

Lei Guo

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.

165
papers

4,442
citations

37
h-index

62
g-index

183
ext. papers

6,172
ext. citations

4.4
avg, IF

6.51
L-index

#	Paper	IF	Citations
165	Experimental and molecular modeling studies of multi-active tetrazole derivative bearing sulfur linker for protecting steel from corrosion. <i>Journal of Molecular Liquids</i> , 2022 , 351, 118638	6	7
164	Novel glycoluril pharmaceutically active compound as a green corrosion inhibitor for the oil and gas industry. <i>Journal of Electroanalytical Chemistry</i> , 2022 , 907, 116055	4.1	4
163	Multidimensional insight into the corrosion inhibition of salbutamol drug molecule on mild steel in oilfield acidizing fluid: Experimental and computer aided modeling approach. <i>Journal of Molecular Liquids</i> , 2022 , 349, 118482	6	2
162	Development of QSAR-based (MLR/ANN) predictive models for effective design of pyridazine corrosion inhibitors. <i>Materials Today Communications</i> , 2022 , 30, 103163	2.5	3
161	Synthesis and anticorrosive activity of two new imidazo[1, 2-a]pyridine Schiff bases. <i>Journal of Molecular Liquids</i> , 2022 , 350, 118458	6	3
160	Theoretical, chemical, and electrochemical studies of Equisetum arvense extract as an impactful inhibitor of steel corrosion in 2M HCl electrolyte.. <i>Scientific Reports</i> , 2022 , 12, 2255	4.9	0
159	Band-engineered Zn ₂ TiO ₄ nanowires for hydrogen generation from water using visible light: A first-principles study. <i>AIP Advances</i> , 2022 , 12, 015201	1.5	0
158	Corrosion inhibition of steel using different families of organic compounds: Past and present progress. <i>Journal of Molecular Liquids</i> , 2022 , 348, 118373	6	6
157	Cinnamomum tamala leaves extract highly efficient corrosion bio-inhibitor for low carbon steel: Applying computational and experimental studies. <i>Journal of Molecular Liquids</i> , 2022 , 347, 118218	6	6
156	Novel gossypol hole modification as a green corrosion inhibitor for low carbon steel in aggressive alkaline solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022 , 637, 128207	5.1	8
155	Molecular dynamic simulation and Quantum chemical calculation of phytochemicals present in Beta vulgaris and electrochemical behaviour of Beta vulgaris peel extract as green corrosion inhibitor for stainless steel (SS-410) in acidic medium. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022 , 632, 127707	5.1	9
154	Environmentally sustainable corrosion inhibitors used for electronics industry 2022 , 359-381		0
153	Pyrazole ionic liquid corrosion inhibitor for magnesium alloy: Synthesis, performances and theoretical explore. <i>Journal of Molecular Liquids</i> , 2022 , 353, 118769	6	0
152	MD simulation/Quantum chemical calculations and experimental studies of Ranunculus bulbosus biomolecules impact on the mild steel dissolution reduction in a destructive acidic liquid. <i>Journal of Molecular Liquids</i> , 2022 , 355, 118950	6	0
151	Ionic liquids as green and sustainable corrosion inhibitors I 2022 , 331-390		0
150	Corrosion inhibitors for Cu chemical mechanical planarization (CMP) 2022 , 155-170		
149	Computational methods used in corrosion inhibition research 2022 , 527-538		

148 Smart corrosion inhibitor: Present status and future scenario **2022**, 485-504

147 Graphene and Graphene Oxides Layers Application as Corrosion Inhibitors in Protective Coatings **2021**, 387-409 1

146 Insight into the anti-corrosion performance of two food flavors as eco-friendly and ultra-high performance inhibitors for copper in sulfuric acid medium. *Journal of Colloid and Interface Science*, **2021**, 9.3 16

145 The recent development of carbon dots as powerful green corrosion inhibitors: A prospective review. *Journal of Molecular Liquids*, **2021**, 349, 118124 6 5

144 Insight on the corrosion inhibition performance of psidium guajava linn leaves extract. *Journal of Molecular Liquids*, **2021**, 346, 117858 6 2

143 Single-layer graphene oxide as corrosion inhibition protection for Cu under 0.5 M H₂SO₄ solution. *Surface Topography: Metrology and Properties*, **2021**, 9, 045016 1.5 3

142 DFT calculations, molecular simulations, and electrochemical investigations of Nature-inspired phytochemical attributes of Achillea Millefolium plants for the construction of effective zinc-based organic anti-corrosion layer on carbon steel. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 5.3 3

