

# Hassane Lgaz

## List of Publications by Year in descending order

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151  
papers

7,765  
citations

41258

49  
h-index

64668

79  
g-index

154  
all docs

154  
docs citations

154  
times ranked

2398  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comprehensive investigation of steel corrosion inhibition at macro/micro level by ecofriendly green corrosion inhibitor in 15% HCl medium. <i>Journal of Colloid and Interface Science</i> , 2020, 560, 225-236.	5.0	266
2	Effect of electron donating functional groups on corrosion inhibition of mild steel in hydrochloric acid: Experimental and quantum chemical study. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 82, 233-251.	2.7	244
3	Molecular dynamics and Monte Carlo simulations as powerful tools for study of interfacial adsorption behavior of corrosion inhibitors in aqueous phase: A review. <i>Journal of Molecular Liquids</i> , 2018, 260, 99-120.	2.3	240
4	A new insight into corrosion inhibition mechanism of copper in aerated 3.5 wt.% NaCl solution by eco-friendly Imidazopyrimidine Dye: experimental and theoretical approach. <i>Chemical Engineering Journal</i> , 2019, 358, 725-742.	6.6	237
5	Amino acid based imidazolium zwitterions as novel and green corrosion inhibitors for mild steel: Experimental, DFT and MD studies. <i>Journal of Molecular Liquids</i> , 2017, 244, 340-352.	2.3	231
6	Thiosemicarbazide and thiocarbohydrazide functionalized chitosan as ecofriendly corrosion inhibitors for carbon steel in hydrochloric acid solution. <i>International Journal of Biological Macromolecules</i> , 2018, 107, 1747-1757.	3.6	227
7	Microwave-Induced Synthesis of Chitosan Schiff Bases and Their Application as Novel and Green Corrosion Inhibitors: Experimental and Theoretical Approach. <i>ACS Omega</i> , 2018, 3, 5654-5668.	1.6	177
8	Insights into corrosion inhibition behavior of three chalcone derivatives for mild steel in hydrochloric acid solution. <i>Journal of Molecular Liquids</i> , 2017, 238, 71-83.	2.3	171
9	Synthesis and investigation of pyran derivatives as acidizing corrosion inhibitors for N80 steel in hydrochloric acid: Theoretical and experimental approaches. <i>Journal of Alloys and Compounds</i> , 2018, 762, 347-362.	2.8	170
10	Effect of clozapine on inhibition of mild steel corrosion in 1.0 M HCl medium. <i>Journal of Molecular Liquids</i> , 2017, 225, 271-280.	2.3	167
11	Correlated experimental and theoretical study on inhibition behavior of novel quinoline derivatives for the corrosion of mild steel in hydrochloric acid solution. <i>Journal of Molecular Liquids</i> , 2017, 244, 154-168.	2.3	165
12	Eco friendly green inhibitor Gum Arabic (GA) for the corrosion control of mild steel in hydrochloric acid medium. <i>Corrosion Science</i> , 2017, 129, 70-81.	3.0	160
13	On the understanding of the adsorption of Fenugreek gum on mild steel in an acidic medium: Insights from experimental and computational studies. <i>Applied Surface Science</i> , 2019, 463, 647-658.	3.1	136
14	Polar group substituted imidazolium zwitterions as eco-friendly corrosion inhibitors for mild steel in acid solution. <i>Corrosion Science</i> , 2020, 172, 108665.	3.0	126
15	Exploring the potential role of pyrazoline derivatives in corrosion inhibition of mild steel in hydrochloric acid solution: Insights from experimental and computational studies. <i>Construction and Building Materials</i> , 2020, 233, 117320.	3.2	123
16	The inhibition action of analgin on the corrosion of mild steel in acidic medium: A combined theoretical and experimental approach. <i>Journal of Molecular Liquids</i> , 2018, 263, 454-462.	2.3	120
17	Synthesis, characterization and corrosion inhibition studies of N-phenyl-benzamides on the acidic corrosion of mild steel: Experimental and computational studies. <i>Journal of Molecular Liquids</i> , 2018, 251, 317-332.	2.3	111
18	Guar gum as efficient non-toxic inhibitor of carbon steel corrosion in phosphoric acid medium: Electrochemical, surface, DFT and MD simulations studies. <i>Journal of Molecular Structure</i> , 2017, 1145, 43-54.	1.8	109

