Hassane Lgaz

List of Publications by Year in Descending Order

149 papers	4,485 citations	37 h-index	62 g-index
154 ext. papers	5,787 ext. citations	4.2 avg, IF	6.37 L-index

#	Paper	IF	Citations
149	Development of QSAR-based (MLR/ANN) predictive models for effective design of pyridazine corrosion inhibitors. *Materials Today Communications*, **2022**, 30, 103163	2.5	3
148	Synthesis of novel hybrid quinoxaline containing triazole and acetamide moieties by azide-alkyne click chemistry: Experimental and theoretical characterization. *Journal of Molecular Structure*, **2022**, 1253, 132132	3.4	2
147	Cupressus arizonica fruit essential oil: A novel green inhibitor for acid corrosion of carbon steel. *Arabian Journal of Chemistry*, **2022**, 103849	5.9	3
146	Computational insights into quinoxaline-based corrosion inhibitors of steel in HCl: Quantum chemical analysis and QSPR-ANN studies. *Arabian Journal of Chemistry*, **2022**, 103870	5.9	0
145	Efficient Adsorption Removal of an Anionic Azo Dye by Lignocellulosic Waste Material and Sludge Recycling into Combustible Briquettes. *Colloids and Interfaces*, **2022**, 6, 22	3	0
144	An environmentally friendly formulation based on Cannabis sativa L. seed oil for corrosion inhibition of E24 steel in HCl medium: Experimental and theoretical study. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2022**, 643, 128745	5.1	1
143	Designing new donors organic compounds with IDIC core for photovoltaic application. *Optik*, **2022**, 262, 169174	2.5	0
142	Pharmaceutical drugs as corrosion inhibitors I **2022**, 195-210		
141	Chemical Medicines as Corrosion Inhibitors **2021**, 287-314		
140	Computational Methods of Corrosion Monitoring **2021**, 39-57		
139	A combined computational & electrochemical exploration of the Ammi visnaga L. extract as a green corrosion inhibitor for carbon steel in HCl solution. *Arabian Journal of Chemistry*, **2021**, 15, 103573	5.9	5
138	Corrosion Inhibition Properties of Thiazolidinedione Derivatives for Copper in 3.5 wt.% NaCl Medium. *Metals*, **2021**, 11, 1861	2.3	0
137	First-principles based theoretical investigation of the adsorption of alkanethiols on the iron surface: A DFT-D3 study. *Journal of Molecular Liquids*, **2021**, 348, 118071	6	2
136	Aminomethylpyridazine isomers as corrosion inhibitors for mild steel in 1 M HCl: electrochemical, DFT and Monte Carlo simulation studies. *Journal of Molecular Liquids*, **2021**, 344, 117882	6	5
135	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. *Journal of Molecular Liquids*, **2021**, 347, 117952	6	7
134	Synergistic inhibition behavior between rhodamine blue and cationic gemini surfactant on mild steel corrosion in 1 M HCl medium. *Journal of Molecular Structure*, **2021**, 1228, 129751	3.4	12
133	Enhanced removal efficiency of NaY zeolite toward phenol from aqueous solution by modification with nickel (Ni-NaY). *Journal of Saudi Chemical Society*, **2021**, 25, 101224	4.3	6

132	A comprehensive investigation of the electrochemical behavior of nickel-aluminum bronze alloy in alkaline solution: The effect of film formation potential. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 614, 126126	5.1	4
131	Corrosion protection of Q235 steel in acidic-chloride media using seed extracts of Piper guineense. *Journal of Molecular Liquids*, **2021**, 330, 115619	6	6
130	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. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 617, 126373	5.1	11
129	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. *Journal of Molecular Structure*, **2021**, 1231, 129901	3.4	7
128	Dehydration of bioethanol produced from argane pulp using pervaporation membrane process: Experimental, molecular dynamics and GCMC simulation studies. *Journal of Molecular Liquids*, **2021**, 329, 115441	6	3