141 Novel bromide cucurbit[7]uril supramolecular ionic liquid as a green corrosion inhibitor for the oil and gas industry. *Journal of Electroanalytical Chemistry*, **2021**, 901, 115794 4.1 11

140 A detailed investigation on the corrosion inhibition effect of by newly synthesized pyran derivative on mild steel in 1.0 M HCl: Experimental, surface morphological (SEM-EDS, DRX& AFM) and computational analysis (DFT & MD simulation). *Journal of Molecular Liquids*, **2021**, 344, 117777 6 9

139 Insights into the newly synthesized N-doped carbon dots for Q235 steel corrosion retardation in acidizing media: A detailed multidimensional study. *Journal of Colloid and Interface Science*, **2021**, 608, 2039-2049 9.3 8

138 Novel cucurbit[6]uril-based [3]rotaxane supramolecular ionic liquid as a green and excellent corrosion inhibitor for the chemical industry. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 633, 127837 5.1 9

137 A gossypol derivative as an efficient corrosion inhibitor for St2 steel in 1M HCl+1M KCl: An experimental and theoretical investigation. *Journal of Molecular Liquids*, **2021**, 328, 115475 6 26

136 Hydroxy phenyl hydrazides and their role as corrosion impeding agent: A detail experimental and theoretical study. *Journal of Molecular Liquids*, **2021**, 330, 115605 6 11

135 Influence of Ring Size on Corrosion Inhibition Potential of Environmental Sustainable Cycloalkyltriphenylphosphonium based Ionic Liquids: Computational and Experimental Demonstrations. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 123, 21-21 5.3 0

134 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

133 Dopamine-functionalized poloxamers for antibacterial coating. *Materials Letters*, **2021**, 291, 129591 3.3 1

132 Effect of pigeon pea seed (isoflavone) molecules on corrosion inhibition of mild steel in oilfield descaling solution: electro-kinetic, DFT modeling and optimization studies. *Journal of the Iranian Chemical Society*, **2021**, 18, 2983 2 4

131 Anticorrosion properties of 5,5'-dithiobis-(2-nitrobenzoic acid) and sodium sulfite compounds for aluminum alloy 2024-T3 in saline solution: Electrochemical, characterization and theoretical investigations. *Journal of Molecular Liquids*, **2021**, 331, 115661 6 6

