

Effect of imidazolium-based ionic liquids on bacterial growth: experimental and QSAR modelling studies

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Ionic liquids effects on the permeability of photosynthetic membranes probed by the electrochromic shift of endogenous carotenoids. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015, 1848, 2898-2909.	2.6	11
2	Contact angles and wettability of ionic liquids on polar and non-polar surfaces. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 31653-31661.	2.8	77
3	Biodegradability of imidazolium, pyridinium, piperidinium and pyrrolidinium based ionic liquid in different water source. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	6
4	Ecotoxicity Study of Amino Acid Ionic Liquids Towards Danio Rerio Fish: Effect of Cations. <i>Procedia Engineering</i> , 2016, 148, 401-408.	1.2	30
5	Quantitative structure-activity relationships (QSARs) for estimation of activity coefficient at infinite dilution of water in ionic liquids for natural gas dehydration. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 66, 222-229.	5.3	26
6	Comprehensive approach for predicting toxicological effects of ionic liquids on several biological systems using unified descriptors. <i>Scientific Reports</i> , 2016, 6, 33403.	3.3	35
7	Understanding the physical properties, toxicities and anti-microbial activities of choline-amino acid-based salts: Low-toxic variants of ionic liquids. <i>Journal of Molecular Liquids</i> , 2016, 221, 133-138.	4.9	41
8	Quantum-chemical-based quantitative structure-activity relationships for estimation of CO ₂ absorption/desorption capacities of α -amine-based absorbents. <i>International Journal of Greenhouse Gas Control</i> , 2016, 49, 372-378.	4.6	12
9	Production, purification and characterization of an ionic liquid tolerant cellulase from <i>Bacillus</i> sp. isolated from rice paddy field soil. <i>Electronic Journal of Biotechnology</i> , 2016, 19, 23-28.	2.2	50
10	Modelling for antimicrobial activities of ionic liquids towards <i>Escherichia coli</i> , <i>Staphylococcus aureus</i> and <i>Candida albicans</i> using linear free energy relationship descriptors. <i>Journal of Hazardous Materials</i> , 2016, 311, 168-175.	12.4	37
11	Computation of chromatographic lipophilicity parameter $\log k_0$ of ionic liquid cations from α -ETA descriptors: Application in modeling of toxicity of ionic liquids to pathogenic bacteria. <i>Journal of Molecular Liquids</i> , 2016, 216, 754-763.	4.9	16
12	Whole-Cell Biocatalytic Processes with Ionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 371-386.	6.7	68
13	Application of electro-Fenton treatment for the elimination of 1-Butyl-3-methylimidazolium triflate from polluted water. <i>Chemical Engineering Journal</i> , 2017, 318, 19-28.	12.7	34
14	Predictability of ionic liquid toxicity from a SAR study on different systematic levels of pathogenic bacteria. <i>Ecotoxicology and Environmental Safety</i> , 2017, 139, 394-403.	6.0	25
15	Environmental Impact of Ionic Liquids: Recent Advances in (Eco)toxicology and (Bio)degradability. <i>ChemSusChem</i> , 2017, 10, 2321-2347.	6.8	202
16	Thermal Hazard of Ionic Liquids: Modeling Thermal Decomposition Temperatures of Imidazolium Ionic Liquids via QSPR Method. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 4185-4195.	3.7	25
17	Development of QSAR model to predict the ecotoxicity of <i>Vibrio fischeri</i> using COSMO-RS descriptors. <i>Chemosphere</i> , 2017, 170, 242-250.	8.2	46
18	Enhancement of anaerobic digestion of grass by pretreatment with imidazolium-based ionic liquids. <i>Environmental Technology (United Kingdom)</i> , 2017, 38, 1843-1851.	2.2	11

