

Indra Bahadur

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2045941/publications.pdf>

Version: 2024-02-01

75
papers

3,626
citations

172386

29
h-index

149623

56
g-index

77
all docs

77
docs citations

77
times ranked

2706
citing authors

#	ARTICLE	IF	CITATIONS
1	Organic corrosion inhibitors for industrial cleaning of ferrous and non-ferrous metals in acidic solutions: A review. <i>Journal of Molecular Liquids</i> , 2018, 256, 565-573.	2.3	379
2	An overview on plant extracts as environmental sustainable and green corrosion inhibitors for metals and alloys in aggressive corrosive media. <i>Journal of Molecular Liquids</i> , 2018, 266, 577-590.	2.3	363
3	Green synthesis of iron nanoparticles using <i>Moringa oleifera</i> extracts and their applications: Removal of nitrate from water and antibacterial activity against <i>Escherichia coli</i> . <i>Journal of Molecular Liquids</i> , 2018, 256, 296-304.	2.3	227
4	Choline based ionic liquids as sustainable corrosion inhibitors on mild steel surface in acidic medium: Gravimetric, electrochemical, surface morphology, DFT and Monte Carlo simulation studies. <i>Applied Surface Science</i> , 2018, 457, 134-149.	3.1	173
5	Experimental and theoretical studies on some selected ionic liquids with different cations/anions as corrosion inhibitors for mild steel in acidic medium. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 64, 252-268.	2.7	145
6	Identification and characterization of potassium solubilizing bacteria (KSB) from Indo-Gangetic Plains of India. <i>Biocatalysis and Agricultural Biotechnology</i> , 2016, 7, 202-209.	1.5	131
7	Potassium solubilization by bacterial strain in waste mica. <i>Bangladesh Journal of Botany</i> , 2015, 43, 235-237.	0.2	123
8	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. <i>Molecules</i> , 2015, 20, 16004-16029.	1.7	109
9	Excess molar volumes of binary mixtures (an ionic liquid+water): A review. <i>Journal of Chemical Thermodynamics</i> , 2015, 82, 34-46.	1.0	92
10	Experimental, density functional theory and molecular dynamics supported adsorption behavior of environmental benign imidazolium based ionic liquids on mild steel surface in acidic medium. <i>Journal of Molecular Liquids</i> , 2019, 273, 1-15.	2.3	92
11	Potassium-Solubilizing Microorganism in Evergreen Agriculture: An Overview. , 2016, , 1-20.		87
12	Apparent Molar Volume and Isentropic Compressibility for the Binary Systems {Methyltrioctylammonium Bis(trifluoromethylsulfonyl)imide + Methyl Acetate or Methanol} and (Methanol + Methyl Acetate) at T=298.15, 303.15, 308.15 and 313.15 K and Atmospheric Pressure. <i>Journal of Solution Chemistry</i> , 2011, 40, 1528-1543.	0.6	80
13	Porphyryns as Corrosion Inhibitors for N80 Steel in 3.5% NaCl Solution: Electrochemical, Quantum Chemical, QSAR and Monte Carlo Simulations Studies. <i>Molecules</i> , 2015, 20, 15122-15146.	1.7	76
14	Apparent molar volume and apparent molar isentropic compressibility for the binary systems {methyltrioctylammoniumbis(trifluoromethylsulfonyl)imide+ethyl acetate or ethanol} at different temperatures under atmospheric pressure. <i>Thermochimica Acta</i> , 2013, 566, 77-83.	1.2	66
15	Towards the Soil Sustainability and Potassium-Solubilizing Microorganisms. , 2016, , 255-266.		64
16	Mineral Release Dynamics of Tricalcium Phosphate and Waste Muscovite by Mineral-Solubilizing Rhizobacteria Isolated from Indo-Gangetic Plain of India. <i>Geomicrobiology Journal</i> , 2016, , 1-13.	1.0	64
17	A Green and Sustainable Approach for Mild Steel Acidic Corrosion Inhibition Using Leaves Extract: Experimental and DFT Studies. <i>Journal of Bio- and Tribo-Corrosion</i> , 2018, 4, 1.	1.2	63
18	Can Potassium-Solubilising Bacteria Mitigate the Potassium Problems in India?. , 2016, , 127-136.		61

