2019, 9, 14782-14796.	1.7	46
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