127	Experimental and theoretical explorations of S-alkylated mercaptobenzimidazole derivatives for use as corrosion inhibitors for carbon steel in HCl. *Journal of Molecular Liquids*, **2021**, 331, 115708	6	13
126	The corrosion inhibition and adsorption behavior of mercaptobenzimidazole and bis-mercaptobenzimidazole on carbon steel in 1.0 M HCl: Experimental and computational insights. *Surfaces and Interfaces*, **2021**, 24, 101095	4.1	13
125	Upgrading the performances of polysulfone/polyetherimide ultrafiltration composite membranes for dyes removal: Experimental and molecular dynamics studies. *Journal of Molecular Liquids*, **2021**, 331, 115743	6	5
124	Effective green corrosion inhibition of aluminium using analgin in acidic medium: an experimental and theoretical study. *Chemical Engineering Communications*, **2021**, 208, 1121-1130	2.2	24
123	New N-Heterocyclic Compounds Based on 8-Hydroxyquinoline as Efficient Corrosion Inhibition for Mild Steel in HCl Solution: Experimental and Theoretical Assessments. *Arabian Journal for Science and Engineering*, **2021**, 46, 257-274	2.5	8
122	Insights into methyl orange adsorption behavior on a cadmium zeolitic-imidazolate framework Cd-ZIF-8: A joint experimental and theoretical study. *Arabian Journal of Chemistry*, **2021**, 14, 102897	5.9	10
121	Phenol adsorption mechanism on the zinc oxide surface: Experimental, cluster DFT calculations, and molecular dynamics simulations. *Journal of Molecular Liquids*, **2021**, 324, 114993	6	9
120	Outstanding anticorrosion and adsorption properties of 2-amino-6-methoxybenzothiazole on Q235 and X70 carbon steels: Effect of time, XPS, electrochemical and theoretical considerations. *Journal of Molecular Liquids*, **2021**, 324, 114663	6	7
119	Molecular modelling of compounds used for corrosion inhibition studies: a review. *Physical Chemistry Chemical Physics*, **2021**, 23, 19987-20027	3.6	17
118	Spectroscopic Insight into Tetrahedrally Distorted Square Planar Copper(II) Complex: XRD/HSA, Physicochemical, DFT, and Thermal Investigations. *Crystals*, **2021**, 11, 1179	2.3	1
117	Assessment of biodegradable glycine and glutamic acid based ionic liquids as mild steel corrosion inhibitors in acid solution: an experimental and theoretical approach. *Journal of Molecular Structure*, **2021**, 1240, 130505	3.4	5
116	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. *Journal of Molecular Liquids*, **2021**, 338, 116522	6	2
115	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. *Journal of Molecular Liquids*, **2021**, 344, 117705	6	3

114	Polysulfone/Polyetherimide Ultrafiltration composite membranes constructed on a three-component Nylon-fiberglass-Nylon support for azo dyes removal: Experimental and molecular dynamics simulations. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 625, 126941	5.1	5
113	Hydrazone-based green corrosion inhibitors for API grade carbon steel in HCl: Insights from electrochemical, XPS, and computational studies. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 626, 127047	5.1	12
112	Electrochemical and theoretical performance of new synthetized pyrazole derivatives as promising corrosion inhibitors for mild steel in acid environment: Molecular structure effect on efficiency. *Journal of Molecular Liquids*, **2021**, 342, 117507	6	3
111	The effect of heterocyclization of 2-mercaptobenzimidazole on its strength of coordination to iron: A dispersion-corrected DFT study. *Applied Surface Science*, **2021**, 567, 150819	6.7	2
110	Hemilability in neutral RuCl2(□P?O)2(N?N) complexes: Physicochemical, trans/cis-isomerization, thermal and A DFT/TD-DFT. *Journal of Molecular Liquids*, **2021**, 341, 117339	6	
109	Synthesis, experimental and theoretical characterization of (E)-2-((2,3-dimethylphenyl)amino)-N□(furan-2-ylmethylene)benzohydrazide. *Journal of Molecular Structure*, **2020**, 1219, 128518	3.4	2
