Lei Guo

List of Publications by Year
in descending order

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179	8,600	50566	60403
papers	citations	48 h-index	85 g-index

183	183	183	3232
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent progress in epoxy resins as corrosion inhibitors: design and performance. Journal of Adhesion Science and Technology, 2023, 37, 923-944.	1.4	10
2	Corrosion inhibition abilities of phytochemicals: a combined computational studies. Journal of Adhesion Science and Technology, 2023, 37, 842-857.	1.4	9
3	Anticorrosive potential of essential oil extracted from the leaves of Calamintha plant for mild steel in 1 M HCl medium. Journal of Adhesion Science and Technology, 2023, 37, 1191-1214.	1.4	9
4	Green and high-efficiency corrosion inhibitors for metals: a review. Journal of Adhesion Science and Technology, 2023, 37, 1501-1524.	1.4	17
5	Quantum chemical and molecular dynamics simulation approach to investigate adsorption behaviour of organic azo dyes on TiO₂ and ZnO surfaces. Journal of Adhesion Science and Technology, 2023, 37, 1649-1665.	1.4	25
6	Intrinsic electronic property and adsorption of organic molecules on specific iron surface: an ab initio DFT and DFTB study. Journal of Adhesion Science and Technology, 2023, 37, 1837-1855.	1.4	9
7	Environmentally sustainable corrosion inhibitors used for electronics industry. , 2022, , 359-381.		1
8	Insight on the corrosion inhibition performance of psidium guajava linn leaves extract. Journal of Molecular Liquids, 2022, 346, 117858.	2.3	18
9	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, 2022, 608, 2039-2049.	5.0	74
10	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, 2022, 633, 127837.	2.3	36
11	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. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 632, 127707.	2.3	47
12	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, 2022, 609, 838-851.	5.0	100
13	Anticorrosion activity of two new pyridine derivatives in protecting X70 pipeline steel in oil well acidizing fluid: experimental and quantum chemical studies. Journal of the Iranian Chemical Society, 2022, 19, 2331-2346.	1.2	12
14	The recent development of carbon dots as powerful green corrosion inhibitors: A prospective review. Journal of Molecular Liquids, 2022, 349, 118124.	2.3	39
15	Band-engineered Zn2TiO4 nanowires for hydrogen generation from water using visible light: A first-principles study. AIP Advances, 2022, 12, 015201.	0.6	1
16	Corrosion inhibition of steel using different families of organic compounds: Past and present progress. Journal of Molecular Liquids, 2022, 348, 118373.	2.3	33
17	Cinnamoum tamala leaves extract highly efficient corrosion bio-inhibitor for low carbon steel: Applying computational and experimental studies. Journal of Molecular Liquids, 2022, 347, 118218.	2.3	37
18	Novel gossypolâ€“indole modification as a green corrosion inhibitor for lowâ€“carbon steel in aggressive alkalineâ€“saline solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 637, 128207.	2.3	70

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19	Synergistic Effect of Imidazoline Derivative and Benzimidazole as Corrosion Inhibitors for Q235 Steel: An Electrochemical, XPS, FT-IR and MD Study. Arabian Journal for Science and Engineering, 2022, 47, 7123-7134.	1.7	5
20	Experimental and molecular modeling studies of multi-active tetrazole derivative bearing sulfur linker for protecting steel from corrosion. Journal of Molecular Liquids, 2022, 351, 118638.	2.3	71
21	A fast and high-efficiency electrochemical exfoliation strategy towards antimonene/carbon composites for selective lubrication and sodiumâ€“ion storage applications. Physical Chemistry Chemical Physics, 2022, 24, 4957-4965.	1.3	7
22	Novel glycoluril pharmaceutically active compound as a green corrosion inhibitor for the oil and gas industry. Journal of Electroanalytical Chemistry, 2022, 907, 116055.	1.9	43