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19	A new schiff base derivative as an effective corrosion inhibitor for mild steel in acidic media: Experimental and computer simulations studies. <i>Journal of Molecular Structure</i> , 2018, 1168, 39-48.	1.8	100
20	Understanding corrosion inhibition of mild steel in acid medium by new benzonitriles: Insights from experimental and computational studies. <i>Journal of Molecular Liquids</i> , 2018, 266, 603-616.	2.3	96
21	Computational and experimental studies on Phenylephrine as anti-corrosion substance of mild steel in acidic medium. <i>Journal of Molecular Liquids</i> , 2019, 293, 111539.	2.3	93
22	Experimental, density functional theory and molecular dynamics supported adsorption behavior of environmental benign imidazolium based ionic liquids on mild steel surface in acidic medium. <i>Journal of Molecular Liquids</i> , 2019, 273, 1-15.	2.3	92
23	Improved corrosion resistance of mild steel in acidic solution by hydrazone derivatives: An experimental and computational study. <i>Arabian Journal of Chemistry</i> , 2020, 13, 2934-2954.	2.3	89
24	Corrosion Inhibition Performance of Acarbose on Mild Steel Corrosion in Acidic Medium: An Experimental and Computational Study. <i>Arabian Journal for Science and Engineering</i> , 2020, 45, 4773-4783.	1.7	85
25	Corrosion inhibition efficiency of bronopol on aluminium in 0.5M HCl solution: Insights from experimental and quantum chemical studies. <i>Surfaces and Interfaces</i> , 2020, 20, 100542.	1.5	84
26	Corrosion inhibition performance of chromone-3-acrylic acid derivatives for low alloy steel with theoretical modeling and experimental aspects. <i>Journal of Molecular Liquids</i> , 2017, 243, 439-450.	2.3	81
27	Benzidine-based Schiff base compounds for employing as corrosion inhibitors for carbon steel in 1.0M HCl aqueous media by chemical, electrochemical and computational methods. <i>Journal of Molecular Liquids</i> , 2020, 317, 114015.	2.3	78
28	Molecular modelling of compounds used for corrosion inhibition studies: a review. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 19987-20027.	1.3	78
29	Experimental and theoretical investigation of aqueous and methanolic extracts of <i>Prunus dulcis</i> peels as green corrosion inhibitors of mild steel in aggressive chloride media. <i>Journal of Molecular Liquids</i> , 2019, 276, 347-361.	2.3	77
30	Synthesis, crystal structure, Hirshfeld surface analysis and DFT calculations of 2-[(2,3-dimethylphenyl)amino]-N <sup>+</sup> =[(E)-thiophen-2-ylmethylidene]benzohydrazide. <i>Journal of Molecular Structure</i> , 2020, 1205, 127654.	1.8	76
31	The effect of the alkyl chain length on corrosion inhibition performances of 1,2,4-triazole-based compounds for mild steel in 1.0M HCl: Insights from experimental and theoretical studies. <i>Journal of Molecular Liquids</i> , 2020, 303, 112631.	2.3	75
32	N-Methyl-N,N,N-trioctylammonium chloride as a novel and green corrosion inhibitor for mild steel in an acid chloride medium: electrochemical, DFT and MD studies. <i>New Journal of Chemistry</i> , 2017, 41, 13647-13662.	1.4	74
33	An Exploration about the Interaction of Mild Steel with Hydrochloric Acid in the Presence of N-(Benzo[thiazole-2-yl)-1-phenylethan-1-imines. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22897-22917.	1.5	73
34	Assessing the impact of electron-donating-substituted chalcones on inhibition of mild steel corrosion in HCl solution: Experimental results and molecular-level insights. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 588, 124366.	2.3	73
35	Effect of Electron Donating Functional Groups on Corrosion Inhibition of J55 Steel in a Sweet Corrosive Environment: Experimental, Density Functional Theory, and Molecular Dynamic Simulation. <i>Materials</i> , 2019, 12, 17.	1.3	71
36	Assessing corrosion inhibition characteristics of hydrazone derivatives on mild steel in HCl: Insights from electronic-scale DFT and atomic-scale molecular dynamics. <i>Journal of Molecular Liquids</i> , 2020, 308, 112998.	2.3	71

