

# Wenli Zhang

## List of Publications by Citations

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106  
papers

1,606  
citations

22  
h-index

34  
g-index

112  
ext. papers

2,152  
ext. citations

6.8  
avg, IF

5.29  
L-index

#	Paper	IF	Citations
106	Recent advances on applications and biotechnological production of D-psicose. <i>Applied Microbiology and Biotechnology</i> , <b>2012</b> , 94, 1461-7	5.7	108
105	Enzymatic approaches to rare sugar production. <i>Biotechnology Advances</i> , <b>2017</b> , 35, 267-274	17.8	95
104	Recent advances in d-allulose: Physiological functionalities, applications, and biological production. <i>Trends in Food Science and Technology</i> , <b>2016</b> , 54, 127-137	15.3	68
103	Characterization of a metal-dependent D-psicose 3-epimerase from a novel strain, <i>Desmospora</i> sp. 8437. <i>Journal of Agricultural and Food Chemistry</i> , <b>2013</b> , 61, 11468-76	5.7	64
102	Characterization of a novel metal-dependent D-psicose 3-epimerase from <i>Clostridium scindens</i> 35704. <i>PLoS ONE</i> , <b>2013</b> , 8, e62987	3.7	60
101	Characterization of a d-psicose 3-epimerase from <i>Dorea</i> sp. CAG317 with an acidic pH optimum and a high specific activity. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2015</b> , 120, 68-74		56
100	Characterization of a D-psicose-producing enzyme, D-psicose 3-epimerase, from <i>Clostridium</i> sp. <i>Biotechnology Letters</i> , <b>2013</b> , 35, 1481-6	3	56
99	Biochemical characterization of a D-psicose 3-epimerase from <i>Treponema primitia</i> ZAS-1 and its application on enzymatic production of D-psicose. <i>Journal of the Science of Food and Agriculture</i> , <b>2016</b> , 96, 49-56	4.3	51
98	Biosynthesis of levan from sucrose using a thermostable levansucrase from <i>Lactobacillus reuteri</i> LTH5448. <i>International Journal of Biological Macromolecules</i> , <b>2018</b> , 113, 29-37	7.9	41
97	Amylosucrase as a transglucosylation tool: From molecular features to bioengineering applications. <i>Biotechnology Advances</i> , <b>2018</b> , 36, 1540-1552	17.8	37
96	Accessibility of the Shine-Dalgarno Sequence Dictates N-Terminal Codon Bias in <i>E. coli</i> . <i>Molecular Cell</i> , <b>2018</b> , 70, 894-905.e5	17.6	34
95	Inulin and its enzymatic production by inulosucrase: Characteristics, structural features, molecular modifications and applications. <i>Biotechnology Advances</i> , <b>2019</b> , 37, 306-318	17.8	34
94	Recent research on the physiological functions, applications, and biotechnological production of D-allose. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 4269-4278	5.7	32
93	Improving the Thermostability and Catalytic Efficiency of the d-Psicose 3-Epimerase from <i>Clostridium boltea</i> ATCC BAA-613 Using Site-Directed Mutagenesis. <i>Journal of Agricultural and Food Chemistry</i> , <b>2016</b> , 64, 3386-93	5.7	30
92	Isomerases for biotransformation of D-hexoses. <i>Applied Microbiology and Biotechnology</i> , <b>2015</b> , 99, 6571-84	3.7	28
91	l-arabinose isomerases: Characteristics, modification, and application. <i>Trends in Food Science and Technology</i> , <b>2018</b> , 78, 25-33	15.3	27
90	Current research on cellobiose 2-epimerase: Enzymatic properties, mechanistic insights, and potential applications in the dairy industry. <i>Trends in Food Science and Technology</i> , <b>2018</b> , 82, 167-176	15.3	26

