Bian Wu

List of Publications by Year
in descending order

45 papers	1,552 citations	279487 23 h-index	315357 38 g-index
57 all docs	57 docs citations	57 times ranked	1541 citing authors

#	Article	IF	Citations
1	Recent advances in biocatalysis of nitrogen-containing heterocycles. Biotechnology Advances, 2022, 54, 107813.	6.0	23
2	Traceless enzymatic protein synthesis without ligation sites constraint. National Science Review, 2022, 9, .	4.6	8
3	A Peptide Derived from GAPDH Enhances Resistance to DNA Damage in Saccharomyces cerevisiae Cells. Applied and Environmental Microbiology, 2022, 88, aem0219421.	1.4	3
4	Computational enzyme redesign: large jumps in function. Trends in Chemistry, 2022, 4, 409-419.	4.4	24
5	Monitoring Methionine Decarboxylase by a Supramolecular Tandem Assay. Chemistry - an Asian Journal, 2022, 17, .	1.7	4
6	Protein design with a machine-learned potential about backbone designability. Trends in Biochemical Sciences, 2022, , .	3.7	0
7	Creating an Unusual Glycine-Rich Motif in a Peptide Amidase Leads to Versatile Protein C-Terminal Traceless Functionalization. ACS Catalysis, 2022, 12, 8019-8026.	5.5	5
8	Computational Redesign of a PETase for Plastic Biodegradation under Ambient Condition by the GRAPE Strategy. ACS Catalysis, 2021, 11, 1340-1350.	5.5	263
9	GRAPE, a greedy accumulated strategy for computational protein engineering. Methods in Enzymology, 2021, 648, 207-230.	0.4	5
10	Construction of an Alternative NAD⁺ De Novo Biosynthesis Pathway. Advanced Science, 2021, 8, 2004632.	5.6	11
11	Development of a versatile and efficient Câ€“N lyase platform for asymmetric hydroamination via computational enzyme redesign. Nature Catalysis, 2021, 4, 364-373.	16.1	39
12	Engineered DNase-inactive Cpf1 variants to improve targeting scope for base editing in E. coli. Synthetic and Systems Biotechnology, 2021, 6, 326-334.	1.8	3
13	Reductase of Mutanobactin Synthetase Triggers Sequential Câ€“C Macrocyclization, Câ€“S Bond Formation, and Câ€“C Bond Cleavage. Organic Letters, 2020, 22, 960-964.	2.4	6
14	Improving the System Performance of the Asymmetric Biosynthesis of <scp>d</scp>-Pantoic Acid by Using Artificially Self-Assembled Enzymes in <i>Escherichia coli</i>. ACS Biomaterials Science and Engineering, 2020, 6, 219-224.	2.6	4
15	Bioretrosynthesis of Functionalized <i>N</i>â€Heterocycles from Glucose via Oneâ€Pot Tandem Collaborations of Designed Microbes. Advanced Science, 2020, 7, 2001188.	5.6	9
16	Characterization and efficient production of a thermostable, halostable and organic solvent-stable cellulase from an oil reservoir. International Journal of Biological Macromolecules, 2020, 159, 622-629.	3.6	15
17	Exploration of Transaminase Diversity for the Oxidative Conversion of Natural Amino Acids into 2-Ketoacids and High-Value Chemicals. ACS Catalysis, 2020, 10, 7950-7957.	5.5	14
18	Molecular dynamics investigations of structural and functional changes in Bcl-2 induced by the novel antagonist BDA-366. Journal of Biomolecular Structure and Dynamics, 2019, 37, 2527-2537.	2.0	4

