

Priyabrata Banerjee

List of Publications by Year in descending order

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142
papers

6,691
citations

61857

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74018

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all docs

142
docs citations

142
times ranked

3183
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel Schiff-base molecules as efficient corrosion inhibitors for mild steel surface in 1 M HCl medium: experimental and theoretical approach. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 17898-17911.	1.3	386
2	Density functional theory and molecular dynamics simulation study on corrosion inhibition performance of mild steel by mercapto-quinoline Schiff base corrosion inhibitor. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015, 66, 332-341.	1.3	361
3	Adsorption and corrosion inhibition effect of Schiff base molecules on the mild steel surface in 1 M HCl medium: a combined experimental and theoretical approach. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 5679-5690.	1.3	346
4	Effect of stereochemical conformation into the corrosion inhibitive behaviour of double azomethine based Schiff bases on mild steel surface in 1%mol L ⁻¹ HCl medium: An experimental, density functional theory and molecular dynamics simulation study. <i>Corrosion Science</i> , 2019, 146, 134-151.	3.0	284
5	Evaluating electronic structure of quinazolinone and pyrimidinone molecules for its corrosion inhibition effectiveness on target specific mild steel in the acidic medium: A combined DFT and MD simulation study. <i>Journal of Molecular Liquids</i> , 2016, 224, 629-638.	2.3	249
6	Correlating electronic structure with corrosion inhibition potentiality of some bis-benzimidazole derivatives for mild steel in hydrochloric acid: Combined experimental and theoretical studies. <i>Corrosion Science</i> , 2015, 98, 541-550.	3.0	241
7	Effect of substitution on corrosion inhibition properties of 2-(substituted phenyl) benzimidazole derivatives on mild steel in 1 M HCl solution: A combined experimental and theoretical approach. <i>Corrosion Science</i> , 2017, 123, 256-266.	3.0	240
8	A theoretical approach to understand the inhibition mechanism of steel corrosion with two aminobenzonitrile inhibitors. <i>RSC Advances</i> , 2015, 5, 71120-71130.	1.7	172
9	Exploring the potential role of pyrazoline derivatives in corrosion inhibition of mild steel in hydrochloric acid solution: Insights from experimental and computational studies. <i>Construction and Building Materials</i> , 2020, 233, 117320.	3.2	123
10	Triazole-modified chitosan: a biomacromolecule as a new environmentally benign corrosion inhibitor for carbon steel in a hydrochloric acid solution. <i>RSC Advances</i> , 2019, 9, 14990-15003.	1.7	116
11	Theoretical evaluation of some benzotriazole and phosphono derivatives as aluminum corrosion inhibitors: DFT and molecular dynamics simulation approaches. <i>RSC Advances</i> , 2016, 6, 74550-74559.	1.7	112
12	Introduction of newly synthesized Schiff base molecules as efficient corrosion inhibitors for mild steel in 1 M HCl medium: an experimental, density functional theory and molecular dynamics simulation study. <i>Materials Chemistry Frontiers</i> , 2018, 2, 1674-1691.	3.2	101
13	A comparative density functional theory and molecular dynamics simulation studies of the corrosion inhibitory action of two novel N-heterocyclic organic compounds along with a few others over steel surface. <i>Journal of Molecular Liquids</i> , 2016, 215, 486-495.	2.3	89
14	Corrosion inhibition property of azomethine functionalized triazole derivatives in 1%mol L ⁻¹ HCl medium for mild steel: Experimental and theoretical exploration. <i>Journal of Molecular Liquids</i> , 2020, 313, 113508.	2.3	89
15	Recognition of an Explosive and Mutagenic Water Pollutant, 2,4,6-Trinitrophenol, by Cost-Effective Luminescent MOFs. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 2851-2857.	1.0	87
16	Experimental and computational studies of imidazolium based ionic liquid 1-methyl-3-propylimidazolium iodide on mild steel corrosion in acidic solution. <i>Materials Research Express</i> , 2020, 7, 016510.	0.8	85
17	Sensitive and fluorescent Schiff base chemosensor for pico molar level fluoride detection: In vitro study and mimic of logic gate function. <i>Sensors and Actuators B: Chemical</i> , 2016, 224, 899-906.	4.0	82
18	Molecular level insights for the corrosion inhibition effectiveness of three amine derivatives on the carbon steel surface in the adverse medium: A combined density functional theory and molecular dynamics simulation study. <i>Surfaces and Interfaces</i> , 2018, 10, 65-73.	1.5	82