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37	Sugar based N,Nâ€²-didodecyl-N,Nâ€²digluconamideethylenediamine gemini surfactant as corrosion inhibitor for mild steel in 3.5% NaCl solution-effect of synergistic KI additive. Scientific Reports, 2018, 8, 3690.	1.6	70
38	Bolaamphiphile-class surfactants as corrosion inhibitor model compounds against acid corrosion of mild steel. Journal of Molecular Liquids, 2020, 309, 113070.	2.3	70
39	Corrosion inhibition performance of imidazolidine derivatives for J55 pipeline steel in acidic oilfield formation water: Electrochemical, surface and theoretical studies. Journal of the Taiwan Institute of Chemical Engineers, 2019, 95, 341-356.	2.7	69
40	Functionalized graphene oxide as a new generation corrosion inhibitor for industrial pickling process: DFT and experimental approach. Materials Chemistry and Physics, 2019, 236, 121727.	2.0	69
41	Inhibitory effect of sodium carboxymethylcellulose and synergistic biodegradable gemini surfactants as effective inhibitors for MS corrosion in 1 M HCl. Journal of Materials Research and Technology, 2019, 8, 4521-4533.	2.6	67
42	New phosphonate based corrosion inhibitors for mild steel in hydrochloric acid useful for industrial pickling processes: experimental and theoretical approach. New Journal of Chemistry, 2017, 41, 13114-13129.	1.4	64
43	Effective green corrosion inhibition of aluminium using analgin in acidic medium: an experimental and theoretical study. Chemical Engineering Communications, 2021, 208, 1121-1130.	1.5	64
44	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
45	Adsorptive removal of phenol using faujasite-type Y zeolite: Adsorption isotherms, kinetics and grand canonical Monte Carlo simulation studies. Journal of Molecular Liquids, 2019, 296, 111997.	2.3	62
46	Synthesis, structural and molecular characterization of 2,2-diphenyl-2H,3H,5H,6H,7H-imidazo[2,1-b][1,3]thiazin-3-one. Journal of Molecular Structure, 2019, 1197, 369-376.	1.8	60
47	Potential of Venlafaxine in the inhibition of mild steel corrosion in HCl: insights from experimental and computational studies. Chemical Papers, 2019, 73, 2255-2264.	1.0	60
48	Evaluation of 2-Mercaptobenzimidazole Derivatives as Corrosion Inhibitors for Mild Steel in Hydrochloric Acid. Metals, 2020, 10, 357.	1.0	58
49	Synthesis of a novel phenytoin derivative: Crystal structure, Hirshfeld surface analysis and DFT calculations. Journal of Molecular Structure, 2020, 1205, 127630.	1.8	56
50	Removal of phenol from aqueous solution by adsorption onto hematite ( $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> ): Mechanism exploration from both experimental and theoretical studies. Arabian Journal of Chemistry, 2020, 13, 5474-5486.	2.3	56
51	Minified dose of urispas drug as better corrosion constraint for soft steel in sulphuric acid solution. Journal of Molecular Liquids, 2018, 269, 371-380.	2.3	55
52	Enhanced corrosion inhibition of carbon steel in HCl solution by a newly synthesized hydrazone derivative: Mechanism exploration from electrochemical, XPS, and computational studies. Journal of Molecular Liquids, 2020, 315, 113805.	2.3	54
53	Corrosion Inhibition Behavior of 9-Hydroxyrisperidone as a Green Corrosion Inhibitor for Mild Steel in Hydrochloric Acid: Electrochemical, DFT and MD Simulations Studies. International Journal of Electrochemical Science, 2018, 13, 250-264.	0.5	53
54	Solvent-free microwave assisted synthesis and corrosion inhibition study of a series of hydrazones derived from thiophene derivatives: Experimental, surface and theoretical study. Journal of Molecular Liquids, 2019, 283, 788-803.	2.3	52