108	Electrochemical and surface studies on chemically modified glucose derivatives as environmentally benign corrosion inhibitors. *Sustainable Chemistry and Pharmacy*, **2020**, 16, 100260	3.9	14
107	Synthesis, crystal structure, hirshfeld surface analysis, DFT computations and molecular dynamics study of 2-(benzyloxy)-3-phenylquinoxaline. *Journal of Molecular Structure*, **2020**, 1221, 128727	3.4	6
106	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	3.9	33
105	Evaluation of 2-Mercaptobenzimidazole Derivatives as Corrosion Inhibitors for Mild Steel in Hydrochloric Acid. *Metals*, **2020**, 10, 357	2.3	27
104	Green Corrosion Inhibition of Mild Steel by Hydrazone Derivatives in 1.0 M HCl. *Coatings*, **2020**, 10, 640	2.9	23
103	Exploring the potential of a new 1,2,4-triazole derivative for corrosion protection of carbon steel in HCl: A computational and experimental evaluation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 597, 124604	5.1	22
102	Polar group substituted imidazolium zwitterions as eco-friendly corrosion inhibitors for mild steel in acid solution. *Corrosion Science*, **2020**, 172, 108665	6.8	52
101	New spirocyclopropane derivatives: synthesis and evaluation of their performances toward corrosion inhibition of mild steel in acidic media. *Research on Chemical Intermediates*, **2020**, 46, 2881-2918	2.8	7
100	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. *Research on Chemical Intermediates*, **2020**, 46, 2919-2950	2.8	4
99	Corrosion Inhibition Performance of Acarbose on Mild Steel Corrosion in Acidic Medium: An Experimental and Computational Study. *Arabian Journal for Science and Engineering*, **2020**, 45, 4773-4783	2.5	35
98	Removal of phenol from aqueous solution by adsorption onto hematite (□Fe2O3): Mechanism exploration from both experimental and theoretical studies. *Arabian Journal of Chemistry*, **2020**, 13, 5474-5486	5.9	29
97	Assessing corrosion inhibition characteristics of hydrazone derivatives on mild steel in HCl: Insights from electronic-scale DFT and atomic-scale molecular dynamics. *Journal of Molecular Liquids*, **2020**, 308, 112998	6	34

96	Bolaamphiphile-class surfactants as corrosion inhibitor model compounds against acid corrosion of mild steel. *Journal of Molecular Liquids*, **2020**, 309, 113070	6	42
95	Green approach of synthesis of thiazolyl imines and their impeding behavior against corrosion of mild steel in acid medium. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 599, 124824	5.1	17
94	Corrosion inhibition efficiency of bronopol on aluminium in 0.5 M HCl solution: Insights from experimental and quantum chemical studies. *Surfaces and Interfaces*, **2020**, 20, 100542	4.1	34
93	Exploring the potential role of pyrazoline derivatives in corrosion inhibition of mild steel in hydrochloric acid solution: Insights from experimental and computational studies. *Construction and Building Materials*, **2020**, 233, 117320	6.7	75
92	Assessing the impact of electron-donating-substituted chalcones on inhibition of mild steel corrosion in HCl solution: Experimental results and molecular-level insights. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 588, 124366	5.1	46
91	Inhibition performances of spirocyclopropane derivatives for mild steel protection in HCl. *Materials Chemistry and Physics*, **2020**, 243, 122582	4.4	28
90	Synthesis of a novel phenytoin derivative: Crystal structure, Hirshfeld surface analysis and DFT calculations. *Journal of Molecular Structure*, **2020**, 1205, 127630	3.4	22
89	Synthesis, crystal structure, Hirshfeld surface analysis and DFT calculations of 2-[(2,3-dimethylphenyl)amino]-N[(E)-thiophen-2-ylmethylidene]benzohydrazide. *Journal of Molecular Structure*, **2020**, 1205, 127654	3.4	23
88	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. *Journal of Adhesion Science and Technology*, **2020**, 34, 1283-1314	2	28