130	Thioglycoluril derivative as a new and effective corrosion inhibitor for low carbon steel in a 1 M HCl medium: Experimental and theoretical investigation. <i>Journal of Molecular Structure</i> , 2021 , 1234, 130165 ^{3,4}	25
129	Improving environmental adaptability and long-term corrosion resistance of Mg alloys by pyrazole ionic liquids: Experimental and theoretical studies. <i>Journal of Molecular Liquids</i> , 2021 , 333, 115964	6 4
128	Synthesis and anticorrosive properties of epoxy polymer for CS in [1[M] HCl solution: Electrochemical, AFM, DFT and MD simulations. <i>Construction and Building Materials</i> , 2021 , 270, 121454	6.7 41
127	Designing of phosphorous based highly functional dendrimeric macromolecular resin as an effective coating material for carbon steel in NaCl: Computational and experimental studies. <i>Journal of Applied Polymer Science</i> , 2021 , 138, 49673	2.9 12
126	Fabrication of environmentally friendly Losartan potassium film for corrosion inhibition of mild steel in HCl medium. <i>Chemical Engineering Journal</i> , 2021 , 406, 126863	14.7 125
125	Experimental and theoretical investigation on the effect of N-substituent position on the inhibition performance of l-lysine derivatives for carbon steel in H ₂ SO ₄ solution. <i>Research on Chemical Intermediates</i> , 2021 , 47, 663-682	2.8 1
124	Banana leaves water extracts as inhibitor for X70 steel corrosion in HCl medium. <i>Journal of Molecular Liquids</i> , 2021 , 327, 114828	6 16
123	Phenolic fraction of Ammi visnaga extract as environmentally friendly antioxidant and corrosion inhibitor for mild steel in acidic medium. <i>Journal of Molecular Liquids</i> , 2021 , 323, 114950	6 17
122	Inhibition properties of 4,5-dihydroxy-4,5-di-p-tolyimidazolidine-2-thione for use on carbon steel in an aggressive alkaline medium with chloride ions: Thermodynamic, electrochemical, surface and theoretical analyses. <i>Journal of Molecular Liquids</i> , 2021 , 327, 114813	6 18
121	5-Mercapto-1-phenyltetrazole as a high-efficiency corrosion inhibitor for Q235 steel in acidic environment. <i>Journal of Molecular Liquids</i> , 2021 , 325, 115132	6 16
120	Three imidazole ionic liquids as green and eco-friendly corrosion inhibitors for mild steel in sulfuric acid medium. <i>Journal of Molecular Liquids</i> , 2021 , 324, 115063	6 21
119	Fe-mediated synthesis of -aryl amides from nitroarenes and acyl chlorides.. <i>RSC Advances</i> , 2021 , 11, 15290-15295	3.7 15295
118	Corrosion inhibition, surface adsorption and computational studies of Momordica charantia extract: a sustainable and green approach. <i>SN Applied Sciences</i> , 2021 , 3, 1	1.8 11
117	Molecular modelling of compounds used for corrosion inhibition studies: a review. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 19987-20027	3.6 17
116	Development of a Novel Thermally Stable Inhibitor Based on Furfuryl Alcohol for Mild Steel Corrosion in a 15% HCl Medium for Acidizing Application. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 11030-11044	3.9 14
115	Experimental and theoretical assessment of new and ecofriendly thioglycoluril derivative as an effective corrosion inhibitor of St2 steel in the aggressive hydrochloric acid with sulfate ions. <i>Journal of Molecular Liquids</i> , 2021 , 335, 116168	6 24
114	Effect of alkyl group position on adsorption behavior and corrosion inhibition of new naphthol based on 8-hydroxyquinoline: Electrochemical, surface, quantum calculations and dynamic simulations. <i>Journal of Molecular Liquids</i> , 2021 , 335, 116552	6 5
113	Decyltriphenylphosphonium bromide containing hydrophobic alkyl-chain as a potential corrosion inhibitor for mild steel in sulfuric acid: Theoretical and experimental studies. <i>Journal of Molecular Liquids</i> , 2021 , 336, 116166	6 9

112	Synthesis, Crystal structure, Hirshfeld surface Analysis and computational approach of new 2-methylbenzimidazo[1,2-a]pyrimidin-4(1H)-one. <i>Journal of Molecular Structure</i> , 2021 , 1239, 130497	3.4	3
111	Theoretical and surface/electrochemical investigations of walnut fruit green husk extract as effective inhibitor for mild-steel corrosion in 1M HCl electrolyte. <i>Journal of Molecular Liquids</i> , 2021 , 338, 116550	6	38
110	Synthesis and Structure of Water-Soluble Sb Quantum Dots and Enhanced Corrosion Inhibition Performance and Mechanisms. <i>Inorganic Chemistry</i> , 2021 , 60, 16346-16356	5.1	8
109	Synthesized carbon dots with high N and S content as excellent corrosion inhibitors for copper in sulfuric acid solution. <i>Journal of Molecular Liquids</i> , 2021 , 338, 116702	6	23
108	Molecular dynamic (MD) simulation and electrochemical assessments of the Satureja Hortensis extract for the construction of effective zinc-based protective film on carbon steel. <i>Journal of Molecular Liquids</i> , 2021 , 338, 116606	6	3
107	Akebia trifoliata koiaz peels extract as environmentally benign corrosion inhibitor for mild steel in HCl solutions: Integrated experimental and theoretical investigations. <i>Journal of Industrial and Engineering Chemistry</i> , 2021 , 101, 227-236	6.3	16
106	Multidimensional insights into the corrosion inhibition of potassium oleate on Cu in alkaline medium: A combined Experimental and theoretical investigation. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021 , 272, 115330	3.1	0
105	Papaver somniferum as an efficient corrosion inhibitor for iron alloy in acidic condition: DFT, MC simulation, LCMS and electrochemical studies. <i>Journal of Molecular Structure</i> , 2021 , 1242, 130822	3.4	13
104	Performance of two new epoxy resins as potential corrosion inhibitors for carbon steel in 1MHCl medium: Combining experimental and computational approaches. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 626, 127066	5.1	10
103	Corrosion inhibition of eco-friendly nitrogen-doped carbon dots for carbon steel in acidic media: Performance and mechanism investigation. <i>Journal of Molecular Liquids</i> , 2021 , 342, 117583	6	10
102	Inhibitive effect of different solvent fractions of bamboo shoots extract on the corrosion of mild steel in 0.5 mol/L H ₂ SO ₄ solution. <i>Journal of Molecular Structure</i> , 2021 , 1243, 130852	3.4	3
101	Experimental and theoretical investigation on the inhibition performance of disulfide derivatives on cobalt corrosion in alkaline medium. <i>Journal of Molecular Liquids</i> , 2021 , 341, 116907	6	3
100	Theoretical and electrochemical analysis on inhibition effects of benzotriazole derivatives (un- and methyl) on copper surface. <i>Journal of Molecular Structure</i> , 2021 , 1243, 130871	3.4	4
99	Unraveling the surface behavior of amino acids on Cu wiring in chemical mechanical polishing of barrier layers: A combination of experiments and ReaxFF MD. <i>Journal of Molecular Liquids</i> , 2021 , 341, 117307	6	0
98	Solvothermal synthesis of functionalized carbon dots from amino acid as an eco-friendly corrosion inhibitor for copper in sulfuric acid solution. <i>Journal of Colloid and Interface Science</i> , 2021 , 604, 1-14	9.3	14
97	Aminoantipyrine derivatives as a novel eco-friendly corrosion inhibitors for P110 steel in simulating acidizing environment: Experimental and computational studies. <i>Journal of Natural Gas Science and Engineering</i> , 2020 , 83, 103547	4.6	24
96	Newly synthesized triazolopyrimidine derivative as an inhibitor for mild steel corrosion in HCl medium: an experimental and in silico study. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 6568-6578	5.5	25
95	Fabrication on designing of a macromolecular epoxy resin as anti-corrosive coating material for electrocatalytically deposited cadmium on 15CDV6 steel in 3% NaCl solution. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 5549-5563	5.5	6