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55	Biopolymer dextrin and poly (vinyl acetate) based graft copolymer as an efficient corrosion inhibitor for mild steel in hydrochloric acid: Electrochemical, surface morphological and theoretical studies. <i>Journal of Molecular Liquids</i> , 2019, 275, 867-878.	2.3	50
56	Dispersive adsorption of <i>Xylopia aethiopica</i> constituents on carbon steel in acid-chloride medium: A combined experimental and theoretical approach. <i>Journal of Molecular Liquids</i> , 2018, 249, 371-388.	2.3	48
57	Electrochemical Behavior and Computational Analysis of Phenylephrine for Corrosion Inhibition of Aluminum in Acidic Medium. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 468-479.	1.1	47
58	Green Corrosion Inhibition of Mild Steel by Hydrazone Derivatives in 1.0 M HCl. <i>Coatings</i> , 2020, 10, 640.	1.2	47
59	Adsorption and Corrosion Inhibition Effect of 2-Mercaptobenzimidazole (Surfactant) on a Carbon Steel Surface in an Acidic Medium: Experimental and Monte Carlo Simulations. <i>Portugaliae Electrochimica Acta</i> , 2018, 36, 197-212.	0.4	47
60	Synthesis, characterization and corrosion inhibition studies of novel 8-hydroxyquinoline derivatives on the acidic corrosion of mild steel: Experimental and computational studies. <i>Materials Discovery</i> , 2018, 12, 43-54.	3.3	46
61	Hydrazone-based green corrosion inhibitors for API grade carbon steel in HCl: Insights from electrochemical, XPS, and computational studies. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 626, 127047.	2.3	46
62	A combined computational & electrochemical exploration of the Ammi visnaga L. extract as a green corrosion inhibitor for carbon steel in HCl solution. <i>Arabian Journal of Chemistry</i> , 2022, 15, 103573.	2.3	45
63	Synthesis and corrosion inhibition evaluation of a new schiff base hydrazone for mild steel corrosion in HCl medium: electrochemical, DFT, and molecular dynamics simulations studies. <i>Journal of Adhesion Science and Technology</i> , 2020, 34, 1283-1314.	1.4	43
64	Inhibition performances of spirocyclopropane derivatives for mild steel protection in HCl. <i>Materials Chemistry and Physics</i> , 2020, 243, 122582.	2.0	40
65	Lemon seeds as green coating material for mitigation of mild steel corrosion in acid media: Molecular dynamics simulations, quantum chemical calculations and electrochemical studies. <i>Journal of Molecular Liquids</i> , 2020, 316, 113797.	2.3	40
66	Green approach of synthesis of thiazolyl imines and their impeding behavior against corrosion of mild steel in acid medium. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 599, 124824.	2.3	39
67	Exploring the potential of a new 1,2,4-triazole derivative for corrosion protection of carbon steel in HCl: A computational and experimental evaluation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 597, 124604.	2.3	38
68	Phosphorous-based epoxy resin composition as an effective anticorrosive coating for steel. <i>International Journal of Industrial Chemistry</i> , 2018, 9, 231-240.	3.1	36
69	Experimental and theoretical explorations of S-alkylated mercaptobenzimidazole derivatives for use as corrosion inhibitors for carbon steel in HCl. <i>Journal of Molecular Liquids</i> , 2021, 331, 115708.	2.3	36
70	The corrosion inhibition and adsorption behavior of mercaptobenzimidazole and bis-mercaptobenzimidazole on carbon steel in 1.0 M HCl: Experimental and computational insights. <i>Surfaces and Interfaces</i> , 2021, 24, 101095.	1.5	36
71	Indoor and outdoor air quality analysis for the city of Nablus in Palestine: seasonal trends of PM10, PM5.0, PM2.5, and PM1.0 of residential homes. <i>Air Quality, Atmosphere and Health</i> , 2018, 11, 229-237.	1.5	35
72	Advanced quantum chemical and electrochemical analysis of ravage drugs for corrosion inhibition of mild steel. <i>Journal of Adhesion Science and Technology</i> , 2019, 33, 1066-1089.	1.4	32

