Lukman O Olasunkanmi

List of Publications by Citations

87	3,744	33	60
papers	citations	h-index	g-index
95	4,522	4.1	6.09
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
87	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
86	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
85	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
84	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
83	Substituents effect on corrosion inhibition performance of organic compounds in aggressive ionic solutions: A review. *Journal of Molecular Liquids*, **2018**, 251, 100-118	6	173
82	L-Proline-promoted synthesis of 2-amino-4-arylquinoline-3-carbonitriles as sustainable corrosion inhibitors for mild steel in 1 M HCl: experimental and computational studies. *RSC Advances*, **2015**, 5, 85417-85430	3.7	130
81	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
80	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
79	Corrosion inhibition of mild steel in 1M HCl by D-glucose derivatives of dihydropyrido [2,3-d:6,5-d′] dipyrimidine-2, 4, 6, 8(1H,3H, 5H,7H)-tetraone. *Scientific Reports*, **2017**, 7, 44432	4.9	103
78	Corrosion inhibition performance of newly synthesized 5-alkoxymethyl-8-hydroxyquinoline derivatives for carbon steel in 1 M HCl solution: experimental, DFT and Monte Carlo simulation studies. *Physical Chemistry Chemical Physics*, **2018**, 20, 20167-20187	3.6	102
77	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
76	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
75	Quinoxaline derivatives as corrosion inhibitors for mild steel in hydrochloric acid medium: Electrochemical and quantum chemical studies. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 76, 109-126	3	90
74	Experimental and computational studies onpropanone derivatives of quinoxalin-6-yl-4,5-dihydropyrazole as inhibitors of mild steel corrosion in hydrochloric acid. *Journal of Colloid and Interface Science*, **2020**, 561, 104-116	9.3	84
73	Zinc Oxide Nanocomposites of Selected Polymers: Synthesis, Characterization, and Corrosion Inhibition Studies on Mild Steel in HCl Solution. *ACS Omega*, **2017**, 2, 8421-8437	3.9	74
72	Anticorrosion performance of three newly synthesized isatin derivatives on carbon steel in hydrochloric acid pickling environment: Electrochemical, surface and theoretical studies. *Journal of Molecular Liquids*, **2017**, 246, 302-316	6	73
71	Adsorption, Thermodynamic and Quantum Chemical Studies of 1-hexyl-3-methylimidazolium Based Ionic Liquids as Corrosion Inhibitors for Mild Steel in HCl. *Materials*, **2015**, 8, 3607-3632	3.5	72

70	Adsorption and Corrosion Inhibition Studies of Some Selected Dyes as Corrosion Inhibitors for Mild Steel in Acidic Medium: Gravimetric, Electrochemical, Quantum Chemical Studies and Synergistic Effect with Iodide Ions. *Molecules*, **2015**, 20, 16004-29	4.8	71
69	Experimental and theoretical investigation of the inhibitory effect of new pyridazine derivatives for the corrosion of mild steel in 1 M HCl. *Journal of Molecular Structure*, **2017**, 1136, 127-139	3.4	63
68	Phthalocyanine Doped Metal Oxide Nanoparticles on Multiwalled Carbon Nanotubes Platform for the detection of Dopamine. *Scientific Reports*, **2017**, 7, 43181	4.9	60
67	Computational simulation and statistical analysis on the relationship between corrosion inhibition efficiency and molecular structure of some hydrazine derivatives in phosphoric acid on mild steel surface. *Applied Surface Science*, **2019**, 491, 707-722	6.7	58
66	Epoxy resins as anticorrosive polymeric materials: A review. *Reactive and Functional Polymers*, **2020**, 156, 104741	4.6	58
65	Gravimetric, Electrochemical, Surface Morphology, DFT, and Monte Carlo Simulation Studies on Three N-Substituted 2-Aminopyridine Derivatives as Corrosion Inhibitors of Mild Steel in Acidic Medium. *Journal of Physical Chemistry C*, **2018**, 122, 11870-11882	3.8	56
