

Wei Zhuang

List of Publications by Year in descending order

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91
papers

1,629
citations

304743

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docs citations

91
times ranked

2167
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigating the Structure–Reactivity Relationships Between Nicotinamide Coenzyme Biomimetics and Pentaerythritol Tetranitrate Reductase. <i>Advanced Synthesis and Catalysis</i> , 2022, 364, 103-113.	4.3	3
2	Design and optimization of JOEX process for highly efficient quaternary separation of 5-ribonucleotides. <i>AIChE Journal</i> , 2022, 68, .	3.6	2
3	Green Mechanochemical Strategy for the Construction of a New Bio-based Nylon 5 ₂ Ternary Salt. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 3513-3520.	6.7	4
4	Mechanocatalytic depolymerization of hemicellulose to xylooligosaccharides: New insights into the influence of impregnation solvent. <i>Industrial Crops and Products</i> , 2022, 180, 114704.	5.2	3
5	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
6	Constructing a multienzyme cascade redox-neutral system for the synthesis of halogenated indoles. <i>Chemical Communications</i> , 2022, 58, 6016-6019.	4.1	1
7	Stabilizing bienzymatic cascade catalysis via immobilization in ZIF-8/GO composites obtained by GO assisted co-growth. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 217, 112585.	5.0	6
8	Design of a Lignin-Based Versatile Bioreinforcement for High-Performance Natural Rubber Composites. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 8031-8042.	6.7	15
9	One-pot depolymerization, demethylation and phenolation of lignin catalyzed by HBr under microwave irradiation for phenolic foam preparation. <i>Composites Part B: Engineering</i> , 2021, 205, 108530.	12.0	52
10	Hydrates of adenosine 3-cyclic monophosphate sodium and their transformation. <i>CrystEngComm</i> , 2021, 23, 174-184.	2.6	2
11	Novel biorefining method for succinic acid processed from sugarcane bagasse. <i>Bioresource Technology</i> , 2021, 324, 124615.	9.6	27
12	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
13	Improved enzymatic activity by oriented immobilization on graphene oxide with tunable surface heterogeneity. <i>Composites Part B: Engineering</i> , 2021, 216, 108788.	12.0	32
14	Improved adenylate cyclase activity via affinity immobilization onto co-modified GO with bio-inspired adhesive and PEI. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 205, 111888.	5.0	13
15	Mechanisms of bio-additives on boosting enzymatic hydrolysis of lignocellulosic biomass. <i>Bioresource Technology</i> , 2021, 337, 125341.	9.6	27
16	Tunable synthesis of polyethylene polyamine modified lignin and application for efficient adsorption of Fe ²⁺ in super acid system. <i>Separation and Purification Technology</i> , 2021, 272, 118950.	7.9	4
17	Co-fermentation of succinic acid and ethanol from sugarcane bagasse based on full hexose and pentose utilization and carbon dioxide reduction. <i>Bioresource Technology</i> , 2021, 339, 125578.	9.6	30
18	Toward controlled geometric structure and surface property heterogeneities of TiO ₂ for lipase immobilization. <i>Process Biochemistry</i> , 2021, 110, 118-128.	3.7	2