87	Interfacial adsorption behavior of quaternary phosphonium based ionic liquids on metal-electrolyte interface: Electrochemical, surface characterization and computational approaches. *Journal of Molecular Liquids*, **2020**, 298, 111995	6	20
86	Unveiled understanding on corrosion inhibition mechanisms of hydrazone derivatives based on naproxen for mild steel in HCl: A joint experimental/theoretical study. *Journal of Molecular Liquids*, **2020**, 320, 114442	6	11
85	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	6	28
84	Lemon seeds as green coating material for mitigation of mild steel corrosion in acid media: Molecular dynamics simulations, quantum chemical calculations and electrochemical studies. *Journal of Molecular Liquids*, **2020**, 316, 113797	6	16
83	Theoretical Prediction and Experimental Study of Benzimidazole Derivate as a Novel Corrosion Inhibitor for Carbon Steel in 1.0 M HCl. *Protection of Metals and Physical Chemistry of Surfaces*, **2020**, 56, 1027-1038	0.9	2
82	Benzidine-based Schiff base compounds for employing as corrosion inhibitors for carbon steel in 1.0 M HCl aqueous media by chemical, electrochemical and computational methods. *Journal of Molecular Liquids*, **2020**, 317, 114015	6	36
81	The effect of the alkyl chain length on corrosion inhibition performances of 1,2,4-triazole-based compounds for mild steel in 1.0 M HCl: Insights from experimental and theoretical studies. *Journal of Molecular Liquids*, **2020**, 303, 112631	6	50
80	Evaluation of inhibitive and adsorption behavior of thiazole-4-carboxylates on mild steel corrosion in HCl. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 606, 125351	5.1	8
79	Corrosion resistance of and Brasses in a descaling solution by a mixture of imidazole and hexadecyltrimethylammonium bromide. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 606, 125399	5.1	4

78	Theoretical insights about inhibition efficiencies of some 8-Hydroxyqionoline derivatives against the corrosion of mild steel. *Molecular Simulation*, **2020**, 46, 1398-1404	2	1
77	New 8-Hydroxyquinoline-Bearing Quinoxaline Derivatives as Effective Corrosion Inhibitors for Mild Steel in HCl: Electrochemical and Computational Investigations. *Coatings*, **2020**, 10, 811	2.9	7
76	Toward the development of an innovative descaling and corrosion inhibiting solutions to protect mild steel equipment: an experimental and theoretical approach. *Chemical Engineering Communications*, **2020**, 207, 632-651	2.2	7
75	Improved corrosion resistance of mild steel in acidic solution by hydrazone derivatives: An experimental and computational study. *Arabian Journal of Chemistry*, **2020**, 13, 2934-2954	5.9	49
74	Comprehensive investigation of steel corrosion inhibition at macro/micro level by ecofriendly green corrosion inhibitor in 15% HCl medium. *Journal of Colloid and Interface Science*, **2020**, 560, 225-236	9.3	157
73	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	5.5	41
72	Improving corrosion inhibition potentials using two triazole derivatives for mild steel in acidic medium: Experimental and theoretical studies. *Materials Today: Proceedings*, **2019**, 13, 920-930	1.4	14
71	Influence of sodium gluconate and cetyltrimethylammonium bromide on the corrosion behavior of duplex (□) brass in sulfuric acid solution. *Materials Chemistry and Physics*, **2019**, 227, 200-210	4.4	10
70	Ultrasound induced green synthesis of pyrazolo-pyridines as novel corrosion inhibitors useful for industrial pickling process: Experimental and theoretical approach. *Results in Physics*, **2019**, 13, 102344	3.7	17
69	Functionalized graphene oxide as a new generation corrosion inhibitor for industrial pickling process: DFT and experimental approach. *Materials Chemistry and Physics*, **2019**, 236, 121727	4.4	41
68	Advanced quantum chemical and electrochemical analysis of ravage drugs for corrosion inhibition of mild steel. *Journal of Adhesion Science and Technology*, **2019**, 33, 1066-1089	2	19
