Ime B Obot

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

203 papers	11,197 citations	58 h-index	98 g-index
208 ext. papers	13,113 ext. citations	4.6 avg, IF	7.21 L-index

#	Paper	IF	Citations
203	The role of some triazoles on the corrosion inhibition of C1020 steel and copper in a desalination descaling solution. *Desalination*, **2022**, 527, 115551	10.3	1
202	Molecular Modeling for Corrosion Inhibitor Design **2022**, 259-278		
201	1,12-Dodecyldiyl-bis(dimethylalkylammonium bromide) compounds anticorrosion property on C1018/15% HCl solution interface: Experimental, molecular dynamics simulation, and DFT studies. *Journal of Molecular Liquids*, **2022**, 346, 118332	6	1
200	Atomistic simulation of polymer-cement interactions: Progress and research challenges. *Construction and Building Materials*, **2022**, 327, 126881	6.7	1
199	Elucidation of corrosion inhibition property of compounds isolated from Butanolic Date Palm Leaves extract for low carbon steel in 15% HCl solution: Experimental and theoretical approaches. *Journal of Molecular Liquids*, **2022**, 356, 119002	6	1
198	Density functional theory and molecular dynamics simulation of the corrosive particle diffusion in pyrimidine and its derivatives films. *Computational Materials Science*, **2022**, 210, 111428	3.2	0
197	Effect of Molecular Structure of two Fluorescein Molecules on the Corrosion Inhibition of Mild Steel in 1 M HCl solution. *Journal of Molecular Liquids*, **2022**, 119311	6	0
196	Modified-polyaspartic acid derivatives as effective corrosion inhibitor for C1018 steel in 3.5% NaCl saturated CO2 brine solution. *Journal of the Taiwan Institute of Chemical Engineers*, **2022**, 135, 104393	5.3	1
195	Mechanistic evaluation of adsorption and corrosion inhibition capabilities of novel indoline compounds for oil well/tubing steel in 15% HCl. *Chemical Engineering Journal*, **2021**, 133481	14.7	6
194	A novel trans-esterified water soluble hyperbranched polymer for surface protection of X60 steel: Experimental and theoretical approach. *Journal of Molecular Liquids*, **2021**, 118091	6	0
193	Theoretical, electrochemical and computational inspection for anti-corrosion activity of triazepine derivatives on mild steel in HCl medium. *Journal of Molecular Liquids*, **2021**, 348, 118075	6	0
192	Corrosion challenges in petroleum refinery operations: Sources, mechanisms, mitigation, and future outlook. *Journal of Saudi Chemical Society*, **2021**, 25, 101370	4.3	3
191	Date palm leaves extract as a green and sustainable corrosion inhibitor for low carbon steel in 15 wt.% HCl solution: the role of extraction solvent on inhibition effect. *Environmental Science and Pollution Research*, **2021**, 28, 40879-40894	5.1	5
190	Top of the line corrosion: causes, mechanisms, and mitigation using corrosion inhibitors. *Arabian Journal of Chemistry*, **2021**, 14, 103116	5.9	11
189	Effect of Intensifier Additives on the Performance of Butanolic Extract of Date Palm Leaves against the Corrosion of API 5L X60 Carbon Steel in 15 wt.% HCl Solution. *Sustainability*, **2021**, 13, 5569	3.6	6
188	Thioglycoluril derivative as a new and effective corrosion inhibitor for low carbon steel in a 1 M HCl medium: Experimental and theoretical investigation. *Journal of Molecular Structure*, **2021**, 1234, 130165	3.4	25
187	Influence of hydrodynamic condition on 1,3,5-tris(4-methoxyphenyl)-1,3,5-triazinane as a novel corrosion inhibitor formulation for oil and gas industry. *Corrosion Engineering Science and Technology*, **2021**, 56, 154-161	1.7	5

186	Banana leaves water extracts as inhibitor for X70 steel corrosion in HCl medium. *Journal of Molecular Liquids*, **2021**, 327, 114828	6	16
185	Mitigation of corrosion in petroleum oil well/tubing steel using pyrimidines as efficient corrosion inhibitor: Experimental and theoretical investigation. *Materials Today Communications*, **2021**, 26, 101862	2.5	16
184	The inhibition of type 304LSS general corrosion in hydrochloric acid by the New Fuchsin compound. *Corrosion Science*, **2021**, 178, 109072	6.8	4
183	Potential of dibenzo-18-crown-6-ether derivatives as a corrosion inhibitor on mild steel in HCl medium: electrochemical and computational approaches. *New Journal of Chemistry*, **2021**, 45, 6826-6842	3.6	4
182	Under-Deposit Corrosion on Steel Pipeline Surfaces: Mechanism, Mitigation and Current Challenges. *Journal of Bio- and Tribo-Corrosion*, **2021**, 7, 1	2.9	3
181	Corrosion challenges and prevention in Ethyl Acetate (EA) production and related processes An overview. *Engineering Failure Analysis*, **2021**, 127, 105511	3.2	3
