Moses M Solomon

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3952528/publications.pdf

Version: 2024-02-01

95 papers	4,775 citations	101543 36 h-index	98798 67 g-index
99 all docs	99 docs citations	99 times ranked	2103 citing authors

#	Article	IF	Citations
1	Inhibitive and adsorption behaviour of carboxymethyl cellulose on mild steel corrosion in sulphuric acid solution. Corrosion Science, 2010, 52, 1317-1325.	6.6	402
2	Carboxymethyl Cellulose/Silver Nanoparticles Composite: Synthesis, Characterization and Application as a Benign Corrosion Inhibitor for St37 Steel in 15% H₂SO₄Medium. ACS Applied Materials & Interfaces, 2017, 9, 6376-6389.	8.0	213
3	A critical review on the recent studies on plant biomaterials as corrosion inhibitors for industrial metals. Journal of Industrial and Engineering Chemistry, 2019, 76, 91-115.	5.8	197
4	Protective polymeric films for industrial substrates: A critical review on past and recent applications with conducting polymers and polymer composites/nanocomposites. Progress in Materials Science, 2019, 104, 380-450.	32.8	190
5	Effect of halide ions on the corrosion inhibition efficiency of different organic species â€“ A review. Journal of Industrial and Engineering Chemistry, 2015, 21, 81-100.	5.8	187
6	Myristic acid based imidazoline derivative as effective corrosion inhibitor for steel in 15% HCl medium. Journal of Colloid and Interface Science, 2019, 551, 47-60.	9.4	174
7	Synergistic corrosion inhibition effect of metal cations and mixtures of organic compounds: A Review. Journal of Environmental Chemical Engineering, 2017, 5, 246-273.	6.7	165
8	In-situ preparation, characterization and anticorrosion property of polypropylene glycol/silver nanoparticles composite for mild steel corrosion in acid solution. Journal of Colloid and Interface Science, 2016, 462, 29-41.	9.4	145
9	Performance Evaluation of a Chitosan/Silver Nanoparticles Composite on St37 Steel Corrosion in a 15% HCl Solution. ACS Sustainable Chemistry and Engineering, 2017, 5, 809-820.	6.7	144
10	Synergistic and antagonistic effects between halide ions and carboxymethyl cellulose for the corrosion inhibition of mild steel in sulphuric acid solution. Cellulose, 2010, 17, 635-648.	4.9	137
11	Exploration of Dextran for Application as Corrosion Inhibitor for Steel in Strong Acid Environment: Effect of Molecular Weight, Modification, and Temperature on Efficiency. ACS Applied Materials & Interfaces, 2018, 10, 28112-28129.	8.0	134
12	Corrosion inhibition by leaves and stem extracts of Sida acuta for mild steel in 1M H2SO4 solutions investigated by chemical and spectroscopic techniques. Arabian Journal of Chemistry, 2016, 9, S209-S224.	4.9	131
13	Experimental and Quantum Chemical Evaluation of 8-Hydroxyquinoline as a Corrosion Inhibitor for Copper in 0.1 M HCl. Industrial & Engineering Chemistry Research, 2016, 55, 9614-9624.	3.7	131
14	Inhibition of mild steel corrosion in H2SO4 solution by coconut coir dust extract obtained from different solvent systems and synergistic effect of iodide ions: Ethanol and acetone extracts. Journal of Environmental Chemical Engineering, 2014, 2, 1048-1060.	6.7	127
15	Zinc Oxide Nanocomposites of Selected Polymers: Synthesis, Characterization, and Corrosion Inhibition Studies on Mild Steel in HCl Solution. ACS Omega, 2017, 2, 8421-8437.	3.5	125
16	Evaluation of chitosan and carboxymethyl cellulose as ecofriendly corrosion inhibitors for steel. International Journal of Biological Macromolecules, 2018, 117, 1017-1028.	7.5	123
17	Gum Arabic-silver nanoparticles composite as a green anticorrosive formulation for steel corrosion in strong acid media. Carbohydrate Polymers, 2018, 181, 43-55.	10.2	100
18	Progress in the development of sour corrosion inhibitors: Past, present, and future perspectives. Journal of Industrial and Engineering Chemistry, 2019, 79, 1-18.	5.8	97