89	Characterization of a d-tagatose 3-epimerase from <i>Caballeronia fortuita</i> and its application in rare sugar production. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 138, 536-545	7.9	25
88	Thermostability Improvement of the d-Allulose 3-Epimerase from <i>Dorea</i> sp. CAG317 by Site-Directed Mutagenesis at the Interface Regions. <i>Journal of Agricultural and Food Chemistry</i> , <b>2018</b> , 66, 5593-5601	5.7	25
87	Recent advances in Levansucrase and Inulosucrase: evolution, characteristics, and application. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2019</b> , 59, 3630-3647	11.5	24
86	An overview on biological production of functional lactose derivatives. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 3683-3691	5.7	23
85	Silver nanoparticles induced cytotoxicity in HT22 cells through autophagy and apoptosis via PI3K/AKT/mTOR signaling pathway. <i>Ecotoxicology and Environmental Safety</i> , <b>2021</b> , 208, 111696	7	22
84	Characterisation of a novel cellobiose 2-epimerase from thermophilic <i>Caldicellulosiruptor obsidiansis</i> for lactulose production. <i>Journal of the Science of Food and Agriculture</i> , <b>2017</b> , 97, 3095-3105	4.3	21
83	D-lyxose isomerase and its application for functional sugar production. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 2051-2062	5.7	21
82	Recent progress on biological production of $\alpha$ -arbutin. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 8145-8152	5.7	21
81	Recent advances on 2Fucosyllactose: physiological properties, applications, and production approaches. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2020</b> , 1-10	11.5	20
80	L-Rhamnose isomerase and its use for biotechnological production of rare sugars. <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 2985-92	5.7	20
79	Characterization of an epilactose-producing cellobiose 2-epimerase from <i>Thermoanaerobacterium saccharolyticum</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2015</b> , 116, 39-44		17
78	Highly selective synthesis of d-amino acids from readily available l-amino acids by a one-pot biocatalytic stereoinversion cascade.. <i>RSC Advances</i> , <b>2019</b> , 9, 29927-29935	3.7	16
77	Preparation of a novel water-soluble gel from <i>Erwinia amylovora</i> levan. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 122, 469-478	7.9	16
76	Production of d-allulose from d-glucose by <i>Escherichia coli</i> transformant cells co-expressing d-glucose isomerase and d-psicose 3-epimerase genes. <i>Journal of the Science of Food and Agriculture</i> , <b>2017</b> , 97, 3420-3426	4.3	15
75	Mannitol: physiological functionalities, determination methods, biotechnological production, and applications. <i>Applied Microbiology and Biotechnology</i> , <b>2020</b> , 104, 6941-6951	5.7	15
74	Semi-rational design and molecular dynamics simulations study of the thermostability enhancement of cellobiose 2-epimerases. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 154, 1356-1365	7.9	15
73	Characterization of a novel d-lyxose isomerase from <i>Thermoflavimicrobium dichotomicum</i> and its application for D-mannose production. <i>Process Biochemistry</i> , <b>2019</b> , 83, 131-136	4.8	14
72	$\alpha$ -L-Fucosidases and their applications for the production of fucosylated human milk oligosaccharides. <i>Applied Microbiology and Biotechnology</i> , <b>2020</b> , 104, 5619-5631	5.7	14

71	An overview of the biological production of 1-deoxynojirimycin: current status and future perspective. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 9335-9344	5.7	14
70	Efficient biotransformation of d-fructose to d-mannose by a thermostable d-lyxose isomerase from <i>Thermosediminibacter oceani</i> . <i>Process Biochemistry</i> , <b>2016</b> , 51, 2026-2033	4.8	14
69	Advances in the enzymatic production of L-hexoses. <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 6971-9	5.7	13
68	Recent studies on the biological production of D-mannose. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 8753-8761	5.7	13
67	Efficient production of inulooligosaccharides from inulin by endoinulinase from <i>Aspergillus arachidicola</i> . <i>Carbohydrate Polymers</i> , <b>2019</b> , 208, 70-76	10.3	13
66	Characterization of a novel thermostable l-rhamnose isomerase from <i>Thermobacillus composti</i> KWC4 and its application for production of d-allose. <i>Process Biochemistry</i> , <b>2017</b> , 53, 153-161	4.8	12
65	Production of d-mannose from d-glucose by co-expression of d-glucose isomerase and d-lyxose isomerase in <i>Escherichia coli</i> . <i>Journal of the Science of Food and Agriculture</i> , <b>2018</b> , 98, 4895-4902	4.3	11
64	Characterization of a thermostable recombinant l-rhamnose isomerase from <i>Caldicellulosiruptor obsidiansis</i> OB47 and its application for the production of l-fructose and l-rhamnulose. <i>Journal of the Science of Food and Agriculture</i> , <b>2018</b> , 98, 2184-2193	4.3	11
63	Metabolic Engineering of for Lacto--triose II Production with High Productivity. <i>Journal of Agricultural and Food Chemistry</i> , <b>2021</b> , 69, 3702-3711	5.7	11
62	Lactic acid bacteria-derived β-glucans: From enzymatic synthesis to miscellaneous applications. <i>Biotechnology Advances</i> , <b>2021</b> , 47, 107708	17.8	11
61	Mitophagy-lysosomal pathway is involved in silver nanoparticle-induced apoptosis in A549 cells. <i>Ecotoxicology and Environmental Safety</i> , <b>2021</b> , 208, 111463	7	11
60	In-depth biochemical identification of a novel methyl parathion hydrolase from <i>Azohydromonas australica</i> and its high effectiveness in the degradation of various organophosphorus pesticides. <i>Bioresource Technology</i> , <b>2021</b> , 323, 124641	11	11
59	Isomerases and epimerases for biotransformation of pentoses. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 7283-7292	5.7	11
58	Sucrose isomers as alternative sweeteners: properties, production, and applications. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 8677-8687	5.7	10
57	Highly Regioselective and Stereoselective Hydroxylation of Free Amino Acids by a 2-Oxoglutarate-Dependent Dioxygenase from. <i>ACS Omega</i> , <b>2019</b> , 4, 8350-8358	3.9	10
56	Preparation, characterization and application of levan/montmorillonite biocomposite and levan/BSA nanoparticle. <i>Carbohydrate Polymers</i> , <b>2020</b> , 234, 115921	10.3	10
55	An overview of levan-degrading enzyme from microbes. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 7891-7902	5.7	10
54	Polyol dehydrogenases: intermediate role in the bioconversion of rare sugars and alcohols. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 6473-6481	5.7	10