64	Experimental, density functional theory and molecular dynamics supported adsorption behavior of environmental benign imidazolium based ionic liquids on mild steel surface in acidic medium. *Journal of Molecular Liquids*, **2019**, 273, 1-15	6	56
63	Adsorption characteristics of Iota-carrageenan and Inulin biopolymers as potential corrosion inhibitors at mild steel/sulphuric acid interface. *Journal of Molecular Liquids*, **2017**, 232, 9-19	6	55
62	Electrochemical, thermodynamic and quantum chemical studies of synthesized benzimidazole derivatives as corrosion inhibitors for N80 steel in hydrochloric acid. *Journal of Molecular Liquids*, **2016**, 213, 122-138	6	53
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	Experimental, quantum chemical and molecular dynamic simulations studies on the corrosion inhibition of mild steel by some carbazole derivatives. *Scientific Reports*, **2017**, 7, 2436	4.9	51
59	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
58	Electrochemical, surface and computational studies on the inhibition performance of some newly synthesized 8-hydroxyquinoline derivatives containing benzimidazole moiety against the corrosion of carbon steel in phosphoric acid environment. *Journal of Materials Research and Technology*, **2020**, 9, 727-748	5.5	44
57	Biopolymer from Tragacanth Gum as a Green Corrosion Inhibitor for Carbon Steel in 1 M HCl Solution. *ACS Omega*, **2017**, 2, 3997-4008	3.9	40
56	Some Phthalocyanine and Naphthalocyanine Derivatives as Corrosion Inhibitors for Aluminium in Acidic Medium: Experimental, Quantum Chemical Calculations, QSAR Studies and Synergistic Effect of Iodide Ions. *Molecules*, **2015**, 20, 15701-34	4.8	35
55	Morpholine and piperazine based carboxamide derivatives as corrosion inhibitors of mild steel in HCl medium. *Journal of Molecular Liquids*, **2017**, 230, 652-661	6	34
54	Polyurethane Based Triblock Copolymers as Corrosion Inhibitors for Mild Steel in 0.5 M H2SO4. *Industrial & Engineering Chemistry Research*, **2017**, 56, 441-456	3.9	32
53	Electrochemical response of nitrite and nitric oxide on graphene oxide nanoparticles doped with Prussian blue (PB) and Fe2O3 nanoparticles. *RSC Advances*, **2015**, 5, 27759-27774	3.7	32

52	Influence of 6-phenyl-3(2 H)-pyridazinone and 3-chloro-6-phenylpyrazine on mild steel corrosion in 0.5 M HCl medium: Experimental and theoretical studies. *Journal of Molecular Structure*, **2017**, 1149, 549-559	3.4	32
51	A Novel Schiff Base of 3-acetyl-4-hydroxy-6-methyl-(2H)pyran-2-one and 2,2′(ethylenedioxy)diethylamine as Potential Corrosion Inhibitor for Mild Steel in Acidic Medium. *Materials*, **2015**, 8, 2918-2934	3.5	32
50	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
49	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
48	Synthesis, characterization, DFT calculations and molecular docking studies of metal (II) complexes. *Journal of Molecular Structure*, **2017**, 1150, 279-292	3.4	29
47	Adsorption characteristics of green 5-arylaminomethylene pyrimidine-2,4,6-triones on mild steel surface in acidic medium: Experimental and computational approach. *Results in Physics*, **2018**, 8, 657-670	3.7	26
46	Coordination behaviours of new (bidentate N,O-chelating) Schiff bases towards copper(II) and nickel(II) metal ions: synthesis, characterization, antimicrobial, antioxidant, and DFT studies. *Research on Chemical Intermediates*, **2017**, 43, 3787-3811	2.8	22
45	Synthesis, Characterization, Antimicrobial Studies and Corrosion Inhibition Potential of 1,8-dimethyl-1,3,6,8,10,13-hexaazacyclotetradecane: Experimental and Quantum Chemical Studies. *Materials*, **2016**, 9,	3.5	22
44	Synthesis, Biological, and Quantum Chemical Studies of Zn(II) and Ni(II) Mixed-Ligand Complexes Derived from N,N-Disubstituted Dithiocarbamate and Benzoic Acid. *Journal of Chemistry*, **2016**, 2016, 1-12	2.3	21