#	Article	IF	Citations
19	Recent Developments on the Use of Polymers as Corrosion Inhibitors - A Review. Open Materials Science Journal, 2014, 8, 39-54.	0.2	93
20	Enhanced corrosion inhibition effect of chitosan for St37 in 15% H2SO4 environment by silver nanoparticles. International Journal of Biological Macromolecules, 2017, 104, 638-649.	7.5	83
21	Exploration of natural polymers for use as green corrosion inhibitors for AZ31 magnesium alloy in saline environment. Carbohydrate Polymers, 2020, 230, 115466.	10.2	80
22	Inhibition of mild steel corrosion in acidic medium using coconut coir dust extracted from water and methanol as solvents. Journal of Industrial and Engineering Chemistry, 2014, 20, 3612-3622.	5.8	70
23	Synergistic inhibition of St37 steel corrosion in 15% H2SO4 solution by chitosan and iodide ion additives. Cellulose, 2017, 24, 931-950.	4.9	65
24	Effect of akyl chain length, flow, and temperature on the corrosion inhibition of carbon steel in a simulated acidizing environment by an imidazoline-based inhibitor. Journal of Petroleum Science and Engineering, 2020, 187, 106801.	4.2	65
25	Comparative studies on the corrosion inhibition efficacy of ethanolic extracts of date palm leaves and seeds on carbon steel corrosion in 15% HCl solution. Journal of Adhesion Science and Technology, 2018, 32, 1934-1951.	2.6	59
26	Poly(methacrylic acid)/silver nanoparticles composites: In-situ preparation, characterization and anticorrosion property for mild steel in H2SO4 solution. Journal of Molecular Liquids, 2015, 212, 340-351.	4.9	58
27	Coconut coir dust extract: a novel eco-friendly corrosion inhibitor for Al in HCl solutions. Green Chemistry Letters and Reviews, 2012, 5, 303-313.	4.7	56
28	Synthesis, characterization, and utilization of a diallylmethylamine-based cyclopolymer for corrosion mitigation in simulated acidizing environment. Materials Science and Engineering C, 2019, 100, 897-914.	7.3	56
29	Enhanced corrosion inhibition effect of polypropylene glycol in the presence of iodide ions at mild steel/sulphuric acid interface. Journal of Environmental Chemical Engineering, 2015, 3, 1812-1826.	6.7	53
30	Corrosion inhibition of N80 steel in simulated acidizing environment by N-(2-(2-pentadecyl-4,5-dihydro-1H-imidazol-1-YL) ethyl) palmitamide. Journal of Molecular Liquids, 2019, 273, 476-487.	4.9	53
31	Evaluation of the inhibitive effect of Diospyros kaki (Persimmon) leaves extract on St37 steel corrosion in acid medium. Sustainable Chemistry and Pharmacy, 2016, 4, 57-66.	3.3	52
32	Performance evaluation of poly (methacrylic acid) as corrosion inhibitor in the presence of iodide ions for mild steel in H₂SO₄solution. Journal of Adhesion Science and Technology, 2015, 29, 1060-1080.	2.6	48
33	Comparative Studies of the Corrosion Inhibition Efficacy of a Dicationic Monomer and Its Polymer against API X60 Steel Corrosion in Simulated Acidizing Fluid under Static and Hydrodynamic Conditions. ACS Omega, 2020, 5, 27057-27071.	3.5	46
34	Electrochemical and gravimetric measurements of inhibition of aluminum corrosion by poly (methacrylic acid) in H2SO4 solution and synergistic effect of iodide ions. Measurement: Journal of the International Measurement Confederation, 2015, 76, 104-116.	5.0	44
35	Eco-friendly 2-Thiobarbituric acid as a corrosion inhibitor for API 5L X60 steel in simulated sweet oilfield environment: Electrochemical and surface analysis studies. Scientific Reports, 2019, 9, 830.	3.3	41
36	Synergistic corrosion inhibition effect of 1-ethyl-1-methylpyrrolidinium tetrafluoroborate and iodide ions for low carbon steel in HCl solution. Journal of Adhesion Science and Technology, 2016, 30, 2383-2403.	2.6	40