53	Sugar alcohols derived from lactose: lactitol, galactitol, and sorbitol. <i>Applied Microbiology and Biotechnology</i> , <b>2020</b> , 104, 9487-9495	5.7	10
52	Simulation-guided enzyme discovery: A new microbial source of cellobiose 2-epimerase. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 139, 1002-1008	7.9	10
51	Combinatorial Modular Pathway Engineering for Guanosine 5TDiphosphate-l-fucose Production in Recombinant. <i>Journal of Agricultural and Food Chemistry</i> , <b>2020</b> , 68, 5668-5675	5.7	9
50	Production of l-ribose from l-arabinose by co-expression of l-arabinose isomerase and d-lyxose isomerase in Escherichia coli. <i>Enzyme and Microbial Technology</i> , <b>2020</b> , 132, 109443	3.8	8
49	Improving Thermostability and Catalytic Behavior of l-Rhamnose Isomerase from Caldicellulosiruptor obsidiansis OB47 toward d-Allulose by Site-Directed Mutagenesis. <i>Journal of Agricultural and Food Chemistry</i> , <b>2018</b> , 66, 12017-12024	5.7	8
48	Human Milk Oligosaccharides: The New Gold Standard for Premium Infant Formula.. <i>Journal of Agricultural and Food Chemistry</i> , <b>2022</b> ,	5.7	7
47	Biochemical characterization of recombinant L-fucose isomerase from Caldanaerobius polysaccharolyticus for L-fuculose production. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 146, 965-975	7.9	7
46	A review on selective l-fucose/d-arabinose isomerases for biocatalytic production of l-fuculose/d-ribulose. <i>International Journal of Biological Macromolecules</i> , <b>2021</b> , 168, 558-571	7.9	7
45	Overview of strategies for developing high thermostability industrial enzymes: Discovery, mechanism, modification and challenges. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2021</b> , 1-18	11.5	7
44	Ribose-5-phosphate isomerases: characteristics, structural features, and applications. <i>Applied Microbiology and Biotechnology</i> , <b>2020</b> , 104, 6429-6441	5.7	6
43	Characterization of recombinant L-ribose isomerase acquired from Cryobacterium sp. N21 with potential application in L-ribulose production. <i>Process Biochemistry</i> , <b>2020</b> , 97, 1-10	4.8	6
42	Computer-Aided Targeted Mutagenesis of d-Allulose 3-Epimerase for Improved Thermostability.. <i>Journal of Agricultural and Food Chemistry</i> , <b>2022</b> ,	5.7	6
41	Efficient production of inulin and oligosaccharides using thermostable inulosucrase from Lactobacillus jensenii. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 165, 1250-1257	7.9	6
40	Enhancement of the Brenneria sp. levansucrase thermostability by site-directed mutagenesis at Glu located at the "-TEAP-" residue motif. <i>Journal of Biotechnology</i> , <b>2019</b> , 290, 1-9	3.7	6
39	Recent advances on biological production of difructose dianhydride III. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 3007-3015	5.7	5
38	Computer-aided search for a cold-active cellobiose 2-epimerase. <i>Journal of Dairy Science</i> , <b>2020</b> , 103, 7730-7741		5
37	One-pot production of d-allulose from inulin by a novel identified thermostable exoinulinase from Aspergillus piperis and Dorea sp. d-allulose 3-epimerase. <i>Process Biochemistry</i> , <b>2020</b> , 99, 87-95	4.8	5
36	Characterization of a Recombinant D-Allulose 3-epimerase from Thermoclostridium caenicola with Potential Application in D-Allulose Production. <i>Molecular Biotechnology</i> , <b>2021</b> , 63, 534-543	3	5