#	ARTICLE	IF	CITATIONS
19	Effect of anion variation on the thermophysical properties of triethylammonium based protic ionic liquids with polar solvent. <i>Thermochimica Acta</i> , 2013, 556, 75-88.	1.2	56
20	Synthesized photo-cross-linking chalcones as novel corrosion inhibitors for mild steel in acidic medium: experimental, quantum chemical and Monte Carlo simulation studies. <i>RSC Advances</i> , 2015, 5, 76675-76688.	1.7	56
21	Density, speed of sound, and refractive index measurements for the binary systems (butanoic) Tj ETQq1 1 0.784314 rgBT /Overlock 1 Thermodynamics, 2013, 57, 203-211.	1.0	55
22	Solubilities of Carbon Dioxide and Oxygen in the Ionic Liquids Methyl Trioctyl Ammonium Bis(trifluoromethylsulfonyl)imide, 1-Butyl-3-Methyl Imidazolium Bis(trifluoromethylsulfonyl)imide, and 1-Butyl-3-Methyl Imidazolium Methyl Sulfate. <i>Journal of Physical Chemistry B</i> , 2015, 119, 1503-1514.	1.2	52
23	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. <i>Molecules</i> , 2015, 20, 15701-15734.	1.7	51
24	Experimental and theoretical studies on inhibition of mild steel corrosion by some synthesized polyurethane tri-block co-polymers. <i>Scientific Reports</i> , 2016, 6, 30937.	1.6	42
25	Polyurethane Based Triblock Copolymers as Corrosion Inhibitors for Mild Steel in 0.5 M H_2SO_4 . <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 441-456.	1.8	42
26	Molecular interactions between ammonium-based ionic liquids and molecular solvents: current progress and challenges. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8278-8326.	1.3	40
27	Volumetric Properties for (Ionic Liquid + Methanol or Ethanol or 1-Propanol + Nitromethane) at 298.15 K and Atmospheric Pressure. <i>Journal of Chemical & Engineering Data</i> , 2011, 56, 1682-1686.	1.0	37
28	Effect of temperature on density, sound velocity, and their derived properties for the binary systems glycerol with water or alcohols. <i>Journal of Chemical Thermodynamics</i> , 2017, 109, 124-136.	1.0	37
29	Measurement of activity coefficients at infinite dilution of organic solutes in the ionic liquid 1-ethyl-3-methylimidazolium 2-(2-methoxyethoxy) ethylsulfate at T=(308.15, 313.15, 323.15 and 333.15)K using gas+liquid chromatography. <i>Journal of Chemical Thermodynamics</i> , 2014, 70, 245-252.	1.0	36
30	Volumetric properties of ternary (IL + 2-propanol or 1-butanol or 2-butanol + ethyl acetate) systems and binary (IL + 2-propanol or 1-butanol or 2-butanol) and (1-butanol or 2-butanol + ethyl acetate) systems. <i>Journal of Chemical Thermodynamics</i> , 2012, 49, 24-38.	1.0	35
31	Anti-corrosion performance of eco-friendly inhibitor (2-aminobenzyl) triphenylphosphonium bromide ionic liquid on mild steel in 0.5 M sulfuric acid. <i>Journal of Molecular Liquids</i> , 2018, 261, 162-173.	2.3	33
32	Optical properties of regiorandom polythiophene/Al ₂ O ₃ nanocomposites and their application to ammonia gas sensing. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 7421-7430.	1.1	32
33	Application of Taguchi method to optimize garlic essential oil nanoemulsions. <i>Journal of Molecular Liquids</i> , 2017, 244, 279-284.	2.3	31
34	A comparative study of the stability of stem bromelain based on the variation of anions of imidazolium-based ionic liquids. <i>Journal of Molecular Liquids</i> , 2017, 246, 178-186.	2.3	29
35	Effects of temperature and concentration on interactions in methanol + ethyl acetate and ethanol + methyl acetate or ethyl acetate systems: Insights from apparent molar volume and apparent molar isentropic compressibility study. <i>Thermochimica Acta</i> , 2014, 577, 87-94.	1.2	28
36	Effect of temperature on density, sound velocity, refractive index and their derived properties for the binary systems (heptanoic acid+propanoic or butanoic acids). <i>Journal of Chemical Thermodynamics</i> , 2014, 78, 7-15.	1.0	28

