Wei Zhuang

List of Publications by Year
in descending order

91 papers	1,629 citations	304368 22 h-index	395343 33 g-index
91 all docs	91 docs citations	91 times ranked	2167 citing authors

#	Article	IF	Citations
1	Investigating the Structureâ€Reactivity Relationships Between Nicotinamide Coenzyme Biomimetics and Pentaerythritol Tetranitrate Reductase. Advanced Synthesis and Catalysis, 2022, 364, 103-113.	2.1	3
2	Design and optimization of <scp>JOâ€IEX</scp> process for highly efficient quaternary separation of 5â€²â€ribonucleotides. AICHE Journal, 2022, 68, .	1.8	2
3	Green Mechanochemical Strategy for the Construction of a New Bio-based Nylon 5₂4T Ternary Salt. ACS Sustainable Chemistry and Engineering, 2022, 10, 3513-3520.	3.2	4
4	Mechanocatalytic depolymerization of hemicellulose to xylooligosaccharides: New insights into the influence of impregnation solvent. Industrial Crops and Products, 2022, 180, 114704.	2.5	3
5	Lignin demethylation for modifying halloysite nanotubes towards robust phenolic foams with excellent thermal insulation and flame retardancy. Journal of Applied Polymer Science, 2022, 139, .	1.3	11
6	Constructing a multienzyme cascade redox-neutral system for the synthesis of halogenated indoles. Chemical Communications, 2022, 58, 6016-6019.	2.2	1
7	Stabilizing bienzymatic cascade catalysis via immobilization in ZIF-8/GO composites obtained by GO assisted co-growth. Colloids and Surfaces B: Biointerfaces, 2022, 217, 112585.	2.5	6
8	Design of a Lignin-Based Versatile Bioreinforcement for High-Performance Natural Rubber Composites. ACS Sustainable Chemistry and Engineering, 2022, 10, 8031-8042.	3.2	15
9	One-pot depolymerization, demethylation and phenolation of lignin catalyzed by HBr under microwave irradiation for phenolic foam preparation. Composites Part B: Engineering, 2021, 205, 108530.	5.9	52
10	Hydrates of adenosine 3â€²,5â€²-cyclic monophosphate sodium and their transformation. CrystEngComm, 2021, 23, 174-184.	1.3	2
11	Novel biorefining method for succinic acid processed from sugarcane bagasse. Bioresource Technology, 2021, 324, 124615.	4.8	27
12	Magnetic composite Ca(OH)2/Fe3O4 for highly efficient flocculation in papermaking black liquor without pH neutralization. Advanced Powder Technology, 2021, 32, 2457-2468.	2.0	8
13	Improved enzymatic activity by oriented immobilization on graphene oxide with tunable surface heterogeneity. Composites Part B: Engineering, 2021, 216, 108788.	5.9	32
14	Improved adenylate cyclase activity via affinity immobilization onto co-modified GO with bio-inspired adhesive and PEI. Colloids and Surfaces B: Biointerfaces, 2021, 205, 111888.	2.5	13
15	Mechanisms of bio-additives on boosting enzymatic hydrolysis of lignocellulosic biomass. Bioresource Technology, 2021, 337, 125341.	4.8	27
16	Tunable synthesis of polyethylene polyamine modified lignin and application for efficient adsorption of Fe2+ in super acid system. Separation and Purification Technology, 2021, 272, 118950.	3.9	4
17	Co-fermentation of succinic acid and ethanol from sugarcane bagasse based on full hexose and pentose utilization and carbon dioxide reduction. Bioresource Technology, 2021, 339, 125578.	4.8	30
18	Toward controlled geometric structure and surface property heterogeneities of TiO2 for lipase immobilization. Process Biochemistry, 2021, 110, 118-128.	1.8	2