94	Multidimensional insights into the corrosion inhibition of 3,3-dithiodipropionic acid on Q235 steel in HSO medium: A combined experimental and in silico investigation. <i>Journal of Colloid and Interface Science</i> , 2020 , 570, 116-124	9.3	95
93	Electrochemical and Computational Studies on the Corrosion Inhibition of Mild Steel by 1-Hexadecyl-3-methylimidazolium Bromide in HCl Medium. <i>International Journal of Electrochemical Science</i> , 2020 , 1893-1903	2.2	12
92	Investigation of Losartan Potassium as an eco-friendly corrosion inhibitor for copper in 0.5 M H ₂ SO ₄ . <i>Journal of Molecular Liquids</i> , 2020 , 305, 112789	6	24
91	Synthesis of Macromolecular Aromatic Epoxy Resins as Anticorrosive Materials: Computational Modeling Reinforced Experimental Studies. <i>ACS Omega</i> , 2020 , 5, 3151-3164	3.9	8
90	Highly functionalized epoxy macromolecule as an anti-corrosive material for carbon steel: Computational (DFT, MDS), surface (SEM-EDS) and electrochemical (OCP, PDP, EIS) studies. <i>Journal of Molecular Liquids</i> , 2020 , 302, 112535	6	39
89	Locust Bean Gum as a green and novel corrosion inhibitor for Q235 steel in 0.5M H ₂ SO ₄ medium. <i>Journal of Molecular Liquids</i> , 2020 , 310, 113239	6	59
88	Anti-corrosion performance of 8-hydroxyquinoline derivatives for mild steel in acidic medium: Gravimetric, electrochemical, DFT and molecular dynamics simulation investigations. <i>Journal of Molecular Liquids</i> , 2020 , 308, 113042	6	61
87	Preparation of (Gd _{0.9} Sc _{0.1}) ₂ Zr ₂ O ₇ /YSZ thermal barrier coatings and their corrosion resistance to V ₂ O ₅ molten salt. <i>Surface and Coatings Technology</i> , 2020 , 389, 125677	4.4	5
86	A new series of synthesized compounds as corrosion mitigator for storage tanks: Detailed electrochemical and theoretical investigations. <i>Construction and Building Materials</i> , 2020 , 259, 120421	6.7	10
85	Experimental and theoretical studies on the inhibition properties of three diphenyl disulfide derivatives on copper corrosion in acid medium. <i>Journal of Molecular Liquids</i> , 2020 , 298, 111975	6	111
84	Epoxy prepolymer as a novel anti-corrosive material for carbon steel in acidic solution: Electrochemical, surface and computational studies. <i>Materials Today Communications</i> , 2020 , 22, 100800	2.5	20
83	Epoxy resin and TiO ₂ composite as anticorrosive material for carbon steel in 3% NaCl medium: Experimental and computational studies. <i>Journal of Molecular Liquids</i> , 2020 , 317, 114249	6	7
82	Trifunctional epoxy resin as anticorrosive material for carbon steel in 1 M HCl: Experimental and computational studies. <i>Surfaces and Interfaces</i> , 2020 , 21, 100707	4.1	6
81	A triazolopyrimidine derivative as corrosion inhibitor for mild steel in HCl solution 2020 ,		1
80	Eco-friendly food spice 2-Furfurylthio-3-methylpyrazine as an excellent inhibitor for copper corrosion in sulfuric acid medium. <i>Journal of Molecular Liquids</i> , 2020 , 317, 113915	6	22
79	Development and Anti-corrosion Performance of Polymeric Epoxy Resin and their Zinc Phosphate Composite on 15CDV6 Steel in 3wt% NaCl: Experimental and Computational Studies. <i>Journal of Bio- and Tribo-Corrosion</i> , 2020 , 6, 1	2.9	9
78	Electrochemical and Computational Investigations on the Corrosion Inhibition of X65 Steel by 2-Phenylbenzimidazole in H ₂ SO ₄ Solution. <i>International Journal of Electrochemical Science</i> , 2020 , 8837-8848	2.2	2
77	Cyclotriphosphazene based dendrimeric epoxy resin as an anti-corrosive material for copper in 3% NaCl: Experimental and computational demonstrations. <i>Journal of Molecular Liquids</i> , 2020 , 308, 113020	6	13

