Hua Zhao

List of Publications by Year
in descending order

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83 papers	8,091 citations	94433 37 h-index	56724 83 g-index
91 all docs	91 docs citations	91 times ranked	7887 citing authors

#	Article	IF	Citations
1	The study and application of biomolecules in deep eutectic solvents. Journal of Materials Chemistry B, 2021, 9, 536-566.	5.8	46
2	Functionalized ionic liquids for lignite dissolution and treatment. Journal of Chemical Technology and Biotechnology, 2021, 96, 3273-3281.	3.2	4
3	Enzyme activation by water-mimicking dual-functionalized ionic liquids. Molecular Catalysis, 2021, 515, 111882.	2.0	5
4	â€œWater-likeâ€•ammonium-based ionic liquids for lipase activation and enzymatic polymerization. Process Biochemistry, 2020, 98, 59-64.	3.7	13
5	What do we learn from enzyme behaviors in organic solvents? â€“ Structural functionalization of ionic liquids for enzyme activation and stabilization. Biotechnology Advances, 2020, 45, 107638.	11.7	40
6	Development of Abraham model correlations for short-chain glycol-grafted imidazolium and pyridinium ionic liquids from inverse gas-chromatographic measurements. Journal of Molecular Liquids, 2020, 317, 113983.	4.9	8
7	Ionic liquids for coal dissolution, extraction and liquefaction. Journal of Chemical Technology and Biotechnology, 2020, 95, 2301-2310.	3.2	16
8	Characterization of the solubilizing ability of short-chained glycol-grafted ammonium and phosphonium ionic liquids. Journal of Molecular Liquids, 2020, 304, 112786.	4.9	9
9	Meet Our Co-Editor. Mini-Reviews in Organic Chemistry, 2020, 17, 1-1.	1.3	8
10	Biocatalysis for Cellulosic Alcohol and Biodiesel Preparation: Roles of (co-)Solvents. , 2020, , 213-213.		0
11	â€œWater-likeâ€•Dual-Functionalized Ionic Liquids for Enzyme Activation. ACS Omega, 2019, 4, 15234-15239.	3.5	9
12	Ether-functionalized ionic liquids for nonaqueous biocatalysis: Effect of different cation cores. Process Biochemistry, 2019, 81, 104-112.	3.7	11
13	Enzymatic polymerization to polyesters in nonaqueous solvents. Methods in Enzymology, 2019, 627, 1-21.	1.0	9
14	The role of extracellular matrix stiffness in regulating cytoskeletal remodeling via vinculin in synthetic smooth muscle cells. Biochemical and Biophysical Research Communications, 2019, 508, 302-307.	2.1	20
15	Quantum Chemical Evaluation of Deep Eutectic Solvents for the Extractive Desulfurization of Fuel. ACS Sustainable Chemistry and Engineering, 2018, 6, 7525-7531.	6.7	69
16	Enzymatic ringâ€•opening polymerization (ROP) of polylactones: roles of nonâ€•aqueous solvents. Journal of Chemical Technology and Biotechnology, 2018, 93, 9-19.	3.2	27
17	Glycol-functionalized ionic liquids for high-temperature enzymatic ring-opening polymerization. RSC Advances, 2018, 8, 36025-36033.	3.6	21
18	Effect of betulinic acid and its ionic derivatives on M-MuLV replication. Biochemical and Biophysical Research Communications, 2018, 500, 365-369.	2.1	5

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19	Enzymatic ring-opening polymerization (ROP) of lactides and lactone in ionic liquids and organic solvents: digging the controlling factors. RSC Advances, 2017, 7, 48639-48648.	3.6	37
20	Design rules of ionic liquids tasked for highly efficient fuel desulfurization by mild oxidative extraction. Fuel, 2017, 189, 334-339.	6.4	35
21	Lipase Activation and Stability Enhancement in Ionic Liquids. , 2016, , 99-152.		2
22	Gâ€quadruplex DNAâ€based asymmetric catalysis of michael addition: Effects of sonication, ligands, and coâ€solvents. Biotechnology Progress, 2016, 32, 891-898.	2.6	10
23	Protein stabilization and enzyme activation in ionic liquids: specific ion effects. Journal of Chemical Technology and Biotechnology, 2016, 91, 25-50.	3.2	236
24	Tuning Task-Specific Ionic Liquids for the Extractive Desulfurization of Liquid Fuel. ACS Sustainable Chemistry and Engineering, 2016, 4, 4771-4780.	6.7	88
25	Microwave-induced inactivation of DNA-based hybrid catalyst in asymmetric catalysis. International Journal of Biological Macromolecules, 2016, 84, 367-371.	7.5	1
26	Ionic derivatives of betulinic acid exhibit antiviral activity against herpes simplex virus type-2 (HSV-2), but not HIV-1 reverse transcriptase. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 3168-3171.	2.2	19
27	Task-Specific Ionic Liquids for Electrochemical Applications. , 2015, , 253-281.		0
28	Oxidative desulfurization of fuels using ionic liquids: A review. Frontiers of Chemical Science and Engineering, 2015, 9, 262-279.	4.4	92
29	DNA stability in ionic liquids and deep eutectic solvents. Journal of Chemical Technology and Biotechnology, 2015, 90, 19-25.	3.2	109
30	DNA-based asymmetric catalysis: role of ionic solvents and glymes. RSC Advances, 2014, 4, 54051-54059.	3.6	17
31	Aqueous ionic liquids and deep eutectic solvents for cellulosic biomass pretreatment and saccharification. RSC Advances, 2014, 4, 10586.	3.6	151
32	Glymes as versatile solvents for chemical reactions and processes: from the laboratory to industry. RSC Advances, 2014, 4, 11251.	3.6	105
33	Ternary Deep Eutectic Solvents Tasked for Carbon Dioxide Capture. ACS Sustainable Chemistry and Engineering, 2014, 2, 2117-2123.	6.7	196
34	Deep Eutectic Solvents: Sustainable Media for Nanoscale and Functional Materials. Accounts of Chemical Research, 2014, 47, 2299-2308.	15.6	708
35	Glymes as benign co-solvents for CaO-catalyzed transesterification of soybean oil to biodiesel. Bioresource Technology, 2013, 139, 107-112.	9.6	24
36	Glymes as new solvents for lipase activation and biodiesel preparation. Bioresource Technology, 2013, 129, 667-671.	9.6	17

