Abraham Joseph

List of Publications by Year
in descending order

88 papers	2,260 citations	201674 27 h-index	254184 43 g-index
89 all docs	89 docs citations	89 times ranked	1703 citing authors

#	Article	IF	Citations
1	Adsorption and electrochemical studies of Pimenta dioica leaf extracts as corrosion inhibitor for mild steel in hydrochloric acid. Materials Chemistry and Physics, 2015, 167, 28-41.	4.0	119
2	Electrochemical and computational aspects of surface interaction and corrosion inhibition of mild steel in hydrochloric acid by Phyllanthus amarus leaf extract (PAE). Journal of Molecular Liquids, 2016, 216, 146-155.	4.9	115
3	Enhancement of corrosion protection of mild steel by chitosan/ZnO nanoparticle composite membranes. Progress in Organic Coatings, 2015, 84, 28-34.	3.9	104
4	Bio-inspired green synthesis of zinc oxide nanoparticles using Abelmoschus esculentus mucilage and selective degradation of cationic dye pollutants. Journal of Physics and Chemistry of Solids, 2019, 127, 265-274.	4.0	101
5	Electrochemical and theoretical studies on the synergistic interaction and corrosion inhibition of alkyl benzimidazoles and thiosemicarbazide pair on mild steel in hydrochloric acid. Materials Chemistry and Physics, 2015, 149-150, 632-647.	4.0	89
6	Selective adsorption of methylene blue (MB) dye from aqueous mixture of MB and methyl orange (MO) using mesoporous titania (TiO2) â€“ poly vinyl alcohol (PVA) nanocomposite. Journal of Molecular Liquids, 2019, 286, 110908.	4.9	88
7	Corrosion inhibition of mild steel using chitosan / TiO2 nanocomposite coatings. Progress in Organic Coatings, 2019, 129, 254-259.	3.9	70
8	Effective inhibition of mild steel corrosion in 1 M hydrochloric acid using substituted triazines: an experimental and theoretical study. RSC Advances, 2012, 2, 9944.	3.6	60
9	Electro analytical, surface morphological and theoretical studies on the corrosion inhibition behavior of different 1,2,4-triazole precursors on mild steel in 1M hydrochloric acid. Materials Chemistry and Physics, 2012, 133, 1083-1091.	4.0	57
10	Corrosion inhibition properties of 1,2,4-Hetrocyclic Systems: Electrochemical, theoretical and Monte Carlo simulation studies. Egyptian Journal of Petroleum, 2017, 26, 721-732.	2.6	53
11	Applications of phytogenic ZnO nanoparticles: A review on recent advancements. Journal of Molecular Liquids, 2021, 331, 115805.	4.9	52
12	Electrochemical measurements and theoretical calculations on the inhibitive interaction of Plectranthus amboinicus leaf extract with mild steel in hydrochloric acid. Measurement: Journal of the International Measurement Confederation, 2017, 95, 297-305.	5.0	51
13	A green approach to corrosion inhibition of mild steel in hydrochloric acid using fruit rind extract of Garcinia indica (Binda). Journal of Molecular Liquids, 2020, 312, 113369.	4.9	51
14	Electrochemical, quantum chemical, and molecular dynamics studies on the interaction of 4â€aminoâ€4H,3,5â€di(methoxy)â€1,2,4â€triazole (ATD), BATD, and DBATD on copper metal in 1N H₂SO₄. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 1031-1041.	1.5	46
15	Effective photocatalytic removal of different dye stuffs using green synthesized zinc oxide nanogranules. Materials Research Bulletin, 2018, 102, 116-121.	5.2	45
16	Effect of substitution and temperature on the corrosion inhibition properties of benzimidazole bearing 1, 3, 4-oxadiazoles for mild steel in sulphuric acid: Physicochemical and theoretical studies. Journal of Environmental Chemical Engineering, 2018, 6, 1072-1085.	6.7	44
17	Adsorption and inhibition effect of methyl carbamate on copper metal in 1 N HNO3: an experimental and theoretical study. RSC Advances, 2013, 3, 8929.	3.6	43
18	Effective inhibition of mild steel corrosion in hydrochloric acid using EBIMOT, a 1, 3, 4-oxadiazole derivative bearing a 2-ethylbenzimidazole moiety: Electro analytical, computational and kinetic studies. Egyptian Journal of Petroleum, 2018, 27, 823-833.	2.6	40

