

Wei Zhuang

List of Publications by Year in descending order

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91
papers

1,629
citations

304743

22
h-index

395702

33
g-index

91
all docs

91
docs citations

91
times ranked

2167
citing authors

#	ARTICLE	IF	CITATIONS
1	Nano-Biocatalysts of Cyt <i>c</i> @ZIF-8/GO Composites with High Recyclability via a de Novo Approach. ACS Applied Materials & Interfaces, 2018, 10, 16066-16076.	8.0	74
2	Enhancement of n-butanol production by in situ butanol removal using permeating "heating" gas stripping in acetone-butanol-ethanol fermentation. Bioresource Technology, 2014, 164, 276-284.	9.6	53
3	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.	12.0	52
4	Facile Synthesis of Mesoporous MoS ₂ @TiO ₂ Nanofibers for Ultrastable Lithium Ion Battery Anodes. ChemElectroChem, 2015, 2, 374-381.	3.4	51
5	Carbon titania mesoporous composite whisker as stable supercapacitor electrode material. Journal of Materials Chemistry, 2010, 20, 7645.	6.7	47
6	TiO ₂ nanofibers heterogeneously wrapped with reduced graphene oxide as efficient Pt electrocatalyst supports for methanol oxidation. International Journal of Hydrogen Energy, 2015, 40, 3679-3688.	7.1	42
7	Continuous citric acid production in repeated-fed batch fermentation by <i>Aspergillus niger</i> immobilized on a new porous foam. Journal of Biotechnology, 2018, 276-277, 1-9.	3.8	42
8	Experimental measurement and modelling of solubility of inosine-5'-monophosphate disodium in pure and mixed solvents. Journal of Chemical Thermodynamics, 2014, 77, 14-22.	2.0	41
9	Simultaneous production of butanol and acetoin by metabolically engineered <i>Clostridium acetobutylicum</i> . Metabolic Engineering, 2015, 27, 107-114.	7.0	38
10	Surface functionalization of graphene oxide by amino acids for <i>Thermomyces lanuginosus</i> lipase adsorption. Journal of Colloid and Interface Science, 2019, 546, 211-220.	9.4	38
11	Stability and repeatability improvement of horseradish peroxidase by immobilization on amino-functionalized bacterial cellulose. Process Biochemistry, 2019, 79, 40-48.	3.7	37
12	Involvement of glycolysis/gluconeogenesis and signaling regulatory pathways in <i>Saccharomyces cerevisiae</i> biofilms during fermentation. Frontiers in Microbiology, 2015, 6, 139.	3.5	36
13	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.	3.6	36
14	Facile synthesis of amino-functionalized mesoporous TiO ₂ microparticles for adenosine deaminase immobilization. Microporous and Mesoporous Materials, 2017, 239, 158-166.	4.4	35
15	Improved enzymatic activity by oriented immobilization on graphene oxide with tunable surface heterogeneity. Composites Part B: Engineering, 2021, 216, 108788.	12.0	32
16	TiO ₂ -B nanofibers with high thermal stability as improved anodes for lithium ion batteries. Electrochemistry Communications, 2013, 27, 124-127.	4.7	31
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.	9.6	30
18	Interfacial microenvironment for lipase immobilization: Regulating the heterogeneity of graphene oxide. Chemical Engineering Journal, 2020, 394, 125038.	12.7	28