35	D-allulose, a versatile rare sugar: recent biotechnological advances and challenges.. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2021</b> , 1-19	11.5	5
34	Biochemical characterization of a novel thermostable DFA I-forming inulin fructotransferases from <i>Streptomyces peucetius</i> subsp. <i>caesius</i> ATCC 27952. <i>Enzyme and Microbial Technology</i> , <b>2020</b> , 137, 109519 <sup>8</sup>	3.8	4
33	Characterization of a recombinant D-mannose-producing D-lyxose isomerase from <i>Caldanaerobius polysaccharolyticus</i> . <i>Enzyme and Microbial Technology</i> , <b>2020</b> , 138, 109553	3.8	4
32	Molecular Dynamics Simulation for Food Enzyme Engineering: Why This Technique Should Be Encouraged To Learn. <i>Journal of Agricultural and Food Chemistry</i> , <b>2021</b> , 69, 4-6	5.7	4
31	Current methods and applications in computational protein design for food industry. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2020</b> , 60, 3259-3270	11.5	4
30	A Novel $\beta$ ,4-Galactosyltransferase from Enables Efficient Biosynthesis of Lacto-Neotetraose via Both Enzymatic and Cell Factory Approaches. <i>Journal of Agricultural and Food Chemistry</i> , <b>2021</b> , 69, 5683-5690	5.7	4
29	A review on l-ribose isomerases for the biocatalytic production of l-ribose and l-ribulose. <i>Food Research International</i> , <b>2021</b> , 145, 110409	7	4
28	Efficient Production of 2Fucosyllactose from l-Fucose Self-Assembling Multienzyme Complexes in Engineered. <i>ACS Synthetic Biology</i> , <b>2021</b> , 10, 2488-2498	5.7	4
27	Efficient control of acrylamide in French fries by an extraordinarily active and thermo-stable l-asparaginase: A lab-scale study. <i>Food Chemistry</i> , <b>2021</b> , 360, 130046	8.5	4
26	Biochemical identification of a hyperthermostable l-ribulose 3-epimerase from <i>Labeledella endophytica</i> and its application for d-allulose bioconversion. <i>International Journal of Biological Macromolecules</i> , <b>2021</b> , 189, 214-222	7.9	4
25	Reconstitution of TCA cycle involving l-isoleucine dioxygenase for hydroxylation of l-isoleucine in using CRISPR-Cas9. <i>3 Biotech</i> , <b>2020</b> , 10, 167	2.8	3
24	Overview of a bioremediation tool: organophosphorus hydrolase and its significant application in the food, environmental, and therapy fields. <i>Applied Microbiology and Biotechnology</i> , <b>2021</b> , 105, 8241-8253	5.7	3
23	Recent advances and future prospective of organophosphorus-degrading enzymes: identification, modification, and application. <i>Critical Reviews in Biotechnology</i> , <b>2021</b> , 41, 1096-1113	9.4	3
22	Efficient biosynthesis of lacto-N-neotetraose by a novel $\beta$ ,4-galactosyltransferase from <i>Aggregatibacter actinomycetemcomitans</i> NUM4039. <i>Enzyme and Microbial Technology</i> , <b>2021</b> , 153, 109912 <sup>8</sup>	3.8	3
21	Recent development of phenyllactic acid: physicochemical properties, biotechnological production strategies and applications.. <i>Critical Reviews in Biotechnology</i> , <b>2021</b> , 1-16	9.4	3
20	Recent advances in properties, production, and applications of L-ribulose. <i>Applied Microbiology and Biotechnology</i> , <b>2020</b> , 104, 5663-5672	5.7	2
19	Microbial and enzymatic strategies for the production of L-ribose. <i>Applied Microbiology and Biotechnology</i> , <b>2020</b> , 104, 3321-3329	5.7	2
18	A close look on the effect of polyethylene glycol on the levansucrase thermostability: a case study of <i>Brenneria</i> sp. levansucrase. <i>Journal of the Science of Food and Agriculture</i> , <b>2019</b> , 99, 6315-6323	4.3	2

