

# Zunxi Huang

## List of Publications by Year in descending order

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66  
papers

1,262  
citations

393982

19  
h-index

433756

31  
g-index

67  
all docs

67  
docs citations

67  
times ranked

1418  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Improving the low-temperature properties of an exo-inulinase via the deletion of a loop fragment located in its catalytic pocket. <i>Electronic Journal of Biotechnology</i> , 2022, 55, 1-8.   | 1.2 | 3         |
| 2  | Biodegradation of Î»-cyhalothrin through cell surface display of bacterial carboxylesterase. <i>Chemosphere</i> , 2022, 289, 133130.  | 4.2 | 13        |
| 3  | Improving the Thermostability of a Fungal GH11 Xylanase via Fusion of a Submodule (C2) from Hyperthermophilic CBM9_1-2. <i>International Journal of Molecular Sciences</i> , 2022, 23, 463.   | 1.8 | 11        |
| 4  | Display of a novel carboxylesterase CarCby on <i>Escherichia coli</i> cell surface for carbaryl pesticide bioremediation. <i>Microbial Cell Factories</i> , 2022, 21, .   | 1.9 | 7         |
| 5  | Biochemical and Molecular Characteristics of a Novel Hyaluronic Acid Lyase from <i>Citrobacter freundii</i> . <i>Foods</i> , 2022, 11, 1989.  | 1.9 | 1         |
| 6  | Analysis of Saccharification Products of High-Concentration Glutinous Rice Fermentation by <i>Rhizopus nigricans</i> Q3 and Alcoholic Fermentation of <i>Saccharomyces cerevisiae</i> GY-1. <i>ACS Omega</i> , 2021, 6, 8038-8044.                                      | 1.6 | 4         |
| 7  | Surface charge engineering of <i>Thermomyces lanuginosus</i> lipase improves enzymatic activity and biodiesel synthesis. <i>Biotechnology Letters</i> , 2021, 43, 1403-1411.  | 1.1 | 8         |
| 8  | Biotechnological Aspects of Salt-Tolerant Xylanases: A Review. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 8610-8624.   | 2.4 | 14        |
| 9  | Transcriptome Analysis of <i>Komagataeibacter europaeus</i> CGMCC 20445 Responses to Different Acidity Levels During Acetic Acid Fermentation. <i>Polish Journal of Microbiology</i> , 2021, 70, 305-313.   | 0.6 | 8         |
| 10 | Enhanced extracellular expression of Î±-Amylase DL3-4-1 in <i>Bacillus subtilis</i> via systematic screening of optimal signal peptides. <i>Process Biochemistry</i> , 2021, 108, 176-184.  | 1.8 | 6         |
| 11 | Removal of N-terminal tail changes the thermostability of the low-temperature-active exo-inulinase InuAGN25. <i>Bioengineered</i> , 2020, 11, 921-931.  | 1.4 | 8         |
| 12 | Improving low-temperature activity and thermostability of exo-inulinase InuAGN25 on the basis of increasing rigidity of the terminus and flexibility of the catalytic domain. <i>Bioengineered</i> , 2020, 11, 1233-1244.   | 1.4 | 4         |
| 13 | Plasticity of the 340-Loop in Influenza Neuraminidase Offers New Insight for Antiviral Drug Development. <i>International Journal of Molecular Sciences</i> , 2020, 21, 5655.   | 1.8 | 3         |
| 14 | Development of a whole-cell biocatalyst for diisobutyl phthalate degradation by functional display of a carboxylesterase on the surface of <i>Escherichia coli</i> . <i>Microbial Cell Factories</i> , 2020, 19, 114.   | 1.9 | 16        |
| 15 | Improving the Thermostability of <i>Rhizopus chinensis</i> Lipase Through Site-Directed Mutagenesis Based on B-Factor Analysis. <i>Frontiers in Microbiology</i> , 2020, 11, 346.   | 1.5 | 14        |
| 16 | Transcriptomic Analysis of <i>Pichia pastoris</i> ( <i>Komagataella phaffii</i> ) GS115 During Heterologous Protein Production Using a High-Cell-Density Fed-Batch Cultivation Strategy. <i>Frontiers in Microbiology</i> , 2020, 11, 463.                              | 1.5 | 17        |
| 17 | Molecular and Biochemical Characterization of Salt-Tolerant Trehalose-6-Phosphate Hydrolases Identified by Screening and Sequencing Salt-Tolerant Clones From the Metagenomic Library of the Gastrointestinal Tract. <i>Frontiers in Microbiology</i> , 2020, 11, 1466. | 1.5 | 3         |
| 18 | Research Article Product Composition Analysis and Process Research of Oligosaccharides Produced from Enzymatic Hydrolysis of High-Concentration Konjac Flour. <i>ACS Omega</i> , 2020, 5, 2480-2487.  | 1.6 | 5         |