180	Molecular Simulation of Cement-based Materials and Their Properties: A Review. *Engineering*, **2021**,	9.7	5
179	Mechanistic Study of Polyepoxy Succinic Acid (PESA) as Green Corrosion Inhibitor on Carbon Steel in Aerated NaCl Solution. *Materials Today Communications*, **2021**, 29, 102848	2.5	2
178	Corrosion inhibition of eco-friendly nitrogen-doped carbon dots for carbon steel in acidic media: Performance and mechanism investigation. *Journal of Molecular Liquids*, **2021**, 342, 117583	6	10
177	Inhibitive effect of different solvent fractions of bamboo shoots extract on the corrosion of mild steel in 0.5 mol/L H2SO4 solution. *Journal of Molecular Structure*, **2021**, 1243, 130852	3.4	3
176	Chromeno-carbonitriles as corrosion inhibitors for mild steel in acidic solution: electrochemical, surface and computational studies.. *RSC Advances*, **2021**, 11, 2462-2475	3.7	9
175	Impact of selected ionic liquids on corrosion protection of mild steel in acidic medium: Experimental and computational studies. *Journal of Molecular Liquids*, **2020**, 314, 113609	6	23
174	Green corrosion inhibitor for oilfield application II: The time evolution effect on the sweet corrosion of API X60 steel in synthetic brine and the inhibition performance of 2-(2-pyridyl) benzimidazole under turbulent hydrodynamics. *Corrosion Science*, **2020**, 168, 108589	6.8	23
173	Investigation on corrosion protection behavior and adsorption of carbohydrazide-pyrazole compounds on mild steel in 15% HCl solution: Electrochemical and computational approach. *Journal of Molecular Liquids*, **2020**, 314, 113513	6	31
172	Impact of Degree of Hydrophilicity of Pyridinium Bromide Derivatives on HCl Pickling of X-60 Mild Steel: Experimental and Theoretical Evaluations. *Coatings*, **2020**, 10, 185	2.9	12
171	Effective acid corrosion inhibitors for X60 steel under turbulent flow condition based on benzimidazoles: electrochemical, theoretical, SEM, ATR-IR and XPS investigations. *European Physical Journal Plus*, **2020**, 135, 1	3.1	6
170	Preparation of Silver/Chitosan Nanofluids Using Selected Plant Extracts: Characterization and Antimicrobial Studies Against Gram-Positive and Gram-Negative Bacteria. *Materials*, **2020**, 13,	3.5	6
169	Investigations on eco-friendly corrosion inhibitors for mild steel in acid environment: Electrochemical, DFT and Monte Carlo Simulation approach. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 599, 124881	5.1	42

168	Inhibition Performances of Nicotinamide Against Aluminum Corrosion in an Acidic Medium. *Portugaliae Electrochimica Acta*, **2020**, 38, 107-123	2.4	9
167	Insight into the nature of the ionic interactions between some aldehydes and Ni-W alloy: A theoretical study. *Materials Today Communications*, **2020**, 22, 100693	2.5	1
166	Corrosion inhibition effect of a benzimidazole derivative on heat exchanger tubing materials during acid cleaning of multistage flash desalination plants. *Desalination*, **2020**, 479, 114283	10.3	20
165	Exploration of natural polymers for use as green corrosion inhibitors for AZ31 magnesium alloy in saline environment. *Carbohydrate Polymers*, **2020**, 230, 115466	10.3	48
164	Ionic liquids derived from α-amino acid ester salts as potent green corrosion inhibitors for mild steel in 1M HCl. *Journal of Molecular Liquids*, **2020**, 318, 113982	6	46
163	Development of a green corrosion inhibitor for use in acid cleaning of MSF desalination plant. *Desalination*, **2020**, 495, 114675	10.3	14
162	Experimental, DFT and QSAR models for the discovery of new pyrazines corrosion inhibitors for steel in oilfield acidizing environment. *International Journal of Electrochemical Science*, **2020**, 9066-9080	2.2	2
161	Investigation and comparative study of the quantum molecular descriptors derived from the theoretical modeling and Monte Carlo simulation of two new macromolecular polyepoxide architectures TGEEBA and HGEMDA. *Journal of King Saud University - Science*, **2020**, 32, 667-676	3.6	33
160	Exploring the effect of mono- and di-fluorinated triphenylamine-based molecules as electron donors for dye-sensitised solar cells. *Molecular Simulation*, **2020**, 46, 41-53	2	5
159	High temperature sweet corrosion and inhibition in the oil and gas industry: Progress, challenges and future perspectives. *Journal of Petroleum Science and Engineering*, **2020**, 185, 106469	4.4	17
158	Highly efficient corrosion inhibitor for C1020 carbon steel during acid cleaning in multistage flash (MSF) desalination plant. *Desalination*, **2019**, 470, 114100	10.3	21
157	Towards Understanding the Anticorrosive Mechanism of Novel Surfactant Based on Mentha pulegium Oil as Eco-friendly Bio-source of Mild Steel in Acid Medium: a Combined DFT and Molecular Dynamics Investigation. *Chemical Research in Chinese Universities*, **2019**, 35, 85-100	2.2	16