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19	Novel Mesoporous Lignin-Calcium for Efficiently Scavenging Cationic Dyes from Dyestuff Effluent. ACS Omega, 2021, 6, 816-826.	3.5	19
20	Efficient preparation of phytase from genetically modified <i>Pichia pastoris</i> in immobilised fermentation biofilms adsorbed on surface-modified cotton fibres. Process Biochemistry, 2021, 111, 69-69.	3.7	7
21	Enhanced Mechanical Properties of Polyvinyl Chloride-Based Wood-Plastic Composites With Pretreated Corn Stalk. Frontiers in Bioengineering and Biotechnology, 2021, 9, 829821.	4.1	9
22	Flow synthesis, characterization, anticoagulant activity of xylan sulfate from sugarcane bagasse. International Journal of Biological Macromolecules, 2020, 155, 1460-1467.	7.5	15
23	Mass transfer process and separation mechanism of four 5'-ribonucleotides on a strong acid cation exchange resin. Journal of Chromatography A, 2020, 1634, 461681.	3.7	3
24	Effect of xylan sulfate on the responsive swelling behavior of poly(methacrylate-ethyl trimethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54.	4.9	6
25	Preparation of a Copper Polyphosphate Kinase Hybrid Nanoflower and Its Application in ADP Regeneration from AMP. ACS Omega, 2020, 5, 9991-9998.	3.5	20
26	Interfacial microenvironment for lipase immobilization: Regulating the heterogeneity of graphene oxide. Chemical Engineering Journal, 2020, 394, 125038.	12.7	28
27	Thermodynamics, Characterization, and Polymorphic Transformation of 1,5-Pentanediamine Carbonate. Industrial & Engineering Chemistry Research, 2020, 59, 10185-10194.	3.7	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.	3.3	10
29	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
30	Metabolic Engineering and Adaptive Evolution of <i>Clostridium beijerinckii</i> To Increase Solvent Production from Corn Stover Hydrolysate. Journal of Agricultural and Food Chemistry, 2020, 68, 7916-7925.	5.2	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.	3.7	15
32	Crystal structure, thermodynamics, and crystallization of bio-based polyamide 56 salt. CrystEngComm, 2020, 22, 3234-3241.	2.6	17
33	Monohydrate and anhydrate of nylon 5I monomer 1,5-pentanediamine- <i>isophthalate</i> . RSC Advances, 2020, 10, 44774-44784.	3.6	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.	1.1	9
35	Application of a humidity-mediated method to remove residual solvent from crystal lattice. Food Chemistry, 2019, 294, 123-129.	8.2	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.	5.0	16

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37	Surface functionalization of graphene oxide by disodium guanosine 5â€²-monophosphate and its excellent performance for lipase immobilization. <i>Applied Surface Science</i> , 2019, 492, 27-36.	6.1	9
38	Competitive adsorption of vanillin and syringaldehyde on a macro-mesopore polymeric resin: modeling. <i>Bioprocess and Biosystems Engineering</i> , 2019, 42, 1435-1445.	3.4	5
39	Biochemical engineering in China. <i>Reviews in Chemical Engineering</i> , 2019, 35, 929-993.	4.4	1
40	Surface functionalization of graphene oxide by amino acids for <i>Thermomyces lanuginosus</i> lipase adsorption. <i>Journal of Colloid and Interface Science</i> , 2019, 546, 211-220.	9.4	38
41	Thermodynamics, crystal structure, and characterization of a bio-based nylon 54 monomer. <i>CrystEngComm</i> , 2019, 21, 7069-7077.	2.6	22
42	Stability and repeatability improvement of horseradish peroxidase by immobilization on amino-functionalized bacterial cellulose. <i>Process Biochemistry</i> , 2019, 79, 40-48.	3.7	37
43	Improving biocatalytic microenvironment with biocompatible $\hat{\mu}$ -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
44	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
45	Combined Adsorption and Covalent Linking of Paclitaxel on Functionalized Nano-Graphene Oxide for Inhibiting Cancer Cells. <i>ACS Omega</i> , 2018, 3, 2396-2405.	3.5	18
46	Nano-Biocatalysts of Cyt <i>c</i> / <i>i</i> @ZIF-8/GO Composites with High Recyclability via a de Novo Approach. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16066-16076.	8.0	74
47	Affinity induced immobilization of adenylate cyclase from the crude cell lysate for ATP conversion. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 164, 155-164.	5.0	16
48	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
49	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
50	Continuous citric acid production in repeated-fed batch fermentation by <i>Aspergillus niger</i> immobilized on a new porous foam. <i>Journal of Biotechnology</i> , 2018, 276-277, 1-9.	3.8	42
51	Concanavalin A induced orientation immobilization of Nuclease P 1 : The effect of lectin agglutination. <i>Process Biochemistry</i> , 2018, 64, 160-169.	3.7	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. <i>RSC Advances</i> , 2018, 8, 37993-38001.	3.6	36
53	<i>Clostridium acetobutylicum</i> grows vegetatively in a biofilm rich in heteropolysaccharides and cytoplasmic proteins. <i>Biotechnology for Biofuels</i> , 2018, 11, 315.	6.2	18
54	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