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19	Inhibition of mild steel corrosion in 1M hydrochloric acid by 4-(N,N-dimethylaminobenzilidine)-3-mercapto-6-methyl-1,2,4-triazin(4H)-5-one (DAMMT). Materials Chemistry and Physics, 2010, 122, 374-379.	4.0	38
20	Investigation on Bovine Serum Albumin (BSA) binding efficiency and antibacterial activity of ZnO nanoparticles. Materials Chemistry and Physics, 2020, 240, 122115.	4.0	38
21	Corrosion inhibition of mild steel by N(4)-substituted thiosemicarbazone in hydrochloric acid media. Egyptian Journal of Petroleum, 2017, 26, 405-412.	2.6	37
22	Experimental and Theoretical Studies on Cinnamomum verum Leaf Extract and One of Its Major Components, Eugenol as Environmentally Benign Corrosion Inhibitors for Mild Steel in Acid Media. Journal of Bio- and Tribo-Corrosion, 2018, 4, 1.	2.6	37
23	Electrochemical and quantum chemical study of 4-[(E)-[(2,4-dihydroxy phenyl) methylidine] amino]-6-methyl-3-sulphanylidine-2,3,4,5-tetra hydro-1,2,4-triazin-5-one [DMSTT]. Materials Chemistry and Physics, 2010, 123, 218-224.	4.0	36
24	Efficient removal of Congo red from aqueous solutions using phytogenic aluminum sulfate nano coagulant. Materials Chemistry and Physics, 2020, 251, 123040.	4.0	34
25	Surface Interaction and Corrosion Inhibition of Mild Steel in Hydrochloric Acid Using Pyoverdine, an Eco-Friendly Bio-molecule. Journal of Bio- and Tribo-Corrosion, 2016, 2, 1.	2.6	33
26	Synthesis, characterization and investigation of methyl orange dye removal from aqueous solutions using waterborne poly vinyl pyrrolidone (PVP) stabilized poly aniline (PANI) coreâ€“shell nanoparticles. RSC Advances, 2017, 7, 20960-20968.	3.6	32
27	Corrosion protection of mild steel in hydrochloric acid up to 313 K using propyl benzimidazole: Electroanalytical, adsorption and quantum chemical studies. Egyptian Journal of Petroleum, 2018, 27, 11-20.	2.6	30
28	Physicochemical studies on the inhibitive properties of a 1,2,4-triazole Schiffâ€™s base, HMATD, on the corrosion of mild steel in hydrochloric acid. Egyptian Journal of Petroleum, 2018, 27, 307-317.	2.6	28
29	Excellent Anticorrosion Behavior of Ruta Graveolens Extract (RGE) for Mild Steel in Hydrochloric Acid: Electro Analytical Studies on the Effect of Time, Temperature, and Inhibitor Concentration. Journal of Bio- and Tribo-Corrosion, 2016, 2, 1.	2.6	27
30	Adsorption and electrochemical studies on the synergistic interaction of alkyl benzimadazoles and ethylene thiourea pair on mild steel in hydrochloric acid. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 3021-3032.	5.3	24
31	Inhibition of mild steel corrosion in hydrochloric using three different 1,2,4-triazole Schiff's bases: A comparative study of electrochemical, theoretical and spectroscopic results. Journal of Molecular Liquids, 2017, 241, 1-8.	4.9	24
32	Electroanalytical and Theoretical Investigations of the Corrosion Inhibition Behavior of Bis-1,2,4-Triazole Precursors EBATTand BBATT on Mild Steel in 0.1 N HNO₃.. Industrial & Engineering Chemistry Research, 2012, 51, 16633-16642.	3.7	23
33	Characterization and Temperature dependent DC conductivity study of bio templated nickel oxide nanoparticles (NiO) and their composites using polyaniline (PANI). Materials Chemistry and Physics, 2020, 242, 122469.	4.0	23
34	Electrochemical, surface analytical and quantum chemical studies on Schiff bases of 4-amino-4H-1, 2, 4-triazole-3,5-dimethanol (ATD) in corrosion protection of aluminium in 1N HNO3. Bulletin of Materials Science, 2011, 34, 1245-1256.	1.7	21
35	Quantum chemical and electrochemical studies on the corrosion inhibition of aluminium in 1â€‰N HNO₃ using 1,2,4â€triazine. Materials and Corrosion - Werkstoffe Und Korrosion, 2013, 64, 625-632.	1.5	21
36	Surface morphological and impedance spectroscopic studies on the interaction of polyethylene glycol (PEG) and polyvinyl pyrrolidone (PVP) with mild steel in acid solutions. Research on Chemical Intermediates, 2013, 39, 1169-1182.	2.7	20