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19	Recognition of fluoride anions at low ppm level inside living cells and from fluorosis affected tooth and saliva samples. RSC Advances, 2015, 5, 27387-27392.	1.7	79
20	Electronic Structure of the [Tris(dithiolene)chromium] ^{0, 1⁺, 2⁺, 3⁺} Electron Transfer Series and Their Manganese(IV) Analogues. An X-ray Absorption Spectroscopic and Density Functional Theoretical Study. Inorganic Chemistry, 2009, 48, 5829-5847.	1.9	78
21	Amine cured double Schiff base epoxy as efficient anticorrosive coating materials for protection of mild steel in 3.5% NaCl medium. Journal of Molecular Liquids, 2019, 278, 521-535.	2.3	71
22	Colorimetric and fluorimetric response of Schiff base molecules towards fluoride anion, solution test kit fabrication, logical interpretations and DFT-D3 study. Physical Chemistry Chemical Physics, 2015, 17, 20288-20295.	1.3	70
23	Palmitic acid based environmentally benign corrosion inhibiting formulation useful during acid cleansing process in MSF desalination plants. Desalination, 2019, 472, 114128.	4.0	66
24	Evaluating corrosion inhibition property of some Schiff bases for mild steel in 1 M HCl: competitive effect of the heteroatom and stereochemical conformation of the molecule. RSC Advances, 2016, 6, 74833-74844.	1.7	65
25	The effect of an N-heterocyclic compound on corrosion inhibition of J55 steel in sweet corrosive medium. New Journal of Chemistry, 2019, 43, 6303-6313.	1.4	65
26	Small molecular probe as selective tritopic sensor of Al ³⁺ , F ⁻ and TNP: Fabrication of portable prototype for onsite detection of explosive TNP. Analytica Chimica Acta, 2017, 965, 111-122.	2.6	62
27	Synthesis, characterization and theoretical exploration of pyrene based Schiff base molecules as corrosion inhibitor. Journal of Molecular Structure, 2021, 1245, 131098.	1.8	62
28	Competitive corrosion inhibition performance of alkyl/acyl substituted 2-(2-hydroxybenzylideneamino)phenol protecting mild steel used in adverse acidic medium: A dual approach analysis using FMOs/molecular dynamics simulation corroborated experimental findings. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 617, 126314.	2.3	61
29	Proline nitrate ionic liquid as high temperature acid corrosion inhibitor for mild steel: Experimental and molecular-level insights. Journal of Industrial and Engineering Chemistry, 2021, 100, 333-350.	2.9	61
30	Construction of a Succinate-Bridged Cd(II)-Based Two-Dimensional Coordination Polymer for Efficient Optoelectronic Device Fabrication and Explosive Sensing Application. Crystal Growth and Design, 2020, 20, 765-776.	1.4	57
31	Newly synthesized quercetin derivatives as corrosion inhibitors for mild steel in 1 M HCl: combined experimental and theoretical investigation. Physical Chemistry Chemical Physics, 2018, 20, 6562-6574.	1.3	56
32	Solvothermal Synthesis of High-Performance d ¹⁰ -MOFs with Hydrogel Membranes @ Turn-On Monitoring of Formaldehyde in Solution and Vapor Phase. ACS Applied Materials & Interfaces, 2021, 13, 25153-25163.	4.0	56
33	Monoanionic Molybdenum and Tungsten Tris(dithiolene) Complexes: A Multifrequency EPR Study. Inorganic Chemistry, 2011, 50, 7106-7122.	1.9	55
34	A simple and dual responsive efficient new Schiff base chemoreceptor for selective sensing of F ⁻ and Hg ²⁺ : application to bioimaging in living cells and mimicking of molecular logic gates. RSC Advances, 2015, 5, 62017-62023.	1.7	55
35	Synthesis and characterization of redox non-innocent cobalt(III) complexes of a O,N,O donor ligand: Radical generation, semi-conductivity, antibacterial and anticancer activities. Inorganica Chimica Acta, 2015, 429, 99-108.	1.2	53
36	Cd(II) Based Coordination Polymer Series: Fascinating Structures, Efficient Semiconductors, and Promising Nitro Aromatic Sensing. Crystal Growth and Design, 2019, 19, 6431-6447.	1.4	53