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73	Exploring deep insights into the interaction mechanism of a quinazoline derivative with mild steel in HCl: electrochemical, DFT, and molecular dynamic simulation studies. <i>Journal of Adhesion Science and Technology</i> , 2019, 33, 921-944.	1.4	32
74	Evaluation of inhibitive and adsorption behavior of thiazole-4-carboxylates on mild steel corrosion in HCl. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 606, 125351.	2.3	32
75	Synthesis, structural analysis and corrosion inhibition application of a new indazole derivative on mild steel surface in acidic media complemented with DFT and MD studies. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 617, 126373.	2.3	32
76	Synthesis and evaluation of some new hydrazones as corrosion inhibitors for mild steel in acidic media. <i>Research on Chemical Intermediates</i> , 2019, 45, 2269-2286.	1.3	29
77	Unveiled understanding on corrosion inhibition mechanisms of hydrazone derivatives based on naproxen for mild steel in HCl: A joint experimental/theoretical study. <i>Journal of Molecular Liquids</i> , 2020, 320, 114442.	2.3	29
78	Ultrasound induced green synthesis of pyrazolo-pyridines as novel corrosion inhibitors useful for industrial pickling process: Experimental and theoretical approach. <i>Results in Physics</i> , 2019, 13, 102344.	2.0	28
79	Phenol adsorption mechanism on the zinc oxide surface: Experimental, cluster DFT calculations, and molecular dynamics simulations. <i>Journal of Molecular Liquids</i> , 2021, 324, 114993.	2.3	28
80	Facile preparation of new hydrazone compounds and their application for long-term corrosion inhibition of N80 steel in 15% HCl: An experimental study combined with DFTB calculations. <i>Journal of Molecular Liquids</i> , 2022, 347, 117952.	2.3	28
81	An environmentally friendly formulation based on Cannabis sativa L. seed oil for corrosion inhibition of E24 steel in HCl medium: Experimental and theoretical study. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 643, 128745.	2.3	28
82	Electrochemical and surface studies on chemically modified glucose derivatives as environmentally benign corrosion inhibitors. <i>Sustainable Chemistry and Pharmacy</i> , 2020, 16, 100260.	1.6	27
83	Chemical, Electrochemical and Computational Studies of Newly Synthesized Novel and Environmental Friendly Heterocyclic Compounds as Corrosion Inhibitors for Mild Steel in Acidic Medium. <i>Journal of Bio- and Tribo-Corrosion</i> , 2018, 4, 1.	1.2	26
84	Adsorption and anticorrosion behaviour of mild steel treated with 2-((1H-indol-2-yl)thio)-6-amino-4-phenylpyridine-3,5-dicarbonitriles in a hydrochloric acid solution: Experimental and computational studies. <i>Journal of Molecular Liquids</i> , 2019, 283, 491-506.	2.3	26
85	Interfacial adsorption behavior of quaternary phosphonium based ionic liquids on metal-electrolyte interface: Electrochemical, surface characterization and computational approaches. <i>Journal of Molecular Liquids</i> , 2020, 298, 111995.	2.3	26
86	Inhibition of C-steel Corrosion by Green Tea Extract in Hydrochloric Solution. <i>International Journal of Electrochemical Science</i> , 2017, 12, 3283-3295.	0.5	26
87	Insights into methyl orange adsorption behavior on a cadmium zeolitic-imidazolate framework Cd-ZIF-8: A joint experimental and theoretical study. <i>Arabian Journal of Chemistry</i> , 2021, 14, 102897.	2.3	25
88	Adsorption and inhibition mechanism of (Z)-4-((4-methoxybenzylidene)amino)-5-methyl-2,4-dihydro-3H-1,2,4-triazole-3-thione on carbon steel corrosion in HCl: Experimental and theoretical insights. <i>Journal of Molecular Structure</i> , 2021, 1231, 129901.	1.8	24
89	Pyrazoline derivatives as possible corrosion inhibitors for mild steel in acidic media: A combined experimental and theoretical approach. <i>Cogent Engineering</i> , 2018, 5, 1441585.	1.1	23
90	New 8-Hydroxyquinoline-Bearing Quinoxaline Derivatives as Effective Corrosion Inhibitors for Mild Steel in HCl: Electrochemical and Computational Investigations. <i>Coatings</i> , 2020, 10, 811.	1.2	23



