

Mohammad Ramezanzadeh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/12202308/publications.pdf>

Version: 2024-02-01

87
papers

5,948
citations

57631

44
h-index

76769

74
g-index

87
all docs

87
docs citations

87
times ranked

2063
citing authors

#	ARTICLE	IF	CITATIONS
1	Stachys byzantina extract: A green biocompatible molecules source for graphene skeletons generation on the carbon steel for superior corrosion mitigation. <i>Bioelectrochemistry</i> , 2022, 143, 107970.	2.4	17
2	Recent innovations in synthesis/characterization of advanced nano-porous metal-organic frameworks (MOFs); current/future trends with a focus on the smart anti-corrosion features. <i>Materials Chemistry and Physics</i> , 2022, 276, 125420.	2.0	21
3	Effective steel alloy surface protection from HCl attacks using Nepeta Pogonesperma plant stems extract. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 634, 127990.	2.3	10
4	Recent progress on the metal-organic frameworks decorated graphene oxide (MOFs-GO) nano-building application for epoxy coating mechanical-thermal/flame-retardant and anti-corrosion features improvement. <i>Progress in Organic Coatings</i> , 2022, 163, 106645.	1.9	27
5	Investigating the thermo-mechanical and UV-shielding properties of a nano-porous Zr(IV)-type metal-organic framework (MOF) incorporated epoxy composite coating. <i>Progress in Organic Coatings</i> , 2022, 164, 106693.	1.9	9
6	Ultrastable Porous Covalent Organic Framework Assembled Carbon Nanotube as a Novel Nanocontainer for Anti-Corrosion Coatings: Experimental and Computational Studies. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 19958-19974.	4.0	32
7	Detailed experimental investigation of the highly active corrosion inhibitive green molecules based on zinc cations/Nepeta Pogonosperma extract and toward the corrosion mitigation of mild steel in the saline solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 642, 128613.	2.3	13
8	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.	2.3	12
9	Rising of MXenes: Novel 2D-functionalized nanomaterials as a new milestone in corrosion science - a critical review. <i>Advances in Colloid and Interface Science</i> , 2022, 307, 102730.	7.0	29
10	Synthesis of graphene oxide nanosheets decorated by nanoporous zeolite-imidazole (ZIF-67) based metal-organic framework with controlled-release corrosion inhibitor performance: Experimental and detailed DFT-D theoretical explorations. <i>Journal of Hazardous Materials</i> , 2021, 404, 124068.	6.5	114
11	Construction of an epoxy composite coating with exceptional thermo-mechanical properties using Zr-based NH ₂ -UiO-66 metal-organic framework (MOF): Experimental and DFT-D theoretical explorations. <i>Chemical Engineering Journal</i> , 2021, 408, 127366.	6.6	62
12	Synthesis of a multi-functional zinc-centered nitrogen-rich graphene-like thin film from natural sources on the steel surface for achieving superior anti-corrosion properties. <i>Corrosion Science</i> , 2021, 178, 109077.	3.0	35
13	Development of an active/barrier bi-functional anti-corrosion system based on the epoxy nanocomposite loaded with highly-coordinated functionalized zirconium-based nanoporous metal-organic framework (Zr-MOF). <i>Chemical Engineering Journal</i> , 2021, 408, 127361.	6.6	89
14	Application of nanoporous cobalt-based ZIF-67 metal-organic framework (MOF) for construction of an epoxy-composite coating with superior anti-corrosion properties. <i>Corrosion Science</i> , 2021, 178, 109099.	3.0	98
15	Thermomechanical and anticorrosion characteristics of metal-organic frameworks. , 2021, , 295-330.		6
16	Highly improving the mechanical-responses/thermal-stability of the epoxy nano-composite using novel highly-oxidized multi-walled carbon nanotubes (OMWCNT) functionalized by Zinc-doped Polyaniline (PANI) nanofibers. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 119, 245-258.	2.7	24
17	A highly-effective/durable metal-organic anti-corrosion film deposition on mild steel utilizing Malva sylvestris (M.S) phytoextract-divalent zinc cations. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 95, 292-304.	2.9	12
18	The role of ethanolic extract of Stachys byzantina's leaves for effective decreasing the mild-steel (MS) degradation in the acidic solution; coupled theoretical/experimental assessments. <i>Journal of Molecular Liquids</i> , 2021, 329, 115571.	2.3	30