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19	Novel biorefining method for succinic acid processed from sugarcane bagasse. <i>Bioresource Technology</i> , 2021, 324, 124615.	9.6	27
20	Mechanisms of bio-additives on boosting enzymatic hydrolysis of lignocellulosic biomass. <i>Bioresource Technology</i> , 2021, 337, 125341.	9.6	27
21	Efficient nanobiocatalytic systems of nuclease P immobilized on PEG-NH ₂ modified graphene oxide: effects of interface property heterogeneity. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 145, 785-794.	5.0	25
22	Molecular Interactions of Protein with TiO ₂ by the AFM-Measured Adhesion Force. <i>Langmuir</i> , 2017, 33, 11626-11634.	3.5	25
23	Engineering Hydrogen Bonding Interaction and Charge Separation in Bio-Polymers for Green Lubrication. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5669-5678.	2.6	23
24	Determination of Solubility of cAMPNa in Water + (Ethanol, Methanol, and Acetone) within 293.15–313.15 K. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 10803-10809.	3.7	22
25	Extracellular polymer substances and the heterogeneity of <i>Clostridium acetobutylicum</i> biofilm induced tolerance to acetic acid and butanol. <i>RSC Advances</i> , 2016, 6, 33695-33704.	3.6	22
26	Efficient decolorization of citric acid fermentation broth using carbon materials prepared from phosphoric acid activation of hydrothermally treated corncob. <i>RSC Advances</i> , 2017, 7, 37112-37121.	3.6	22
27	Thermodynamics, crystal structure, and characterization of a bio-based nylon 54 monomer. <i>CrystEngComm</i> , 2019, 21, 7069-7077.	2.6	22
28	Towards acetone-uncoupled biofuels production in solventogenic <i>Clostridium</i> through reducing power conservation. <i>Metabolic Engineering</i> , 2018, 47, 102-112.	7.0	21
29	Co-localization of glucose oxidase and catalase enabled by a self-assembly approach: Matching between molecular dimensions and hierarchical pore sizes. <i>Food Chemistry</i> , 2019, 275, 197-205.	8.2	21
30	Recovery of lactic acid from the pretreated fermentation broth based on a novel hyper-cross-linked meso-micropore resin: Modeling. <i>Bioresource Technology</i> , 2017, 241, 593-602.	9.6	20
31	Solution-Mediated Polymorphic Transformation: From Amorphous to Crystals of Disodium Guanosine 5'-Monophosphate in Ethanol. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 8274-8282.	3.7	20
32	Preparation of a Copper Polyphosphate Kinase Hybrid Nanoflower and Its Application in ADP Regeneration from AMP. <i>ACS Omega</i> , 2020, 5, 9991-9998.	3.5	20
33	Influences of geometrical topography and surface chemistry on the stable immobilization of adenosine deaminase on mesoporous TiO ₂ . <i>Chemical Engineering Science</i> , 2016, 139, 142-151.	3.8	19
34	Immobilization of <i>Clostridium acetobutylicum</i> onto natural textiles and its fermentation properties. <i>Microbial Biotechnology</i> , 2017, 10, 502-512.	4.2	19
35	Grafting heteroelement-rich groups on graphene oxide: Tuning polarity and molecular interaction with bio-ionic liquid for enhanced lubrication. <i>Journal of Colloid and Interface Science</i> , 2017, 498, 47-54.	9.4	19
36	Bio-butanol sorption performance on novel porous-carbon adsorbents from corncob prepared via hydrothermal carbonization and post-pyrolysis method. <i>Scientific Reports</i> , 2017, 7, 11753.	3.3	19