#	ARTICLE	IF	CITATIONS
19	The ecotoxicity and tribological properties of choline amino acid ionic liquid lubricants. <i>Tribology International</i> , 2018, 121, 435-441.	5.9	51
20	Impact of the alkyl chain length on binding of imidazolium-based ionic liquids to bovine serum albumin. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 196, 323-333.	3.9	27
21	Imidazolium ionic liquids as effective antiseptics and disinfectants against drug resistant <i>S. aureus</i> : In silico and in vitro studies. <i>Computational Biology and Chemistry</i> , 2018, 73, 127-138.	2.3	23
22	QSAR models for describing the toxicological effects of ILs against <i>Staphylococcus aureus</i> based on norm indexes. <i>Chemosphere</i> , 2018, 195, 831-838.	8.2	29
23	Using machine learning and quantum chemistry descriptors to predict the toxicity of ionic liquids. <i>Journal of Hazardous Materials</i> , 2018, 352, 17-26.	12.4	76
24	Thermophysical properties and ecotoxicity of new nitrile functionalised protic ionic liquids. <i>Journal of Molecular Liquids</i> , 2018, 249, 583-590.	4.9	20
25	Influence of hydrogen bond accepting ability of anions on the adsorption performance of ionic liquid surface molecularly imprinted polymers. <i>Journal of Chromatography A</i> , 2018, 1532, 40-49.	3.7	20
26	Study of the antimicrobial activity of cyclic cation-based ionic liquids via experimental and group contribution QSAR model. <i>Chemosphere</i> , 2018, 195, 21-28.	8.2	35
27	Effect of the Density and the Refractive Index on the Toxicity of Imidazolium Ionic Liquids: A study of Ionic Interactions. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 458, 012086.	0.6	0
28	Environmental Concerns Regarding Ionic Liquids in Biotechnological Applications. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2018, 168, 241-328.	1.1	3
29	Effect of ionic composition on thermal properties of energetic ionic liquids. <i>Npj Computational Materials</i> , 2018, 4, .	8.7	13
30	Imidazolium ionic liquids-based salting-out extraction of 2,3-butanediol from fermentation broths. <i>Process Biochemistry</i> , 2018, 71, 175-181.	3.7	16
31	Amphiphilic Ionic Liquid-Induced Membrane Permeabilization: Binding Is Not Enough. <i>Journal of Physical Chemistry B</i> , 2018, 122, 6763-6770.	2.6	25
32	The interaction between ionic liquids (ILs) and an enriched ammonia oxidising bacteria (AOB) culture. <i>Chemosphere</i> , 2019, 235, 842-848.	8.2	2
33	Application of Ionic Liquids in Biotechnology. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2019, , .	1.1	14
34	Application of general toxic effects of ionic liquids to predict toxicities of ionic liquids to <i>Spodoptera frugiperda</i> , <i>Eisenia fetida</i> , <i>Caenorhabditis elegans</i> , and <i>Danio rerio</i> . <i>Environmental Pollution</i> , 2019, 255, 113185.	7.5	17
35	Alteration between inhibition and stimulation in individual and mixture effects of [amim]Br and [apyr]Br on <i>Aliivibrio fischeri</i> : Time and side-chain dependence. <i>Chemosphere</i> , 2019, 233, 292-299.	8.2	12
36	Engineering <i>Corynebacterium glutamicum</i> to produce the biogasoline isopentenol from plant biomass hydrolysates. <i>Biotechnology for Biofuels</i> , 2019, 12, 41.	6.2	51

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37	A novel controllable molecularly imprinted drug delivery system based on the photothermal effect of graphene oxide quantum dots. <i>Journal of Materials Science</i> , 2019, 54, 9124-9139.	3.7	35
38	Relationship between structure and biodegradability of gemini imidazolium surface active ionic liquids. <i>Journal of Molecular Liquids</i> , 2019, 278, 145-155.	4.9	14
39	A review of recent advances towards the development of QSAR models for toxicity assessment of ionic liquids. <i>Journal of Hazardous Materials</i> , 2020, 384, 121429.	12.4	61
40	Cytotoxicity, Hammett acidity and CO ₂ solubility of AMPS-based organic salts: A comparative analysis of experimental and computational tools. <i>Journal of Molecular Structure</i> , 2020, 1202, 127255.	3.6	2
41	An Overview on the Toxicological Properties of Ionic Liquids toward Microorganisms. <i>Biotechnology Journal</i> , 2020, 15, e1900073.	3.5	53
42	Synthesis, Characterization, and Antimicrobial Toxicity Study of Dicyanamide-Based Ionic Liquids and Their Application to Liquid-Liquid Extraction. <i>Journal of Chemical & Engineering Data</i> , 2020, 65, 34-42.	1.9	7
43	Representation of the Structure—A Key Point of Building QSAR/QSPR Models for Ionic Liquids. <i>Materials</i> , 2020, 13, 2500.	2.9	6
44	Disturbance of chiral ionic liquids to phototaxis of <i>Chlamydomonas reinhardtii</i> : regular analysis and mechanism attempt. <i>Environmental Science and Pollution Research</i> , 2020, 27, 15011-15019.	5.3	5
45	Development of quantitative structure-property relationship (QSPR) models for predicting the thermal hazard of ionic liquids: A review of methods and models. <i>Journal of Molecular Liquids</i> , 2020, 301, 112471.	4.9	15
46	Synergistic interactions of ionic liquids and antimicrobials improve drug efficacy. <i>IScience</i> , 2021, 24, 101853.	4.1	26
47	Predictive molecular thermodynamic models for ionic liquids. , 2021, , 209-241.		1
48	pH and electrical conductivity measurements of aqueous solutions of amino acid-based ionic. <i>E3S Web of Conferences</i> , 2021, 287, 02018.	0.5	1
49	Structure-Activity Relationship Modeling and Experimental Validation of the Imidazolium and Pyridinium Based Ionic Liquids as Potential Antibacterials of MDR <i>Acinetobacter baumannii</i> and <i>Staphylococcus aureus</i> . <i>International Journal of Molecular Sciences</i> , 2021, 22, 563.	4.1	10
50	In silico and in vitro Studies of Imidazolium Ionic Liquids as Effective Antibacterial Agents against Multidrug Resistant <i>Escherichia coli</i> Strains. <i>Current Bioactive Compounds</i> , 2021, 17, 130-144.	0.5	0
51	Cytotoxicity and Membrane Permeability of Double-Chained 1,3-Dialkylimidazolium Cations in Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2021, 125, 3613-3621.	2.6	14
52	Ionic Liquids—A Review of Their Toxicity to Living Organisms. <i>International Journal of Molecular Sciences</i> , 2021, 22, 5612.	4.1	85
53	Ionic liquid-based microwave-assisted extraction of protein from <i>Nannochloropsis</i> sp. biomass. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 8327-8338.	4.6	8
54	Supercritical Antisolvent Fractionation of Antioxidant Compounds from <i>Salvia officinalis</i> . <i>International Journal of Molecular Sciences</i> , 2021, 22, 9351.	4.1	2