156	Theoretical and experimental investigation of two alkyl carboxylates as corrosion inhibitors for steel in acidic medium. *Journal of Molecular Liquids*, **2019**, 279, 190-207	6	30
155	Anticorrosive property of heterocyclic based epoxy resins on carbon steel corrosion in acidic medium: Electrochemical, surface morphology, DFT and Monte Carlo simulation studies. *Journal of Molecular Liquids*, **2019**, 287, 110977	6	31
154	Electrochemical kinetics, molecular dynamics, adsorption and anticorrosion behavior of melatonin biomolecule on steel surface in acidic medium. *Bioelectrochemistry*, **2019**, 129, 42-53	5.6	26
153	Effect of substituent dependent molecular structure on anti-corrosive behavior of one-pot multicomponent synthesized pyrimido [2,1-B] benzothiazoles: Computer modelling supported experimental studies. *Journal of Molecular Liquids*, **2019**, 287, 110972	6	24
152	Electrochemical noise (EN) technique: review of recent practical applications to corrosion electrochemistry research. *Journal of Adhesion Science and Technology*, **2019**, 33, 1453-1496	2	23
151	Hexamethylene-1,6-bis(N-D-glucopyranosylamine) as a novel corrosion inhibitor for oil and gas industry: electrochemical and computational analysis. *New Journal of Chemistry*, **2019**, 43, 7282-7293	3.6	52

150	Empirical and theoretical investigations on the corrosion inhibition characteristics of mild steel by three new Schiff base derivatives. *Journal of Adhesion Science and Technology*, **2019**, 33, 1139-1168	2	32
149	Functionalized 2-hydrazinobenzothiazole with carbohydrates as a corrosion inhibitor: electrochemical, XPS, DFT and Monte Carlo simulation studies. *Materials Chemistry Frontiers*, **2019**, 3, 931-940	7.8	43
148	Newly synthesized pyrimidine compound as CO2 corrosion inhibitor for steel in highly aggressive simulated oilfield brine. *Journal of Adhesion Science and Technology*, **2019**, 33, 1226-1247	2	18
147	A critical review on the recent studies on plant biomaterials as corrosion inhibitors for industrial metals. *Journal of Industrial and Engineering Chemistry*, **2019**, 76, 91-115	6.3	102
146	Studies of the anticorrosion property of a newly synthesized Green isoxazolidine for API 5L X60 steel in acid environment. *Journal of Materials Research and Technology*, **2019**, 8, 4399-4416	5.5	19
145	Alternative corrosion inhibitor formulation for carbon steel in CO2-saturated brine solution under high turbulent flow condition for use in oil and gas transportation pipelines. *Corrosion Science*, **2019** , 159, 108140	6.8	29
144	Progress in the development of sour corrosion inhibitors: Past, present, and future perspectives. *Journal of Industrial and Engineering Chemistry*, **2019**, 79, 1-18	6.3	51
143	Corrosion inhibitors for acid cleaning of desalination heat exchangers: Progress, challenges and future perspectives. *Journal of Molecular Liquids*, **2019**, 296, 111760	6	28
142	Green corrosion inhibitor for oilfield application I: Electrochemical assessment of 2-(2-pyridyl) benzimidazole for API X60 steel under sweet environment in NACE brine ID196. *Corrosion Science*, **2019**, 150, 183-193	6.8	75
141	Pyrazine derivatives as green oil field corrosion inhibitors for steel. *Journal of Molecular Liquids*, **2019**, 277, 749-761	6	55
140	Cyclodextrin-based functionalized graphene oxide as an effective corrosion inhibitor for carbon steel in acidic environment. *Progress in Organic Coatings*, **2019**, 128, 157-167	4.8	33
139	Two new 8-hydroxyquinoline derivatives as an efficient corrosion inhibitors for mild steel in hydrochloric acid: Synthesis, electrochemical, surface morphological, UV‐visible and theoretical studies. *Journal of Molecular Liquids*, **2019**, 276, 120-133	6	81
138	Corrosion protection of carbon steel by two newly synthesized benzimidazol-2-ones substituted 8-hydroxyquinoline derivatives in 1 M HCl: Experimental and theoretical study. *Surfaces and Interfaces*, **2019**, 14, 222-237	4.1	51
137	Atomistic Simulation: A Unique and Powerful Computational Tool for Corrosion Inhibition Research. *Arabian Journal for Science and Engineering*, **2019**, 44, 1-32	2.5	96
136	Synthesis and investigation of quinazoline derivatives based on 8-hydroxyquinoline as corrosion inhibitors for mild steel in acidic environment: experimental and theoretical studies. *Ionics*, **2019**, 25, 3473-3491	2.7	31
135	Comparative studies on the corrosion inhibition efficacy of ethanolic extracts of date palm leaves and seeds on carbon steel corrosion in 15% HCl solution. *Journal of Adhesion Science and Technology*, **2018**, 32, 1934-1951	2	47