#	ARTICLE	IF	CITATIONS
19	Synthesis and application of Zn-doped polyaniline modified multi-walled carbon nanotubes as stimuli-responsive nanocarrier in the epoxy matrix for achieving excellent barrier-self-healing corrosion protection potency. <i>Chemical Engineering Journal</i> , 2021, 412, 128637.	6.6	81
20	Highly-effective/durable method of mild-steel corrosion mitigation in the chloride-based solution via fabrication of hybrid metal-organic film (MOF) generated between the active <i>Trachyspermum Ammi</i> bio-molecules-divalent zinc cations. <i>Corrosion Science</i> , 2021, 184, 109383.	3.0	24
21	Superior inhibition action of the Mish Gush (MG) leaves extract toward mild steel corrosion in HCl solution: Theoretical and electrochemical studies. <i>Journal of Molecular Liquids</i> , 2021, 332, 115876.	2.3	86
22	A comprehensive electronic-scale DFT modeling, atomic-level MC/MD simulation, and electrochemical/surface exploration of active nature-inspired phytochemicals based on <i>Heracleum persicum</i> seeds phytoextract for effective retardation of the acidic-induced corrosion of mild steel. <i>Journal of Molecular Liquids</i> , 2021, 331, 115764.	2.3	34
23	Theoretical and experimental assessment of a green corrosion inhibitor extracted from <i>Malva sylvestris</i> . <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105256.	3.3	47
24	Eco-friendly protocol for zinc-doped amorphous carbon-based film construction over steel surface using nature-inspired phytochemicals: Coupled experimental and classical atomic/molecular and electronic-level theoretical explorations. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105487.	3.3	19
25	Ce-TA MOF assembled GO nanosheets reinforced epoxy composite for superior thermo-mechanical properties. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 126, 313-323.	2.7	19
26	Designing an eco-friendly lanthanide-based metal organic framework (MOF) assembled graphene-oxide with superior active anti-corrosion performance in epoxy composite. <i>Journal of Cleaner Production</i> , 2021, 319, 128732.	4.6	74
27	Nano-scale P, Zn-codoped reduced-graphene oxide incorporated epoxy composite; synthesis, electronic-level DFT-D modeling, and anti-corrosion properties. <i>Progress in Organic Coatings</i> , 2021, 159, 106416.	1.9	17
28	Combined atomic-scale/DFT-theoretical simulations & electrochemical assessments of the chamomile flower extract as a green corrosion inhibitor for mild steel in HCl solution. <i>Journal of Molecular Liquids</i> , 2021, 342, 117570.	2.3	73
29	Golpar leaves extract application for construction of an effective anti-corrosion film for superior mild-steel acidic-induced corrosion mitigation at different temperatures. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 629, 127488.	2.3	21
30	S, P-codoped rGO-phytic acid-polythiophene core-shell; synthesis, modeling, and dual active-passive anti-corrosion performance of epoxy nanocomposite. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 103, 102-117.	2.9	15
31	Designing a dual-functional epoxy composite system with self-healing/barrier anti-corrosion performance using graphene oxide nano-scale platforms decorated with zinc doped-conductive polypyrrole nanoparticles with great environmental stability and non-toxicity. <i>Chemical Engineering Journal</i> , 2020, 382, 122819.	6.6	122
32	Production of an environmentally stable anti-corrosion film based on Esfand seed extract molecules-metal cations: Integrated experimental and computer modeling approaches. <i>Journal of Hazardous Materials</i> , 2020, 382, 121029.	6.5	98
33	Integrated modeling and electrochemical study of Myrobalan extract for mild steel corrosion retardation in acidizing media. <i>Journal of Molecular Liquids</i> , 2020, 298, 112046.	2.3	59
34	Experimental complemented with microscopic (electronic/atomic)-level modeling explorations of <i>Laurus nobilis</i> extract as green inhibitor for carbon steel in acidic solution. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 84, 52-71.	2.9	59
35	Corrosion resistance of epoxy coating on mild steel through polyamidoamine dendrimer-covalently functionalized graphene oxide nanosheets. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 82, 290-302.	2.9	57
36	A detailed investigation of the chloride-induced corrosion of mild steel in the presence of combined green organic molecules of Primrose flower and zinc cations. <i>Journal of Molecular Liquids</i> , 2020, 297, 111862.	2.3	33