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37	Novel Mesoporous Lignin-Calcium for Efficiently Scavenging Cationic Dyes from Dyestuff Effluent. ACS Omega, 2021, 6, 816-826.	3.5	19
38	Combined Adsorption and Covalent Linking of Paclitaxel on Functionalized Nano-Graphene Oxide for Inhibiting Cancer Cells. ACS Omega, 2018, 3, 2396-2405.	3.5	18
39	Clostridium acetobutylicum grows vegetatively in a biofilm rich in heteropolysaccharides and cytoplasmic proteins. Biotechnology for Biofuels, 2018, 11, 315.	6.2	18
40	Stable Dispersed Zeolitic Imidazolate Framework/Graphene Oxide Nanocomposites in Ionic Liquids Resulting in High Lubricating Performance. Advanced Materials Interfaces, 2020, 7, 1902194.	3.7	18
41	Determination of Metastable Zone Widths and the Primary Nucleation and Growth Mechanisms for the Crystallization of Disodium Guanosine 5'-Monophosphate from a Water-Ethanol System. Industrial & Engineering Chemistry Research, 2015, 54, 137-145.	3.7	17
42	Crystal structure, thermodynamics, and crystallization of bio-based polyamide 56 salt. CrystEngComm, 2020, 22, 3234-3241.	2.6	17
43	Affinity induced immobilization of adenylate cyclase from the crude cell lysate for ATP conversion. Colloids and Surfaces B: Biointerfaces, 2018, 164, 155-164.	5.0	16
44	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.	5.0	16
45	Flow synthesis, characterization, anticoagulant activity of xylan sulfate from sugarcane bagasse. International Journal of Biological Macromolecules, 2020, 155, 1460-1467.	7.5	15
46	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.	3.7	15
47	Design of a Lignin-Based Versatile Bioreinforcement for High-Performance Natural Rubber Composites. ACS Sustainable Chemistry and Engineering, 2022, 10, 8031-8042.	6.7	15
48	Insight into a direct solid-solid transformation: a potential approach for the removal of residual solvents. CrystEngComm, 2016, 18, 1699-1704.	2.6	14
49	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
50	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.	3.4	13
51	Concanavalin A induced orientation immobilization of Nuclease P 1 : The effect of lectin agglutination. Process Biochemistry, 2018, 64, 160-169.	3.7	13
52	Regulating Cofactor Balance In Vivo with a Synthetic Flavin Analogue. Angewandte Chemie - International Edition, 2018, 57, 16464-16468.	13.8	13
53	Thermodynamics, Characterization, and Polymorphic Transformation of 1,5-Pentanediamine Carbonate. Industrial & Engineering Chemistry Research, 2020, 59, 10185-10194.	3.7	13
54	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.	5.0	13

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55	In Vivo Multienzyme Complex Coconstruction of N-Acetylneuraminic Acid Lyase and N-Acetylglucosamine-2-epimerase for Biosynthesis of N-Acetylneuraminic Acid. <i>Journal of Agricultural and Food Chemistry</i> , 2017, 65, 7467-7475.	5.2	11
56	Monohydrate and anhydrate of nylon 5I monomer 1,5-pentanediamine- <i>isophthalate</i> . <i>RSC Advances</i> , 2020, 10, 44774-44784.	3.6	11
57	Lignin demethylation for modifying halloysite nanotubes towards robust phenolic foams with excellent thermal insulation and flame retardancy. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	11
58	Desorption of 1-butanol from polymeric resin: experimental studies and mathematical modeling. <i>RSC Advances</i> , 2015, 5, 105464-105474.	3.6	10
59	Solvent effects on nucleation of disodium guanosine 5'-monophosphate in anti-solvent/water mixtures. <i>CrystEngComm</i> , 2016, 18, 6653-6663.	2.6	10
60	Improving biocatalytic microenvironment with biocompatible μ -poly-L-lysine for one step gluconic acid production in low pH enzymatic systems. <i>Process Biochemistry</i> , 2019, 76, 118-127.	3.7	10
61	Synthesis, adsorption and molecular simulation study of methylamine-modified hyper-cross-linked resins for efficient removal of citric acid from aqueous solution. <i>Scientific Reports</i> , 2020, 10, 9623.	3.3	10
62	Synthesis of Highly Porous Metal-Free Oxygen Reduction Electrocatalysts in a Self-Sacrificial Bacterial Cellulose Microreactor. <i>Advanced Sustainable Systems</i> , 2017, 1, 1700045.	5.3	9
63	Surface functionalization of graphene oxide by disodium guanosine 5'-monophosphate and its excellent performance for lipase immobilization. <i>Applied Surface Science</i> , 2019, 492, 27-36.	6.1	9
64	Metabolic Engineering and Adaptive Evolution of <i>Clostridium beijerinckii</i> To Increase Solvent Production from Corn Stover Hydrolysate. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 7916-7925.	5.2	9
65	Crystal forms and phase transformation of 1,5-pentanediamine-terephthalate: a bio-based nylon 5T monomer. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2020, 76, 524-533.	1.1	9
66	Enhanced Mechanical Properties of Polyvinyl Chloride-Based Wood-Plastic Composites With Pretreated Corn Stalk. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 829821.	4.1	9
67	Comparative transcriptomic and proteomic analysis of <i>Arthrobacter</i> sp. CGMCC 3584 responding to dissolved oxygen for cAMP production. <i>Scientific Reports</i> , 2018, 8, 1246.	3.3	8
68	Efficient Xylitol Production from Cornstalk Hydrolysate Using Engineered <i>Escherichia coli</i> Whole Cells. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 13209-13216.	5.2	8
69	Magnetic composite Ca(OH) ₂ /Fe ₃ O ₄ for highly efficient flocculation in papermaking black liquor without pH neutralization. <i>Advanced Powder Technology</i> , 2021, 32, 2457-2468.	4.1	8
70	Regulating Cofactor Balance In Vivo with a Synthetic Flavin Analogue. <i>Angewandte Chemie</i> , 2018, 130, 16702-16706.	2.0	7
71	Application of electrodialysis to extract 5'-ribonucleotides from hydrolysate: efficient decolorization and membrane fouling. <i>RSC Advances</i> , 2018, 8, 29115-29128.	3.6	7
72	Efficient preparation of phytase from genetically modified <i>Pichia pastoris</i> in immobilised fermentation biofilms adsorbed on surface-modified cotton fibres. <i>Process Biochemistry</i> , 2021, 111, 69-69.	3.7	7