134	A combined electrochemical and theoretical study of pyridine-based Schiff bases as novel corrosion inhibitors for mild steel in hydrochloric acid medium. *Journal of Chemical Sciences*, **2018**, 130, 1	1.8	29
133	Computational, Monte Carlo simulation and experimental studies of some arylazotriazoles (AATR) and their copper complexes in corrosion inhibition process. *Journal of Molecular Liquids*, **2018**, 260, 351-374	6	84

132	Isoxazolidine derivatives as corrosion inhibitors for low carbon steel in HCl solution: experimental, theoretical and effect of KI studies.. *RSC Advances*, **2018**, 8, 1764-1777	3.7	77
131	Promising Hard Carbon Coatings on Cu Substrates: Corrosion and Tribological Performance with Theoretical Aspect. *Journal of Materials Engineering and Performance*, **2018**, 27, 2306-2316	1.6	7
130	Pyrazines as Potential Corrosion Inhibitors for Industrial Metals and Alloys: A Review. *Journal of Bio- and Tribo-Corrosion*, **2018**, 4, 1	2.9	14
129	Experimental and computational evaluation of illicium verum as a novel eco-friendly corrosion inhibitor for aluminium. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2018**, 69, 125-139	1.6	14
128	Exploration of Dextran for Application as Corrosion Inhibitor for Steel in Strong Acid Environment: Effect of Molecular Weight, Modification, and Temperature on Efficiency. *ACS Applied Materials & Interfaces*, **2018**, 10, 28112-28129	9.5	89
127	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	6.7	107
126	Conceptual Density Functional Theory and its Application to Corrosion Inhibition Studies **2018**, 195-216		1
125	Chemical Equalization Principles and Their New Applications **2018**, 89-144		
124	Mechanistic study of polyaspartic acid (PASP) as eco-friendly corrosion inhibitor on mild steel in 3% NaCl aerated solution. *Journal of Molecular Liquids*, **2018**, 250, 50-62	6	69
123	Anticorrosion studies of some hydantoin derivatives for mild steel in 0.5 M HCl solution: Experimental, quantum chemical, Monte Carlo simulations and QSAR studies. *Journal of Molecular Liquids*, **2018**, 252, 62-74	6	30
122	Electrochemical frequency modulation (EFM) technique: Theory and recent practical applications in corrosion research. *Journal of Molecular Liquids*, **2018**, 249, 83-96	6	58
121	Molecular level insights for the corrosion inhibition effectiveness of three amine derivatives on the carbon steel surface in the adverse medium: A combined density functional theory and molecular dynamics simulation study. *Surfaces and Interfaces*, **2018**, 10, 65-73	4.1	54
120	Theoretical Study of the Mechanism of Corrosion Inhibition of Carbon Steel in Acidic Solution by 2-aminobenzothaizole and 2- Mercatobenzothiazole. *International Journal of Electrochemical Science*, **2018**, 3535-3554	2.2	26
119	Experimental and theoretical evaluation of some synthesized imidazolidine derivatives as novel corrosion inhibitors for X60 steel in 1 M HCl solution. *Journal of Adhesion Science and Technology*, **2018**, 32, 2569-2589	2	5
118	Gelatin: A green corrosion inhibitor for carbon steel in oil well acidizing environment. *Journal of Molecular Liquids*, **2018**, 264, 515-525	6	74
117	Use of Sapindus (reetha) as corrosion inhibitor of aluminium in acidic medium. *Materials Research Express*, **2018**, 5, 076510	1.7	15
116	Pyrimidine derivatives as novel acidizing corrosion inhibitors for N80 steel useful for petroleum industry: A combined experimental and theoretical approach. *Journal of Industrial and Engineering Chemistry*, **2017**, 49, 176-188	6.3	145
115	Theoretical insight into an empirical rule about organic corrosion inhibitors containing nitrogen, oxygen, and sulfur atoms. *Applied Surface Science*, **2017**, 406, 301-306	6.7	206

114	Pyranpyrazole derivatives as novel corrosion inhibitors for mild steel useful for industrial pickling process: Experimental and Quantum Chemical study. *Journal of Industrial and Engineering Chemistry* , **2017**, 52, 197-210	6.3	93
113	Mild steel green inhibition by Ficus carica leaves extract under practical field conditions. *Journal of Adhesion Science and Technology*, **2017**, 31, 2697-2718	2	18
112	Sodium dodecyl benzene sulfonate as a sustainable inhibitor for zinc corrosion in 26% NH4Cl solution. *Journal of Cleaner Production*, **2017**, 152, 17-25	10.3	66
111	8-Hydroxyquinoline as an alternative green and sustainable acidizing oilfield corrosion inhibitor. *Sustainable Materials and Technologies*, **2017**, 14, 1-10	5.3	52