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19	Novel Mesoporous Lignin-Calcium for Efficiently Scavenging Cationic Dyes from Dyestuff Effluent. ACS Omega, 2021, 6, 816-826.	1.6	19
20	Efficient preparation of phytase from genetically modified Pichia pastoris in immobilised fermentation biofilms adsorbed on surface-modified cotton fibres. Process Biochemistry, 2021, 111, 69-69.	1.8	7
21	Enhanced Mechanical Properties of Polyvinyl Chloride-Based Woodâ€“Plastic Composites With Pretreated Corn Stalk. Frontiers in Bioengineering and Biotechnology, 2021, 9, 829821.	2.0	9
22	Flow synthesis, characterization, anticoagulant activity of xylan sulfate from sugarcane bagasse. International Journal of Biological Macromolecules, 2020, 155, 1460-1467.	3.6	15
23	Mass transfer process and separation mechanism of four 5â€²-ribonucleotides on a strong acid cation exchange resin. Journal of Chromatography A, 2020, 1634, 461681.	1.8	3
24	Effect of xylan sulfate on the responsive swelling behavior of poly(methacrylatoethyl trimethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	2.4	6
25	Preparation of a Copper Polyphosphate Kinase Hybrid Nanoflower and Its Application in ADP Regeneration from AMP. ACS Omega, 2020, 5, 9991-9998.	1.6	20
26	Interfacial microenvironment for lipase immobilization: Regulating the heterogeneity of graphene oxide. Chemical Engineering Journal, 2020, 394, 125038.	6.6	28
27	Thermodynamics, Characterization, and Polymorphic Transformation of 1,5-Pentanediamine Carbonate. Industrial & Engineering Chemistry Research, 2020, 59, 10185-10194.	1.8	13
28	Synthesis, adsorption and molecular simulation study of methylamine-modified hyper-cross-linked resins for efficient removal of citric acid from aqueous solution. Scientific Reports, 2020, 10, 9623.	1.6	10
29	Stable Dispersed Zeolitic Imidazolate Framework/Graphene Oxide Nanocomposites in Ionic Liquids Resulting in High Lubricating Performance. Advanced Materials Interfaces, 2020, 7, 1902194.	1.9	18
30	Metabolic Engineering and Adaptive Evolution of Clostridium beijerinckii To Increase Solvent Production from Corn Stover Hydrolysate. Journal of Agricultural and Food Chemistry, 2020, 68, 7916-7925.	2.4	9
31	Preparation of 5-Hydroxymethylfurfural from High Fructose Corn Syrup Using Organic Weak Acid in Situ as Catalyst. Industrial & Engineering Chemistry Research, 2020, 59, 4358-4366.	1.8	15
32	Crystal structure, thermodynamics, and crystallization of bio-based polyamide 56 salt. CrystEngComm, 2020, 22, 3234-3241.	1.3	17
33	Monohydrate and anhydrate of nylon 5I monomer 1,5-pentanediamineâ€“isophthalate. RSC Advances, 2020, 10, 44774-44784.	1.7	11
34	Crystal forms and phase transformation of 1,5-pentanediamine-terephthalate: a bio-based nylon 5T monomer. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2020, 76, 524-533.	0.5	9
35	Application of a humidity-mediated method to remove residual solvent from crystal lattice. Food Chemistry, 2019, 294, 123-129.	4.2	3
36	Immobilization of a polyphosphate kinase 2 by coordinative self-assembly of his-tagged units with metal-organic frameworks and its application in ATP regeneration from AMP. Colloids and Surfaces B: Biointerfaces, 2019, 181, 261-269.	2.5	16

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37	Surface functionalization of graphene oxide by disodium guanosine 5â€²-monophosphate and its excellent performance for lipase immobilization. Applied Surface Science, 2019, 492, 27-36.	3.1	9
38	Competitive adsorption of vanillin and syringaldehyde on a macro-mesopore polymeric resin: modeling. Bioprocess and Biosystems Engineering, 2019, 42, 1435-1445.	1.7	5
39	Biochemical engineering in China. Reviews in Chemical Engineering, 2019, 35, 929-993.	2.3	1
40	Surface functionalization of graphene oxide by amino acids for Thermomyces lanuginosus lipase adsorption. Journal of Colloid and Interface Science, 2019, 546, 211-220.	5.0	38
41	Thermodynamics, crystal structure, and characterization of a bio-based nylon 54 monomer. CrystEngComm, 2019, 21, 7069-7077.	1.3	22
42	Stability and repeatability improvement of horseradish peroxidase by immobilization on amino-functionalized bacterial cellulose. Process Biochemistry, 2019, 79, 40-48.	1.8	37
43	Improving biocatalytic microenvironment with biocompatible Îµ-poly-l-lysine for one step gluconic acid production in low pH enzymatic systems. Process Biochemistry, 2019, 76, 118-127.	1.8	10
44	Co-localization of glucose oxidase and catalase enabled by a self-assembly approach: Matching between molecular dimensions and hierarchical pore sizes. Food Chemistry, 2019, 275, 197-205.	4.2	21
45	Combined Adsorption and Covalent Linking of Paclitaxel on Functionalized Nano-Graphene Oxide for Inhibiting Cancer Cells. ACS Omega, 2018, 3, 2396-2405.	1.6	18
46	Nano-Biocatalysts of Cyt c@ZIF-8/GO Composites with High Recyclability via a de Novo Approach. ACS Applied Materials & Interfaces, 2018, 10, 16066-16076.	4.0	74
47	Affinity induced immobilization of adenylate cyclase from the crude cell lysate for ATP conversion. Colloids and Surfaces B: Biointerfaces, 2018, 164, 155-164.	2.5	16
48	Comparative transcriptomic and proteomic analysis of Arthrobacter sp. CGMCC 3584 responding to dissolved oxygen for cAMP production. Scientific Reports, 2018, 8, 1246.	1.6	8
49	Towards acetone-uncoupled biofuels production in solventogenic Clostridium through reducing power conservation. Metabolic Engineering, 2018, 47, 102-112.	3.6	21
50	Continuous citric acid production in repeated-fed batch fermentation by Aspergillus niger immobilized on a new porous foam. Journal of Biotechnology, 2018, 276-277, 1-9.	1.9	42
51	Concanavalin A induced orientation immobilization of Nuclease P 1 : The effect of lectin agglutination. Process Biochemistry, 2018, 64, 160-169.	1.8	13
52	Production of cyclopentanone from furfural over Ru/C with Al_{11.6}PO_{23.7} and application in the synthesis of diesel range alkanes. RSC Advances, 2018, 8, 37993-38001.	1.7	36
53	Clostridium acetobutylicum grows vegetatively in a biofilm rich in heteropolysaccharides and cytoplasmic proteins. Biotechnology for Biofuels, 2018, 11, 315.	6.2	18
54	Efficient Xylitol Production from Cornstalk Hydrolysate Using Engineered Escherichia coli Whole Cells. Journal of Agricultural and Food Chemistry, 2018, 66, 13209-13216.	2.4	8

