Stefan Stolte

List of Publications by Citations

107 papers	6,585 citations	40 h-index	80 g-index
114 ext. papers	7,357 ext. citations	9.9 avg, IF	5.73 L-index

#	Paper	IF	Citations
107	Design of sustainable chemical products--the example of ionic liquids. *Chemical Reviews*, **2007**, 107, 2183-206	46.6	695
106	The nanoparticle biomolecule corona: lessons learned - challenge accepted?. *Chemical Society Reviews*, **2015**, 44, 6094-121	58.5	427
105	Effects of different head groups and functionalised side chains on the aquatic toxicity of ionic liquids. *Green Chemistry*, **2007**, 9, 1170	10	377
104	The influence of anion species on the toxicity of 1-alkyl-3-methylimidazolium ionic liquids observed in an (eco)toxicological test battery. *Green Chemistry*, **2007**, 9, 1198	10	288
103	Lipophilicity parameters for ionic liquid cations and their correlation to in vitro cytotoxicity. *Ecotoxicology and Environmental Safety*, **2007**, 67, 430-8	7	286
102	Anion effects on the cytotoxicity of ionic liquids. *Green Chemistry*, **2006**, 8, 621	10	275
101	Primary biodegradation of ionic liquid cations, identification of degradation products of 1-methyl-3-octylimidazolium chloride and electrochemical wastewater treatment of poorly biodegradable compounds. *Green Chemistry*, **2008**, 10, 214-224	10	206
100	Antimicrobial and surface activity of 1-alkyl-3-methylimidazolium derivatives. *Green Chemistry*, **2010**, 12, 593	10	204
99	Progress in evaluation of risk potential of ionic liquids□basis for an eco-design of sustainable products. *Green Chemistry*, **2005**, 7, 362	10	199
98	Effects of different head groups and functionalised side chains on the cytotoxicity of ionic liquids. *Green Chemistry*, **2007**, 9, 760-767	10	193
97	(Eco)toxicity and biodegradability of selected protic and aprotic ionic liquids. *Journal of Hazardous Materials*, **2013**, 261, 99-105	12.8	169
96	Qualitative and quantitative structure activity relationships for the inhibitory effects of cationic head groups, functionalised side chains and anions of ionic liquids on acetylcholinesterase. *Green Chemistry*, **2008**, 10, 47-58	10	163
95	Ecotoxicity evaluation of selected sulfonamides. *Chemosphere*, **2011**, 85, 928-33	8.4	142
94	Environmental and health impact assessment of Liquid Organic Hydrogen Carrier (LOHC) systems □ challenges and preliminary results. *Energy and Environmental Science*, **2015**, 8, 1035-1045	35.4	134
93	Electrochemical degradation of sulfonamides at BDD electrode: kinetics, reaction pathway and eco-toxicity evaluation. *Journal of Hazardous Materials*, **2014**, 280, 579-87	12.8	121
92	Hydrolysis of sulphonamides in aqueous solutions. *Journal of Hazardous Materials*, **2012**, 221-222, 264-74	12.8	104
91	Ionic liquids as lubricants or lubrication additives: an ecotoxicity and biodegradability assessment. *Chemosphere*, **2012**, 89, 1135-41	8.4	103

90	Biodegradability of 27 pyrrolidinium, morpholinium, piperidinium, imidazolium and pyridinium ionic liquid cations under aerobic conditions. *Green Chemistry*, **2014**, 16, 2174-2184	10	95
89	The Biodegradation of Ionic Liquids - the View from a Chemical Structure Perspective. *Current Organic Chemistry*, **2011**, 15, 1946-1973	1.7	94
88	Stability of Ionic Liquids in Application Conditions. *Current Organic Chemistry*, **2011**, 15, 1974-1991	1.7	86
87	Imidazolium based ionic liquids in soils: effects of the side chain length on wheat (Triticum aestivum) and cress (Lepidium sativum) as affected by different clays and organic matter. *Green Chemistry*, **2008**, 10, 584	10	83
86	Synthesis, toxicity, biodegradability and physicochemical properties of 4-benzyl-4-methylmorpholinium-based ionic liquids. *Green Chemistry*, **2011**, 13, 2901	10	77