#	ARTICLE	IF	CITATIONS
37	Exploring the Effect of Choline-Based Ionic Liquids on the Stability and Activity of Stem Bromelain. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10435-10444.	1.2	28
38	Density, speed of sound and refractive index of mixtures containing 2-phenoxyethanol with propanol or butanol at various temperatures. <i>Journal of Chemical Thermodynamics</i> , 2019, 128, 394-405.	1.0	26
39	Evaluation of potassium solubilizing rhizobacteria (KSR): enhancing K-bioavailability and optimizing K-fertilization of maize plants under Indo-Gangetic Plains of India. <i>Environmental Science and Pollution Research</i> , 2018, 25, 36412-36424.	2.7	22
40	Protein packaging in ionic liquid mixtures: an ecofriendly approach towards the improved stability of β -lactoglobulin in cholinium-based mixed ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 14811-14821.	1.3	20
41	Volumetric, acoustic and transport properties of mixtures containing dimethyl sulfoxide and some amines or alkanolamines: Measurement and correlation. <i>Journal of Chemical Thermodynamics</i> , 2018, 121, 187-198.	1.0	19
42	Influence of temperature on molecular interactions of imidazolium-based ionic liquids with acetophenone: thermodynamic properties and quantum chemical studies. <i>RSC Advances</i> , 2016, 6, 104708-104723.	1.7	18
43	Screening of environmental friendly ionic liquid as a solvent for the different types of separations problem: Insight from activity coefficients at infinite dilution measurement using (gas + liquid) chromatography technique. <i>Journal of Chemical Thermodynamics</i> , 2016, 92, 35-42.	1.0	18
44	Ionic salt (4-ethoxybenzyl)-triphenylphosphonium bromide as a green corrosion inhibitor on mild steel in acidic medium: experimental and theoretical evaluation. <i>RSC Advances</i> , 2017, 7, 31907-31920.	1.7	18
45	Hydrothermally grown β -MoO ₃ microfibers for photocatalytic degradation of methylene blue dye. <i>Journal of Molecular Liquids</i> , 2022, 349, 118202.	2.3	17
46	Interactions between main protease of SARS-CoV-2 and testosterone or progesterone using computational approach. <i>Journal of Molecular Structure</i> , 2021, , 131965.	1.8	17
47	Formulation and Optimization of Eudragit RS PO-Tenofovir Nanocarriers Using Box-Behnken Experimental Design. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-11.	1.5	16
48	Probing Molecular Interactions between Ammonium-Based Ionic Liquids and N,N-Dimethylacetamide: A Combined FTIR, DLS, and DFT Study. <i>Journal of Physical Chemistry B</i> , 2016, 120, 12584-12595.	1.2	16
49	Ionic liquids-assisted greener preparation of silver nanoparticles. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2022, 33, 100581.	3.2	15
50	Solid-liquid equilibria measurements for binary systems comprising (butyric acid+propionic or) <i>Journal of Chemical Thermodynamics</i> , 2013, 57, 485-492.	1.0	14
51	Vapor-liquid equilibria, density and sound velocity measurements of (water or methanol or ethanol +) <i>Journal of Chemical Thermodynamics</i> , 2013, 57, 485-492.	1.2	14
52	Investigate the interaction of testosterone/progesterone with ionic liquids on varying the anion to combat COVID-19: Density functional theory calculations and molecular docking approach. <i>Journal of Physical Organic Chemistry</i> , 2021, 34, e4273.	0.9	14
53	Thermophysical approach to understand the nature of molecular interactions and structural factor between methyl isobutyl ketone and organic solvents mixtures. <i>Journal of Chemical Thermodynamics</i> , 2017, 113, 291-300.	1.0	13
54	Hydrogen Bonding Interactions of Chlorotoluene with 1-Alkanol Analyzed by Thermodynamic, Fourier Transform Infrared Spectroscopy, Density Functional Theory, and Natural Bond Orbital. <i>ACS Omega</i> , 2018, 3, 4679-4687.	1.6	13