23	Multidimensional insight into the corrosion inhibition of salbutamol drug molecule on mild steel in oilfield acidizing fluid: Experimental and computer aided modeling approach. Journal of Molecular Liquids, 2022, 349, 118482.	2.3	32
24	Development of QSAR-based (MLR/ANN) predictive models for effective design of pyridazine corrosion inhibitors. Materials Today Communications, 2022, 30, 103163.	0.9	18
25	Synthesis and anticorrosive activity of two new imidazo[1, 2-a]pyridine Schiff bases. Journal of Molecular Liquids, 2022, 350, 118458.	2.3	12
26	Theoretical, chemical, and electrochemical studies of Equisetum arvense extract as an impactful inhibitor of steel corrosion in 2ÂM HCl electrolyte. Scientific Reports, 2022, 12, 2255.	1.6	8
27	Experimental and Theoretical Studies on the Inhibition Properties of an Imidazoline Derivative on Q235 Corrosion in a Simulated Concrete Pore Solution. ChemistrySelect, 2022, 7, .	0.7	2
28	One-Pot Hydrothermal Synthesized Nitrogen and Sulfur Codoped Carbon Dots for Acid Corrosion Inhibition of Q235 Steel. Langmuir, 2022, 38, 3984-3992.	1.6	25
29	Effect of imidazoline derivatives on the corrosion inhibition of Q235 steel in HCl medium: experimental and theoretical investigation. Corrosion Reviews, 2022, 40, 275-288.	1.0	2
30	Pyrazole ionic liquid corrosion inhibitor for magnesium alloy: Synthesis, performances and theoretical explore. Journal of Molecular Liquids, 2022, 353, 118769.	2.3	12
31	MD simulation/Quantum chemical calculations and experimental studies of Ranunculus bulbosus biomolecules impact on the mild steel dissolution reduction in a destructive acidic liquid. Journal of Molecular Liquids, 2022, 355, 118950.	2.3	12
32	Ionic liquids as green and sustainable corrosion inhibitors I. , 2022, , 331-390.		3
33	Corrosion inhibitors for Cu chemical mechanical planarization (CMP). , 2022, , 155-170.		0
34	Computational methods used in corrosion inhibition research. , 2022, , 527-538.		0
35	Smart corrosion inhibitor: Present status and future scenario. , 2022, , 485-504.		1
36	De-scaling, experimental, DFT, and MD-simulation studies of unwanted growing plant as natural corrosion inhibitor for SS-410 in acid medium. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 649, 129333.	2.3	19

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37	Aesculus hippocastanum seeds extract as eco-friendly corrosion inhibitor for desalination plants: Experimental and theoretical studies. Journal of Molecular Liquids, 2022, 361, 119594.	2.3	12
38	Synthesis and anticorrosive properties of epoxy polymer for CS in [1ÂM] HCl solution: Electrochemical, AFM, DFT and MD simulations. Construction and Building Materials, 2021, 270, 121454.	3.2	92
39	Designing of phosphorous based highly functional dendrimeric macromolecular resin as an effective coating material for carbon steel in <scp>NaCl</scp>: Computational and experimental studies. Journal of Applied Polymer Science, 2021, 138, 49673.	1.3	38
40	Fabrication of environmentally friendly Losartan potassium film for corrosion inhibition of mild steel in HCl medium. Chemical Engineering Journal, 2021, 406, 126863.	6.6	294
41	Experimental and theoretical investigation on the effect of N-substituent position on the inhibition performance of l-lysine derivatives for carbon steel in H2SO4 solution. Research on Chemical Intermediates, 2021, 47, 663-682.	1.3	5
42	Banana leaves water extracts as inhibitor for X70 steel corrosion in HCl medium. Journal of Molecular Liquids, 2021, 327, 114828.	2.3	52
43	Phenolic fraction of Ammi visnaga extract as environmentally friendly antioxidant and corrosion inhibitor for mild steel in acidic medium. Journal of Molecular Liquids, 2021, 323, 114950.	2.3	45
44	Inhibition properties of 4,5-dihydroxy-4,5-di-p-tolylimidazolidine-2-thione for use on carbon steel in an aggressive alkaline medium with chloride ions: Thermodynamic, electrochemical, surface and theoretical analyses. Journal of Molecular Liquids, 2021, 327, 114813.	2.3	39