85	Toxicity and biodegradability of dicationic ionic liquids. *RSC Advances*, **2014**, 4, 5198	3.7	71
84	Beta-blockers in the environment: part II. Ecotoxicity study. *Science of the Total Environment*, **2014**, 493, 1122-6	10.2	70
83	Beta-blockers in the environment: part I. Mobility and hydrolysis study. *Science of the Total Environment*, **2014**, 493, 1112-21	10.2	69
82	Identification of ionic liquid breakdown products in an advanced oxidation system. *Journal of Hazardous Materials*, **2009**, 171, 478-83	12.8	68
81	Aquatic toxicity of four veterinary drugs commonly applied in fish farming and animal husbandry. *Chemosphere*, **2013**, 92, 1253-9	8.4	66
80	Ionic liquids in soils: effects of different anion species of imidazolium based ionic liquids on wheat (Triticum aestivum) as affected by different clay minerals and clay concentrations. *Ecotoxicology*, **2009**, 18, 197-203	2.9	63
79	Development of sensitive and reliable LC-MS/MS methods for the determination of three fluoroquinolones in water and fish tissue samples and preliminary environmental risk assessment of their presence in two rivers in northern Poland. *Science of the Total Environment*, **2014**, 493, 1006-13	10.2	60
78	Changing environments and biomolecule coronas: consequences and challenges for the design of environmentally acceptable engineered nanoparticles. *Green Chemistry*, **2018**, 20, 4133-4168	10	58
77	The influence of salinity on the toxicity of selected sulfonamides and trimethoprim towards the green algae Chlorella vulgaris. *Journal of Hazardous Materials*, **2016**, 308, 179-86	12.8	57
76	Mixture effects and predictability of combination effects of imidazolium based ionic liquids as well as imidazolium based ionic liquids and cadmium on terrestrial plants (Triticum aestivum) and limnic green algae (Scenedesmus vacuolatus). *Green Chemistry*, **2008**, 10, 784	10	57
75	(Eco)toxicity of fluoro-organic and cyano-based ionic liquid anions. *Chemical Communications*, **2012**, 48, 9382-4	5.8	53
74	Toxicity of ionic liquid cations and anions towards activated sewage sludge organisms from different sources -- consequences for biodegradation testing and wastewater treatment plant operation. *Water Research*, **2013**, 47, 2921-8	12.5	52
73	Ionic liquids: predictions of physicochemical properties with experimental and/or DFT-calculated LFER parameters to understand molecular interactions in solution. *Journal of Physical Chemistry B*, **2011**, 115, 6040-50	3.4	49

72	Ecotoxicity of artificial sweeteners and stevioside. *Environment International*, **2013**, 60, 123-7	12.9	45
71	In silico modelling for predicting the cationic hydrophobicity and cytotoxicity of ionic liquids towards the Leukemia rat cell line, Vibrio fischeri and Scenedesmus vacuolatus based on molecular interaction potentials of ions. *SAR and QSAR in Environmental Research*, **2013**, 24, 863-82	3.5	45
70	Ionic liquid effects on the activity of monooxygenase P450 BM-3. *Green Chemistry*, **2008**, 10, 117-123	10	45
69	Advanced oxidation process for the removal of ionic liquids from water: The influence of functionalized side chains on the electrochemical degradability of imidazolium cations. *Separation and Purification Technology*, **2012**, 101, 26-33	8.3	43
68	Anaerobic biodegradability of ionic liquid cations under denitrifying conditions. *Green Chemistry*, **2010**, 12, 620	10	42
67	Electrochemical oxidation of imidazolium-based ionic liquids: The influence of anions. *Chemical Engineering Journal*, **2012**, 198-199, 338-345	14.7	39
66	Acute Aquatic Toxicity and Biodegradability of Fluorinated Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 3733-3741	8.3	39