43	Experimental and computational mediated illustration of effect of different substituents on adsorption tendency of phthalazinone derivatives on mild steel surface in acidic medium. *Journal of Molecular Liquids*, **2020**, 305, 112844	6	20
42	Adsorption and anticorrosion behaviour of mild steel treated with 2-((1H-indol-2-yl)thio)-6-amino-4-phenylpyridine-3,5-dicarbonitriles in a hydrochloric acid solution: Experimental and computational studies. *Journal of Molecular Liquids*, **2019**, 283, 491-506	6	19
41	Experimental and theoretical investigations of cyclometalated ruthenium(ii) complex containing CCC-pincer and anti-inflammatory drugs as ligands: synthesis, characterization, inhibition of cyclooxygenase and in vitro cytotoxicity activities in various cancer cell lines. *Dalton Transactions*, **2019**, 48, 728-740	4.3	18
40	Molecular modelling of compounds used for corrosion inhibition studies: a review. *Physical Chemistry Chemical Physics*, **2021**, 23, 19987-20027	3.6	17
39	Effect of surface treatment on the bioactivity and electrochemical behavior of magnesium alloys in simulated body fluid. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2017**, 68, 776-790	1.6	16
38	DMol 3 /COSMO-RS prediction of aqueous solubility and reactivity of selected Azo dyes: Effect of global orbital cut-off and COSMO segment variation. *Journal of Molecular Liquids*, **2018**, 249, 346-360	6	16
37	Surface protection activities of some 6-substituted 3-chloropyridazine derivatives for mild steel in 1 M hydrochloric acid: Experimental and theoretical studies. *Surfaces and Interfaces*, **2018**, 12, 8-19	4.1	15
36	Synthesis, DFT Calculation, and Antimicrobial Studies of Novel Zn(II), Co(II), Cu(II), and Mn(II) Heteroleptic Complexes Containing Benzoylacetone and Dithiocarbamate. *Bioinorganic Chemistry and Applications*, **2015**, 2015, 789063	4.2	14
35	N-substituted carbazoles as corrosion inhibitors in microbiologically influenced and acidic corrosion of mild steel: Gravimetric, electrochemical, surface and computational studies. *Journal of Molecular Structure*, **2021**, 1223, 129328	3.4	14

34	Adsorption and Corrosion Inhibition Potentials of Salicylaldehyde-based Schiff Bases of Semicarbazide and p-Toluidine on Mild Steel in Acidic Medium: Experimental and Computational Studies. *Surfaces and Interfaces*, **2020**, 21, 100782	4.1	13
33	Probing Molecular Interactions between Ammonium-Based Ionic Liquids and N,N-Dimethylacetamide: A Combined FTIR, DLS, and DFT Study. *Journal of Physical Chemistry B*, **2016**, 120, 12584-12595	3.4	12
32	Acridine-based thiosemicarbazones as novel inhibitors of mild steel corrosion in 1 M HCl: synthesis, electrochemical, DFT and Monte Carlo simulation studies.. *RSC Advances*, **2019**, 9, 29590-29599	3.7	11
31	Quantitative structure activity relationship and artificial neural network as vital tools in predicting coordination capabilities of organic compounds with metal surface: A review. *Coordination Chemistry Reviews*, **2021**, 446, 214101	23.2	10
30	Prediction of aqueous solubility by treatment of COSMO-RS data with empirical solubility equations: the roles of global orbital cut-off and COSMO solvent radius. *Theoretical Chemistry Accounts*, **2019**, 138, 1	1.9	9
29	Synthesis, experimental and theoretical characterization, and antimicrobial studies of some Fe(II), Co(II), and Ni(II) complexes of 2-(4,6-dihydroxypyrimidin-2-ylamino)naphthalene-1,4-dione. *Research on Chemical Intermediates*, **2018**, 44, 5857-5877	2.8	9
28	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
27	Intermolecular interactions between methanol and some sulphonamide drugs in aqueous medium using thermodynamics approach. *Journal of Molecular Liquids*, **2019**, 283, 451-461	6	8
26	Synthesis and structures of divalent Co, Ni, Zn and Cd complexes of mixed dichalcogen and dipnictogen ligands with corrosion inhibition properties: experimental and computational studies.. *RSC Advances*, **2020**, 10, 41967-41982	3.7	8