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19	Biochemical and structural characterization of a highly active branched-chain amino acid aminotransferase from Pseudomonas sp. for efficient biosynthesis of chiral amino acids. Applied Microbiology and Biotechnology, 2019, 103, 8051-8062.	1.7	7
20	Thermostability improvement of the glucose oxidase from Aspergillus niger for efficient gluconic acid production via computational design. International Journal of Biological Macromolecules, 2019, 136, 1060-1068.	3.6	39
21	Engineering improved thermostability of the GH11 xylanase from Neocallimastix patriciarum via computational library design. Applied Microbiology and Biotechnology, 2018, 102, 3675-3685.	1.7	40
22	Enzymatic clickable functionalization of peptides via computationally engineered peptide amidase. Chinese Chemical Letters, 2018, 29, 1116-1118.	4.8	6
23	Cryptococcus neoformans sexual reproduction is controlled by a quorum sensing peptide. Nature Microbiology, 2018, 3, 698-707.	5.9	47
24	Computational redesign of enzymes for regio- and enantioselective hydroamination. Nature Chemical Biology, 2018, 14, 664-670.	3.9	137
25	Regioâ€•and Stereospecific <i>O</i>â€•Glycosylation of Phenolic Compounds Catalyzed by a Fungal Glycosyltransferase from <i>Mucor hiemalis</i>. Advanced Synthesis and Catalysis, 2017, 359, 995-1006.	2.1	28
26	Peptiligase, an Enzyme for Efficient Chemoenzymatic Peptide Synthesis and Cyclization in Water. Advanced Synthesis and Catalysis, 2016, 358, 2140-2147.	2.1	62
27	Versatile Peptide C-Terminal Functionalization via a Computationally Engineered Peptide Amidase. ACS Catalysis, 2016, 6, 5405-5414.	5.5	60
28	Engineering a Diverse Ligase Toolbox for Peptide Segment Condensation. Advanced Synthesis and Catalysis, 2016, 358, 4041-4048.	2.1	34
29	Enzymatic network for production of ether amines from alcohols. Biotechnology and Bioengineering, 2016, 113, 1853-1861.	1.7	23
30	Peptide synthesis in neat organic solvents with novel thermostable proteases. Enzyme and Microbial Technology, 2015, 73-74, 20-28.	1.6	18
31	Structural Investigations into the Stereochemistry and Activity of a Phenylalanine-2,3-aminomutase from <i>Taxus chinensis</i>. Biochemistry, 2014, 53, 3187-3198.	1.2	21
32	Oneâ€•Step <i>C</i>â€•Terminal Deprotection and Activation of Peptides with Peptide Amidase from <i>Stenotrophomonas maltophilia</i> in Neat Organic Solvent. Advanced Synthesis and Catalysis, 2014, 356, 2197-2202.	2.1	7
33	Redesign of a Phenylalanine Aminomutase into a Phenylalanine Ammonia Lyase. ChemCatChem, 2013, 5, 1797-1802.	1.8	27
34	Azobenzene Photoswitches for Staudingerâ€"Bertozzi Ligation. Angewandte Chemie - International Edition, 2013, 52, 2068-2072.	7.2	44
35	Priming ammonia lyases and aminomutases for industrial and therapeutic applications. Current Opinion in Chemical Biology, 2013, 17, 250-260.	2.8	85
36	Proteolysin, a Novel Highly Thermostable and Cosolvent-Compatible Protease from the Thermophilic Bacterium Coprothermobacter proteolyticus. Applied and Environmental Microbiology, 2013, 79, 5625-5632.	1.4	31

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37	Biochemical Properties and Crystal Structure of a Î²-Phenylalanine Aminotransferase from Variovorax paradoxus. Applied and Environmental Microbiology, 2013, 79, 185-195.	1.4	29
38	Mechanismâ€•Inspired Engineering of Phenylalanine Aminomutase for Enhanced Î²â€•Regioselective Asymmetric Amination of Cinnamates. Angewandte Chemie - International Edition, 2012, 51, 482-486.	7.2	48
39	Aminomutases: mechanistic diversity, biotechnological applications and future perspectives. Trends in Biotechnology, 2011, 29, 352-362.	4.9	54
40	Efficient Tandem Biocatalytic Process for the Kinetic Resolution of Aromatic Î²â€•Amino Acids. Advanced Synthesis and Catalysis, 2010, 352, 1409-1412.	2.1	37
41	Engineering of an enantioselective tyrosine aminomutase by mutation of a single active site residue in phenylalanine aminomutase. Chemical Communications, 2010, 46, 8157.	2.2	23
42	Enantiomerically pure Î²-phenylalanine analogues from Î±â€“Î²-phenylalanine mixtures in a single reactive extraction step. Chemical Communications, 2010, 46, 901-903.	2.2	26
43	Enzymatic Synthesis of Enantiopure Î±â€•and Î²â€•Amino Acids by Phenylalanine Aminomutaseâ€•Catalysed Amination of Cinnamic Acid Derivatives. ChemBioChem, 2009, 10, 338-344.	1.3	71
44	Phenylalanine Aminomutase-Catalyzed Addition of Ammonia to Substituted Cinnamic Acids: a Route to Enantiopure Î±- and Î²-Amino Acids. Journal of Organic Chemistry, 2009, 74, 9152-9157.	1.7	69
45	(<i>S</i>)â€•3â€•aminopiperidineâ€•2,6â€•dione is a biosynthetic intermediate of microbial blue pigment indigoidine. , 0, , .		0