#	ARTICLE	IF	CITATIONS
37	Applying detailed molecular/atomic level simulation studies and electrochemical explorations of the green inhibiting molecules adsorption at the interface of the acid solution-steel substrate. <i>Journal of Molecular Liquids</i> , 2020, 299, 112220.	2.3	25
38	Construction of an epoxy composite with excellent thermal/mechanical properties using graphene oxide nanosheets reduced/functionalized by Tamarindus indica extract/zinc ions; detailed experimental and DFT-D computer modeling explorations. <i>Results in Physics</i> , 2020, 19, 103400.	2.0	12
39	Green synthesis of reduced graphene oxide nanosheets decorated with zinc-centered metal-organic film for epoxy-ester composite coating reinforcement: DFT-D modeling and experimental explorations. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 114, 311-330.	2.7	16
40	Detailed atomic/molecular-level/electronic-scale computer modeling and electrochemical explorations of the adsorption and anti-corrosion effectiveness of the green nitrogen-based phytochemicals on the mild steel surface in the saline solution. <i>Journal of Molecular Liquids</i> , 2020, 319, 114312.	2.3	16
41	Unique 2-methylimidazole based Inorganic Building Brick nano-particles (NPs) functionalized with 3-aminopropyltriethoxysilane with excellent controlled corrosion inhibitors delivery performance; Experimental coupled with molecular/DFT-D simulations. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 117, 209-222.	2.7	27
42	Theoretical MD/DFT computer explorations and surface-electrochemical investigations of the zinc/iron metal cations interactions with highly active molecules from Lemon balm extract toward the steel corrosion retardation in saline solution. <i>Journal of Molecular Liquids</i> , 2020, 310, 113220.	2.3	21
43	Estimating the synergistic corrosion inhibition potency of (2-(3,4-)-3,5,7-trihydroxy-4H-chromen-4-one) and trivalent-cerium ions on mild steel in NaCl solution. <i>Construction and Building Materials</i> , 2020, 261, 119923.	3.2	29
44	Potential role of a novel green eco-friendly inhibitor in corrosion inhibition of mild steel in HCl solution: Detailed macro/micro-scale experimental and computational explorations. <i>Construction and Building Materials</i> , 2020, 245, 118464.	3.2	121
45	Probing molecular adsorption/interactions and anti-corrosion performance of poppy extract in acidic environments. <i>Journal of Molecular Liquids</i> , 2020, 304, 112750.	2.3	63
46	Inspection the corrosion prevention performance and dry/wet interfacial adhesion qualities of the melamine-cured polyester coating applied on the treated mild steel surface with a nanostructured composite cerium-neodymium film. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 590, 124472.	2.3	13
47	Development of metal-organic framework (MOF) decorated graphene oxide nanoplatfoms for anti-corrosion epoxy coatings. <i>Carbon</i> , 2020, 161, 231-251.	5.4	260
48	A green assisted route for the fabrication of a high-efficiency self-healing anti-corrosion coating through graphene oxide nanoplatfom reduction by Tamarindus indica extract. <i>Journal of Hazardous Materials</i> , 2020, 390, 122147.	6.5	83
49	Steel corrosion lowering in front of the saline solution by a nitrogen-rich source of green inhibitors: Detailed surface, electrochemical and computational studies. <i>Construction and Building Materials</i> , 2020, 254, 119266.	3.2	31
50	Aloysia citrodora leaves extract corrosion retardation effect on mild-steel in acidic solution: Molecular/atomic scales and electrochemical explorations. <i>Journal of Molecular Liquids</i> , 2020, 310, 113221.	2.3	39
51	Construction of a smart active/barrier anti-corrosion system based on epoxy-ester/zinc intercalated kaolin nanocontainer for steel substrate. <i>Construction and Building Materials</i> , 2020, 247, 118555.	3.2	21
52	Detailed-level computer modeling explorations complemented with comprehensive experimental studies of Quercetin as a highly effective inhibitor for acid-induced steel corrosion. <i>Journal of Molecular Liquids</i> , 2020, 309, 113035.	2.3	64
53	Graphene oxide nanoplatfoms reduction by green plant-sourced organic compounds for construction of an active anti-corrosion coating; experimental/electronic-scale DFT-D modeling studies. <i>Chemical Engineering Journal</i> , 2020, 397, 125433.	6.6	57
54	Utilizing Lemon Balm extract as an effective green corrosion inhibitor for mild steel in 1M HCl solution: A detailed experimental, molecular dynamics, Monte Carlo and quantum mechanics study. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 95, 252-272.	2.7	242