45	5-Mercapto-1-phenyltetrazole as a high-efficiency corrosion inhibitor for Q235 steel in acidic environment. Journal of Molecular Liquids, 2021, 325, 115132.	2.3	32
46	Three imidazole ionic liquids as green and eco-friendly corrosion inhibitors for mild steel in sulfuric acid medium. Journal of Molecular Liquids, 2021, 324, 115063.	2.3	47
47	Fe-mediated synthesis of N-aryl amides from nitroarenes and acyl chlorides. RSC Advances, 2021, 11, 15290-15295.	1.7	10
48	Corrosion inhibition, surface adsorption and computational studies of Momordica charantia extract: a sustainable and green approach. SN Applied Sciences, 2021, 3, 1.	1.5	34
49	Molecular modelling of compounds used for corrosion inhibition studies: a review. Physical Chemistry Chemical Physics, 2021, 23, 19987-20027.	1.3	78
50	A gossypol derivative as an efficient corrosion inhibitor for St2 steel in 1ÂM HClÂ+Â1ÂM KCl: An experimental and theoretical investigation. Journal of Molecular Liquids, 2021, 328, 115475.	2.3	69
51	Hydroxy phenyl hydrazides and their role as corrosion impeding agent: A detail experimental and theoretical study. Journal of Molecular Liquids, 2021, 330, 115605.	2.3	24
52	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, 21-33.	2.7	8
53	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.	2.3	32
54	Dopamine-functionalized poloxamers for antibacterial coating. Materials Letters, 2021, 291, 129591.	1.3	2

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55	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, 2983-3005.	1.2	12
56	Anticorrosion properties of 5,5â€²-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.	2.3	18
57	Thioglycoluril derivative as a new and effective corrosion inhibitor for low carbon steel in a 1ÂM HCl medium: Experimental and theoretical investigation. Journal of Molecular Structure, 2021, 1234, 130165.	1.8	55
58	Improving environmental adaptability and long-term corrosion resistance of Mg alloys by pyrazole ionic liquids: Experimental and theoretical studies. Journal of Molecular Liquids, 2021, 333, 115964.	2.3	13
59	Development of a Novel Thermally Stable Inhibitor Based on Furfuryl Alcohol for Mild Steel Corrosion in a 15% HCl Medium for Acidizing Application. Industrial & Engineering Chemistry Research, 2021, 60, 11030-11044.	1.8	35
60	Experimental and theoretical assessment of new and ecoâ€“friendly thioglycoluril derivative as an effective corrosion inhibitor of St2 steel in the aggressive hydrochloric acid with sulfate ions. Journal of Molecular Liquids, 2021, 335, 116168.	2.3	51
61	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. Journal of Molecular Liquids, 2021, 335, 116552.	2.3	31
62	Decyltriphenylphosphonium bromide containing hydrophobic alkyl-chain as a potential corrosion inhibitor for mild steel in sulfuric acid: Theoretical and experimental studies. Journal of Molecular Liquids, 2021, 336, 116166.	2.3	21
63	Synthesis, Crystal structure, Hirshfeld surface Analysis and computational approach of new 2-methylbenzimidazo[1,2-a]pyrimidin-4(1H)-one. Journal of Molecular Structure, 2021, 1239, 130497.	1.8	10
64	Theoretical and surface/electrochemical investigations of walnut fruit green husk extract as effective inhibitor for mild-steel corrosion in 1M HCl electrolyte. Journal of Molecular Liquids, 2021, 338, 116550.	2.3	117
65	Synthesis and Structure of Water-Soluble Sb Quantum Dots and Enhanced Corrosion Inhibition Performance and Mechanisms. Inorganic Chemistry, 2021, 60, 16346-16356.	1.9	19
66	Synthesized carbon dots with high N and S content as excellent corrosion inhibitors for copper in sulfuric acid solution. Journal of Molecular Liquids, 2021, 338, 116702.	2.3	62
67	Molecular dynamic (MD) simulation and electrochemical assessments of the Satureja Hortensis extract for the construction of effective zinc-based protective film on carbon steel. Journal of Molecular Liquids, 2021, 338, 116606.	2.3	10