110	Quantum Chemical Investigation of the Relationship Between Molecular Structure and Corrosion Inhibition Efficiency of Benzotriazole and its Alkyl-Derivatives on Iron. *Protection of Metals and Physical Chemistry of Surfaces*, **2017**, 53, 1139-1149	0.9	12
109	Synergistic Effect of Potassium Iodide with L-Tryptophane on the Corrosion Inhibition of Mild Steel: A Combined Electrochemical and Theoretical Study. *International Journal of Electrochemical Science*, **2017**, 166-177	2.2	22
108	Sodium alginate: A promising biopolymer for corrosion protection of API X60 high strength carbon steel in saline medium. *Carbohydrate Polymers*, **2017**, 178, 200-208	10.3	69
107	Benzimidazole: Small planar molecule with diverse anti-corrosion potentials. *Journal of Molecular Liquids*, **2017**, 246, 66-90	6	37
106	,RDialkylcystine Gemini and Monomeric -Alkyl Cysteine Surfactants as Corrosion Inhibitors on Mild Steel Corrosion in 1 M HCl Solution: A Comparative Study. *ACS Omega*, **2017**, 2, 5691-5707	3.9	45
105	Toward understanding the anticorrosive mechanism of some thiourea derivatives for carbon steel corrosion: A combined DFT and molecular dynamics investigation. *Journal of Colloid and Interface Science*, **2017**, 506, 478-485	9.3	177
104	DFT study of the interactions between thiophene-based corrosion inhibitors and an Fe cluster. *Journal of Molecular Modeling*, **2017**, 23, 260	2	5
103	Anticorrosion potential of some 5-amino-8-hydroxyquinolines derivatives on carbon steel in hydrochloric acid solution: Gravimetric, electrochemical, surface morphological, UV-visible, DFT and Monte Carlo simulations. *Journal of Molecular Liquids*, **2017**, 248, 1014-1027	6	46
102	3,5-Diaryl-4-amino-1,2,4-triazole derivatives as effective corrosion inhibitors for mild steel in hydrochloric acid solution: Correlation between anti-corrosion activity and chemical structure. *Protection of Metals and Physical Chemistry of Surfaces*, **2017**, 53, 548-559	0.9	23
101	Promising bio-composites of polypyrrole and chitosan: Surface protective and in vitro biocompatibility performance on 316L SS implants. *Carbohydrate Polymers*, **2017**, 173, 121-130	10.3	46
100	Determination of corrosion inhibition effects of amino acids: Quantum chemical and molecular dynamic simulation study. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 58, 528-535	5.3	153
99	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	3.7	98
98	Carbohydrate compounds as green corrosion inhibitors: electrochemical, XPS, DFT and molecular dynamics simulation studies. *RSC Advances*, **2016**, 6, 110053-110069	3.7	39
97	Experimental and theoretical studies on inhibition of mild steel corrosion by some synthesized polyurethane tri-block co-polymers. *Scientific Reports*, **2016**, 6, 30937	4.9	30

96	Quantum chemical and molecular dynamic simulation studies for the prediction of inhibition efficiencies of some piperidine derivatives on the corrosion of iron. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 65, 522-529	5.3	108
95	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	3.7	116
94	Theoretical modeling and molecular level insights into the corrosion inhibition activity of 2-amino-1,3,4-thiadiazole and its 5-alkyl derivatives. *Journal of Molecular Liquids*, **2016**, 221, 579-602	6	53
93	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	3.8	214
92	Density Functional Theory (DFT) modeling and Monte Carlo simulation assessment of inhibition performance of some carbohydrazide Schiff bases for steel corrosion. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 80, 82-90	3	89
91	Theoretical evaluation of triazine derivatives as steel corrosion inhibitors: DFT and Monte Carlo simulation approaches. *Research on Chemical Intermediates*, **2016**, 42, 4963-4983	2.8	44
90	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	6	124
89	Extraction, characterization and anti-corrosion activity of Mentha pulegium oil: Weight loss, electrochemical, thermodynamic and surface studies. *Journal of Molecular Liquids*, **2016**, 216, 724-731	6	54
88	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	3.7	108
87	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	6	47
86	A novel method for the calculation of bond stretching force constants of diatomic molecules. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2016**, 154, 103-107	4.4	10
85	Effective Protection for Copper Corrosion by Two Thiazole Derivatives in Neutral Chloride Media: Experimental and Computational Study. *International Journal of Electrochemical Science*, **2016**, 3147-3163	2.2	6
84	Anticorrosive efficacy and adsorptive study of guar gum with mild steel in acidic medium. *Journal of Analytical Science and Technology*, **2016**, 7,	3.4	6