#	Article	IF	Citations
37	Evaluation of the corrosion inhibiting efficacy of a newly synthesized nitrone against St37 steel corrosion in acidic medium: Experimental and theoretical approaches. Materials Science and Engineering C, 2018, 93, 539-553.	7.3	38
38	Pterocarpus santalinoides leaves extract as a sustainable and potent inhibitor for low carbon steel in a simulated pickling medium. Sustainable Chemistry and Pharmacy, 2020, 15, 100196.	3.3	37
39	Development of a green corrosion inhibitor for use in acid cleaning of MSF desalination plant. Desalination, 2020, 495, 114675.	8.2	34
40	Corrosion inhibition effect of a benzimidazole derivative on heat exchanger tubing materials during acid cleaning of multistage flash desalination plants. Desalination, 2020, 479, 114283.	8.2	33
41	Benzotriazole derivative as an effective corrosion inhibitor for low carbon steel in 1ÂM HCl and 1ÂM HClÂ+Â3.5Âwt% NaCl solutions. Journal of Molecular Liquids, 2020, 313, 113536.	4.9	33
42	Comparative Study of the Corrosion Inhibition Efficacy of Polypropylene Glycol and Poly (Methacrylic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.4	31
43	Performance assessment of poly (methacrylic acid)/silver nanoparticles composite as corrosion inhibitor for aluminium in acidic environment. Journal of Adhesion Science and Technology, 2015, 29, 2311-2333.	2.6	31
44	Corrosion response of ultra-high strength steels used for automotive applications. Materials Research Express, 2019, 6, 0865a6.	1.6	30
45	Corrosion inhibition by amitriptyline and amitriptyline based formulations for steels in simulated pickling and acidizing media. Journal of Petroleum Science and Engineering, 2019, 174, 984-996.	4.2	30
46	Adsorption and corrosion inhibition characteristics of 2â€“(chloromethyl)benzimidazole for C1018 carbon steel in a typical sweet corrosion environment: Effect of chloride ion concentration and temperature. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125638.	4.7	30
47	Evaluation of the corrosion inhibition efficacy of Cola acuminata extract for low carbon steel in simulated acid pickling environment. Environmental Science and Pollution Research, 2020, 27, 34270-34288.	5.3	29
48	Polypropylene Glycol-Silver Nanoparticle Composites: A Novel Anticorrosion Material for Aluminum in Acid Medium. Journal of Materials Engineering and Performance, 2015, 24, 4206-4218.	2.5	28
49	Effect of polyvinylpyrrolidone â€“ polyethylene glycol blends on the corrosion inhibition of aluminium in HCl solution. Pigment and Resin Technology, 2014, 43, 299-313.	0.9	27
50	Studies of the anticorrosion property of a newly synthesized Green isoxazolidine for API 5L X60 steel in acid environment. Journal of Materials Research and Technology, 2019, 8, 4399-4416.	5.8	27
51	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.	1.5	25
52	Synthesis, characterization and electrochemical evaluation of anticorrosion property of a tetrapolymer for carbon steel in strong acid media. Chinese Journal of Chemical Engineering, 2019, 27, 965-978.	3.5	25
53	Metal Organic Frameworks as Biosensing Materials for COVID-19. Cellular and Molecular Bioengineering, 2021, 14, 535-553.	2.1	24
54	Influence of 1-butyl-1-methylpiperidinium tetrafluoroborate on St37 steel dissolution behavior in HCl environment. Chemical Engineering Communications, 2018, 205, 538-548.	2.6	23

#	Article	IF	Citations
55	Olive leaves extract mediated zero-valent iron nanoparticles: synthesis, characterization, and assessment as adsorbent for nickel (II) ions in aqueous medium. Chemical Engineering Communications, 2018, 205, 1568-1582.	2.6	22
56	An evaluation of the anticorrosion effect of ethylene glycol for AA7075-T6 alloy in 3.5% NaCl solution. Measurement: Journal of the International Measurement Confederation, 2018, 116, 264-272.	5.0	19
57	Elucidation of corrosion inhibition property of compounds isolated from Butanolic Date Palm Leaves extract for low carbon steel in 15% HCl solution: Experimental and theoretical approaches. Journal of Molecular Liquids, 2022, 356, 119002.	4.9	17
58	A censorious appraisal of the oil well acidizing corrosion inhibitors. Journal of Petroleum Science and Engineering, 2022, 215, 110711.	4.2	17
59	Preparation of Silver/Chitosan Nanofluids Using Selected Plant Extracts: Characterization and Antimicrobial Studies against Gram-Positive and Gram-Negative Bacteria. Materials, 2020, 13, 1629.	2.9	16
60	Synthesis and anticorrosion studies of 4-[(2-nitroacetophenonylidene)-amino]-antipyrine on SAE 1012 carbon steel in 15â€‰wt.% HCl solution. Journal of Adhesion Science and Technology, 2020, 34, 2448-2466.	2.6	15
61	Effect of Intensifier Additives on the Performance of Butanolic Extract of Date Palm Leaves against the Corrosion of API 5L X60 Carbon Steel in 15 wt.% HCl Solution. Sustainability, 2021, 13, 5569.	3.2	15
62	Synergistic inhibition of aluminium corrosion in H₂SO₄ solution by polypropylene glycol in the presence of iodide ions. Pigment and Resin Technology, 2016, 45, 280-293.	0.9	13
63	Green synthesis, characterization and antibacterial activities of silver nanoparticles from strawberry fruit extract. Polish Journal of Chemical Technology, 2017, 19, 128-136.	0.5	13
64	Date palm leaves extract as a green and sustainable corrosion inhibitor for low carbon steel in 15 wt.% HCl solution: the role of extraction solvent on inhibition effect. Environmental Science and Pollution Research, 2021, 28, 40879-40894.	5.3	12
65	Electrochemical and morphological assessments of inhibition level of 8-hydroxylquinoline for AA2024-T4 alloy in 3.5% NaCl solution. Journal of Adhesion Science and Technology, 2018, 32, 207-223.	2.6	10
66	Synthesis and Characterization of Cyclic Cationic Polymer and its Anti-corrosion Property for Low Carbon Steel in 15% HCl Solution. International Journal of Electrochemical Science, 2017, 12, 9061-9083.	1.3	9
67	A newly synthesized ionic liquid as an effective corrosion inhibitor for carbon steel in HCl medium: A combined experimental and computational studies. Materials Today Communications, 2021, 29, 102905.	1.9	9
68	Understanding the Corrosion Behavior of the AZ91D Alloy in Simulated Body Fluid through the Use of Dynamic EIS. ACS Omega, 2022, 7, 11929-11938.	3.5	7
69	Corrosion characteristics of plasma spray, arc spray, high velocity oxygen fuel, and diamond jet coated 30MnB5 boron alloyed steel in 3.5Âwt.% NaCl solution. Corrosion Reviews, 2022, 40, 51-63.	2.0	7
70	Synergistic corrosion inhibition of low carbon steel in HCl and H₂SO₄ media by 5-methyl-3-phenylisoxazole-4-carboxylic acid and iodide ions. Journal of Adhesion Science and Technology, 2022, 36, 1200-1226.	2.6	6
71	Exploration of the potentials of imidazole-based inhibitor package for heat exchanger-type stainless steel during acid cleaning operation. Arabian Journal of Chemistry, 2022, 15, 103837.	4.9	6
72	Aspartame as a Green and Effective Corrosion Inhibitor for T95 Carbon Steel in 15 wt.% HCl Solution. Sustainability, 2022, 14, 6500.	3.2	6