68	Akebia trifoliate koiaz peels extract as environmentally benign corrosion inhibitor for mild steel in HCl solutions: Integrated experimental and theoretical investigations. Journal of Industrial and Engineering Chemistry, 2021, 101, 227-236.	2.9	73
69	Multidimensional insights into the corrosion inhibition of potassium oleate on Cu in alkaline medium: A combined Experimental and theoretical investigation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 272, 115330.	1.7	15
70	Papaver somniferum as an efficient corrosion inhibitor for iron alloy in acidic condition: DFT, MC simulation, LCMS and electrochemical studies. Journal of Molecular Structure, 2021, 1242, 130822.	1.8	54
71	Performance of two new epoxy resins as potential corrosion inhibitors for carbon steel in 1MHCl medium: Combining experimental and computational approaches. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 626, 127066.	2.3	44
72	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.	2.3	42

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73	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.	1.8	17
74	Experimental and theoretical investigation on the inhibition performance of disulfide derivatives on cobalt corrosion in alkaline medium. Journal of Molecular Liquids, 2021, 341, 116907.	2.3	17
75	Theoretical and electrochemical analysis on inhibition effects of benzotriazole derivatives (un- and) Tj ETQq1 1 0.784314 rgBT /Overlo	1.8	16
76	Unraveling the surface behavior of amino acids on Cu wiring in chemical mechanical polishing of barrier layers: A combination of experiments and ReaxFF MD. Journal of Molecular Liquids, 2021, 341, 117307.	2.3	10
77	Solvothermal synthesis of functionalized carbon dots from amino acid as an eco-friendly corrosion inhibitor for copper in sulfuric acid solution. Journal of Colloid and Interface Science, 2021, 604, 1-14.	5.0	81
78	Single-layer graphene oxide as corrosion inhibition protection for Cu under 0.5 M H2SO4 solution. Surface Topography: Metrology and Properties, 2021, 9, 045016.	0.9	3
79	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, 129, 273-288.	2.7	15
80	Novel bromideâ€“cucurbit[7]uril supramolecular ionic liquid as a green corrosion inhibitor for the oil and gas industry. Journal of Electroanalytical Chemistry, 2021, 901, 115794.	1.9	51
81	A detailed investigation on the corrosion inhibition effect of by newly synthesized pyran derivative on mild steel in 1.0ÂM HCl: Experimental, surface morphological (SEM-EDS, DRX& AFM) and computational analysis (DFT & MD simulation). Journal of Molecular Liquids, 2021, 344, 117777.	2.3	50
82	Editorial: Frontiers in Chemistry-Rising Stars: Asia. Frontiers in Chemistry, 2021, 9, 811459.	1.8	0
83	Experimental and theoretical studies on the inhibition properties of three diphenyl disulfide derivatives on copper corrosion in acid medium. Journal of Molecular Liquids, 2020, 298, 111975.	2.3	172
84	Epoxy prepolymer as a novel anti-corrosive material for carbon steel in acidic solution: Electrochemical, surface and computational studies. Materials Today Communications, 2020, 22, 100800.	0.9	28
85	Epoxy resin and TiO2 composite as anticorrosive material for carbon steel in 3% NaCl medium: Experimental and computational studies. Journal of Molecular Liquids, 2020, 317, 114249.	2.3	22
86	Trifunctional epoxy resin as anticorrosive material for carbon steel in 1 M HCl: Experimental and computational studies. Surfaces and Interfaces, 2020, 21, 100707.	1.5	13
87	A triazolopyrimidine derivative as corrosion inhibitor for mild steel in HCl solution. AIP Conference Proceedings, 2020, , .	0.3	1
88	Eco-friendly food spice 2-Furfurylthio-3-methylpyrazine as an excellent inhibitor for copper corrosion in sulfuric acid medium. Journal of Molecular Liquids, 2020, 317, 113915.	2.3	40
89	Development and Anti-corrosion Performance of Polymeric Epoxy Resin and their Zinc Phosphate Composite on 15CDV6 Steel in 3wt% NaCl: Experimental and Computational Studies. Journal of Bio- and Tribo-Corrosion, 2020, 6, 1.	1.2	24