67	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. *Journal of Molecular Liquids*, **2019**, 283, 491-506	6	19
66	Potential of Venlafaxine in the inhibition of mild steel corrosion in HCl: insights from experimental and computational studies. *Chemical Papers*, **2019**, 73, 2255-2264	1.9	39
65	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	6	32
64	Exploring deep insights into the interaction mechanism of a quinazoline derivative with mild steel in HCl: electrochemical, DFT, and molecular dynamic simulation studies. *Journal of Adhesion Science and Technology*, **2019**, 33, 921-944	2	23
63	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. *Chemical Engineering Journal*, **2019**, 358, 725-742	14.7	143
62	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	5.3	37
61	An Exploration about the Interaction of Mild Steel with Hydrochloric Acid in the Presence of N-(Benzo[d]thiazole-2-yl)-1-phenylethan-1-imines. *Journal of Physical Chemistry C*, **2019**, 123, 22897-22917	3.8	51

60	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	3.4	28
59	Corrosion Inhibition of Mild Steel in 1.0 M HCl by two Hydrazone Derivatives. *International Journal of Electrochemical Science*, **2019**, 6667-6681	2.2	13
58	Computational and experimental studies on Phenylephrine as anti-corrosion substance of mild steel in acidic medium. *Journal of Molecular Liquids*, **2019**, 293, 111539	6	56
57	Insights into corrosion inhibition behavior of a triazole derivative For mild steel in hydrochloric acid solution. *Materials Today: Proceedings*, **2019**, 13, 1008-1022	1.4	6
56	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	6	33
55	New Benzohydrazide Derivative as Corrosion Inhibitor for Carbon Steel in a 1.0 M HCl Solution: Electrochemical, DFT and Monte Carlo Simulation Studies. *Portugaliae Electrochimica Acta*, **2019**, 37, 147-165	2.4	8
54	Electrochemical DFT and MD Simulation Study of Substituted Imidazoles as Novel Corrosion Inhibitors for Mild Steel. *Portugaliae Electrochimica Acta*, **2019**, 37, 217-239	2.4	6
53	Mild Steel Corrosion Inhibition by Furocoumarin Derivatives in Acidic Media. *International Journal of Electrochemical Science*, **2019**, 6699-6721	2.2	2
52	On the understanding of the adsorption of Fenugreek gum on mild steel in an acidic medium: Insights from experimental and computational studies. *Applied Surface Science*, **2019**, 463, 647-658	6.7	89
51	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. *Journal of Molecular Liquids*, **2019**, 275, 867-878	6	28
50	Experimental and theoretical investigation of aqueous and methanolic extracts of Prunus dulcis peels as green corrosion inhibitors of mild steel in aggressive chloride media. *Journal of Molecular Liquids*, **2019**, 276, 347-361	6	49
49	PVP oxime-TiO2-adenine as a hybrid material: Decent synthesis and depiction with advanced theoretical measurements for anticorrosive behavior and antibacterial potentiality. *Journal of Molecular Liquids*, **2019**, 278, 438-451	6	9
48	Synthesis and evaluation of some new hydrazones as corrosion inhibitors for mild steel in acidic media. *Research on Chemical Intermediates*, **2019**, 45, 2269-2286	2.8	17
47	Electrochemical Behavior and Computational Analysis of Phenylephrine for Corrosion Inhibition of Aluminum in Acidic Medium. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 468-479	2.3	30
46	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	6	56
45	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. *Journal of Bio- and Tribo-Corrosion*, **2018**, 4, 1	2.9	10
44	Pyrazoline derivatives as possible corrosion inhibitors for mild steel in acidic media: A combined experimental and theoretical approach. *Cogent Engineering*, **2018**, 5, 1441585	1.5	12