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55	Regulating Cofactor Balance In Vivo with a Synthetic Flavin Analogue. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16464-16468.	13.8	13
56	Regulating Cofactor Balance In Vivo with a Synthetic Flavin Analogue. <i>Angewandte Chemie</i> , 2018, 130, 16702-16706.	2.0	7
57	Application of electro dialysis to extract 5â€²-ribonucleotides from hydrolysate: efficient decolorization and membrane fouling. <i>RSC Advances</i> , 2018, 8, 29115-29128.	3.6	7
58	Model-based design of an intermittent simulated moving bed process for recovering lactic acid from ternary mixture. <i>Journal of Chromatography A</i> , 2018, 1562, 47-58.	3.7	2
59	Immobilization of <i>Clostridium acetobutylicum</i> onto natural textiles and its fermentation properties. <i>Microbial Biotechnology</i> , 2017, 10, 502-512.	4.2	19
60	Efficient immobilization of AGE and NAL enzymes onto functional amino resin as recyclable and high-performance biocatalyst. <i>Bioprocess and Biosystems Engineering</i> , 2017, 40, 331-340.	3.4	13
61	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
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	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
64	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
65	Combined ion exchange and adsorption equilibria of 5â€²-ribonucleotides on the strong acid cation exchange resin NH-1. <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 1678-1689.	3.2	5
66	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
67	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
68	Molecular Interactions of Protein with TiO ₂ by the AFM-Measured Adhesion Force. <i>Langmuir</i> , 2017, 33, 11626-11634.	3.5	25
69	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
70	Solution-Mediated Polymorphic Transformation: From Amorphous to Crystals of Disodium Guanosine 5â€²-Monophosphate in Ethanol. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 8274-8282.	3.7	20
71	Facile synthesis of amino-functionalized mesoporous TiO ₂ microparticles for adenosine deaminase immobilization. <i>Microporous and Mesoporous Materials</i> , 2017, 239, 158-166.	4.4	35
72	Solvent effects on nucleation of disodium guanosine 5â€²-monophosphate in anti-solvent/water mixtures. <i>CrystEngComm</i> , 2016, 18, 6653-6663.	2.6	10

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73	Large-Scale Fabrication of Rutile TiO ₂ with 3D Hierarchical Flower-Like Morphology. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 12991-12995.	0.9	0
74	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
75	Insight into a direct solid→solid transformation: a potential approach for the removal of residual solvents. <i>CrystEngComm</i> , 2016, 18, 1699-1704.	2.6	14
76	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
77	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
78	Desorption of 1-butanol from polymeric resin: experimental studies and mathematical modeling. <i>RSC Advances</i> , 2015, 5, 105464-105474.	3.6	10
79	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. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 137-145.	3.7	17
80	TiO ₂ nanofibers heterogeneously wrapped with reduced graphene oxide as efficient Pt electrocatalyst supports for methanol oxidation. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 3679-3688.	7.1	42
81	Facile Synthesis of Mesoporous MoS ₂ /TiO ₂ Nanofibers for Ultrastable Lithium Ion Battery Anodes. <i>ChemElectroChem</i> , 2015, 2, 374-381.	3.4	51
82	A novel procedure for purification of uridine 5'-monophosphate based on adsorption methodology using a hyper-cross-linked resin. <i>Bioprocess and Biosystems Engineering</i> , 2015, 38, 967-979.	3.4	1
83	Involvement of glycolysis/gluconeogenesis and signaling regulatory pathways in <i>Saccharomyces cerevisiae</i> biofilms during fermentation. <i>Frontiers in Microbiology</i> , 2015, 6, 139.	3.5	36
84	Ion-exchange equilibrium of N-acetyl-d-neuraminic acid on a strong anionic exchanger. <i>Food Chemistry</i> , 2015, 183, 259-264.	8.2	1
85	Simultaneous production of butanol and acetoin by metabolically engineered <i>Clostridium acetobutylicum</i> . <i>Metabolic Engineering</i> , 2015, 27, 107-114.	7.0	38
86	Reversible, selective immobilization of nuclease P1 from a crude enzyme solution on a weak base anion resin activated by polyethylenimine. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 101, 92-100.	1.8	13
87	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
88	Experimental measurement and modelling of solubility of inosine-5'-monophosphate disodium in pure and mixed solvents. <i>Journal of Chemical Thermodynamics</i> , 2014, 77, 14-22.	2.0	41
89	Enhancement of n-butanol production by in situ butanol removal using permeating/heating gas stripping in acetone/butanol/ethanol fermentation. <i>Bioresource Technology</i> , 2014, 164, 276-284.	9.6	53
90	TiO ₂ -B nanofibers with high thermal stability as improved anodes for lithium ion batteries. <i>Electrochemistry Communications</i> , 2013, 27, 124-127.	4.7	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