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91	Evaluating the corrosion inhibition properties of novel 1,2,3-triazolyl nucleosides and their synergistic effect with iodide ions against mild steel corrosion in HCl: A combined experimental and computational exploration. <i>Journal of Molecular Liquids</i> , 2021, 338, 116522.	2.3	23
92	Corrosion Inhibition Activity of an Expired Antibacterial Drug in Acidic Media amid Elucidate DFT and MD Simulations. <i>Portugaliae Electrochimica Acta</i> , 2018, 36, 213-230.	0.4	23
93	Computational insights into quinoxaline-based corrosion inhibitors of steel in HCl: Quantum chemical analysis and QSPR-ANN studies. <i>Arabian Journal of Chemistry</i> , 2022, 15, 103870.	2.3	23
94	Electrochemical and theoretical performance of new synthesized pyrazole derivatives as promising corrosion inhibitors for mild steel in acid environment: Molecular structure effect on efficiency. <i>Journal of Molecular Liquids</i> , 2021, 342, 117507.	2.3	22
95	Corrosion Inhibition of Mild Steel in 1.0 M HCl by two Hydrazone Derivatives. <i>International Journal of Electrochemical Science</i> , 2019, 14, 6667-6681.	0.5	21
96	Improving corrosion inhibition potentials using two triazole derivatives for mild steel in acidic medium: Experimental and theoretical studies. <i>Materials Today: Proceedings</i> , 2019, 13, 920-930.	0.9	21
97	PVP oxime-TiO <sub>2</sub> -adenine as a hybrid material: Decent synthesis and depiction with advanced theoretical measurements for anticorrosive behavior and antibacterial potentiality. <i>Journal of Molecular Liquids</i> , 2019, 278, 438-451.	2.3	21
98	Synergistic inhibition behavior between rhodamine blue and cationic gemini surfactant on mild steel corrosion in 1 M HCl medium. <i>Journal of Molecular Structure</i> , 2021, 1228, 129751.	1.8	21
99	Enhanced removal efficiency of NaY zeolite toward phenol from aqueous solution by modification with nickel (Ni-NaY). <i>Journal of Saudi Chemical Society</i> , 2021, 25, 101224.	2.4	21
100	Corrosion protection of Q235 steel in acidic-chloride media using seed extracts of Piper guineense. <i>Journal of Molecular Liquids</i> , 2021, 330, 115619.	2.3	21
101	Cupressus arizonica fruit essential oil: A novel green inhibitor for acid corrosion of carbon steel. <i>Arabian Journal of Chemistry</i> , 2022, 15, 103849.	2.3	21
102	New N-Heterocyclic Compounds Based on 8-Hydroxyquinoline as Efficient Corrosion Inhibition for Mild Steel in HCl Solution: Experimental and Theoretical Assessments. <i>Arabian Journal for Science and Engineering</i> , 2021, 46, 257-274.	1.7	20
103	Assessment of biodegradable glycine and glutamic acid based ionic liquids as mild steel corrosion inhibitors in acid solution: an experimental and theoretical approach. <i>Journal of Molecular Structure</i> , 2021, 1240, 130505.	1.8	20
104	Towards a Deeper Understanding of the Anticorrosive Properties of Hydrazine Derivatives in Acid Medium: Experimental, DFT and MD Simulation Assessment. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 5180-5191.	1.1	19
105	Influence of sodium gluconate and cetyltrimethylammonium bromide on the corrosion behavior of duplex ( $\hat{1}\pm\hat{1}^2$ ) brass in sulfuric acid solution. <i>Materials Chemistry and Physics</i> , 2019, 227, 200-210.	2.0	19
106	Corrosion resistance of $\hat{1}\pm$ - and ( $\hat{1}\pm + \hat{1}^2$ )-Brasses in a descaling solution by a mixture of imidazole and hexadecyltrimethylammonium bromide. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 606, 125399.	2.3	18
107	Aminomethylpyridazine isomers as corrosion inhibitors for mild steel in 1M HCl: Electrochemical, DFT and Monte Carlo simulation studies. <i>Journal of Molecular Liquids</i> , 2021, 344, 117882.	2.3	18
108	Synthesis of novel hybrid quinoxaline containing triazole and acetamide moieties by azide-alkyne click chemistry: Experimental and theoretical characterization. <i>Journal of Molecular Structure</i> , 2022, 1253, 132132.	1.8	18