83	Organic sensitizers for dye-sensitized solar cell (DSSC): Properties from computation, progress and future perspectives. *Journal of Molecular Structure*, **2016**, 1122, 80-87	3.4	77
82	Corrosion inhibition of mild steel by Calotropis procera leaves extract in a CO2 saturated sodium chloride solution. *Journal of Adhesion Science and Technology*, **2016**, 30, 2523-2543	2	27
81	Synergistic effect of iodide ion addition on the inhibition of mild steel corrosion in 1 M HCl by 3-amino-2-methylbenzylalcohol. *Materials Chemistry and Physics*, **2016**, 177, 266-275	4.4	42
80	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	6	95
79	Macrocyclic inhibitor for corrosion of N80 steel in 3.5% NaCl solution saturated with CO2. *Journal of Molecular Liquids*, **2016**, 219, 865-874	6	25

78	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	5.3	93
77	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	3.8	313
76	Corrosion Inhibitors: Computational Design of Steel in Aqueous Media **2016**, 887-898		
75	Performance evaluation of pectin as ecofriendly corrosion inhibitor for X60 pipeline steel in acid medium: experimental and theoretical approaches. *Carbohydrate Polymers*, **2015**, 124, 280-91	10.3	163
74	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	6	175
73	Surface protection of mild steel using benzimidazole derivatives: experimental and theoretical approach. *Journal of Adhesion Science and Technology*, **2015**, 29, 2130-2152	2	37
72	Use of natural gums as green corrosion inhibitors: an overview. *International Journal of Industrial Chemistry*, **2015**, 6, 153-164	3.1	54
71	Date palm (Phoenix dactylifera) leaf extract as an eco-friendly corrosion inhibitor for carbon steel in 1M hydrochloric acid solution. *Anti-Corrosion Methods and Materials*, **2015**, 62, 19-28	0.8	20
70	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	3.8	301
69	Corrosion mitigation of J55 steel in 3.5% NaCl solution by a macrocyclic inhibitor. *Applied Surface Science*, **2015**, 356, 341-347	6.7	54
68	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	6	134
67	Potential of Azadirachta indica as a green corrosion inhibitor against mild steel, aluminum, and tin: a review. *Journal of Analytical Science and Technology*, **2015**, 6,	3.4	36
66	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	3.7	47
65	In-situ synthesis of hydrophobic SiO2-PMMA composite for surface protective coatings: Experimental and quantum chemical analysis. *Polymer*, **2015**, 77, 79-86	3.9	34
64	Humic Acid from Livestock Dung: Ecofriendly Corrosion Inhibitor for 3SR Aluminum Alloy in Alkaline Medium. *Chemical Engineering Communications*, **2015**, 202, 206-216	2.2	9
63	Theoretical prediction and electrochemical evaluation of vinylimidazole and allylimidazole as corrosion inhibitors for mild steel in 1 M HCl. *Journal of Industrial and Engineering Chemistry*, **2015**, 21, 1328-1339	6.3	130
62	Adsorption and corrosion inhibition characteristics of strawberry fruit extract at steel/acids interfaces: experimental and theoretical approaches. *Ionics*, **2015**, 21, 1171-1186	2.7	25
61	Porphyrins as Corrosion Inhibitors for N80 Steel in 3.5% NaCl Solution: Electrochemical, Quantum Chemical, QSAR and Monte Carlo Simulations Studies. *Molecules*, **2015**, 20, 15122-46	4.8	52

60	Fabrication of nitrogen doped graphene oxide coatings: experimental and theoretical approach for surface protection. *RSC Advances*, **2015**, 5, 19264-19272	3.7	79
59	Experimental and Theoretical Studies of Red Apple Fruit Extract as Green Corrosion Inhibitor for Mild Steel in HCl Solution. *Journal of Dispersion Science and Technology*, **2015**, 36, 789-802	1.5	31
58	Effect of degree of hydrolysis of polyvinyl alcohol on the corrosion inhibition of steel: theoretical and experimental studies. *Journal of Adhesion Science and Technology*, **2015**, 29, 271-295	2	36
57	Enhanced corrosion inhibition effect of tannic acid in the presence of gallic acid at mild steel/HCl acid solution interface. *Journal of Industrial and Engineering Chemistry*, **2015**, 25, 105-111	6.3	54
56	Density functional theory (DFT) as a powerful tool for designing new organic corrosion inhibitors. Part 1: An overview. *Corrosion Science*, **2015**, 99, 1-30	6.8	502
55	A DFT study of pyrazine derivatives and their Fe complexes in corrosion inhibition process. *Journal of Molecular Structure*, **2015**, 1086, 64-72	3.4	26
54	An electrochemical, in vitro bioactivity, and quantum chemical approach to nanostructured copolymer coatings for orthopedic applications. *Journal of Materials Science*, **2014**, 49, 4067-4080	4.3	23