#	ARTICLE	IF	CITATIONS
55	Cumulative impact assessment of hazardous ionic liquids towards aquatic species using risk assessment methods. <i>Journal of Hazardous Materials</i> , 2021, 415, 125364.	12.4	12
56	Review of the toxic effects of ionic liquids. <i>Science of the Total Environment</i> , 2021, 786, 147309.	8.0	135
57	Toward the Proactive Design of Sustainable Chemicals: Ionic Liquids as a Prime Example. <i>Chemical Reviews</i> , 2021, 121, 13132-13173.	47.7	63
58	Direct conversion of cellulose to levulinic acid using SO ₃ H-functionalized ionic liquids containing halogen-anions. <i>Journal of Molecular Liquids</i> , 2021, 339, 117278.	4.9	13
59	Ionic liquids and deep eutectic solvents for the recovery of phenolic compounds: effect of ionic liquids structure and process parameters. <i>RSC Advances</i> , 2021, 11, 12398-12422.	3.6	53
60	Conceptual Framework for the Conservation of Natural Environment from Toxic Ionic Liquids by QSAR Model. <i>E3S Web of Conferences</i> , 2021, 287, 03007.	0.5	0
61	Imidazole and Imidazolium Antibacterial Drugs Derived from Amino Acids. <i>Pharmaceuticals</i> , 2020, 13, 482.	3.8	28
62	Comprehensive Interrogation on Acetylcholinesterase Inhibition by Ionic Liquids Using Machine Learning and Molecular Modeling. <i>Environmental Science & Technology</i> , 2021, 55, 14720-14731.	10.0	24
63	Quantitative Structure-Activity Relationships to Estimate Toxicity of Ionic Liquids (ILs)., 2019, , 1-16.		0
64	Effects of pyridinium-based ionic liquids with different alkyl chain lengths on the growth of maize seedlings. <i>Journal of Hazardous Materials</i> , 2022, 427, 127868.	12.4	7
65	Pretreatment of Jerusalem artichoke stalk using hydroxylammonium ionic liquids and their influences on 2,3-butanediol fermentation by <i>Bacillus subtilis</i> . <i>Bioresource Technology</i> , 2022, 354, 127219.	9.6	8
66	Effect of amphiphilic ionic liquids on the colorimetric properties of polyketides colorants. <i>Journal of Molecular Liquids</i> , 2022, 363, 119857.	4.9	3
67	Application of ionic liquids in pharmaceuticals and medicine. , 2022, , 317-375.		0
68	Greener Approach for the Separation of Naphthenic Acid from Crude Oil Using Pyrrolidinium-Based Amino Acid Ionic Liquids. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
69	Predictive modeling of antibacterial activity of ionic liquids by machine learning methods. <i>Computational Biology and Chemistry</i> , 2022, 101, 107775.	2.3	3
70	Ammonium-based ionic liquids: synthesis, characterization, computational approach, molecular docking study and phytotoxicity assessment. <i>Journal of Molecular Structure</i> , 2023, 1273, 134337.	3.6	3
71	Greener approach for the separation of naphthenic acid from model oil using Pyrrolidinium-based amino acid ionic liquids. <i>Fuel</i> , 2023, 337, 127141.	6.4	3
72	Measurement of physicochemical properties of green aqueous amino acid-based ionic liquids and their correlation with temperature and concentration. <i>Asia-Pacific Journal of Chemical Engineering</i> , 0, , .	1.5	0

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73	Rhodobacter sphaeroides as a model to study the ecotoxicity of 1-alkyl-3-methylimidazolium bromide. Frontiers in Molecular Biosciences, 0, 10, .	3.5	0
74	Quantitative Structure-Activity Relationships to Estimate Toxicity of Ionic Liquids (ILs). , 2022, , 1139-1154.		0
75	Chitosan Dissolution in [BMIM]Cl Ionic Liquid: An Optimisation and Bacterial Ecotoxicity Study. Pertanika Journal of Science and Technology, 2023, 31, 3013-3038.	0.6	0
76	Ionic liquids as lubricants: An overview of recent developments. Journal of Molecular Structure, 2024, 1301, 137307.	3.6	0