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109	Development of QSAR-based (MLR/ANN) predictive models for effective design of pyridazine corrosion inhibitors. <i>Materials Today Communications</i> , 2022, 30, 103163.	0.9	18
110	Efficient Adsorption Removal of an Anionic Azo Dye by Lignocellulosic Waste Material and Sludge Recycling into Combustible Briquettes. <i>Colloids and Interfaces</i> , 2022, 6, 22.	0.9	18
111	Outstanding anticorrosion and adsorption properties of 2-amino-6-methoxybenzothiazole on Q235 and X70 carbon steels: Effect of time, XPS, electrochemical and theoretical considerations. <i>Journal of Molecular Liquids</i> , 2021, 324, 114663.	2.3	16
112	Spiro [indoline-3,4-pyrano[2,3-c]pyrazole] Derivatives as Novel Class of Green Corrosion Inhibitors for Mild Steel in Hydrochloric Acid Medium: Theoretical and Experimental Approach. <i>Journal of Bio- and Tribo-Corrosion</i> , 2018, 4, 1.	1.2	14
113	The Synergistic Effect of Chloride Ion and 1,5-Diaminonaphthalene on the Corrosion Inhibition of Mild Steel in 0.5 M Sulfuric Acid: Experimental and Theoretical Insights.. <i>Surfaces and Interfaces</i> , 2018, 13, 168-177.	1.5	14
114	Synthesis, crystal structure, hirshfeld surface analysis, DFT computations and molecular dynamics study of 2-(benzyloxy)-3-phenylquinoxaline. <i>Journal of Molecular Structure</i> , 2020, 1221, 128727.	1.8	14
115	Upgrading the performances of polysulfone/polyetherimide ultrafiltration composite membranes for dyes removal: Experimental and molecular dynamics studies. <i>Journal of Molecular Liquids</i> , 2021, 331, 115743.	2.3	14
116	Polysulfone/Polyetherimide Ultrafiltration composite membranes constructed on a three-component Nylon-fiberglass-Nylon support for azo dyes removal: Experimental and molecular dynamics simulations. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 625, 126941.	2.3	14
117	New Benzohydrazide Derivative as Corrosion Inhibitor for Carbon Steel in a 1.0 M HCl Solution: Electrochemical, DFT and Monte Carlo Simulation Studies. <i>Portugaliae Electrochimica Acta</i> , 2019, 37, 147-165.	0.4	14
118	First-principles based theoretical investigation of the adsorption of alkanethiols on the iron surface: A DFT-D3 study. <i>Journal of Molecular Liquids</i> , 2022, 348, 118071.	2.3	14
119	Two Novel Benzodiazepines as Corrosion Inhibitors for Carbon Steel in Hydrochloric Acid: Experimental and Computational Studies. <i>Journal of Bio- and Tribo-Corrosion</i> , 2018, 4, 1.	1.2	13
120	A comprehensive investigation of the electrochemical behavior of nickel-aluminum bronze alloy in alkaline solution: The effect of film formation potential. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 614, 126126.	2.3	13
121	Computational investigation on interaction mechanism of sulfur mustard adsorption by zeolitic imidazolate frameworks ZIF-8 and ZIF-67: Insights from periodic and cluster DFT calculations. <i>Journal of Molecular Liquids</i> , 2021, 344, 117705.	2.3	13
122	6-phenylpyridazin-3(2H)one as New Corrosion Inhibitor for C38 Steel in 1 M HCl.. <i>International Journal of Electrochemical Science</i> , 2017, 12, 3309-3322.	0.5	13
123	Characterization and adsorption capacity of four low-cost adsorbents based on coconut, almond, walnut, and peanut shells for copper removal. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 3655-3666.	2.9	13
124	Synthesis, experimental and theoretical characterization of (E)-2-((2,3-dimethylphenyl)amino)-N-(furan-2-ylmethylene)benzohydrazide. <i>Journal of Molecular Structure</i> , 2020, 1219, 128518.	1.8	12
125	Anticorrosive properties of green-synthesized benzylidene derivatives for mild steel in hydrochloric acid: An experimental study combined with DFTB and molecular dynamics simulations. <i>Journal of Molecular Liquids</i> , 2022, 363, 119790.	2.3	12
126	Toward the development of an innovative descaling and corrosion inhibiting solutions to protect mild steel equipment: an experimental and theoretical approach. <i>Chemical Engineering Communications</i> , 2020, 207, 632-651.	1.5	11