76	Synergistic effect of potassium iodide and sodium dodecyl sulfonate on the corrosion inhibition of carbon steel in HCl medium: a combined experimental and theoretical investigation.. <i>RSC Advances</i> , 2020 , 10, 15163-15170	3.7	49
75	Polydopamine functionalized graphene oxide nanocomposites reinforced the corrosion protection and adhesion properties of waterborne polyurethane coatings. <i>European Polymer Journal</i> , 2019 , 120, 109249	5.2	52
74	Adsorption and anticorrosive behavior of aromatic epoxy monomers on carbon steel corrosion in acidic solution: computational studies and sustained experimental studies.. <i>RSC Advances</i> , 2019 , 9, 14782-14796	3.7	35
73	Experimental and Theoretical Studies on the Corrosion Inhibition of Carbon Steel by Two Indazole Derivatives in HCl Medium. <i>Materials</i> , 2019 , 12,	3.5	9
72	Probing the frictional properties of sulfur-doped diamond-like carbon films under high vacuum by first-principles calculations. <i>Applied Surface Science</i> , 2019 , 481, 1483-1489	6.7	9
71	Synergistic corrosion inhibition effect of thiazolyl-based ionic liquids between anions and cations for copper in HCl solution. <i>Applied Surface Science</i> , 2019 , 483, 901-911	6.7	46
70	Rheological, electrochemical, surface, DFT and molecular dynamics simulation studies on the anticorrosive properties of new epoxy monomer compound for steel in 1M HCl solution.. <i>RSC Advances</i> , 2019 , 9, 4454-4462	3.7	47
69	Experimental and Theoretical Investigation of Corrosion Inhibition Effect of Multi-Active Compounds on Mild Steel in 1 M HCl. <i>International Journal of Electrochemical Science</i> , 2019 , 6855-6873	2.2	3
68	Epoxy pre-polymers as new and effective materials for corrosion inhibition of carbon steel in acidic medium: Computational and experimental studies. <i>Scientific Reports</i> , 2019 , 9, 11715	4.9	55
67	Insights into the inhibition mechanism of three 5-phenyltetrazole derivatives for copper corrosion in sulfuric acid medium via experimental and DFT methods. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019 , 102, 424-437	5.3	76
66	Triblock Copolymer Pluronic F68 as a Corrosion Inhibitor for Aluminum-air Battery: An Electrochemical and in Silico Study. <i>International Journal of Electrochemical Science</i> , 2019 , 11480-11490	2.2	3
65	Multidimensional insights involving electrochemical and investigation into the corrosion inhibition of newly synthesized pyrazolotriazole derivatives on carbon steel in a HCl solution.. <i>RSC Advances</i> , 2019 , 9, 34761-34771	3.7	4
64	Synthesis, crystal structure, DFT, molecular dynamics simulation and evaluation of the anticorrosion performance of a new pyrazolotriazole derivative. <i>Journal of Molecular Structure</i> , 2019 , 1176, 290-297	3.4	23
63	Mn ₃ O ₄ with different morphologies tuned through one-step electrochemical method for high-performance lithium-ion batteries anode. <i>Journal of Alloys and Compounds</i> , 2019 , 771, 335-342	5.7	21
62	Electrochemical, DFT and MD simulation of newly synthesized triazolotriazepine derivatives as corrosion inhibitors for carbon steel in 1 M HCl. <i>Journal of Molecular Liquids</i> , 2019 , 274, 759-769	6	37
61	Corrosion inhibition of X65 steel in sulfuric acid by two food flavorants 2-isobutylthiazole and 1-(1,3-Thiazol-2-yl) ethanone as the green environmental corrosion inhibitors: Combination of experimental and theoretical researches. <i>Journal of Colloid and Interface Science</i> , 2019 , 538, 519-529	9.3	139
60	Anticorrosion potential of domperidone on copper in different concentration of hydrochloric acid solution. <i>Journal of Adhesion Science and Technology</i> , 2018 , 32, 1485-1502	2	4
59	Experimental and computational investigations of 2-amino-6-bromobenzothiazole as a corrosion inhibitor for copper in sulfuric acid. <i>Journal of Adhesion Science and Technology</i> , 2018 , 32, 2083-2098	2	18