43	Sugar based N,N'-didodecyl-N,N'digluconamideethylenediamine gemini surfactant as corrosion inhibitor for mild steel in 3.5% NaCl solution-effect of synergistic KI additive. *Scientific Reports*, **2018**, 8, 3690	4.9	56

42	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. *Air Quality, Atmosphere and Health*, **2018**, 11, 229-237	5.6	27
41	The inhibition action of analgin on the corrosion of mild steel in acidic medium: A combined theoretical and experimental approach. *Journal of Molecular Liquids*, **2018**, 263, 454-462	6	80
40	Experimental and Theoretical Studies on Inhibition of Carbon Steel Corrosion by 1,5-Diaminonaphthalene. *Journal of Bio- and Tribo-Corrosion*, **2018**, 4, 1	2.9	5
39	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	6	146
38	Thiosemicarbazide and thiocarbohydrazide functionalized chitosan as ecofriendly corrosion inhibitors for carbon steel in hydrochloric acid solution. *International Journal of Biological Macromolecules*, **2018**, 107, 1747-1757	7.9	172
37	Understanding corrosion inhibition of mild steel in acid medium by new benzonitriles: Insights from experimental and computational studies. *Journal of Molecular Liquids*, **2018**, 266, 603-616	6	70
36	Towards a Deeper Understanding of the Anticorrosive Properties of Hydrazine Derivatives in Acid Medium: Experimental, DFT and MD Simulation Assessment. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 5180-5191	2.3	15
35	A new schiff base derivative as an effective corrosion inhibitor for mild steel in acidic media: Experimental and computer simulations studies. *Journal of Molecular Structure*, **2018**, 1168, 39-48	3.4	60
34	Chemical, Electrochemical and Computational Studies of Newly Synthesized Novel and Environmental Friendly Heterocyclic Compounds as Corrosion Inhibitors for Mild Steel in Acidic Medium. *Journal of Bio- and Tribo-Corrosion*, **2018**, 4, 1	2.9	14
33	Minified dose of urispas drug as better corrosion constraint for soft steel in sulphuric acid solution. *Journal of Molecular Liquids*, **2018**, 269, 371-380	6	37
32	Two Novel Benzodiazepines as Corrosion Inhibitors for Carbon Steel in Hydrochloric Acid: Experimental and Computational Studies. *Journal of Bio- and Tribo-Corrosion*, **2018**, 4, 1	2.9	7
31	Experimental and Theoretical Studies of the Corrosion Inhibition of 4-amino-2-(4-chlorophenyl)-8-(2, 3-dimethoxyphenyl)-6-oxo-2, 6-dihydropyrimido [2, 1-b][1, 3] thiazine-3,7-dicarbonitrile on Carbon Steel in a 1.0 M HCl Solution. *Portugaliae Electrochimica Acta*, 2018, 36, 35-52	2.4	2
30	Adsorption and Corrosion Inhibition Effect of 2-Mercaptobenzimidazole (Surfactant) on a Carbon Steel Surface in an Acidic Medium: Experimental and Monte Carlo Simulations. *Portugaliae Electrochimica Acta*, **2018**, 36, 197-212	2.4	36
29	Corrosion Inhibition Activity of an Expired Antibacterial Drug in Acidic Media amid Elucidate DFT and MD Simulations. *Portugaliae Electrochimica Acta*, **2018**, 36, 213-230	2.4	13
28	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. *Materials*, **2018**, 12,	3.5	44
27	Effect of electron donating functional groups on corrosion inhibition of mild steel in hydrochloric acid: Experimental and quantum chemical study. *Journal of the Taiwan Institute of Chemical Engineers*, **2018**, 82, 233-251	5.3	162
26	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	6	77
25	Dispersive adsorption of Xylopia aethiopica constituents on carbon steel in acid-chloride medium: A combined experimental and theoretical approach. *Journal of Molecular Liquids*, **2018**, 249, 371-388	6	36

24	Synthesis, characterization and corrosion inhibition studies of novel 8-hydroxyquinoline derivatives on the acidic corrosion of mild steel: Experimental and computational studies. *Materials Discovery*, **2018**, 12, 43-54		38
23	Phosphorous-based epoxy resin composition as an effective anticorrosive coating for steel. *International Journal of Industrial Chemistry*, **2018**, 9, 231-240	3.1	31