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37	Stimuli-responsive discriminative detection of Cu ²⁺ and Hg ²⁺ with concurrent sensing of S ²⁻ from aqueous medium and bio-fluids by C N fused azophenine functionalized "smart" hydrogel assay @A potential biomarker sensor for Wilson's disease. <i>Sensors and Actuators B: Chemical</i> , 2021, 341, 129925.	4.0	53
38	Cell permeable fluorescent colorimetric Schiff base chemoreceptor for detecting F ⁻ in aqueous solvent. <i>Sensors and Actuators B: Chemical</i> , 2015, 220, 347-355.	4.0	52
39	Trace-Level Humidity Sensing from Commercial Organic Solvents and Food Products by an AIE/ESIPT-Triggered Piezochromic Luminogen and ppb-Level "ON" "OFF" Sensing of Cu ²⁺ : A Combined Experimental and Theoretical Outcome. <i>ACS Omega</i> , 2021, 6, 14104-14121.	1.6	51
40	Bis-benzothiazoles as efficient corrosion inhibitors for mild steel in aqueous HCl: Molecular structure-reactivity correlation study. <i>Journal of Molecular Liquids</i> , 2020, 313, 113537.	2.3	49
41	Calculation of diffusion coefficient of long chain molecules using molecular dynamics. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015, 69, 371-377.	1.3	48
42	How paramagnetic and diamagnetic LMOCs detect picric acid from surface water and the intracellular environment: a combined experimental and DFT-D3 study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 22805-22815.	1.3	48
43	Isolation and Assessment of the Molecular and Electronic Structures of Azo-Anion-Radical Complexes of Chromium and Molybdenum. Experimental and Theoretical Characterization of Complete Electron-Transfer Series. <i>Inorganic Chemistry</i> , 2011, 50, 9993-10004.	1.9	47
44	Selective Identification and Encapsulation of Biohazardous <i>m</i> -Xylene among a Pool of Its Other Constitutional C ₈ Alkyl Isomers by Luminescent d ¹⁰ MOFs: A Combined Theoretical and Experimental Study. <i>Inorganic Chemistry</i> , 2020, 59, 4366-4376.	1.9	45
45	Adsorption and anti-corrosion characteristics of vanillin Schiff bases on mild steel in 1 M HCl: experimental and theoretical study. <i>RSC Advances</i> , 2020, 10, 9258-9273.	1.7	44
46	Unusual Reduction of Ammonium Heptamolybdate to Novel Molybdenum(IV)-Stabilized Azo Anion Radical Complexes. <i>Inorganic Chemistry</i> , 2004, 43, 7456-7462.	1.9	43
47	Novel Nanoporous Ti-Phosphonate Metal-Organic Framework for Selective Sensing of 2,4,6-Trinitrophenol and a Promising Electrode in an Energy Storage Device. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14224-14237.	3.2	42
48	Designed synthesis of CO ₂ -promoted copper(II) coordination polymers: synthesis, structural and spectroscopic characterization, and studies of versatile functional properties. <i>Dalton Transactions</i> , 2014, 43, 13500-13508.	1.6	40
49	A Ni(II) Metal-Organic Framework with Mixed Carboxylate and Bipyridine Ligands for Ultrafast and Selective Sensing of Explosives and Photoelectrochemical Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 20907-20918.	4.0	40
50	A simple urea-based multianalyte and multichannel chemosensor for the selective detection of F ⁻ , Hg ²⁺ and Cu ²⁺ in solution and cells and the extraction of Hg ²⁺ and Cu ²⁺ from real water sources: a logic gate mimic ensemble. <i>Dalton Transactions</i> , 2019, 48, 4375-4386.	1.6	39
51	Discerning Detection of Mutagenic Biopollutant TNP from Water and Soil Samples with Transition Metal-Containing Luminescence Metal-Organic Frameworks. <i>ACS Omega</i> , 2020, 5, 15949-15961.	1.6	39
52	A simple cleft shaped hydrazine-functionalized colorimetric new Schiff base chemoreceptor for selective detection of F ⁻ in organic solvent through PET signaling: Development of a chemoreceptor based sensor kit for detection of fluoride. <i>Sensors and Actuators B: Chemical</i> , 2017, 241, 706-715.	4.0	38
53	Adsorption of redox-active Schiff bases and corrosion inhibiting property for mild steel in 1 mol ⁻¹ H ₂ SO ₄ : Experimental analysis supported by ab initio DFT, DFTB and molecular dynamics simulation approach. <i>Journal of Molecular Liquids</i> , 2021, 326, 115215.	2.3	38
54	Chromogenic and fluorogenic Schiff base chemosensor for nano scale level fluoride detection with logical interpretation. <i>Chemical Physics</i> , 2016, 478, 103-109.	0.9	37