58	A combined experimental and theoretical study of the inhibition effect of three disulfide-based flavouring agents for copper corrosion in 0.5 M sulfuric acid. <i>Journal of Colloid and Interface Science</i> , 2018 , 526, 268-280	9.3	119
57	Quantum chemical calculations, molecular dynamic (MD) simulations and experimental studies of using some azo dyes as corrosion inhibitors for iron. Part 2: Bisazo dye derivatives. <i>Journal of Molecular Structure</i> , 2018 , 1163, 397-417	3.4	63
56	Influence of the alkyl chain length of alkyltriazoles on the corrosion inhibition of iron: A DFTB study 2018 ,		6
55	Experimental and theoretical investigations of some pyrazolo-pyrimidine derivatives as corrosion inhibitors on copper in sulfuric acid solution. <i>Applied Surface Science</i> , 2018 , 459, 612-620	6.7	68
54	Rapid Production of MnO ₂ /rGO as an Efficient Electrode Material for Supercapacitor by Flame Plasma. <i>Materials</i> , 2018 , 11,	3.5	27
53	Experimental and Theoretical Investigation of Thiazolyl Blue as a Corrosion Inhibitor for Copper in Neutral Sodium Chloride Solution. <i>Materials</i> , 2018 , 11,	3.5	30
52	Anticorrosive Effects of Some Thiophene Derivatives Against the Corrosion of Iron: A Computational Study. <i>Frontiers in Chemistry</i> , 2018 , 6, 155	5	84
51	Corrosion inhibition of mild steel in sulfuric acid solution by loquat (<i>Eriobotrya japonica</i> Lindl.) leaves extract. <i>Scientific Reports</i> , 2018 , 8, 9140	4.9	43
50	Magnetic core-shell-structured FeO@CeO as an efficient catalyst for catalytic wet peroxide oxidation of benzoic acid.. <i>RSC Advances</i> , 2018 , 8, 33972-33979	3.7	11
49	Halogeno-substituted indazoles against copper corrosion in industrial pickling process: a combined electrochemical, morphological and theoretical approach.. <i>RSC Advances</i> , 2018 , 8, 38860-38871	3.7	5
48	Synergistic Effect of Purpald with Tartaric Acid on the Corrosion Inhibition of Mild Steel: from Electrochemical to Theoretical Insights. <i>Protection of Metals and Physical Chemistry of Surfaces</i> , 2018 , 54, 917-925	0.9	6
47	Understanding the corrosion behavior of amorphous multiple-layer carbon coating 2018 ,		1
46	Theoretical evaluation of the corrosion inhibition performance of 1,3-thiazole and its amino derivatives. <i>Arabian Journal of Chemistry</i> , 2017 , 10, 121-130	5.9	69
45	A computational study on corrosion inhibition performances of novel quinoline derivatives against the corrosion of iron. <i>Journal of Molecular Structure</i> , 2017 , 1134, 751-761	3.4	123
44	Theoretical insight into an empirical rule about organic corrosion inhibitors containing nitrogen, oxygen, and sulfur atoms. <i>Applied Surface Science</i> , 2017 , 406, 301-306	6.7	206
43	Experimental and theoretical studies of four allyl imidazolium-based ionic liquids as green inhibitors for copper corrosion in sulfuric acid. <i>Corrosion Science</i> , 2017 , 119, 68-78	6.8	327
42	Corrosion control of mild steel in 0.1 M H ₂ SO ₄ solution by benzimidazole and its derivatives: an experimental and theoretical study. <i>RSC Advances</i> , 2017 , 7, 23961-23969	3.7	17
41	Toward understanding the adsorption mechanism of large size organic corrosion inhibitors on an Fe(110) surface using the DFTB method. <i>RSC Advances</i> , 2017 , 7, 29042-29050	3.7	105