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37	Comparative studies on the corrosion inhibition characteristics of three different triazine based Schiffâ€™s bases, HMMT, DHMMT and MHMMT, for mild steel exposed in sulfuric acid. Egyptian Journal of Petroleum, 2018, 27, 467-475.	2.6	20
38	Highly selective inhibition of Î±-glucosidase by green synthesised ZnO nanoparticles - In-vitro screening and in-silico docking studies. International Journal of Biological Macromolecules, 2019, 139, 712-718.	7.5	20
39	Interaction of Benzimidazoles and Benzotriazole: Its Corrosion Protection Properties on Mild Steel in Hydrochloric Acid. Journal of Materials Engineering and Performance, 2014, 23, 4089-4101.	2.5	19
40	Comparative studies on the electrochemical and physicochemical behaviour of three different benzimidazole motifs as corrosion inhibitor for mild steel in hydrochloric acid. Egyptian Journal of Petroleum, 2018, 27, 1067-1076.	2.6	19
41	Density functional treatment and electro analytical measurements of liquid phase interaction of 2-ethylbenzimidazole (EBI) and ethyl (2-ethylbenzimidazolyl) acetate (EEBA) on mild steel in hydrochloric acid. Journal of Molecular Liquids, 2016, 220, 707-717.	4.9	18
42	Inhibition of mild steel corrosion in HCl using aqueous and alcoholic extracts of Crotalaria Pallida â€“ A combination of experimental, simulation and theoretical studies. Journal of Molecular Liquids, 2021, 334, 116515.	4.9	18
43	Inhibition of Mild Steel Corrosion using Chitosanâ€“Polyvinyl Alcohol Nanocomposite Films by Solâ€“Gel Method: An Environmentally Friendly Approach. Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	2.6	17
44	Protection of mild steel in hydrochloric acid using methyl benzimidazole substituted 1, 3, 4-oxadiazole: computational, electroanalytical, thermodynamic and kinetic studies. Journal of Adhesion Science and Technology, 2019, 33, 2227-2249.	2.6	17
45	Synthesis, characterization, in silico, and in vitro biological screening of coordination compounds with 1,2,4-triazine based biocompatible ligands and selected 3d-metal ions. Heliyon, 2020, 6, e05144.	3.2	17
46	Bio-fabricated ZnO nanoparticles: direct sunlight-driven selective photodegradation, antibacterial activity, and thermoluminescence-emission characteristics. New Journal of Chemistry, 2020, 44, 8273-8279.	2.8	17
47	Stearic acid grafted chitosan/epoxy blend surface coating for prolonged protection of mild steel in saline environment. Journal of Adhesion Science and Technology, 2019, 33, 2250-2264.	2.6	16
48	Effect of surfactant addition to Guar Gum and protection of mild steel in hydrochloric acid at high temperatures: Experimental and theoretical studies. Journal of Molecular Liquids, 2021, 331, 115807.	4.9	15
49	Mesoporous Titania-Silica nanocomposite as an effective material for the degradation of Bisphenol A under visible light. Journal of Saudi Chemical Society, 2020, 24, 651-662.	5.2	15
50	Synergistic effects and hydrogen bonded interaction of alkyl benzimadazoles and thiourea pair on mild steel in hydrochloric acid. Journal of the Taiwan Institute of Chemical Engineers, 2015, 52, 127-139.	5.3	14
51	Excellent protection of mild steel in sodium chloride solution for a substantial period of time using a hybrid nanocoating of poly vinyl alcohol and Titania. Arabian Journal of Chemistry, 2020, 13, 6921-6930.	4.9	13
52	Electroanalytical studies of the corrosion-protection properties of 4-amino-4H-1,2,4-triazole-3,5-dimethanol (ATD) on mild steel in 0.5ÂN sulfuric acid. Research on Chemical Intermediates, 2012, 38, 1359-1373.	2.7	12
53	Electrochemical studies on the interaction of l-cysteine with metallic copper in sulfuric acid. Research on Chemical Intermediates, 2013, 39, 3531-3543.	2.7	11