90	Electrochemical and Computational Investigations on the Corrosion Inhibition of X65 Steel by 2-Phenylbenzimidazole in H2SO4 Solution. International Journal of Electrochemical Science, 2020, , 8837-8848.	0.5	3

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91	2-Cyanopyridine as a corrosion inhibitor for mild steel: An in silico study. AIP Conference Proceedings, 2020, , .	0.3	0
92	Aminoantipyrine derivatives as a novel eco-friendly corrosion inhibitors for P110 steel in simulating acidizing environment: Experimental and computational studies. Journal of Natural Gas Science and Engineering, 2020, 83, 103547.	2.1	43
93	Newly synthesized triazolopyrimidine derivative as an inhibitor for mild steel corrosion in HCl medium: an experimental and in silico study. Journal of Materials Research and Technology, 2020, 9, 6568-6578.	2.6	43
94	Fabrication on designing of a macromolecular epoxy resin as anti-corrosive coating material for electrocatalytically deposited cadmium on 15CDV6 steel in 3% NaCl solution. Journal of Materials Research and Technology, 2020, 9, 5549-5563.	2.6	11
95	Multidimensional insights into the corrosion inhibition of 3,3-dithiodipropionic acid on Q235 steel in H2SO4 medium: A combined experimental and in silico investigation. Journal of Colloid and Interface Science, 2020, 570, 116-124.	5.0	193
96	Electrochemical and Computational Studies on the Corrosion Inhibition of Mild Steel by 1-Hexadecyl-3-methylimidazolium Bromide in HCl Medium. International Journal of Electrochemical Science, 2020, 15, 1893-1903.	0.5	29
97	Investigation of Losartan Potassium as an eco-friendly corrosion inhibitor for copper in 0.5ÂM H2SO4. Journal of Molecular Liquids, 2020, 305, 112789.	2.3	51
98	Synthesis of Macromolecular Aromatic Epoxy Resins as Anticorrosive Materials: Computational Modeling Reinforced Experimental Studies. ACS Omega, 2020, 5, 3151-3164.	1.6	23
99	Highly functionalized epoxy macromolecule as an anti-corrosive material for carbon steel: Computational (DFT, MDS), surface (SEM-EDS) and electrochemical (OCP, PDP, EIS) studies. Journal of Molecular Liquids, 2020, 302, 112535.	2.3	69
100	Locust Bean Gum as a green and novel corrosion inhibitor for Q235 steel in 0.5ÂM H2SO4 medium. Journal of Molecular Liquids, 2020, 310, 113239.	2.3	111
101	Anti-corrosion performance of 8-hydroxyquinoline derivatives for mild steel in acidic medium: Gravimetric, electrochemical, DFT and molecular dynamics simulation investigations. Journal of Molecular Liquids, 2020, 308, 113042.	2.3	113
102	Preparation of (Gd0.9Sc0.1)2Zr2O7/YSZ thermal barrier coatings and their corrosion resistance to V2O5 molten salt. Surface and Coatings Technology, 2020, 389, 125677.	2.2	12
103	Cyclotriphosphazene based dendrimeric epoxy resin as an anti-corrosive material for copper in 3% NaCl: Experimental and computational demonstrations. Journal of Molecular Liquids, 2020, 308, 113020.	2.3	31
104	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. RSC Advances, 2020, 10, 15163-15170.	1.7	85
105	A new series of synthesized compounds as corrosion mitigator for storage tanks: Detailed electrochemical and theoretical investigations. Construction and Building Materials, 2020, 259, 120421.	3.2	22
106	Experimental and Theoretical Investigation of Corrosion Inhibition Effect of Multi-Active Compounds on Mild Steel in 1 M HCl. International Journal of Electrochemical Science, 2019, 14, 6855-6873.	0.5	8
107	Epoxy pre-polymers as new and effective materials for corrosion inhibition of carbon steel in acidic medium: Computational and experimental studies. Scientific Reports, 2019, 9, 11715.	1.6	90
108	Insights into the inhibition mechanism of three 5-phenyltetrazole derivatives for copper corrosion in sulfuric acid medium via experimental and DFT methods. Journal of the Taiwan Institute of Chemical Engineers, 2019, 102, 424-437.	2.7	125