65	Toxicity of anthelmintic drugs (fenbendazole and flubendazole) to aquatic organisms. *Environmental Science and Pollution Research*, **2015**, 22, 2566-73	5.1	38
64	Synthesis, Toxicity, and Biodegradation of Tunable Aryl Alkyl Ionic Liquids (TAAILs). *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 410-418	8.3	38
63	Influence of microbial adaption and supplementation of nutrients on the biodegradation of ionic liquids in sewage sludge treatment processes. *Journal of Hazardous Materials*, **2011**, 195, 378-82	12.8	38
62	Review of the toxic effects of ionic liquids. *Science of the Total Environment*, **2021**, 786, 147309	10.2	38
61	Biodegradability of fluoroorganic and cyano-based ionic liquid anions under aerobic and anaerobic conditions. *Green Chemistry*, **2012**, 14, 410-418	10	36
60	A comparative study of electrochemical degradation of imidazolium and pyridinium ionic liquids: A reaction pathway and ecotoxicity evaluation. *Separation and Purification Technology*, **2015**, 156, 522-534	8.3	33
59	Hydrolysis study of fluoroorganic and cyano-based ionic liquid anions – consequences for operational safety and environmental stability. *Green Chemistry*, **2012**, 14, 2474	10	33
58	Mixture toxicity of six sulfonamides and their two transformation products to green algae Scenedesmus vacuolatus and duckweed Lemna minor. *Chemosphere*, **2017**, 173, 542-550	8.4	31
57	Comprehensive approach for predicting toxicological effects of ionic liquids on several biological systems using unified descriptors. *Scientific Reports*, **2016**, 6, 33403	4.9	31
56	Acute aquatic toxicity assessment of six anti-cancer drugs and one metabolite using biotest battery - Biological effects and stability under test conditions. *Chemosphere*, **2017**, 189, 689-698	8.4	30
55	Primary degradation of antidiabetic drugs. *Journal of Hazardous Materials*, **2017**, 324, 428-435	12.8	30

54	Modelling for antimicrobial activities of ionic liquids towards Escherichia coli, Staphylococcus aureus and Candida albicans using linear free energy relationship descriptors. *Journal of Hazardous Materials*, **2016**, 311, 168-75	12.8	29
53	Ultimate biodegradability and ecotoxicity of orally administered antidiabetic drugs. *Journal of Hazardous Materials*, **2017**, 333, 154-161	12.8	27
52	Membrane partitioning of ionic liquid cations, anions and ion pairs□□Estimating the bioconcentration potential of organic ions. *Environmental Pollution*, **2017**, 228, 378-389	9.3	26
51	Structure-activity relationships for the impact of selected isothiazol-3-one biocides on glutathione metabolism and glutathione reductase of the human liver cell line Hep G2. *Toxicology*, **2008**, 246, 203-12	4.4	26
50	Toxicity of dimercaptosuccinate-coated and un-functionalized magnetic iron oxide nanoparticles towards aquatic organisms. *Environmental Science: Nano*, **2016**, 3, 754-767	7.1	26
49	Testing True Choline Ionic Liquid Biocompatibility from a Biotechnological Standpoint. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 8302-8309	8.3	24
48	Ecotoxicity screening evaluation of selected pharmaceuticals and their transformation products towards various organisms. *Environmental Science and Pollution Research*, **2020**, 27, 26103-26114	5.1	22
47	The green platform molecule gamma-valerolactone □ecotoxicity, biodegradability, solvent properties, and potential applications. *Green Chemistry*, **2021**, 23, 2962-2976	10	21
46	Readily biodegradable and low-toxic biocompatible ionic liquids for cellulose processing. *RSC Advances*, **2016**, 6, 87325-87331	3.7	20
45	Mixture toxicity of flubendazole and fenbendazole to Daphnia magna. *International Journal of Hygiene and Environmental Health*, **2017**, 220, 575-582	6.9	19