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55	Regulating Cofactor Balance In Vivo with a Synthetic Flavin Analogue. Angewandte Chemie - International Edition, 2018, 57, 16464-16468.	7.2	13
56	Regulating Cofactor Balance In Vivo with a Synthetic Flavin Analogue. Angewandte Chemie, 2018, 130, 16702-16706.	1.6	7
57	Application of electrodialysis to extract 5â€²-ribonucleotides from hydrolysate: efficient decolorization and membrane fouling. RSC Advances, 2018, 8, 29115-29128.	1.7	7
58	Model-based design of an intermittent simulated moving bed process for recovering lactic acid from ternary mixture. Journal of Chromatography A, 2018, 1562, 47-58.	1.8	2
59	Immobilization of Clostridium acetobutylicum onto natural textiles and its fermentation properties. Microbial Biotechnology, 2017, 10, 502-512.	2.0	19
60	Efficient immobilization of AGE and NAL enzymes onto functional amino resin as recyclable and high-performance biocatalyst. Bioprocess and Biosystems Engineering, 2017, 40, 331-340.	1.7	13
61	Engineering Hydrogen Bonding Interaction and Charge Separation in Bio-Polymers for Green Lubrication. Journal of Physical Chemistry B, 2017, 121, 5669-5678.	1.2	23
62	Synthesis of Highly Porous Metalâ€Free Oxygen Reduction Electrocatalysts in a Selfâ€Sacrificial Bacterial Cellulose Microreactor. Advanced Sustainable Systems, 2017, 1, 1700045.	2.7	9
63	Recovery of lactic acid from the pretreated fermentation broth based on a novel hyper-cross-linked meso-micropore resin: Modeling. Bioresource Technology, 2017, 241, 593-602.	4.8	20
64	Grafting heteroelement-rich groups on graphene oxide: Tuning polarity and molecular interaction with bio-ionic liquid for enhanced lubrication. Journal of Colloid and Interface Science, 2017, 498, 47-54.	5.0	19
65	Combined ion exchange and adsorption equilibria of 5â€²-ribonucleotides on the strong acid cation exchange resin NH-1. Journal of Chemical Technology and Biotechnology, 2017, 92, 1678-1689.	1.6	5
66	Bio-butanol sorption performance on novel porous-carbon adsorbents from corncob prepared via hydrothermal carbonization and post-pyrolysis method. Scientific Reports, 2017, 7, 11753.	1.6	19
67	Efficient decolorization of citric acid fermentation broth using carbon materials prepared from phosphoric acid activation of hydrothermally treated corncob. RSC Advances, 2017, 7, 37112-37121.	1.7	22
68	Molecular Interactions of Protein with TiO₂ by the AFM-Measured Adhesion Force. Langmuir, 2017, 33, 11626-11634.	1.6	25
69	In Vivo Multienzyme Complex Coconstruction ofN-Acetylneuraminic Acid Lyase andN-Acetylglucosamine-2-epimerase for Biosynthesis ofN-Acetylneuraminic Acid. Journal of Agricultural and Food Chemistry, 2017, 65, 7467-7475.	2.4	11
70	Solution-Mediated Polymorphic Transformation: From Amorphous to Crystals of Disodium Guanosine 5â€²-Monophosphate in Ethanol. Industrial & Engineering Chemistry Research, 2017, 56, 8274-8282.	1.8	20
71	Facile synthesis of amino-functionalized mesoporous TiO 2 microparticles for adenosine deaminase immobilization. Microporous and Mesoporous Materials, 2017, 239, 158-166.	2.2	35
72	Solvent effects on nucleation of disodium guanosine 5â€²-monophosphate in anti-solvent/water mixtures. CrystEngComm, 2016, 18, 6653-6663.	1.3	10

