

Reddicherla Umapathi

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

1,636
citations

304368

22
h-index

301761

39
g-index

50
all docs

50
docs citations

50
times ranked

1090
citing authors

#	ARTICLE	IF	CITATIONS
1	Portable electrochemical sensing methodologies for on-site detection of pesticide residues in fruits and vegetables. <i>Coordination Chemistry Reviews</i> , 2022, 453, 214305.	9.5	212
2	Colorimetric based on-site sensing strategies for the rapid detection of pesticides in agricultural foods: New horizons, perspectives, and challenges. <i>Coordination Chemistry Reviews</i> , 2021, 446, 214061.	9.5	159
3	Advances in optical-sensing strategies for the on-site detection of pesticides in agricultural foods. <i>Trends in Food Science and Technology</i> , 2022, 119, 69-89.	7.8	144
4	Cellulose an ageless renewable green nanomaterial for medical applications: An overview of ionic liquids in extraction, separation and dissolution of cellulose. <i>International Journal of Biological Macromolecules</i> , 2019, 129, 750-777.	3.6	110
5	Thermophysical Properties of Aqueous Solution of Ammonium-Based Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2014, 118, 5971-5982.	1.2	64
6	Hybridized 1D ⁺ 2D MnMoO ₄ MXene nanocomposites as high-performing electrochemical sensing platform for the sensitive detection of dihydroxybenzene isomers in wastewater samples. <i>Journal of Hazardous Materials</i> , 2022, 421, 126775.	6.5	61
7	Pd ⁺ Cu nanospheres supported on Mo ₂ C for the electrochemical sensing of nitrites. <i>Journal of Hazardous Materials</i> , 2021, 408, 124914.	6.5	57
8	An ultrasensitive electrochemical sensing platform for rapid detection of rutin with a hybridized 2D-1D MXene-FeWO ₄ nanocomposite. <i>Sensors and Actuators B: Chemical</i> , 2021, 344, 130202.	4.0	51
9	Improved conductivity of flower-like MnWO ₄ on defect engineered graphitic carbon nitride as an efficient electrocatalyst for ultrasensitive sensing of chloramphenicol. <i>Journal of Hazardous Materials</i> , 2020, 399, 122868.	6.5	49
10	Waste-to-energy: Utilization of recycled waste materials to fabricate triboelectric nanogenerator for mechanical energy harvesting. <i>Journal of Cleaner Production</i> , 2022, 363, 132532.	4.6	49
11	Influence of additives on thermoresponsive polymers in aqueous media: a case study of poly(<i>N</i> -isopropylacrylamide). <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 9717-9744.	1.3	44
12	Interactions of ionic liquids with hydration layer of poly(<i>N</i> -isopropylacrylamide): comprehensive analysis of biophysical techniques results. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10708-10718.	1.3	39
13	The biological stimuli for governing the phase transition temperature of the "smart" polymer PNIPAM in water. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 135, 588-595.	2.5	37
14	Assessing the efficiency of imidazolium-based ionic liquids on the phase behavior of a synthetic biomedical thermoresponsive polymer. <i>Journal of Colloid and Interface Science</i> , 2018, 511, 174-183.	5.0	36
15	Hierarchical dense Ni [~] Co layered double hydroxide supported carbon nanofibers for the electrochemical determination of metronidazole in biological samples. <i>Electrochimica Acta</i> , 2020, 354, 136723.	2.6	36
16	A green approach to offset the perturbation action of 1-butyl-3-methylimidazolium iodide on β -chymotrypsin. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 184-190.	1.3	35
17	Solution Behavior of Triblock Copolymer in the Presence of Ionic Liquids: A Comparative Study of Two Ionic Liquids Possessing Different Cations with Same Anion. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 2412-2421.	3.2	35
18	Structural insights into the effect of cholinium-based ionic liquids on the critical micellization temperature of aqueous triblock copolymers. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8342-8351.	1.3	32