40	First-principles investigation of a EMnO ₂ and graphene composite as a promising cathode material for rechargeable Li-ion batteries. <i>RSC Advances</i> , 2017 , 7, 29821-29826	3.7	10
39	Sodium dodecyl benzene sulfonate as a sustainable inhibitor for zinc corrosion in 26% NH ₄ Cl solution. <i>Journal of Cleaner Production</i> , 2017 , 152, 17-25	10.3	66
38	Applications of graphene-based composite hydrogels: a review. <i>RSC Advances</i> , 2017 , 7, 51008-51020	3.7	42
37	Synergistic Effect of Potassium Iodide with L-Tryptophane on the Corrosion Inhibition of Mild Steel: A Combined Electrochemical and Theoretical Study. <i>International Journal of Electrochemical Science</i> , 2017 , 166-177	2.2	22
36	Specific Adsorption of Halide Ions on Iron Surface: A Combined Electrochemical and Monte Carlo Simulation Investigation. <i>International Journal of Electrochemical Science</i> , 2017 , 7064-7074	2.2	11
35	Mercury (II) adsorption from aqueous solution using nitrogen and sulfur co-doped activated carbon. <i>Water Science and Technology</i> , 2017 , 2017, 310-318	2.2	8
34	Toward understanding the anticorrosive mechanism of some thiourea derivatives for carbon steel corrosion: A combined DFT and molecular dynamics investigation. <i>Journal of Colloid and Interface Science</i> , 2017 , 506, 478-485	9.3	177
33	Synergistic effect of tartaric acid with 2,6-diaminopyridine on the corrosion inhibition of mild steel in 0.5 M HCl. <i>Scientific Reports</i> , 2016 , 6, 33305	4.9	104
32	Quantum chemical and molecular dynamic simulation studies for the prediction of inhibition efficiencies of some piperidine derivatives on the corrosion of iron. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016 , 65, 522-529	5.3	108
31	Effective Protection for Copper Corrosion by Two Thiazole Derivatives in Neutral Chloride Media: Experimental and Computational Study. <i>International Journal of Electrochemical Science</i> , 2016 , 3147-3163	2.2	6
30	Quantum chemical and molecular dynamics simulation studies on inhibition performances of some thiazole and thiadiazole derivatives against corrosion of iron. <i>Journal of Molecular Liquids</i> , 2016 , 219, 497-504	6	75
29	Quantum chemical calculations, molecular dynamics simulation and experimental studies of using some azo dyes as corrosion inhibitors for iron. Part 1: Mono-azo dye derivatives. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016 , 68, 461-480	5.3	57
28	Investigation of indole-3-carboxylic acid as steel inhibitor in 0.1 M H ₂ SO ₄ solution. <i>Journal of Industrial and Engineering Chemistry</i> , 2015 , 25, 295-303	6.3	10
27	Comparative theoretical study on the corrosion inhibition properties of benzoxazole and benzothiazole. <i>Research on Chemical Intermediates</i> , 2015 , 41, 3729-3742	2.8	28
26	Experimental and theoretical studies of benzalkonium chloride as an inhibitor for carbon steel corrosion in sulfuric acid. <i>Journal of Industrial and Engineering Chemistry</i> , 2015 , 24, 174-180	6.3	63
25	Evaluating two new Schiff bases synthesized on the inhibition of corrosion of copper in NaCl solutions. <i>RSC Advances</i> , 2015 , 5, 14804-14813	3.7	46
24	Electrochemical and Quantum Chemical Assessment of 2-Aminothiazole as Inhibitor for Carbon Steel in Sulfuric Acid Solution. <i>Asian Journal of Chemistry</i> , 2015 , 27, 2917-2923	0.4	5
23	A first-principles study on the structural, elastic, electronic, and optical properties of CdRh ₂ O ₄ . <i>Journal of Materials Science</i> , 2014 , 49, 1205-1214	4.3	18