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109	Triblock Copolymer Pluronic F68 as a Corrosion Inhibitor for Aluminum-air Battery: An Electrochemical and in Silico Study. International Journal of Electrochemical Science, 2019, , 11480-11490.	0.5	5
110	Polydopamine functionalized graphene oxide nanocomposites reinforced the corrosion protection and adhesion properties of waterborne polyurethane coatings. European Polymer Journal, 2019, 120, 109249.	2.6	100
111	Adsorption and anticorrosive behavior of aromatic epoxy monomers on carbon steel corrosion in acidic solution: computational studies and sustained experimental studies. RSC Advances, 2019, 9, 14782-14796.	1.7	46
112	Experimental and Theoretical Studies on the Corrosion Inhibition of Carbon Steel by Two Indazole Derivatives in HCl Medium. Materials, 2019, 12, 1339.	1.3	24
113	Probing the frictional properties of sulfur-doped diamond-like carbon films under high vacuum by first-principles calculations. Applied Surface Science, 2019, 481, 1483-1489.	3.1	13
114	Synergistic corrosion inhibition effect of thiazolyl-based ionic liquids between anions and cations for copper in HCl solution. Applied Surface Science, 2019, 483, 901-911.	3.1	77
115	Rheological, electrochemical, surface, DFT and molecular dynamics simulation studies on the anticorrosive properties of new epoxy monomer compound for steel in 1ÂM HCl solution. RSC Advances, 2019, 9, 4454-4462.	1.7	62
116	Multidimensional insights involving electrochemical andin silicoinvestigation into the corrosion inhibition of newly synthesized pyrazolotriazole derivatives on carbon steel in a HCl solution. RSC Advances, 2019, 9, 34761-34771.	1.7	8
117	Synthesis, crystal structure, DFT, molecular dynamics simulation and evaluation of the anticorrosion performance of a new pyrazolotriazole derivative. Journal of Molecular Structure, 2019, 1176, 290-297.	1.8	27
118	Mn3O4 with different morphologies tuned through one-step electrochemical method for high-performance lithium-ion batteries anode. Journal of Alloys and Compounds, 2019, 771, 335-342.	2.8	30
119	Electrochemical, DFT and MD simulation of newly synthesized triazolotriazepine derivatives as corrosion inhibitors for carbon steel in 1â€¯M HCl. Journal of Molecular Liquids, 2019, 274, 759-769.	2.3	49
120	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. Journal of Colloid and Interface Science, 2019, 538, 519-529.	5.0	215
121	Anticorrosion potential of domperidone on copper in different concentration of hydrochloric acid solution. Journal of Adhesion Science and Technology, 2018, 32, 1485-1502.	1.4	6
122	Experimental and computational investigations of 2-amino-6-bromobenzothiazole as a corrosion inhibitor for copper in sulfuric acid. Journal of Adhesion Science and Technology, 2018, 32, 2083-2098.	1.4	25
123	A combined experimental and theoretical study of the inhibition effect of three disulfide-based flavouring agents for copper corrosion in 0.5â€¯M sulfuric acid. Journal of Colloid and Interface Science, 2018, 526, 268-280.	5.0	198
124	Mercury (II) adsorption from aqueous solution using nitrogen and sulfur co-doped activated carbon. Water Science and Technology, 2018, 2017, 310-318.	1.2	11
125	Quantum chemical calculations, molecular dynamic (MD) simulations and experimental studies of using some azo dyes as corrosion inhibitors for iron. Part 2: Bisâ€“azo dye derivatives. Journal of Molecular Structure, 2018, 1163, 397-417.	1.8	101
126	Magnetic coreâ€“shell-structured Fe₃O₄@CeO₂ as an efficient catalyst for catalytic wet peroxide oxidation of benzoic acid. RSC Advances, 2018, 8, 33972-33979.	1.7	15

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127	Halogeno-substituted indazoles against copper corrosion in industrial pickling process: a combined electrochemical, morphological and theoretical approach. RSC Advances, 2018, 8, 38860-38871.	1.7	11