53	Inhibition of mild steel corrosion in H2SO4 solution by coconut coir dust extract obtained from different solvent systems and synergistic effect of iodide ions: Ethanol and acetone extracts. *Journal of Environmental Chemical Engineering*, **2014**, 2, 1048-1060	6.8	95
52	Inhibition of mild steel corrosion in acidic medium using coconut coir dust extracted from water and methanol as solvents. *Journal of Industrial and Engineering Chemistry*, **2014**, 20, 3612-3622	6.3	53
51	Multi-functional ceramic hybrid coatings on biodegradable AZ31 Mg implants: electrochemical, tribological and quantum chemical aspects for orthopaedic applications. *RSC Advances*, **2014**, 4, 24272	3.7	42
50	Theoretical evaluation of corrosion inhibition performance of some pyrazine derivatives. *Corrosion Science*, **2014**, 83, 359-366	6.8	226
49	Synergistic inhibition between 1-octadecanethiol and iodide ions on X60 pipeline steel for corrosion protection. *Journal of Adhesion Science and Technology*, **2014**, 28, 2054-2068	2	9
48	Synthesis, characterization and corrosion inhibition efficiency of 2-(6-methylpyridin-2-yl)-1H-imidazo[4,5-f][1,10] phenanthroline on mild steel in sulphuric acid. *Arabian Journal of Chemistry*, **2014**, 7, 197-207	5.9	32
47	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	2.8	68
46	Metronidazole as environmentally safe corrosion inhibitor for mild steel in 0.5 M HCl: Experimental and theoretical investigation. *Journal of Environmental Chemical Engineering*, **2013**, 1, 431-439	6.8	131
45	Natural Products for Material Protection: Inhibition of Mild Steel Corrosion by Date Palm Seed Extracts in Acidic Media. *Industrial & Engineering Chemistry Research*, **2013**, 52, 14855-14865	3.9	112
44	Xanthione: A new and effective corrosion inhibitor for mild steel in sulphuric acid solution. *Arabian Journal of Chemistry*, **2013**, 6, 211-223	5.9	56
43	Experimental and theoretical investigations of adsorption characteristics of itraconazole as green corrosion inhibitor at a mild steel/hydrochloric acid interface. *Research on Chemical Intermediates*, **2012**, 38, 1761-1779	2.8	27

42	Spondias mombin L. as a green corrosion inhibitor for aluminium in sulphuric acid: Correlation between inhibitive effect and electronic properties of extracts major constituents using density functional theory. *Arabian Journal of Chemistry*, **2012**, 5, 361-373	5.9	71
41	Coconut coir dust extract: a novel eco-friendly corrosion inhibitor for Al in HCl solutions. *Green Chemistry Letters and Reviews*, **2012**, 5, 303-313	4.7	37
40	Adsorption behavior and corrosion inhibitive potential of xanthene on mild steel/sulphuric acid interface. *Arabian Journal of Chemistry*, **2012**, 5, 121-133	5.9	32
39	Public health options for improving cardiovascular health among older Americans. *American Journal of Public Health*, **2012**, 102, 1498-507	5.1	13
38	ADSORPTION AND KINETIC STUDIES ON THE INHIBITION POTENTIAL OF FLUCONAZOLE FOR THE CORROSION OF Al IN HCl SOLUTION. *Chemical Engineering Communications*, **2011**, 198, 711-725	2.2	29
37	Anticorrosion Potential of 2-Mesityl-1H-imidazo[4,5-f][1,10]phenanthroline on Mild Steel in Sulfuric Acid Solution: Experimental and Theoretical Study. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2098-2110	3.9	150
36	Inhibitive properties, thermodynamic and quantum chemical studies of alloxazine on mild steel corrosion in H2SO4. *Corrosion Science*, **2011**, 53, 263-275	6.8	149
35	Quantum chemical investigation and statistical analysis of the relationship between corrosion inhibition efficiency and molecular structure of xanthene and its derivatives on mild steel in sulphuric acid. *Journal of Molecular Structure*, **2011**, 1002, 86-96	3.4	111
34	Anti-corrosive properties of xanthone on mild steel corrosion in sulphuric acid: Experimental and theoretical investigations. *Current Applied Physics*, **2011**, 11, 382-392	2.6	125
33	Phytochemical and Antimicrobial Properties of Leaves ofAlchonea Cordifolia. *E-Journal of Chemistry* , **2010**, 7, 1071-1079		10
32	A Study of Superficial Sediments and Aquifers in Parts of Uyo Local Government Area, Akwa Ibom State, Southern Nigeria, Using Electrical Sounding Method. *E-Journal of Chemistry*, **2010**, 7, 1018-1022		19
31	Resistivity Study of Shallow Aquifers in theParts of Southern Ukanafun Local Government Area, Akwa Ibom State, Nigeria. *E-Journal of Chemistry*, **2010**, 7, 693-700		16
30	Inhibition of Aluminium Corrosion in Hydrochloric Acid Using Nizoral and the Effect of Iodide Ion Addition. *E-Journal of Chemistry*, **2010**, 7, 837-843		10