54	Controlling the Rate of Dissolution of Mild Steel in Sulfuric Acid Through the Adsorption and Inhibition Characteristics of (4-(4-Hydroxybenzylideneamino)-4H-1,2,4-Triazole-3,5-diyl)dimethanol (HATD). Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	2.6	11

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55	Enhanced Inhibition of the Corrosion of Metallic Copper Exposed in Sulphuric Acid Through the Synergistic Interaction of Cysteine and Alanine: Electrochemical and Computational Studies. Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	2.6	11
56	A comprehensive study of mild steel corrosion in the aggressive acidic environment using CMPPC, a substituted pyrazole derivative. Chemical Papers, 2020, 74, 3025-3037.	2.2	11
57	Extended protection of mild steel in molar HCl using the Garcinia Indica fruit rind extract (GIW) and iodide ions; electrochemical, thermodynamic and kinetic studies. Journal of the Indian Chemical Society, 2021, 98, 100167.	2.8	11
58	Dependence of temperature on the corrosion protection properties of vanillin and its derivative, HMATD, towards copper in nitric acid: theoretical and electroanalytical studies. Research on Chemical Intermediates, 2015, 41, 1053-1077.	2.7	10
59	Electroanalytical and computational studies on the corrosion inhibition behavior of ethyl (2-methylbenzimidazolyl) acetate (EMBA) on mild steel in hydrochloric acid. Research on Chemical Intermediates, 2015, 41, 4795-4823.	2.7	10
60	Electroanalytical Studies on the Interaction Of l-Serine-Based Schiff Base, HHDMP, with Copper in Sulphuric Acid. Journal of Bio- and Tribo-Corrosion, 2016, 2, 1.	2.6	10
61	Corrosion protection of mild steel in hydrochloric acid solution through the synergistic of alkylbenzimidazoles and semicarbazide pair â€“ Electroanalytical and computational studies. Egyptian Journal of Petroleum, 2017, 26, 421-437.	2.6	10
62	Development of Flower Like Hierarchical Thiourea Loaded Titaniaâ€“Poly Vinyl Alcohol Nano Composite Coatings for the Corrosion Protection of Mild Steel in Hydrochloric Acid. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 1468-1482.	3.7	10
63	The influence of aqueous and alcoholic extracts of Garcinia cambogia fruit rind in the management of mild steel corrosion in hydrochloric acid: Theoretical and electroanalytical studies. Journal of Molecular Liquids, 2022, 346, 117873.	4.9	10
64	Synergistic and hydrogen bonded interaction of alkyl benzimadazoles and urea pair on mild steel in hydrochloric acid: Adsorption, electroanalytical and theoretical studies. Journal of the Taiwan Institute of Chemical Engineers, 2016, 58, 517-527.	5.3	9
65	Effect of Methyl, Ethyl, and Propyl Substitution on Benzimidazole for the Protection of Copper Metal in Nitric Acid: Theoretical and Electrochemical Screening Studies. Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	2.6	9
66	Protection of Metallic Copper from the Attack of Sulphuric Acid Using HDMMA, a Schiff Base Derived from l-Cysteine and 2-Hydroxy-1-naphthaldehyde. Journal of Bio- and Tribo-Corrosion, 2019, 5, 1.	2.6	8
67	A sustainable method of mitigating acid corrosion of mild steel using jackfruit pectin (JP) as green inhibitor: Theoretical and electrochemical studies. Journal of the Indian Chemical Society, 2022, 99, 100271.	2.8	8
68	Development of passive film and enhancement of corrosion protection of mild steel in hydrochloric acid through the synergistic interaction of 2-amino-4-methyl benzothiazole (AMBT) and 27, 621-632.	2.6	7
69	Synergistic interaction of 2-amino 4-methyl benzothiazole (AMBT) and benzotriazole (BTZ) offers excellent protection to mild steel exposed in acid atmosphere at elevated temperatures: Electrochemical, computational and surface studies. Egyptian Journal of Petroleum, 2019, 28, 35-45.	2.6	6
70	Electrochemical and surface characterization of mild steel with corrosion resistant zirconia network fabricated by aqueous sol-gel technique. Journal of the Indian Chemical Society, 2021, 98, 100052.	2.8	6