44	In silico prediction of linear free energy relationship descriptors of neutral and ionic compounds. *RSC Advances*, **2015**, 5, 80634-80642	3.7	19
43	Analyzing cytotoxic effects of selected isothiazol-3-one biocides using the toxic ratio concept and structure-activity relationship considerations. *Chemical Research in Toxicology*, **2009**, 22, 1954-61	4	19
42	Ionic liquid long-term stability assessment and its contribution to toxicity and biodegradation study of untreated and altered ionic liquids. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2012**, 226, 903-922	1.4	18
41	Bacterial consortium and axenic cultures isolated from activated sewage sludge for biodegradation of imidazolium-based ionic liquid. *International Journal of Environmental Science and Technology*, **2014**, 11, 1919-1926	3.3	17
40	Phase-out-compliant fluorosurfactants: unique methimazolium derivatives including room temperature ionic liquids. *Green Chemistry*, **2017**, 19, 3225-3237	10	15
39	Preliminary toxicity and ecotoxicity assessment of methyltrioxorhenium and its derivatives. *Green Chemistry*, **2015**, 17, 1136-1144	10	14
38	Validation and updating of QSAR models for partitioning coefficients of ionic liquids in octanol-water and development of a new LFER model. *Science of the Total Environment*, **2018**, 633, 920-928	10.2	14
37	Design of Inherently Safer Ionic Liquids: Toxicology and Biodegradation **2010**, 233		13

36	Interaction of dodecaborate cluster compounds on hydrophilic column materials in water. *Journal of Chromatography A*, **2012**, 1256, 98-104	4.5	12
35	Detection of bioactive exometabolites produced by the filamentous marine cyanobacterium Geitlerinema sp. *Marine Biotechnology*, **2012**, 14, 436-45	3.4	12
34	Hazard assessment of quinaldine-, alkylcarbazole-, benzene- and toluene-based liquid organic hydrogen carrier (LOHCs) systems. *Energy and Environmental Science*, **2019**, 12, 366-383	35.4	11
33	Determination of LFER descriptors of 30 cations of ionic liquids--progress in understanding their molecular interaction potentials. *ChemPhysChem*, **2012**, 13, 780-7	3.2	11
32	Ion chromatographic determination of structurally varied ionic liquid cations and anions reliable analytical methodology applicable to technical and natural matrices. *Analytical Methods*, **2011**, 3, 919	3.2	11
31	Catalytically active perrhenate based ionic liquids: a preliminary ecotoxicity and biodegradability assessment. *New Journal of Chemistry*, **2015**, 39, 5431-5436	3.6	10
30	Mobility and biodegradability of an imidazolium based ionic liquid in soil and soil amended with waste sewage sludge. *Environmental Sciences: Processes and Impacts*, **2015**, 17, 1462-9	4.3	10
29	Identification of Selected Antibiotic Resistance Genes in Two Different Wastewater Treatment Plant Systems in Poland: A Preliminary Study. *Molecules*, **2020**, 25,	4.8	10
28	Biodegradation potential of cyano-based ionic liquid anions in a culture of Cupriavidus spp. and their in vitro enzymatic hydrolysis by nitrile hydratase. *Environmental Science and Pollution Research* , **2014**, 21, 9495-505	5.1	10
27	Thinking in Terms of Structure-Activity-Relationships (T-SAR): A Tool to Better Understand Nanofiltration Membranes. *Membranes*, **2011**, 1, 162-83	3.8	10
26	Biologische Abbaubarkeit von ionischen Fl sigkeiten Testverfahren und strukturelles Design. *Chemie-Ingenieur-Technik*, **2011**, 83, 1454-1467	0.8	10
25	Catalytic wet peroxide oxidation of imidazolium-based ionic liquids: Catalyst stability and biodegradability enhancement. *Chemical Engineering Journal*, **2019**, 376, 120431	14.7	10