25	De novo design of thioredoxin reductase-targeted heterometallic titanocene-gold compounds of chlorambucil for mechanistic insights into renal cancer. *Chemical Communications*, **2019**, 56, 297-300	5.8	7
24	Electrochemical and Computational Studies of Some Carbazole Derivatives as Inhibitors of Mild Steel Corrosion in Abiotic and Biotic Environments. *Journal of Bio- and Tribo-Corrosion*, **2018**, 4, 1	2.9	6
23	Aminomethylpyridazine isomers as corrosion inhibitors for mild steel in 1 M HCl: electrochemical, DFT and Monte Carlo simulation studies. *Journal of Molecular Liquids*, **2021**, 344, 117882	6	5
22	A DFT Study of Disperse Yellow 119 Degradation Mechanism by Hydroxyl Radical Attack. *ChemistrySelect*, **2018**, 3, 12988-12997	1.8	5
21	Inhibition of Mild Steel Corrosion in Acidic Medium by Extract of Spilanthes Uliginosa Leaves. *Electroanalysis*, **2020**, 32, 2693-2702	3	4
20	Hydrogen Bonding Interactions of Chlorotoluene with 1-Alkanol Analyzed by Thermodynamic, Fourier Transform Infrared Spectroscopy, Density Functional Theory, and Natural Bond Orbital. *ACS Omega*, **2018**, 3, 4679-4687	3.9	4
19	Development of QSAR-based (MLR/ANN) predictive models for effective design of pyridazine corrosion inhibitors. *Materials Today Communications*, **2022**, 30, 103163	2.5	3
18	Investigation on Corrosion Inhibition of Mild Steel by Extract of Dracaena arborea Leaves in Acidic Medium. *Chemistry Africa*, **2021**, 4, 647-658	2.2	3
17	Tuning the aqueous solubility, chemical reactivity and absorption wavelength of azo dye through systematic adjustment of molecular charge density: a DFT study. *Molecular Physics*, **2020**, 118, e1626508	1.7	3

16	Theoretical Study of the Molecular Geometries, Electronic and Thermodynamic Properties of Chlorinated Dipyrido-(3,2-a:,-c)-Phenazine. *Journal of Chemistry*, **2013**, 2013, 1-7	2.3	2
15	Synergistic effect of opposite polar substituents on selected properties of disperse yellow 119 dye. *Chemical Physics Letters*, **2018**, 704, 55-61	2.5	2
14	Synthesis, computational and biological studies of alkyltin(IV) -methyl--hydroxyethyl dithiocarbamate complexes. *Heliyon*, **2021**, 7, e07693	3.6	2
13	Antioxidant properties, computational studies and corrosion inhibition potential of 3-hydroxy-1-(2-hydroxyphenyl)-5-(phenyl)-2,4-pentadien-1-one analogues. *Journal of Molecular Liquids*, **2016**, 223, 819-827	6	1
12	Synthesis, antimicrobial activities and computational studies of some oxazolone derivatives. *Ife Journal of Science*, **2018**, 20, 1	0.6	1
11	Fundamentals of corrosion chemistry **2022**, 25-45		1
10	Nanomaterials and Nanocomposites as Corrosion Inhibitors. *ACS Symposium Series*,187-217	0.4	1
9	Computational Study of the Mechanistic Pathway Of Hydroxyl Radical-Initiated Degradation of Disperse Red 73 Dye. *Chemistry Africa*,1	2.2	0
8	Investigating the synergism of some hydrazinecarboxamides and iodide ions as corrosion inhibitor formulations for mild steel in hydrochloric Acid: Experimental and computational studies. *Journal of Molecular Liquids*, **2021**, 343, 117600	6	0
7	Computational insights into quinoxaline-based corrosion inhibitors of steel in HCl: Quantum chemical analysis and QSPR-ANN studies. *Arabian Journal of Chemistry*, **2022**, 103870	5.9	0
6	Functionalized Carbon Allotropes as Corrosion Inhibitors. *ACS Symposium Series*,87-114	0.4	0
5	Utilization of ZnO-based materials as anticorrosive agents: a review **2022**, 161-182		
4	Indole and Its Derivatives as Corrosion Inhibitors **2021**, 167-220		
3	Electrochemical Properties of Nanoporous Based Materials **2019**, 3-24		
2	Nutrient composition and in-vitro starch hydrolysis of acacia colei (Maslin and thompson) seeds as affected by year of harvest. *Scientific African*, **2020**, 9, e00475	1.7	
1	Evaluation of the efficiency of ZnCl2 activated cocoa pod husk charcoal on the removal of Cu2+, Cd2+, and Pb2+ ions from aqueous solution. *Journal of Dispersion Science and Technology*,1-10	1.5	