71	Effect of Lunamarine, the Major Constituent of Boerhaavia diffusa Leave Extract on the Corrosion Inhibition of Mild Steel in Hydrochloric Acid; Computational Modelling, Surface Screening and Electroanalytical Studies. Journal of Bio- and Tribo-Corrosion, 2022, 8, 1.	2.6	6
72	Inhibition of Mild Steel Corrosion in 1ÂM Hydrochloric Acid Using (E)-(4-(4-methoxybenzylideneamino)-4H-1,2,4-triazole-3,5-diyl) Dimethanol (MBATD). Journal of Dispersion Science and Technology, 2012, 33, 739-749.	2.4	5

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73	HMDSâ€“GPTMS Modified Titania Silica Nanocomposite: A New Material for Oilâ€“Water Separation. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 2134-2141.	3.7	5
74	Extended protection of mild steel in saline and acidic environment using stearic acid grafted chitosan preloaded with mesoporous-hydrophobic silica (mhSiO2). Surface and Coatings Technology, 2020, 402, 126350.	4.8	5
75	Development of self-assembled monolayer of stearic acid grafted chitosan on mild steel and inhibition of corrosion in hydrochloric acid. Chemical Data Collections, 2020, 28, 100402.	2.3	5
76	Complexometric Determination of Cobalt(II) in Low Concentrations Using 1,10-Phenanthroline as Selective Releasing Agent.. Analytical Sciences, 2000, 16, 985-986.	1.6	4
77	Development of Passive Film and Enhancement of Corrosion Protection of Mild Steel Exposed in Hydrochloric Acid due to the Adsorption of Water Dispersed 4-[(E)-(3,4-Dihydroxybenzylidene)amino]-6-Methyl-3-Mercapto-1,2,4-Triazin-5(4H)-one(DHMMT). Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	2.6	4
78	Electroanalytical and Kinetic Studies on PBIMOT, a Benzimidazole Motif of 1,3,4-Oxadiazole as a Powerful Corrosion Inhibitor for Mild Steel in Nitric Acid. Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	2.6	3
79	Electroanalytical and surface studies on the protective action of a coating of PVA@3WGO on mild steel in acidic and saline environment. Results in Surfaces and Interfaces, 2021, 4, 100018.	2.4	3
80	Biogenic MnO₂nanoparticles derived from aCedrus deodarapine needle extract and their composites with polyaniline/activated charcoal as an electrode material for supercapacitor applications. New Journal of Chemistry, 2022, 46, 4325-4333.	2.8	3
81	Adsorption, Surface Morphological, and Electrochemical Studies on the Inhibitive Properties of 4-(N,) Tj ETQq1 1 0.784314 rgBT /Over H2SO4. Journal of Dispersion Science and Technology, 2012, 33, 1097-1105.	2.4	2
82	Photoluminescence of Co: ZnNiO and Zr: ZnNiO nanocomposites capped with biodegradable polymer poly (2-ethyl-2-oxazoline). AIP Conference Proceedings, 2018, , .	0.4	1
83	Type 2 pyoverdine from strain BUP2 as - biosensor for the rapid detection of iron and copper ions in contaminated water. Journal of Microbiology and Biotechnology, 2016, , .	2.1	1
84	The co-adsorption of thymohydroquinone dimethyl ether (THQ) and coumarin present in the aqueous extract of Ayapana triplinervis on mild steel and its protection in hydrochloric acid up to 323 K: computational and physicochemical studies. RSC Advances, 2022, 12, 14328-14341.	3.6	1
85	Complexometric Determination of Zinc(II) Using 2,2?-Bipyridyl as Selective Masking Agent. Mikrochimica Acta, 2000, 134, 33-35.	5.0	0
86	Corrosion Protection Properties of 4-[(E)-[(2,4-Dihydroxy phenyl)methylidene] amino]-6-methyl-3-sulfanylidene-2,3,4,5-tetrahydro-1,2,4-triazin-5-one [DMSTT] Toward Mild Steel in Sulfuric Acid. Journal of Materials Engineering and Performance, 2013, 22, 483-491.	2.5	0
87	Protection of Mild Steel in Hydrochloric Acid Through Surface Finishing using HMMT, a Substituted 3-Mercapto-6-Methyl-1,2,4-Triazin(4H)-5-One. Protection of Metals and Physical Chemistry of Surfaces, 2017, 53, 1150-1160.	1.1	0
88	Gamma-ray induced thermoluminescence emission of green synthesized zinc oxide nanophosphors. Journal of the Indian Chemical Society, 2021, 98, 100153.	2.8	0