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55	“Naked-eye” detection of CN ³⁻ from aqueous phase and other extracellular matrices: an experimental and theoretical approach mimicking the logic gate concept. <i>New Journal of Chemistry</i> , 2019, 43, 18098-18109.	1.4	37
56	Weak interactions: The architect behind the structural diversity of coordination polymer. <i>Inorganica Chimica Acta</i> , 2019, 488, 86-119.	1.2	37
57	Nanomolar-level selective dual channel sensing of Cu ²⁺ and CN ³⁻ from an aqueous medium by an opto-electronic chemoreceptor. <i>Dalton Transactions</i> , 2018, 47, 1082-1091.	1.6	36
58	Nitroaromatic explosives detection by a luminescent Cd(II) based metal organic framework. <i>Polyhedron</i> , 2017, 123, 217-225.	1.0	35
59	How explosive TNP interacts with a small tritopic receptor: a combined crystallographic and thermodynamic approach. <i>CrystEngComm</i> , 2017, 19, 6703-6710.	1.3	35
60	An ESIPT based turn on fluorochromogenic sensor for low level discrimination of chemically analogous Zn ²⁺ and Cd ²⁺ & aqueous phase recognition of bio-hazardous CN ³⁻ : From solution state analysis to prototype fabrication. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 129172.	4.0	35
61	Nanomolar level detection of explosive and pollutant TNP by fluorescent aryl naphthalene sulfones: DFT study, in vitro detection and portable prototype fabrication. <i>Sensors and Actuators B: Chemical</i> , 2017, 251, 985-992.	4.0	34
62	Sensitive and Selective in Vitro Recognition of Biologically Toxic As(III) by Rhodamine Based Chemoreceptor. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13687-13697.	3.2	34
63	Corrosion inhibition and adsorption of imidazolium based ionic liquid over P110 steel surface in 15% HCl under static and dynamic conditions: Experimental, surface and theoretical analysis. <i>Journal of Molecular Liquids</i> , 2021, 323, 114608.	2.3	34
64	Strategic Design of Anthracene-Decorated Highly Luminescent Coordination Polymers for Selective and Rapid Detection of TNP: An Explosive Nitro Derivative and Mutagenic Pollutant. <i>Crystal Growth and Design</i> , 2021, 21, 3344-3354.	1.4	34
65	L-Alanine methyl ester nitrate ionic liquid: synthesis, characterization and anti-corrosive application. <i>Journal of Molecular Liquids</i> , 2021, 334, 116469.	2.3	34
66	Corrosion inhibition behavior of piperidinium based ionic liquids on Q235 steel in hydrochloric acid solution: Experimental, density functional theory and molecular dynamics study. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 623, 126708.	2.3	34
67	Zn and Fe Complexes Containing a Redox Active Macrocyclic Biquinazoline Ligand. <i>Inorganic Chemistry</i> , 2009, 48, 2944-2955.	1.9	33
68	Mononuclear to Polynuclear Transition Induced by Ligand Coordination: Synthesis, X-ray Structure, and Properties of Mono-, Di-, and Polynuclear Copper(II) Complexes of Pyridyl-Containing Azo Ligands. <i>Inorganic Chemistry</i> , 2006, 45, 562-570.	1.9	32
69	Exploratory studies towards various anion recognition chemistry by two different sized cleft shaped organic ligands. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 124, 492-499.	2.0	32
70	Eco-friendly disposal of expired anti-tuberculosis drug isoniazid and its role in the protection of metal. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 102971.	3.3	32
71	Efficient tribological properties of azomethine-functionalized chitosan as a bio-lubricant additive in paraffin oil: experimental and theoretical analysis. <i>RSC Advances</i> , 2020, 10, 33401-33416.	1.7	32
72	Isolation and Characterization of ZnII and HgII Coordination Polymers with a Designed Azo-Aromatic Ligand: Identification of Micrometer- and Nanometer-Sized Particles. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 835-845.	1.0	29