17	Glycosyltransferase from <i>Is</i> a Novel $\beta$ 1,3-Fucosyltransferase that Can Be Used for 3-Fucosyllactose Production In Vivo by Metabolically Engineered .. <i>Journal of Agricultural and Food Chemistry</i> , <b>2022</b> ,	5.7	2
16	Identification of a novel recombinant D-lyxose isomerase from <i>Thermoprotei</i> archaeon with high thermostable, weak-acid and nickel ion dependent properties. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 164, 1267-1274	7.9	2
15	Constructing Rh-Rh modified TaO@TaON@TaN with special double n-n mutant heterojunctions for enhanced photocatalytic H <sub>2</sub> -evolution.. <i>RSC Advances</i> , <b>2020</b> , 10, 29424-29431	3.7	2
14	Metabolic Engineering of for Efficient Biosynthesis of Lacto--tetraose Using a Novel $\beta$ 1,3-Galactosyltransferase From. <i>Journal of Agricultural and Food Chemistry</i> , <b>2021</b> , 69, 11342-11349	5.7	2
13	Comprehensive utilization of sucrose resources via chemical and biotechnological processes: A review. <i>Biotechnology Advances</i> , <b>2022</b> , 60, 107990	17.8	2
12	Engineering <i>Escherichia coli</i> for highly efficient production of lacto-N-triose II from N-acetylglucosamine, the monomer of chitin. <i>Biotechnology for Biofuels</i> , <b>2021</b> , 14, 198	7.8	1
11	Neurobehavior and neuron damage following prolonged exposure of silver nanoparticles with/without polyvinylpyrrolidone coating in <i>Caenorhabditis elegans</i> . <i>Journal of Applied Toxicology</i> , <b>2021</b> , 41, 2055-2067	4.1	1
10	Kinetic study and molecular dynamics simulation of two novel mannose isomerases. <i>Catalysis Science and Technology</i> , <b>2021</b> , 11, 5898-5907	5.5	1
9	Difructose anhydride III: a 50-year perspective on its production and physiological functions. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2021</b> , 1-26	11.5	1
8	Molecular Characterization of a Mesophilic Cellobiose 2-Epimerase That Maintains a High Catalytic Efficiency at Low Temperatures. <i>Journal of Agricultural and Food Chemistry</i> , <b>2021</b> , 69, 8268-8275	5.7	1
7	Occurrence, functional properties, and preparation of 3-fucosyllactose, one of the smallest human milk oligosaccharides.. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2022</b> , 1-15	11.5	1
6	Characterization of a Novel Mannose Isomerase from <i>Stenotrophomonas rhizophila</i> and Identification of Its Possible Catalytic Residues.. <i>Molecular Biotechnology</i> , <b>2022</b> , 1	3	0
5	Preparation and photocatalytic activity of pendant heteroaryl groups (pyrimidine and pyridine) grafted polyterthiophene/TiO <sub>2</sub> composites. <i>Materials Express</i> , <b>2020</b> , 10, 1877-1891	1.3	0
4	The key role of autophagy in silver nanoparticle-induced BV2 cells inflammation and polarization. <i>Food and Chemical Toxicology</i> , <b>2021</b> , 154, 112324	4.7	0
3	Microbial production, molecular modification, and practical application of l-Asparaginase: A review. <i>International Journal of Biological Macromolecules</i> , <b>2021</b> , 186, 975-983	7.9	0
2	An overview of D-galactose utilization through microbial fermentation and enzyme-catalyzed conversion. <i>Applied Microbiology and Biotechnology</i> , <b>2021</b> , 105, 7161-7170	5.7	0
1	Enzymatic Production of Lactosucrose by Levansucrase, $\beta$ Fructofuranosidase, and $\beta$ Galactosidase <b>2021</b> , 125-146		