#	ARTICLE	IF	CITATIONS
55	Highly effective mild steel corrosion inhibition in 1 M HCl solution by novel green aqueous Mustard seed extract: Experimental, electronic-scale DFT and atomic-scale MC/MD explorations. <i>Journal of Molecular Liquids</i> , 2019, 293, 111559.	2.3	124
56	Study of the synergistic effect of <i>Mangifera indica</i> leaves extract and zinc ions on the mild steel corrosion inhibition in simulated seawater: Computational and electrochemical studies. <i>Journal of Molecular Liquids</i> , 2019, 292, 111387.	2.3	97
57	A green complex film based on the extract of Persian <i>Echium amoenum</i> and zinc nitrate for mild steel protection in saline solution; Electrochemical and surface explorations besides dynamic simulation. <i>Journal of Molecular Liquids</i> , 2019, 291, 111281.	2.3	31
58	Molecular/electronic/atomic-level simulation and experimental exploration of the corrosion inhibiting molecules attraction at the steel/chloride-containing solution interface. <i>Journal of Molecular Liquids</i> , 2019, 296, 111809.	2.3	48
59	Fabrication of Highly Effective Polyaniline Grafted Carbon Nanotubes To Induce Active Protective Functioning in a Silane Coating. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 20309-20322.	1.8	37
60	Combined molecular simulation, DFT computation and electrochemical studies of the mild steel corrosion protection against NaCl solution using aqueous <i>Eucalyptus</i> leaves extract molecules linked with zinc ions. <i>Journal of Molecular Liquids</i> , 2019, 294, 111550.	2.3	43
61	Electronic/atomic level fundamental theoretical evaluations combined with electrochemical/surface examinations of <i>Tamarindus indica</i> aqueous extract as a new green inhibitor for mild steel in acidic solution (HCl 1 M). <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 102, 349-377.	2.7	93
62	Application of green molecules from <i>Chicory</i> aqueous extract for steel corrosion mitigation against chloride ions attack; the experimental examinations and electronic/atomic level computational studies. <i>Journal of Molecular Liquids</i> , 2019, 290, 111176.	2.3	79
63	Elucidating detailed experimental and fundamental understandings concerning the green organic-inorganic corrosion inhibiting molecules onto steel in chloride solution. <i>Journal of Molecular Liquids</i> , 2019, 290, 111212.	2.3	66
64	<i>Eriobotrya japonica</i> Lindl leaves extract application for effective corrosion mitigation of mild steel in HCl solution: Experimental and computational studies. <i>Construction and Building Materials</i> , 2019, 220, 161-176.	3.2	64
65	Adsorption mechanism and synergistic corrosion-inhibiting effect between the green <i>Nettle</i> leaves extract and Zn ²⁺ cations on carbon steel. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 77, 323-343.	2.9	81
66	Detailed macro/micro-scale exploration of the excellent active corrosion inhibition of a novel environmentally friendly green inhibitor for carbon steel in acidic environments. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 100, 239-261.	2.7	87
67	Novel cost-effective and high-performance green inhibitor based on aqueous <i>Peganum harmala</i> seed extract for mild steel corrosion in HCl solution: Detailed experimental and electronic/atomic level computational explorations. <i>Journal of Molecular Liquids</i> , 2019, 283, 174-195.	2.3	175
68	Interfacial adhesion and corrosion protection properties improvement of a polyester-melamine coating by deposition of a novel green praseodymium oxide nanofilm: A comprehensive experimental and computational study. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 74, 26-40.	2.9	12
69	Green method of carbon steel effective corrosion mitigation in 1 M HCl medium protected by <i>Primula vulgaris</i> flower aqueous extract via experimental, atomic-level MC/MD simulation and electronic-level DFT theoretical elucidation. <i>Journal of Molecular Liquids</i> , 2019, 284, 658-674.	2.3	74
70	Development of a nanostructured Ce(III)-Pr(III) film for excellently corrosion resistance improvement of epoxy/polyamide coating on carbon steel. <i>Journal of Alloys and Compounds</i> , 2019, 792, 375-388.	2.8	26
71	A combined experimental and theoretical study of green corrosion inhibition of mild steel in HCl solution by aqueous <i>Citrullus lanatus</i> fruit (CLF) extract. <i>Journal of Molecular Liquids</i> , 2019, 279, 603-624.	2.3	145
72	Use of <i>Rosa canina</i> fruit extract as a green corrosion inhibitor for mild steel in 1 M HCl solution: A complementary experimental, molecular dynamics and quantum mechanics investigation. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 69, 18-31.	2.9	209