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19	Thermo-responsive triblock copolymer phase transition behaviour in imidazolium-based ionic liquids: Role of the effect of alkyl chain length of cations. <i>Journal of Colloid and Interface Science</i> , 2017, 485, 183-191.	5.0	29
20	Sowing kernels for food safety: Importance of rapid on-site detection of pesticide residues in agricultural foods. <i>Food Frontiers</i> , 2022, 3, 666-676.	3.7	29
21	A simple strategy for the synthesis of flower-like textures of Au-ZnO anchored carbon nanocomposite towards the high-performance electrochemical sensing of sunset yellow. <i>Food Chemistry</i> , 2020, 323, 126848.	4.2	24
22	Enhanced anticancer activity of half-sandwich Ru(II)-p-cymene complex bearing heterocyclic hydrazone ligand. <i>Inorganic Chemistry Communication</i> , 2020, 119, 108054.	1.8	23
23	Influence of biological stimuli on the phase behaviour of a biomedical thermoresponsive polymer: A comparative investigation of hemeproteins. <i>Journal of Colloid and Interface Science</i> , 2019, 541, 1-11.	5.0	22
24	Biological Stimuli-Induced Phase Transition of a Synthesized Block Copolymer: Preferential Interactions between PNIPAM- <i>b</i> -PNVCL and Heme Proteins. <i>Langmuir</i> , 2021, 37, 1682-1696.	1.6	20
25	Emergence of high-performing and ultra-fast 2D-graphene nano-biosensing system. <i>Materials Letters</i> , 2022, 308, 131241.	1.3	18
26	Comprehensive Computational and Experimental Analysis of Biomaterial toward the Behavior of Imidazolium-Based Ionic Liquids: An Interplay between Hydrophilic and Hydrophobic Interactions. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4909-4922.	1.2	17
27	How do biological stimuli modulate conformational changes of biomedical thermoresponsive polymer?. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 178, 479-487.	2.5	16
28	Controllable synthesis of bottlebrush-like ZnO nanowires decorated on carbon nanofibers as an efficient electrocatalyst for the highly sensitive detection of silymarin in biological samples. <i>Sensors and Actuators B: Chemical</i> , 2020, 321, 128544.	4.0	16
29	Multilayered PVDF-HFP Porous Separator via Phase Separation and Selective Solvent Etching for High Voltage Lithium-Ion Batteries. <i>Membranes</i> , 2021, 11, 41.	1.4	16
30	How Does a Smart Polymer Respond to Imidazolium-Based Ionic Liquids?. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 1400-1410.	3.2	15
31	Scalable preparation of ultrathin porous polyurethane membrane-based triboelectric nanogenerator for mechanical energy harvesting. <i>EXPRESS Polymer Letters</i> , 2021, 15, 1019-1031.	1.1	14
32	Tweaking Behavior of Hydrogen Bond Donor in Choline Chloride-Based Deep Eutectic Solvents for Regulating the Phase Transition of Poly(<i>N</i> -vinylcaprolactam): A Sustainable Medium for an Early Hydrophobic Collapse. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14335-14344.	3.2	14
33	Fabrication of Carbon Disulfide Added Colloidal Gold Colorimetric Sensor for the Rapid and On-Site Detection of Biogenic Amines. <i>Sensors</i> , 2021, 21, 1738.	2.1	12
34	Simple synthesis of a clew-like tungsten carbide nanocomposite decorated with gold nanoparticles for the ultrasensitive detection of tert-butylhydroquinone. <i>Food Chemistry</i> , 2021, 348, 128936.	4.2	12
35	Effect of various seed metals on uniformity of Ag layer formed by atmospheric plasma reduction on polyethylene terephthalate substrate: An application to electromagnetic interference shielding effectiveness. <i>Thin Solid Films</i> , 2019, 676, 75-86.	0.8	11
36	Unravelling the interactions between biomedical thermoresponsive polymer and biocompatible ionic liquids. <i>Journal of Molecular Liquids</i> , 2020, 300, 112362.	2.3	10

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37	An Overview on Single-Cell Technology for Hepatocellular Carcinoma Diagnosis. International Journal of Molecular Sciences, 2022, 23, 1402.	1.8	10
38	The influence of various alkylammonium-based ionic liquids on the hydration state of temperature-responsive polymer. Journal of Molecular Liquids, 2017, 225, 186-194.	2.3	9
39	Influence of temperature on thermophysical properties of tri(butyl)methylphosphonium methyl sulfate + N-methyl-2-pyrrolidone. Journal of Molecular Liquids, 2017, 242, 375-381.	2.3	7
40	Comprehensive adsorption characteristics of a newly synthesized and sustainable anti-corrosion catalyst on mild steel surface exposed to a highly corrosive electrolytic solution. Journal of Molecular Liquids, 2018, 268, 37-48.	2.3	7
41	Profiling the molecular interactions between a promising thermoresponsive polymer and ionic liquid: A biophysical outlook. Journal of Molecular Liquids, 2019, 278, 716-721.	2.3	7
42	Investigation of temperature and composition dependence of molecular interactions between phosphonium-based ionic liquid + N,N-dimethylformamide: A study of thermophysical properties. Journal of Molecular Liquids, 2019, 291, 110987.	2.3	5
43	Effect of temperature on molecular interactions between tri(butyl)methylphosphonium methylsulfate and furfural. Journal of Chemical Thermodynamics, 2020, 149, 106150.	1.0	5
44	Quantifying the influence of ionic liquid on the phase behaviour of a biomedical thermoresponsive polymer: A biophysical experimental approach. Reactive and Functional Polymers, 2019, 143, 104327.	2.0	4
45	Interactions between a biomedical thermoresponsive polymer and imidazolium-based ionic liquids: A comprehensive biophysical investigation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 641, 128619.	2.3	4
46	Tunnelling the structural insights between poly(N-isopropylacrylamide) and imidazolium sulfate ionic liquids. Journal of Molecular Liquids, 2022, 360, 119404.	2.3	4
47	A study of the conformational changes of β -lactoglobulin in the vicinity of critical point of binary mixed solvents. New Journal of Chemistry, 2016, 40, 1747-1755.	1.4	3
48	Effect of Taylor vortex wavelength on polymorphic crystallization of L-histidine. Journal of Molecular Liquids, 2022, 353, 118768.	2.3	2
49	How does bovine serum albumin sustain in saccharomate [®] derived from pine tree biomass?. Colloids and Surfaces B: Biointerfaces, 2020, 191, 110975.	2.5	1
50	Polymer-ceramic based solid composite membranes as potential electrolytes for the lithium batteries. , 2022, , 181-200.		0