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73	Effect of xylan sulfate on the responsive swelling behavior of poly(methacrylateoethyl trimethyl) Tj ETQq1 1 0.784314,rgBT /Oyerlock 10	4.9	6
74	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.	5.0	6
75	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.	3.2	5
76	Competitive adsorption of vanillin and syringaldehyde on a macro-mesopore polymeric resin: modeling. Bioprocess and Biosystems Engineering, 2019, 42, 1435-1445.	3.4	5
77	Tunable synthesis of polyethylene polyamine modified lignin and application for efficient adsorption of Fe ²⁺ in super acid system. Separation and Purification Technology, 2021, 272, 118950.	7.9	4
78	Green Mechanochemical Strategy for the Construction of a New Bio-based Nylon 5₂4T Ternary Salt. ACS Sustainable Chemistry and Engineering, 2022, 10, 3513-3520.	6.7	4
79	Application of a humidity-mediated method to remove residual solvent from crystal lattice. Food Chemistry, 2019, 294, 123-129.	8.2	3
80	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.	3.7	3
81	Investigating the Structureâ€Reactivity Relationships Between Nicotinamide Coenzyme Biomimetics and Pentaerythritol Tetranitrate Reductase. Advanced Synthesis and Catalysis, 2022, 364, 103-113.	4.3	3
82	Mechanocatalytic depolymerization of hemicellulose to xylooligosaccharides: New insights into the influence of impregnation solvent. Industrial Crops and Products, 2022, 180, 114704.	5.2	3
83	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.	3.7	2
84	Hydrates of adenosine 3â€²,5â€²-cyclic monophosphate sodium and their transformation. CrystEngComm, 2021, 23, 174-184.	2.6	2
85	Toward controlled geometric structure and surface property heterogeneities of TiO ₂ for lipase immobilization. Process Biochemistry, 2021, 110, 118-128.	3.7	2
86	Design and optimization of JOâ€EX process for highly efficient quaternary separation of 5â€²-ribonucleotides. AIChE Journal, 2022, 68, .	3.6	2
87	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.	3.4	1
88	Ion-exchange equilibrium of N-acetyl-d-neuraminic acid on a strong anionic exchanger. Food Chemistry, 2015, 183, 259-264.	8.2	1
89	Biochemical engineering in China. Reviews in Chemical Engineering, 2019, 35, 929-993.	4.4	1
90	Constructing a multienzyme cascade redox-neutral system for the synthesis of halogenated indoles. Chemical Communications, 2022, 58, 6016-6019.	4.1	1

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91	Large-Scale Fabrication of Rutile TiO ₂ with 3D Hierarchical Flower-Like Morphology. Journal of Nanoscience and Nanotechnology, 2016, 16, 12991-12995.	0.9	0