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37	Activation of Commercial CaO for Biodiesel Production from Rapeseed Oil Using a Novel Deep Eutectic Solvent. Industrial & Engineering Chemistry Research, 2013, 52, 11943-11947.	3.7	48
38	Ionic liquids and deep eutectic solvents for biodiesel synthesis: a review. Journal of Chemical Technology and Biotechnology, 2013, 88, 3-12.	3.2	242
39	Ionic liquids containing fluorinated Î²-diketonate anions: synthesis, characterization and potential applications. New Journal of Chemistry, 2013, 37, 909.	2.8	19
40	Choline-based deep eutectic solvents for enzymatic preparation of biodiesel from soybean oil. Journal of Molecular Catalysis B: Enzymatic, 2013, 85-86, 243-247.	1.8	172
41	Characterizing the binding of nucleotide ATP on serum albumin by ³¹P NMR diffusion. Canadian Journal of Chemistry, 2012, 90, 411-418.	1.1	0
42	Ionic derivatives of betulinic acid as novel HIV-1 protease inhibitors. Journal of Enzyme Inhibition and Medicinal Chemistry, 2012, 27, 715-721.	5.2	32
43	PEG-functionalized ionic liquids for cellulose dissolution and saccharification. Green Chemistry, 2012, 14, 2922.	9.0	116
44	Ether- and alcohol-functionalized task-specific ionic liquids: attractive properties and applications. Chemical Society Reviews, 2012, 41, 4030.	38.1	512
45	New ionic derivatives of betulinic acid as highly potent anti-cancer agents. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 1734-1738.	2.2	64
46	Fluorescence energy transfer efficiency in labeled yeast cytochrome c: a rapid screen for ion biocompatibility in aqueous ionic liquids. Physical Chemistry Chemical Physics, 2011, 13, 3642.	2.8	34
47	New eutectic ionic liquids for lipase activation and enzymatic preparation of biodiesel. Organic and Biomolecular Chemistry, 2011, 9, 1908.	2.8	231
48	Protease activation in glycerol-based deep eutectic solvents. Journal of Molecular Catalysis B: Enzymatic, 2011, 72, 163-167.	1.8	181
49	Fast enzymatic saccharification of switchgrass after pretreatment with ionic liquids. Biotechnology Progress, 2010, 26, 127-133.	2.6	73
50	New Ether-Functionalized Ionic Liquids for Lipase-Catalyzed Synthesis of Biodiesel. Applied Biochemistry and Biotechnology, 2010, 162, 13-23.	2.9	54
51	High transesterification activities of immobilized proteases in new ether-functionalized ionic liquids. Biotechnology Letters, 2010, 32, 1109-1116.	2.2	27
52	Methods for stabilizing and activating enzymes in ionic liquidsâ€"a review. Journal of Chemical Technology and Biotechnology, 2010, 85, 891-907.	3.2	327
53	Elucidation of spermidine interaction with nucleotide ATP by multiple NMR techniques. Magnetic Resonance in Chemistry, 2010, 48, 123-128.	1.9	6
54	Migration of reactive trace compounds from NovozymÂ® 435 into organic solvents and ionic liquids. Biochemical Engineering Journal, 2010, 49, 113-118.	3.6	31