24	Consequences of a Chronic Exposure of Cultured Brain Astrocytes to the Anti-Retroviral Drug Efavirenz and its Primary Metabolite 8-Hydroxy Efavirenz. *Neurochemical Research*, **2016**, 41, 3278-3288	4.6	9
23	Preliminary study on suitability of ionic liquids as potential passive-sampling media of polyaromatic-hydrocarbon (PAH) analyses in water. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 3531-6	4.4	8
22	Biodegradable Surface Active D-Glucose Based Quaternary Ammonium Ionic Liquids in the Solventless Synthesis of Chloroprene. *ACS Sustainable Chemistry and Engineering*, **2020**,	8.3	8
21	Quantitative analysis of molecular interaction potentials of ionic liquid anions using multi-functionalized stationary phases in HPLC. *ChemPhysChem*, **2014**, 15, 2351-8	3.2	8
20	Permeation through nanochannels: revealing fast kinetics. *Journal of Physics Condensed Matter*, **2010**, 22, 454131	1.8	8
19	In vitro methods for predicting the bioconcentration of xenobiotics in aquatic organisms. *Science of the Total Environment*, **2020**, 739, 140261	10.2	7

18	Interaction of organic compounds and boron clusters with new silica matrices containing the phosphatidylcholine headgroup. *Analytical Methods*, **2014**, 6, 3045-3055	3.2	7
17	Toward the Proactive Design of Sustainable Chemicals: Ionic Liquids as a Prime Example. *Chemical Reviews*, **2021**, 121, 13132-13173	68.1	7
16	Structural and Ecotoxicological Profile of N-Alkoxymorpholinium-Based Ionic Liquids. *Heterocycles*, **2015**, 90, 1018	0.8	5
15	Microplastics from textile origin emission and reduction measures. *Green Chemistry*, **2021**, 23, 5247-5271	10	5
14	Toxicity of a Quinaldine-Based Liquid Organic Hydrogen Carrier (LOHC) System toward Soil Organisms Arthrobacter globiformis and Folsomia candida. *Environmental Science & Technology*, **2018**, 52, 258-265	10.3	5
13	(Eco)Toxicology and Biodegradation of Ionic Liquids **2015**, 189-208		4
12	Anthelmintics in the Aquatic Environment: A New Analytical Approach. *Current Analytical Chemistry*, **2016**, 12, 227-236	1.7	4
11	New bifunctional ionic liquid-based plant systemic acquired resistance (SAR) inducers with an improved environmental hazard profile. *Green Chemistry*, **2021**, 23, 5138-5149	10	4
10	The influence of textile finishing agents on the biodegradability of shed fibres. *Green Chemistry*, **2021**, 23, 5212-5221	10	4
9	Sketching a Suitable Immobilization Strategy for Ionic Liquid Removal in a Fixed-Bed Bioreactor. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 4307-4314	8.3	3
8	Environmental contamination by microplastics originating from textiles: emission, transport, fate and toxicity. *Journal of Hazardous Materials*, **2022**, 128453	12.8	2
7	Toxicity Assessment of Molecular Rhenium(VII) Epoxidation Catalysts **2016**, 1-14		1
6	Mobility and adsorption of liquid organic hydrogen carriers (LOHCs) in soils environmental hazard perspective. *Green Chemistry*, **2020**, 22, 6519-6530	10	1
5	Effects of five sulphonamides on duckweed (Lemna minor) after prolonged exposure time and their dependency on photoradiation. *Science of the Total Environment*, **2018**, 618, 952-960	10.2	1
4	Interaction of ionic liquids with human serum albumin in the view of bioconcentration: a preliminary study. *Chemical Papers*,1	1.9	0
3	Mixture toxicity of six pharmaceuticals towards Aliivibrio fischeri, Daphnia magna, and Lemna minor.. *Environmental Science and Pollution Research*, **2021**, 29, 26977	5.1	0
2	Treatment of electropolishing industrial wastewater and its impact on the immobilisation of Daphnia magna.. *Environmental Research*, **2022**, 212, 113438	7.9	0
1	Bacterial Consortium and Axenic Cultures Isolated from Activated Sewage Sludge for Biodegradation of Imidazolium-based Ionic Liquid **2016**, 201-216		