#	ARTICLE	IF	CITATIONS
73	Corrosion inhibition of mild steel in 1 M HCl solution by ethanolic extract of eco-friendly <i>Mangifera indica</i> (mango) leaves: Electrochemical, molecular dynamics, Monte Carlo and ab initio study. <i>Applied Surface Science</i> , 2019, 463, 1058-1077.	3.1	214
74	The role of chrome and zinc free-based neodymium oxide nanofilm on adhesion and corrosion protection properties of polyester/melamine coating on mild steel: Experimental and molecular dynamics simulation study. <i>Journal of Cleaner Production</i> , 2019, 210, 872-886.	4.6	26
75	Potential of Borage flower aqueous extract as an environmentally sustainable corrosion inhibitor for acid corrosion of mild steel: Electrochemical and theoretical studies. <i>Journal of Molecular Liquids</i> , 2019, 277, 895-911.	2.3	199
76	Mild steel surface eco-friendly treatment by Neodymium-based nanofilm for fusion bonded epoxy coating anti-corrosion/adhesion properties enhancement in simulated seawater. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 72, 474-490.	2.9	27
77	The influence of steel surface treatment by a novel eco-friendly praseodymium oxide nanofilm on the adhesion and corrosion protection properties of a fusion-bonded epoxy powder coating. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 62, 427-435.	2.9	19
78	<i>Glycyrrhiza glabra</i> leaves extract as a green corrosion inhibitor for mild steel in 1 M hydrochloric acid solution: Experimental, molecular dynamics, Monte Carlo and quantum mechanics study. <i>Journal of Molecular Liquids</i> , 2018, 255, 185-198.	2.3	346
79	Highly effective inhibition of mild steel corrosion in 3.5% NaCl solution by green Nettle leaves extract and synergistic effect of eco-friendly cerium nitrate additive: Experimental, MD simulation and QM investigations. <i>Journal of Molecular Liquids</i> , 2018, 256, 67-83.	2.3	173
80	New detailed insights on the role of a novel praseodymium nanofilm on the polymer/steel interfacial adhesion bonds in dry and wet conditions: An integrated molecular dynamics simulation and experimental study. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 85, 221-236.	2.7	33
81	Fabrication of an efficient system for Zn ions removal from industrial wastewater based on graphene oxide nanosheets decorated with highly crystalline polyaniline nanofibers (GO-PANI): Experimental and ab initio quantum mechanics approaches. <i>Chemical Engineering Journal</i> , 2018, 337, 385-397.	6.6	84
82	Polyaniline-cerium oxide (PANI-CeO ₂) coated graphene oxide for enhancement of epoxy coating corrosion protection performance on mild steel. <i>Corrosion Science</i> , 2018, 137, 111-126.	3.0	273
83	Studying the <i>Urtica dioica</i> leaves extract inhibition effect on the mild steel corrosion in 1 M HCl solution: Complementary experimental, ab initio quantum mechanics, Monte Carlo and molecular dynamics studies. <i>Journal of Molecular Liquids</i> , 2018, 272, 120-136.	2.3	74
84	A facile synthesis method of an effective anti-corrosion nanopigment based on zinc polyphosphate through microwaves assisted combustion method; comparing the influence of nanopigment and conventional zinc phosphate on the anti-corrosion properties of an epoxy coating. <i>Journal of Alloys and Compounds</i> , 2018, 762, 730-744.	2.8	57
85	Cerium oxide nanoparticles influences on the binding and corrosion protection characteristics of a melamine-cured polyester resin on mild steel: An experimental, density functional theory and molecular dynamics simulation study. <i>Corrosion Science</i> , 2017, 118, 69-83.	3.0	77
86	Corrosion protective and adhesion properties of a melamine-cured polyester coating applied on steel substrate treated by a nanostructure cerium-lanthanum film. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 81, 419-434.	2.7	20
87	Experimental and theoretical studies of the synergistic inhibition effects between the plant leaves extract (PLE) and zinc salt (ZS) in corrosion control of carbon steel in chloride solution. <i>Journal of Molecular Liquids</i> , 2017, 248, 854-870.	2.3	117