#	ARTICLE	IF	CITATIONS
55	Intermolecular interactions between methanol and some sulphonamide drugs in aqueous medium using thermodynamics approach. <i>Journal of Molecular Liquids</i> , 2019, 283, 451-461.	2.3	13
56	Separation of Aromatic Solvents from the Reformate Fraction of an Oil Refining Process using Extraction by a Designed Ionic Liquid. <i>Separation Science and Technology</i> , 2014, 49, 1883-1888.	1.3	10
57	Separation of aromatic solvents from oil refinery reformates by a newly designed ionic liquid using gas chromatography with flame ionization detection. <i>Journal of Separation Science</i> , 2015, 38, 951-957.	1.3	10
58	Liquid-Liquid Equilibria for Mixtures of Hexadecane and Ethanol with Imidazolium-Based Ionic Liquids. <i>Journal of Solution Chemistry</i> , 2015, 44, 593-605.	0.6	10
59	Excess/deviation properties of binary mixtures of 2,5-dimethylfuran with furfuryl alcohol, methyl isobutyl ketone, 1-butanol and 2-butanol at temperature range of (293.15-323.15) K. <i>Oil and Gas Science and Technology</i> , 2018, 73, 64.	1.4	10
60	Effect of temperature on intermolecular interactions between the organic solvents: Insights from density and excess volume. <i>Journal of Chemical Thermodynamics</i> , 2019, 132, 461-469.	1.0	9
61	Adsorption of cysteine on metal(II) octacyanomolybdate(IV) at different pH values: Surface complexes characterization by FT-IR, SEM with EDXA, CHNS and Langmuir isotherm analysis. <i>Journal of Molecular Liquids</i> , 2022, 349, 118197.	2.3	9
62	Assessment of Potential of <i>Croton gratissimus</i> Oil for Macroscale Production of Biodiesel Based on Thermophysical Properties. <i>Energy & Fuels</i> , 2014, 28, 7576-7581.	2.5	8
63	Activity coefficients at infinite dilution of hydrocarbons in glycols: Experimental data and thermodynamic modeling with the GCA-EoS. <i>Journal of Chemical Thermodynamics</i> , 2017, 105, 226-237.	1.0	8
64	Temperature and concentration dependent physicochemical interactions of L-ascorbic acid in aqueous LiCl solution: Experimental and theoretical study. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 623, 126672.	2.3	8
65	Physicochemical Properties of <i>N</i> -Butyl- <i>N</i> -methyl-2-oxopyrrolidonium Bromide and Its Binary Mixtures with Water or Methanol. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 601-608.	3.2	7
66	Potassium-Solubilizing Bacteria (KSB): A Microbial Tool for K-Solubility, Cycling, and Availability to Plants. , 2019, , 257-265.		7
67	L-amino-acids as immunity booster against COVID-19: DFT, molecular docking and MD simulations. <i>Journal of Molecular Structure</i> , 2022, 1250, 131924.	1.8	7
68	Investigation on the molecular interaction of binary mixtures of acetophenone with carboxylic acids at various temperature: Thermodynamic and spectroscopic aspects. <i>Journal of Chemical Thermodynamics</i> , 2022, 166, 106667.	1.0	4
69	A study of the molecular interactions between ammonium-based ionic liquids and <i>N,N</i> -dimethylacetamide. <i>Journal of Molecular Liquids</i> , 2016, 223, 687-698.	2.3	2
70	Antioxidant properties, computational studies and corrosion inhibition potential of 3-hydroxy-1-(2-hydroxyphenyl)-5-(phenyl)-2,4-pentadien-1-one analogues. <i>Journal of Molecular Liquids</i> , 2016, 223, 819-827.	2.3	2
71	Measurement and Modeling of Thermodynamic Properties for Ternary Mixtures Containing 1-Butyl-3-methylimidazolium-Based Ionic Liquids with Acetophenone and Acetic or Propionic Acid. <i>Journal of Chemical & Engineering Data</i> , 2021, 66, 4368-4383.	1.0	2
72	Morphological and photoluminescence study of chemically synthesized Al ₂ O ₃ polythiophene composite. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
73	Interaction studies of methyl acetate in aqueous solutions of quinoxaline derivatives: Effect of temperature and concentration. Journal of Molecular Liquids, 2015, 211, 567-576.	2.3	1
74	A DFT and MP2 mechanistic and kinetic study on hypohalogenation reaction of cysteine and N-acetylcysteine in aqueous solution. Journal of Molecular Liquids, 2022, 349, 118191.	2.3	1
75	Synthesis and optical studies of chemically synthesized PPy/Al ₂ O ₃ nanocomposites. AIP Conference Proceedings, 2016, , .	0.3	0