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73	Explosive and pollutant TNP detection by structurally flexible SOFs: DFT-D3, TD-DFT study and in vitro recognition. <i>Journal of Luminescence</i> , 2017, 185, 272-278.	1.5	29
74	A quinoline-based compound for explosive 2,4,6-trinitrophenol sensing: experimental and DFT-D3 studies. <i>New Journal of Chemistry</i> , 2018, 42, 8408-8414.	1.4	29
75	A prolonged exposure of Ti-Si-B-C nanocomposite coating in 3.5 wt% NaCl solution: Electrochemical and morphological analysis. <i>Surface and Coatings Technology</i> , 2019, 375, 477-488.	2.2	29
76	Exploratory studies of a multidimensionally talented simple Mn ^{II} -based porous network: selective "turn-on" recognition @ cysteine over homocysteine with an indication of cystinuria and renal dysfunction. <i>New Journal of Chemistry</i> , 2020, 44, 14712-14722.	1.4	29
77	Recent progress in OD optical nanoprobe for applications in the sensing of (bio)analytes with the prospect of global health monitoring and detailed mechanistic insights. <i>Materials Advances</i> , 2022, 3, 4421-4459.	2.6	29
78	Knoevenagel condensation triggered synthesis of dual-channel oxene based chemosensor: Discriminative spectrophotometric recognition of F ⁻ , CN ⁴⁻ and HSO ₄ ⁻ with breast cancer cell imaging, real sample analysis and molecular keypad lock applications. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 273, 120989.	2.0	28
79	Coumarin functionalized molecular scaffolds for the effectual detection of hazardous fluoride and cyanide. <i>Dalton Transactions</i> , 2021, 50, 429-451.	1.6	27
80	A novel ditopic chemosensor for cadmium and fluoride and its possible application as a pH sensor. <i>Analytical Methods</i> , 2017, 9, 124-133.	1.3	25
81	Investigation of phenol-formaldehyde resins as corrosion impeding agent in acid solution. <i>Journal of Molecular Liquids</i> , 2021, 330, 115649.	2.3	25
82	Selective recognition of ammonia and aliphatic amines by C-N fused phenazine derivative: A hydrogel based smartphone assisted "opto-electronic nose"™ for food spoilage evaluation with potent anti-counterfeiting activity and a potential prostate cancer biomarker sensor. <i>Analytica Chimica Acta</i> , 2022, 1202, 339597.	2.6	25
83	Quantum chemical and molecular dynamics simulation approach to investigate adsorption behaviour of organic azo dyes on TiO ₂ and ZnO surfaces. <i>Journal of Adhesion Science and Technology</i> , 2023, 37, 1649-1665.	1.4	25
84	Hydrazine functionalized probes for chromogenic and fluorescent ratiometric sensing of pH and F ⁻ : experimental and DFT studies. <i>Photochemical and Photobiological Sciences</i> , 2017, 16, 1654-1663.	1.6	24
85	A Urea-Functionalized Chemoreceptor for Expedient Chromogenic Recognition of Toxic Industrial Pollutants Cu ²⁺ and CN ⁴⁻ from Real Water Sources and Biofluids: Diagnosis of Wilson's disease from Human Urine. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 19077-19092.	1.8	24
86	Synthesis of Azoaromatic Dyes via Redox Driven C-N Bond Fusion. <i>Organic Letters</i> , 2009, 11, 3218-3221.	2.4	22
87	Electrochemical behaviour of uncoated and phosphatidylcholine coated copper in hydrochloric acid medium. <i>Journal of Molecular Liquids</i> , 2018, 249, 930-940.	2.3	22
88	Tandem Detection of Sub-Nano Molar Level CN ⁴⁻ and Hg ²⁺ in Aqueous Medium by a Suitable Molecular Sensor: A Viable Solution for Detection of CN ⁴⁻ and Development of the RGB-Based Sensory Device. <i>ACS Omega</i> , 2020, 5, 6576-6587.	1.6	22
89	Toxic organic solvent adsorption by a hydrophobic covalent polymer. <i>New Journal of Chemistry</i> , 2019, 43, 3769-3777.	1.4	21
90	Soft actuator based on Kraton with GO/Ag/Pani composite electrodes for robotic applications. <i>Materials Research Express</i> , 2017, 4, 115701.	0.8	19