29	Adsorption properties and inhibition of mild steel corrosion in sulphuric acid solution by ketoconazole: Experimental and theoretical investigation. *Corrosion Science*, **2010**, 52, 198-204	6.8	327
28	2,3-Diphenylbenzoquinoxaline: A new corrosion inhibitor for mild steel in sulphuric acid. *Corrosion Science*, **2010**, 52, 282-285	6.8	97
27	Theoretical study of benzimidazole and its derivatives and their potential activity as corrosion inhibitors. *Corrosion Science*, **2010**, 52, 657-660	6.8	218
26	Acenaphtho [1,2-b] quinoxaline as a novel corrosion inhibitor for mild steel in 0.5 M H2SO4. *Corrosion Science*, **2010**, 52, 923-926	6.8	101
25	An interesting and efficient green corrosion inhibitor for aluminium from extracts of Chlomolaena odorata L. in acidic solution. *Journal of Applied Electrochemistry*, **2010**, 40, 1977-1984	2.6	57

24	Indeno-1-one [2,3-b]quinoxaline as an effective inhibitor for the corrosion of mild steel in 0.5M H2SO4 solution. *Materials Chemistry and Physics*, **2010**, 122, 325-328	4.4	78
23	Variational Principle Techniques and the Propertiesof a Cut-off and Anharmonic Wave Function. *E-Journal of Chemistry*, **2009**, 6, 113-119		2
22	Raphia hookeri gum as a potential eco-friendly inhibitor for mild steel in sulfuric acid. *Journal of Materials Science*, **2009**, 44, 274-279	4.3	74
21	The Inhibition of aluminium corrosion in hydrochloric acid solution by exudate gum from Raphia hookeri. *Desalination*, **2009**, 247, 561-572	10.3	101
20	The synergistic inhibitive effect and some quantum chemical parameters of 2,3-diaminonaphthalene and iodide ions on the hydrochloric acid corrosion of aluminium. *Corrosion Science*, **2009**, 51, 276-282	6.8	181
19	Antifungal drugs as corrosion inhibitors for aluminium in 0.1M HCl. *Corrosion Science*, **2009**, 51, 1868-1876	6.8	209
18	Synergistic Inhibition Between Polyvinylpyrollidone and Iodide Ions on Corrosion of Aluminium in HCl~!2008-10-03~!2008-11-08~!2009-01-06~!. *The Open Corrosion Journal*, **2009**, 2, 1-7		13
17	Ipomoea Involcrata as an Ecofriendly Inhibitor for Aluminium in Alkaline Medium. *Portugaliae Electrochimica Acta*, **2009**, 27, 517-524	2.4	32
16	Synergistic Effect of Nizoral and Iodide Ions on the Corrosion Inhibition of Mild Steel in Sulphuric Acid Solution. *Portugaliae Electrochimica Acta*, **2009**, 27, 539-553	2.4	35
15	INHIBITORY EFFECT AND ADSORPTION CHARACTERISTICS OF 2,3-DIAMINONAPHTHALENE AT ALUMINUM/HYDROCHLORIC ACID INTERFACE: EXPERIMENTAL AND THEORETICAL STUDY. *Surface Review and Letters*, **2008**, 15, 903-910	1.1	49
14	POLYVINYLPYROLLIDONE AND POLYACRYLAMIDE AS CORROSION INHIBITORS FOR MILD STEEL IN ACIDIC MEDIUM. *Surface Review and Letters*, **2008**, 15, 277-286	1.1	63
13	Adsorption and corrosive inhibitive properties of Vigna unguiculata in alkaline and acidic media. *Pigment and Resin Technology*, **2008**, 37, 98-105	1	28
12	Effluents and Solid Waste Analysis in a Petrochemical Company- A Case Study of Eleme Petrochemical Company Ltd, Port Harcourt, Nigeria. *E-Journal of Chemistry*, **2008**, 5, 74-80		9
11	Recovery of Glycerol from Spent Soap LyeBy - Product of Soap Manufacture. *E-Journal of Chemistry*, **2008**, 5, 940-945		11
10	Anti-Nutritional Factors and Potassium Bromate Content in Bread and Flour Samples in Uyo Metropolis, Nigeria. *E-Journal of Chemistry*, **2008**, 5, 736-741		9
9	Corrosion Inhibition of Aluminium Using Exudate Gum fromPachylobus edulisin the Presence of Halide Ions in HCl. *E-Journal of Chemistry*, **2008**, 5, 355-364		55
8	Production of Cellulosic Polymers from Agricultural Wastes. *E-Journal of Chemistry*, **2008**, 5, 81-85		16
7	Evaluation of the Effect of Azo Group on the Biological Activity of 1-(4-Methylphenylazo)-2-naphthol. *E-Journal of Chemistry*, **2008**, 5, 431-434		10

6	Fluconazole as an inhibitor for aluminium corrosion in 0.1M HCl. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2008**, 330, 207-212	5.1	121
5	Studies on the Inhibitive Effect of Exudate Gum from Dacroydes edulis on the Acid Corrosion of Aluminium. *Portugaliae Electrochimica Acta*, **2007**, 26, 199-209	2.4	31
4	Eco-friendly Inhibitors from Naturally Occurring Exudate Gums for Aluminium Corrosion Inhibition in Acidic Medium. *Portugaliae Electrochimica Acta*, **2007**, 26, 267-282	2.4	32
3	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	0.8	138
2	Inhibition of mild steel corrosion in sulphuric acid using indigo dye and synergistic halide additives. *Materials Chemistry and Physics*, **2004**, 84, 363-368	4.4	166
1	(E)-2-amino-7-hydroxy-4-styrylquinoline-3-carbonitrile as a novel inhibitor for oil and gas industry: influence of temperature and synergistic agent. *Journal of Adhesion Science and Technology*,1-25	2	1