22	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.. *Surfaces and Interfaces*, **2018**, 13, 168-177	4.1	9
21	Synthesis and investigation of pyran derivatives as acidizing corrosion inhibitors for N80 steel in hydrochloric acid: Theoretical and experimental approaches. *Journal of Alloys and Compounds*, **2018** , 762, 347-362	5.7	116
20	Microwave-Induced Synthesis of Chitosan Schiff Bases and Their Application as Novel and Green Corrosion Inhibitors: Experimental and Theoretical Approach. *ACS Omega*, **2018**, 3, 5654-5668	3.9	123
19	Insights into corrosion inhibition behavior of three chalcone derivatives for mild steel in hydrochloric acid solution. *Journal of Molecular Liquids*, **2017**, 238, 71-83	6	125
18	Guar gum as efficient non-toxic inhibitor of carbon steel corrosion in phosphoric acid medium: Electrochemical, surface, DFT and MD simulations studies. *Journal of Molecular Structure*, **2017**, 1145, 43-54	3.4	73
17	Novel Natural Based Diazepines as Effective Corrosion Inhibitors for Carbon Steel in HCl Solution: Experimental, Theoretical and Monte Carlo Simulations. *Transactions of the Indian Institute of Metals*, **2017**, 70, 2319-2333	1.2	5
16	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	3.6	51
15	Eco friendly green inhibitor Gum Arabic (GA) for the corrosion control of mild steel in hydrochloric acid medium. *Corrosion Science*, **2017**, 129, 70-81	6.8	102
14	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. *New Journal of Chemistry*, **2017**, 41, 13647-13662	3.6	52
13	Correlated experimental and theoretical study on inhibition behavior of novel quinoline derivatives for the corrosion of mild steel in hydrochloric acid solution. *Journal of Molecular Liquids*, **2017**, 244, 154-168	6	125
12	Corrosion inhibition performance of chromone-3-acrylic acid derivatives for low alloy steel with theoretical modeling and experimental aspects. *Journal of Molecular Liquids*, **2017**, 243, 439-450	6	63
11	Amino acid based imidazolium zwitterions as novel and green corrosion inhibitors for mild steel: Experimental, DFT and MD studies. *Journal of Molecular Liquids*, **2017**, 244, 340-352	6	166
10	Effect of clozapine on inhibition of mild steel corrosion in 1.0 M HCl medium. *Journal of Molecular Liquids*, **2017**, 225, 271-280	6	123
9	Characterization of corrosion products formed on carbon steel in hydrochloric acid medium by 4-(dimethylamino)-1-(6-methoxy- 6-oxohexyl)pyridinium bromide. *International Journal of Corrosion and Scale Inhibition*, **2016**, 5, 209-231	2.2	3
8	Corrosion inhibition potentiality of some benzimidazole derivatives for mild steel in hydrochloric acid: Electrochemical and weight loss studies. *International Journal of Corrosion and Scale Inhibition*, **2016**, 5, 347-359	2.2	8
7	Synthesis, Characterization and Corrosion Protection Properties of Imidazole Derivatives on Mild Steel in 1.0 M HCl. *Portugaliae Electrochimica Acta*, **2016**, 34, 213-229	2.4	3

6	6-phenylpyridazin-3(2H)one as New Corrosion Inhibitor for C38 Steel in 1 M HCl.. *International Journal of Electrochemical Science*,3309-3322	2.2	3
5	Inhibition of C-steel Corrosion by Green Tea Extract in Hydrochloric Solution. *International Journal of Electrochemical Science*,3283-3295	2.2	16
4	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*,250-264	2.2	29
3	Green and eco-friendly montmorillonite clay for the removal of Cr(III) metal ion from aqueous environment. *International Journal of Environmental Science and Technology*,1	3.3	1
2	Characterization and adsorption capacity of four low-cost adsorbents based on coconut, almond, walnut, and peanut shells for copper removal. *Biomass Conversion and Biorefinery*,1	2.3	0
1	Computational Methods of Corrosion Inhibition Assessment. *ACS Symposium Series*,87-109	0.4	0