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55	Chapter 5. Microwave-assisted Enzymatic Reactions in Aqueous Media. RSC Green Chemistry, 2010, , 123-144.	0.1	4
56	Myosin-catalyzed ATP hydrolysis elucidated by 31P NMR kinetic studies and 1H PFG-diffusion measurements. Analytical and Bioanalytical Chemistry, 2009, 395, 1453-1459.	3.7	11
57	Effect of ionic liquid properties on lipase stabilization under microwave irradiation. Journal of Molecular Catalysis B: Enzymatic, 2009, 57, 149-157.	1.8	101
58	Regenerating cellulose from ionic liquids for an accelerated enzymatic hydrolysis. Journal of Biotechnology, 2009, 139, 47-54.	3.8	423
59	Lipase dissolution and stabilization in ether-functionalized ionic liquids. Green Chemistry, 2009, 11, 1128.	9.0	103
60	Designing enzyme-compatible ionic liquids that can dissolve carbohydrates. Green Chemistry, 2008, 10, 696.	9.0	431
61	Microwave-Assisted Esterification of N-Acetyl-L-Phenylalanine Using Modified Mukaiyamaâ€™s Reagents: A New Approach Involving Ionic Liquids. International Journal of Molecular Sciences, 2008, 9, 33-44.	4.1	14
62	Nuclear magnetic relaxation of water in ionic-liquid solutions: determining the kosmotropicity of ionic liquids and its relationship with the enzyme enantioselectivity. Journal of Chemical Technology and Biotechnology, 2007, 82, 304-312.	3.2	25
63	INNOVATIVE APPLICATIONS OF IONIC LIQUIDS AS â€œGREENâ€•ENGINEERING LIQUIDS. Chemical Engineering Communications, 2006, 193, 1660-1677.	2.6	318
64	Viscosity B-coefficients and standard partial molar volumes of amino acids, and their roles in interpreting the protein (enzyme) stabilization. Biophysical Chemistry, 2006, 122, 157-183.	2.8	243
65	Effect of kosmotropicity of ionic liquids on the enzyme stability in aqueous solutions. Bioorganic Chemistry, 2006, 34, 15-25.	4.1	172
66	Hofmeister series of ionic liquids: kosmotropic effect of ionic liquids on the enzymatic hydrolysis of enantiomeric phenylalanine methyl ester. Tetrahedron: Asymmetry, 2006, 17, 377-383.	1.8	116
67	Enhancing protease enantioselectivity by ionic liquids based on chiral- or Ï‰-amino acids. Tetrahedron: Asymmetry, 2006, 17, 1549-1553.	1.8	50
68	Using ionic liquid [EMIM][CH3COO] as an enzyme-â€˜friendlyâ€™ co-solvent for resolution of amino acids. Tetrahedron: Asymmetry, 2006, 17, 2491-2498.	1.8	82
69	Improving the Enzyme Catalytic Efficiency Using Ionic Liquids with Kosmotropic Anions. Chinese Journal of Chemistry, 2006, 24, 580-584.	4.9	33
70	Are ionic liquids kosmotropic or chaotropic? An evaluation of available thermodynamic parameters for quantifying the ion kosmotropicity of ionic liquids. Journal of Chemical Technology and Biotechnology, 2006, 81, 877-891.	3.2	165
71	Effect of ions and other compatible solutes on enzyme activity, and its implication for biocatalysis using ionic liquids. Journal of Molecular Catalysis B: Enzymatic, 2005, 37, 16-25.	1.8	337
72	Use of ionic liquids as â€˜greenâ€™ solvents for extractions. Journal of Chemical Technology and Biotechnology, 2005, 80, 1089-1096.	3.2	780

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73	Enantioseparation of the esters of Î±-N-acetyl amino acids by lipase in ionic liquid. Chirality, 2005, 17, S240-S242.	2.6	20
74	Radial Distribution Functions In Liquids And Fractal Aggregates. Chemical Engineering Communications, 2005, 192, 145-154.	2.6	4
75	Ionic Liquids: Highly Effective Medium for Enantiopure Amino Acids via Enzymatic Resolution. ACS Symposium Series, 2005, , 111-123.	0.5	1
76	Current Studies on Some Physical Properties of Ionic Liquids. ChemInform, 2004, 35, no.	0.0	1
77	Kinetic Study on the Enzymatic Resolution of Homophenylalanine Ester Using Ionic Liquids. Biotechnology Progress, 2003, 19, 1016-1018.	2.6	46
78	Optimization of a process for carboxymethyl cellulose (CMC) preparation in mixed solvents. International Journal of Polymeric Materials and Polymeric Biomaterials, 2003, 52, 749-759.	3.4	16
79	Review: Current studies on some physical properties of ionic liquids. Physics and Chemistry of Liquids, 2003, 41, 545-557.	1.2	75
80	PREPARATION AND CHARACTERIZATION OF THREE ROOM-TEMPERATURE IONIC LIQUIDS. Physics and Chemistry of Liquids, 2003, 41, 487-492.	1.2	38
81	A new equation of state (hsft) based on fractal theory. Chemical Engineering Communications, 2002, 189, 1155-1195.	2.6	4
82	Enzymatic resolution of amino acid esters using ionic liquid N-ethyl pyridinium trifluoroacetate. Biotechnology Letters, 2002, 24, 1257-1259.	2.2	101
83	Concise Synthesis and Enzymatic Resolution of L-(+)-Homophenylalanine Hydrochloride. Enantiomer, 2002, 7, 1-3.	0.5	18