#	Article	IF	Citations
73	Improved Performance of 1-Ethyl-3-Methylimidazolium Tetrafluoroborate at Steel/HCl Interface by Iodide Ions. Journal of Bio- and Tribo-Corrosion, 2018, 4, 1.	2.6	5
74	Corrosion resistance and passivation behavior of 3004 AlMnMg and 4044AlSi aluminum alloys in acid-chloride electrolytes. Materials Research Express, 2021, 8, 096529.	1.6	3
75	Shallow cryogenic treatment: effect on the corrosion resistance and hardness properties of AA5083-H111 alloy in chloride-ions enriched medium. Materials Research Express, 2021, 8, 076516.	1.6	2
76	Exploration of the Corrosion Inhibition Potential of Cashew Nutshell on Thermo-Mechanically Treated Steel in Seawater. Arabian Journal for Science and Engineering, 2023, 48, 223-237.	3.0	2
77	Biopolymer Composites and Nanocomposites for Corrosion Protection of Industrial Metal Substrates. , 2021, , 16-31.		1
78	Chemical Additives for Corrosion Control in Desalination Plants. , 2020, , 191-207.		1
79	Assessment of the Corrosion Behaviour of Unmodified and Chemically Modified Pure Magnesium in Simulated Body Fluid. SSRN Electronic Journal, 0, , .	0.4	1
80	Basic concepts of corrosion. , 2022, , 83-102.		1
81	Assessment of the corrosion behaviour of untreated and chemically treated pure magnesium in simulated body fluid. Journal of Adhesion Science and Technology, 2023, 37, 1789-1805.	2.6	1
82	A study on the composition of heavy organic precipitates at various locations of a petroleum production line: wellhead, separator, and flowline. Petroleum Science and Technology, 2022, 40, 469-485.	1.5	0
83	Conducting polymers. , 2022, , 443-466.		0
84	Copolymers. , 2022, , 489-519.		0
85	Chitosan. , 2022, , 131-153.		0
86	Alginate and its derivatives. , 2022, , 271-286.		0
87	Acrylic polymers. , 2022, , 343-372.		0
88	Natural gums and their derivatives. , 2022, , 209-236.		0
89	Polyethers. , 2022, , 399-417.		0
90	Polyglycols. , 2022, , 325-342.		0

#	Article	IF	Citations
91	Pectin and derivatives. , 2022, , 255-269.		0
92	Cellulose and its derivatives. , 2022, , 187-207.		0
93	Resin based polymers. , 2022, , 419-441.		0
94	Vinyl polymers. , 2022, , 373-398.		0
95	Other natural polymers: gelatin, dextrin, and dextran. , 2022, , 303-322.		0