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127	Theoretical insights about inhibition efficiencies of some 8-Hydroxyquinoline derivatives against the corrosion of mild steel. <i>Molecular Simulation</i> , 2020, 46, 1398-1404.	0.9	11
128	The effect of heterocyclization of 2-mercaptobenzimidazole on its strength of coordination to iron: A dispersion-corrected DFT study. <i>Applied Surface Science</i> , 2021, 567, 150819.	3.1	10
129	Corrosion inhibition potentiality of some benzimidazole derivatives for mild steel in hydrochloric acid: Electrochemical and weight loss studies. <i>International Journal of Corrosion and Scale Inhibition</i> , 2016, 5, 347-359.	0.5	10
130	Novel Natural Based Diazepines as Effective Corrosion Inhibitors for Carbon Steel in HCl Solution: Experimental, Theoretical and Monte Carlo Simulations. <i>Transactions of the Indian Institute of Metals</i> , 2017, 70, 2319-2333.	0.7	9
131	New spirocyclopropane derivatives: synthesis and evaluation of their performances toward corrosion inhibition of mild steel in acidic media. <i>Research on Chemical Intermediates</i> , 2020, 46, 2881-2918.	1.3	9
132	Experimental and Theoretical Studies on Inhibition of Carbon Steel Corrosion by 1,5-Diaminonaphthalene. <i>Journal of Bio- and Tribo-Corrosion</i> , 2018, 4, 1.	1.2	8
133	Insights into corrosion inhibition behavior of a triazole derivative For mild steel in hydrochloric acid solution. <i>Materials Today: Proceedings</i> , 2019, 13, 1008-1022.	0.9	8
134	Theoretical Prediction and Experimental Study of Benzimidazole Derivate as a Novel Corrosion Inhibitor for Carbon Steel in 1.0 M HCl. <i>Protection of Metals and Physical Chemistry of Surfaces</i> , 2020, 56, 1027-1038.	0.3	8
135	Inhibitory effect of a new isoniazid derivative as an effective inhibitor for mild steel corrosion in 1.0 M HCl: combined experimental and computational study. <i>Research on Chemical Intermediates</i> , 2020, 46, 2919-2950.	1.3	8
136	Green and eco-friendly montmorillonite clay for the removal of Cr(III) metal ion from aqueous environment. <i>International Journal of Environmental Science and Technology</i> , 2022, 19, 2443-2454.	1.8	8
137	Computational Methods of Corrosion Inhibition Assessment. <i>ACS Symposium Series</i> , 0, , 87-109.	0.5	8
138	Electrochemical DFT and MD Simulation Study of Substituted Imidazoles as Novel Corrosion Inhibitors for Mild Steel. <i>Portugaliae Electrochimica Acta</i> , 2019, 37, 217-239.	0.4	7
139	Effects of Cetyltrimethylammonium bromide on the Corrosion Inhibition of a Lead-free $\beta$ -Brass by Sodium Gluconate in Sulfuric Acid. <i>Journal of Electrochemical Science and Technology</i> , 2019, 10, 257-270.	0.9	7
140	Dehydration of bioethanol produced from argane pulp using pervaporation membrane process: Experimental, molecular dynamics and GCMC simulation studies. <i>Journal of Molecular Liquids</i> , 2021, 329, 115441.	2.3	6
141	Corrosion Inhibition Properties of Thiazolidinedione Derivatives for Copper in 3.5 wt.% NaCl Medium. <i>Metals</i> , 2021, 11, 1861.	1.0	6
142	Characterization of corrosion products formed on carbon steel in hydrochloric acid medium by 4-(dimethylamino)-1-(6-methoxy-6-oxohexyl)pyridinium bromide. <i>International Journal of Corrosion and Scale Inhibition</i> , 2016, 5, 209-231.	0.5	5
143	Experimental and first-principles DFT insights into the corrosion protection mechanism of carbon steel in an HCl medium by two thiazolidinedione compounds. <i>Materials Today Communications</i> , 2022, 32, 103841.	0.9	5
144	Experimental and Theoretical Studies of the Corrosion Inhibition of 4-amino-2-(4-chlorophenyl)-8-(2,2,2-trifluoroethyl)imidazole in a 1.0 M HCl Solution. <i>Portugaliae Electrochimica Acta</i> , 2018, 36, 35-52.	0.4	4

#	ARTICLE	IF	CITATIONS
145	Mild Steel Corrosion Inhibition by Furocoumarin Derivatives in Acidic Media. International Journal of Electrochemical Science, 2019, , 6699-6721.	0.5	3
146	Synthesis, Characterization and Corrosion Protection Properties of Imidazole Derivatives on Mild Steel in 1.0 M HCl. Portugaliae Electrochimica Acta, 2016, 34, 213-229.	0.4	3
147	Spectroscopic Insight into Tetrahedrally Distorted Square Planar Copper(II) Complex: XRD/HSA, Physicochemical, DFT, and Thermal Investigations. Crystals, 2021, 11, 1179.	1.0	2
148	Hemilability in neutral $RuCl_2(\hat{1}\hat{1}\hat{P}\hat{a}\hat{O})_2(N\hat{a}\hat{N})$ complexes: Physicochemical, trans/cis-isomerization, thermal and A DFT/TD-DFT. Journal of Molecular Liquids, 2021, 341, 117339.	2.3	2
149	Designing new donors organic compounds with IDIC core for photovoltaic application. Optik, 2022, 262, 169174.	1.4	2
150	Potentiodynamic Polarization Behavior and Microscopic Examination of Tungsten Carbide Hard Metal Materials in Supported Ammoniacal Medium. Portugaliae Electrochimica Acta, 2020, 38, 253-280.	0.4	1
151	Pharmaceutical drugs as corrosion inhibitors I. , 2022, , 195-210.		0