22	Theoretical challenges in understanding the inhibition mechanism of copper corrosion in acid media in the presence of three triazole derivatives. <i>RSC Advances</i> , 2014 , 4, 41956-41967	3.7	61
21	Experimental and computational studies of two antibacterial drugs as corrosion inhibitors for mild steel in acid media. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2014 , 65, 935-942	1.6	30
20	Theoretical studies of three triazole derivatives as corrosion inhibitors for mild steel in acidic medium. <i>Corrosion Science</i> , 2014 , 87, 366-375	6.8	174
19	Thermodynamics, core-level spectroscopy, morphology, and work function study of different TiCl ₃ crystalline phases: A theoretical approach. <i>Journal of Alloys and Compounds</i> , 2014 , 602, 66-71	5.7	4
18	Elastic, electronic, optical, and spectroscopic properties of EAgMO_2 (M = Al and Ga): First-principles calculations. <i>Computational Materials Science</i> , 2014 , 92, 92-101	3.2	7
17	pH Influence on Performance of Phytic Acid Conversion Coatings on AZ31 Magnesium Alloy in Simulated Body Fluid. <i>Chinese Journal of Chemical Physics</i> , 2014 , 27, 535-540	0.9	3
16	A first-principles study on the structural, elastic, electronic, optical, lattice dynamical, and thermodynamic properties of zinc-blende CdX (X = S, Se, and Te). <i>Journal of Alloys and Compounds</i> , 2013 , 579, 583-593	5.7	39
15	Structural, elastic, electronic and optical properties of beryllium chalcogenides BeX (X=S, Se, Te) with zinc-blende structure. <i>Journal of Alloys and Compounds</i> , 2013 , 561, 16-22	5.7	29
14	Structural, Elastic, Electronic and Optical Properties of Zinc-Blende MTe (M=Zn/Mg). <i>Wuli Huaxue Xuebao/Acta Physico - Chimica Sinica</i> , 2013 , 29, 929-936	3.8	6
13	An oxadiazole-functionalized ligand and its yellow-emitting Re(I) complex for organoelectronic application. <i>Optical Materials</i> , 2012 , 34, 1303-1309	3.3	4
12	Synthesis and Photoluminescent Properties of a Zinc (II) Complex with Phenanthroline Derivative. <i>Advanced Materials Research</i> , 2012 , 496, 38-41	0.5	
11	Synergistic Effect of Imidazoline Derivative and Benzimidazole as Corrosion Inhibitors for Q235 Steel: An Electrochemical, XPS, FT-IR and MD Study. <i>Arabian Journal for Science and Engineering</i> , 1	2.5	1
10	Anticorrosion activity of two new pyridine derivatives in protecting X70 pipeline steel in oil well acidizing fluid: experimental and quantum chemical studies. <i>Journal of the Iranian Chemical Society</i> , 1	2	1
9	New and Green Corrosion Inhibitor Based on New Imidazole Derivate for Carbon Steel in 1 M Hcl Medium: Experimental and Theoretical Analyses. <i>International Journal of Engineering Research in Africa</i> , 58, 11-44	0.7	9
8	Monte Carlo simulations of corrosion inhibition of copper by two Schiff bases		2
7	Azole-Based Compounds as Corrosion Inhibitors for Metallic Materials		4
6	Recent progress in epoxy resins as corrosion inhibitors: design and performance. <i>Journal of Adhesion Science and Technology</i> , 1-22	2	3
5	Corrosion inhibition abilities of phytochemicals: a combined computational studies. <i>Journal of Adhesion Science and Technology</i> , 1-16	2	0

4	Synergistic effect of 4-dimethylaminopyridine with sodium dodecyl sulfonate and potassium bromide on the corrosion inhibition of mild steel in HCl medium: a collective experimental and computational investigation. <i>Journal of Adhesion Science and Technology</i> ,1-16	2	1
3	Anticorrosive potential of essential oil extracted from the leaves of Calamintha plant for mild steel in 1 M HCl medium. <i>Journal of Adhesion Science and Technology</i> ,1-24	2	1
2	Green and high-efficiency corrosion inhibitors for metals: a review. <i>Journal of Adhesion Science and Technology</i> ,1-24	2	2
1	An Overview of Corrosion. <i>ACS Symposium Series</i> ,1-19	0.4	0