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91	Trace Level Recognition of Zn ²⁺ and Cd ²⁺ by Biocompatible Chemosensor inside Androecium, Diagnosis of Pick's Disease from Urine and Biomimetic β -Cell Exocytosis. ACS Applied Bio Materials, 2018, 1, 683-692.	2.3	19
92	Organization of the Ru ₂ Na Moiety of a Phenazine Ligand Into a New Coordination Network Promoted by ClO ₄ ⁻ Aromatic- π Interactions. European Journal of Inorganic Chemistry, 2008, 2008, 44-47.	1.0	17
93	Tailor-made synthesis of an melamine-based aminal hydrophobic polymer for selective adsorption of toxic organic pollutants: an initiative towards wastewater purification. RSC Advances, 2019, 9, 7469-7478.	1.7	17
94	A Series of [Co(Mabiq)Cl ₂ ·n] (n = 0, 1, 2) Compounds and Evidence for the Elusive Bimetallic Form. Inorganic Chemistry, 2015, 54, 5864-5873.	1.9	16
95	Phenoxazinone synthase activity of two iron(III) complexes comprising the same Schiff base ligand: Biomimetic functional model and mechanistic investigation. Inorganica Chimica Acta, 2018, 474, 105-112.	1.2	15
96	n-alkylamino analogs of Vitamin K3: Electrochemical, DFT and anticancer activity of their oxidized and one electron reduced form. Journal of Molecular Structure, 2019, 1179, 443-452.	1.8	15
97	Biological macromolecule as an eco-friendly high temperature corrosion inhibitor for P110 steel under sweet environment in NACE brine ID196: Experimental and computational approaches. Journal of Molecular Liquids, 2022, 345, 117866.	2.3	15
98	Density functional theory, Monte Carlo simulation and non-covalent interaction study for exploring the adsorption and corrosion inhibiting property of double azomethine functionalised organic molecules. Journal of Adhesion Science and Technology, 2022, 36, 2732-2760.	1.4	15
99	Experimental and theoretical investigation towards anti-corrosive property of glutamic acid and poly- β -glutamic acid for mild steel in 1M HCl: intramolecular synergism due to copolymerization. Research on Chemical Intermediates, 2017, 43, 4423-4444.	1.3	14
100	Amine-substituent induced highly selective and rapid α -turn-on detection of carcinogenic 1,4-dioxane from purely aqueous and vapour phase with novel post-synthetically modified d10-MOFs. Dalton Transactions, 2022, 51, 2083-2093.	1.6	14
101	Unprecedented examples of double-addition of aromatic amines across a ruthenium(II)-coordinated nitrile function: Isolation and X-ray structures of ruthenium complexes of amidinate and cyclometalated amidine. Journal of Organometallic Chemistry, 2006, 691, 2915-2923.	0.8	13
102	A simple hydrazine based molecule for selective detection of Fluoride ion in DMSO. Journal of Chemical Sciences, 2017, 129, 463-470.	0.7	13
103	A Journey towards Salivary Fluoride Level Detection by Suitable Low Cost Chemosensor: From Molecule to Product. Chemical Record, 2019, 19, 2119-2129.	2.9	13
104	Experimental and theoretical assessment of almond gum as an economically and environmentally viable corrosion inhibitor for mild steel in 1M HCl. Sustainable Chemistry and Pharmacy, 2020, 18, 100337.	1.6	13
105	Exploratory studies on azido-bridged complexes (Ni ²⁺ and Mn ²⁺) as dual colourimetric chemosensors for S ²⁻ and Ag ⁺ : combined experimental and theoretical outcomes with real field applications. Dalton Transactions, 2020, 49, 13090-13099.	1.6	13
106	Advancement in functionalized luminescent frameworks and their prospective applications as inkjet-printed sensors and anti-counterfeit materials. Dalton Transactions, 2021, 50, 8657-8670.	1.6	13
107	An insight about the interaction of Aryl Benzothiazoles with mild steel surface in aqueous HCl solution. Journal of Molecular Liquids, 2022, 354, 118890.	2.3	13
108	In Situ Trans-Cis Isomerization of Naphthylvinylpyridine Ligand in a Zinc(II) Coordination Polymer: Liquid and Vapor Phase Sensing of Mutagenic Pollutants and Nitroexplosives. ACS Applied Polymer Materials, 2022, 4, 2841-2850.	2.0	12