128	Synergistic Effect of Purpald with Tartaric Acid on the Corrosion Inhibition of Mild Steel: from Electrochemical to Theoretical Insights. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 917-925.	0.3	7
129	Understanding the corrosion behavior of amorphous multiple-layer carbon coating. AIP Conference Proceedings, 2018, , .	0.3	1
130	Influence of the alkyl chain length of alkyltriazoles on the corrosion inhibition of iron: A DFTB study. AIP Conference Proceedings, 2018, , .	0.3	13
131	Experimental and theoretical investigations of some pyrazolo-pyrimidine derivatives as corrosion inhibitors on copper in sulfuric acid solution. Applied Surface Science, 2018, 459, 612-620.	3.1	115
132	Rapid Production of Mn3O4/rGO as an Efficient Electrode Material for Supercapacitor by Flame Plasma. Materials, 2018, 11, 881.	1.3	43
133	Experimental and Theoretical Investigation of Thiazolyl Blue as a Corrosion Inhibitor for Copper in Neutral Sodium Chloride Solution. Materials, 2018, 11, 1042.	1.3	43
134	Anticorrosive Effects of Some Thiophene Derivatives Against the Corrosion of Iron: A Computational Study. Frontiers in Chemistry, 2018, 6, 155.	1.8	144
135	Corrosion inhibition of mild steel in sulfuric acid solution by loquat (Eriobotrya japonica Lindl.) leaves extract. Scientific Reports, 2018, 8, 9140.	1.6	65
136	Theoretical evaluation of the corrosion inhibition performance of 1,3-thiazole and its amino derivatives. Arabian Journal of Chemistry, 2017, 10, 121-130.	2.3	101
137	Understanding the adsorption of a benzotriazole derivative on Cu (111) surface: A DFT and MD investigation. , 2017, , .		0
138	A computational study on corrosion inhibition performances of novel quinoline derivatives against the corrosion of iron. Journal of Molecular Structure, 2017, 1134, 751-761.	1.8	222
139	Theoretical insight into an empirical rule about organic corrosion inhibitors containing nitrogen, oxygen, and sulfur atoms. Applied Surface Science, 2017, 406, 301-306.	3.1	323
140	Experimental and theoretical studies of four allyl imidazolium-based ionic liquids as green inhibitors for copper corrosion in sulfuric acid. Corrosion Science, 2017, 119, 68-78.	3.0	466
141	Corrosion control of mild steel in 0.1ÂM H2SO4 solution by benzimidazole and its derivatives: an experimental and theoretical study. RSC Advances, 2017, 7, 23961-23969.	1.7	28
142	Toward understanding the adsorption mechanism of large size organic corrosion inhibitors on an Fe(110) surface using the DFTB method. RSC Advances, 2017, 7, 29042-29050.	1.7	170
143	First-principles investigation of a Î²-MnO₂ and graphene composite as a promising cathode material for rechargeable Li-ion batteries. RSC Advances, 2017, 7, 29821-29826.	1.7	11
144	Sodium dodecyl benzene sulfonate as a sustainable inhibitor for zinc corrosion in 26% NH 4 Cl solution. Journal of Cleaner Production, 2017, 152, 17-25.	4.6	107

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145	Applications of graphene-based composite hydrogels: a review. RSC Advances, 2017, 7, 51008-51020.	1.7	61
146	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.	5.0	268
147	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, 12, 166-177.	0.5	45
148	Specific Adsorption of Halide Ions on Iron Surface: A Combined Electrochemical and Monte Carlo Simulation Investigation. International Journal of Electrochemical Science, 2017, , 7064-7074.	0.5	15
149	Quantum chemical and molecular dynamics simulation studies on inhibition performances of some thiazole and thiadiazole derivatives against corrosion of iron. Journal of Molecular Liquids, 2016, 219, 497-504.	2.3	111
150	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. Journal of the Taiwan Institute of Chemical Engineers, 2016, 68, 461-480.	2.7	74
151	Synergistic effect of tartaric acid with 2,6-diaminopyridine on the corrosion inhibition of mild steel in 0.5 M HCl. Scientific Reports, 2016, 6, 33305.	1.6	138
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