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73	Large-Scale Fabrication of Rutile TiO2 with 3D Hierarchical Flower-Like Morphology. Journal of Nanoscience and Nanotechnology, 2016, 16, 12991-12995.	0.9	0
74	Efficient nanobiocatalytic systems of nuclease P immobilized on PEG-NH2 modified graphene oxide: effects of interface property heterogeneity. Colloids and Surfaces B: Biointerfaces, 2016, 145, 785-794.	2.5	25
75	Insight into a direct solidâ€“solid transformation: a potential approach for the removal of residual solvents. CrystEngComm, 2016, 18, 1699-1704.	1.3	14
76	Extracellular polymer substances and the heterogeneity of Clostridium acetobutylicum biofilm induced tolerance to acetic acid and butanol. RSC Advances, 2016, 6, 33695-33704.	1.7	22
77	Influences of geometrical topography and surface chemistry on the stable immobilization of adenosine deaminase on mesoporous TiO 2. Chemical Engineering Science, 2016, 139, 142-151.	1.9	19
78	Desorption of 1-butanol from polymeric resin: experimental studies and mathematical modeling. RSC Advances, 2015, 5, 105464-105474.	1.7	10
79	Determination of Metastable Zone Widths and the Primary Nucleation and Growth Mechanisms for the Crystallization of Disodium Guanosine 5â€²-Monophosphate from a Waterâ€“Ethanol System. Industrial & Engineering Chemistry Research, 2015, 54, 137-145.	1.8	17
80	TiO2 nanofibers heterogeneously wrapped with reduced graphene oxide as efficient Pt electrocatalyst supports for methanol oxidation. International Journal of Hydrogen Energy, 2015, 40, 3679-3688.	3.8	42
81	Facile Synthesis of Mesoporous MoS₂â€TiO₂ Nanofibers for Ultrastable Lithium Ion Battery Anodes. ChemElectroChem, 2015, 2, 374-381.	1.7	51
82	A novel procedure for purification of uridine 5â€²-monophosphate based on adsorption methodology using a hyper-cross-linked resin. Bioprocess and Biosystems Engineering, 2015, 38, 967-979.	1.7	1
83	Involvement of glycolysis/gluconeogenesis and signaling regulatory pathways in Saccharomyces cerevisiae biofilms during fermentation. Frontiers in Microbiology, 2015, 6, 139.	1.5	36
84	Ion-exchange equilibrium of N-acetyl-d-neuraminic acid on a strong anionic exchanger. Food Chemistry, 2015, 183, 259-264.	4.2	1
85	Simultaneous production of butanol and acetoin by metabolically engineered Clostridium acetobutylicum. Metabolic Engineering, 2015, 27, 107-114.	3.6	38
86	Reversible, selective immobilization of nuclease P1 from a crude enzyme solution on a weak base anion resin activated by polyethylenimine. Journal of Molecular Catalysis B: Enzymatic, 2014, 101, 92-100.	1.8	13
87	Determination of Solubility of cAMPNa in Water + (Ethanol, Methanol, and Acetone) within 293.15â€“313.15 K. Industrial & Engineering Chemistry Research, 2014, 53, 10803-10809.	1.8	22
88	Experimental measurement and modelling of solubility of inosine-5â€²-monophosphate disodium in pure and mixed solvents. Journal of Chemical Thermodynamics, 2014, 77, 14-22.	1.0	41
89	Enhancement of n-butanol production by in situ butanol removal using permeatingâ€“heatingâ€“gas stripping in acetoneâ€“butanolâ€“ethanol fermentation. Bioresource Technology, 2014, 164, 276-284.	4.8	53
90	TiO2-B nanofibers with high thermal stability as improved anodes for lithium ion batteries. Electrochemistry Communications, 2013, 27, 124-127.	2.3	31

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91	Carbon titania mesoporous composite whisker as stable supercapacitor electrode material. Journal of Materials Chemistry, 2010, 20, 7645.	6.7	47