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109	Synthesis, characterisation and corrosion inhibition assessment of a novel ionic liquid-graphene oxide nanohybrid. <i>Journal of Molecular Structure</i> , 2022, 1262, 133027.	1.8	12
110	Two Novel Reactions of a Ruthenium-Coordinated Phenazine – Oxidative Aromatic Ring Hydroxylation and Dimerization via a New C–N Bond Formation. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 412-421.	1.0	11
111	Electrochemical Conversion of Bicarbonate to Formate Mediated by the Complex Ru ^{III} (edta) (edta ⁴⁻ = ethylenediaminetetraacetate). <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 5856-5859.	1.0	11
112	Chelator Probe with Exceptionally High Stokes Shift for Selective Detection of OAc ⁻ with Red Emission: Application as a Biosensor. <i>ChemistrySelect</i> , 2018, 3, 1151-1156.	0.7	11
113	A Harmonized Applied and Theoretical Exploration for Nanomolar Level Recognition of Perilous F ⁻ and CN ⁻ by Multichannel Chemosensor: Proposition of Hg ²⁺ -Mediated Logic Gate Imitator. <i>ChemistrySelect</i> , 2020, 5, 11976-11985.	0.7	10
114	The designed synthesis of a hydrophobic covalent polymer composite to expel toxic dyes and oil from wastewater: theoretical corroboration. <i>New Journal of Chemistry</i> , 2021, 45, 5165-5175.	1.4	10
115	Anti-corrosive propensity of naturally occurring aldehydes and 1-(3-aminopropyl)imidazole condensed Schiff bases: Comparison on the effect of extended conjugation over electron donating substituents. <i>Journal of Molecular Structure</i> , 2022, 1268, 133684.	1.8	10
116	Halide salts and their structural properties in presence of secondary amine based molecule: A combined experimental and theoretical analysis. <i>Journal of Molecular Structure</i> , 2018, 1157, 444-449.	1.8	9
117	Engineering bio-molecular device with biocompatible sensor <i>via</i> symmetric encryption–decryption of spectroscopic signals towards F ⁻ detection and Zn ²⁺ recognition by the imine hydrolysis pathway. <i>New Journal of Chemistry</i> , 2020, 44, 15251-15259.	1.4	9
118	A new phosphonate based Mn-MOF in recognising arginine over lysine in aqueous medium and other bio-fluids with – disease remediation. <i>Chemical Engineering Journal</i> , 2022, 446, 136916.	6.6	9
119	Intrinsic electronic property and adsorption of organic molecules on specific iron surface: an <i>ab initio</i> DFT and DFTB study. <i>Journal of Adhesion Science and Technology</i> , 2023, 37, 1837-1855.	1.4	9
120	Chromofluorogenic sensory probe for ppb level recognition of hazardous F ⁻ : Proposition towards Hg ²⁺ mediated logic gate simulator. <i>Journal of Fluorine Chemistry</i> , 2021, 246, 109783.	0.9	8
121	Effect of molecular chain length on the tribological properties of two diazomethine functionalised molecules as efficient surface protective lubricant additive: experimental and <i>in silico</i> investigation. <i>Journal of Adhesion Science and Technology</i> , 2023, 37, 213-239.	1.4	8
122	A hybrid electro-responsive SWNT/PEDOT: PSS-based membrane towards soft actuator applications. <i>Journal of Reinforced Plastics and Composites</i> , 2021, 40, 87-102.	1.6	7
123	Investigation on Multifunctional Properties of Sputtered Ti-Si-B-C Coating with Varied Thickness over Targeted Surface. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 4432-4444.	1.2	7
124	Evaluation of nanomaterials-grafted enzymes for application in contaminants degradation: Need of the hour with proposed IoT synchronized nanosensor fit sustainable clean water technology in en masse. <i>Journal of the Indian Chemical Society</i> , 2022, 99, 100429.	1.3	7
125	Nitrate as corrosion inhibitor. , 2022, , 269-296.		6
126	Smartphone-based digitized recognition of As ³⁺ along with its effectual mitigation in water using a benzothiazole-functionalized molecular scaffold. <i>Materials Advances</i> , 2022, 3, 4649-4658.	2.6	6

#	ARTICLE	IF	CITATIONS
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