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|----|--|-----|-----------|
| 19 | Characterization of EstZY: A new acetyl esterase with 7-aminocephalosporanic acid deacetylase activity from <i>Alicyclobacillus tengchongensis</i> . <i>International Journal of Biological Macromolecules</i> , 2020, 148, 333-341.                       | 3.6 | 5         |
| 20 | Identification and characterization of an acetyl esterase from <i>Paenibacillus</i> sp. XW-6-66 and its novel function in 7-aminocephalosporanic acid deacetylation. <i>Biotechnology Letters</i> , 2019, 41, 1059-1065.                                   | 1.1 | 2         |
| 21 | Biochemical and structural properties of a low-temperature-active glycoside hydrolase family 43 $\beta$ -xylosidase: Activity and instability at high neutral salt concentrations. <i>Food Chemistry</i> , 2019, 301, 125266.                              | 4.2 | 15        |
| 22 | Enhancing thermal tolerance of a fungal GH11 xylanase guided by B-factor analysis and multiple sequence alignment. <i>Enzyme and Microbial Technology</i> , 2019, 131, 109422.   | 1.6 | 18        |
| 23 | Characterization of a novel salt-, xylose- and alkali-tolerant GH43 bifunctional $\beta$ -xylosidase/ $\beta$ -l-arabinofuranosidase from the gut bacterial genome. <i>Journal of Bioscience and Bioengineering</i> , 2019, 128, 429-437.                  | 1.1 | 24        |
| 24 | Examining the molecular characteristics of glycoside hydrolase family 20 $\beta$ -N-acetylglucosaminidases with high activity. <i>Bioengineered</i> , 2019, 10, 71-77.   | 1.4 | 0         |
| 25 | Glycoside Hydrolase Family 39 $\beta$ -Xylosidases Exhibit $\beta$ -1,2-Xylosidase Activity for Transformation of Notoginsenosides: A New EC Subsubclass. <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 3220-3228.                         | 2.4 | 17        |
| 26 | Metagenomic Analysis of the Fecal Microbiomes of Wild Asian Elephants Reveals Microflora and Enzymes that Mainly Digest Hemicellulose. <i>Journal of Microbiology and Biotechnology</i> , 2019, 29, 1255-1265.   | 0.9 | 22        |
| 27 | A thermostable and alkaline GDSL-motif esterase from <i>Bacillus</i> sp. K91: crystallization and X-ray crystallographic analysis. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2018, 74, 117-121.                         | 0.4 | 5         |
| 28 | Enzymatic properties of $\beta$ -N-acetylglucosaminidases. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 93-103.  | 1.7 | 35        |
| 29 | Enhancing thermal tolerance of <i>Aspergillus niger</i> PhyA phytase directed by structural comparison and computational simulation. <i>BMC Biotechnology</i> , 2018, 18, 36.  | 1.7 | 20        |
| 30 | Glycoside Hydrolase Family 39 $\beta$ -Xylosidase of <i>Sphingomonas</i> Showing Salt/Ethanol/Trypsin Tolerance, Low-pH/Low-Temperature Activity, and Transxylosylation Activity. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 9465-9472. | 2.4 | 24        |
| 31 | Application and Analysis of <i>Rhizopus oryzae</i> Mycelia Extending Characteristic in Solid-state Fermentation for Producing Glucoamylase. <i>Journal of Microbiology and Biotechnology</i> , 2018, 28, 1865-1875.  | 0.9 | 4         |
| 32 | A <i>Shinella</i> $\beta$ -N-acetylglucosaminidase of glycoside hydrolase family 20 displays novel biochemical and molecular characteristics. <i>Extremophiles</i> , 2017, 21, 699-709.  | 0.9 | 21        |
| 33 | Improving the thermostability of a fungal GH11 xylanase via site-directed mutagenesis guided by sequence and structural analysis. <i>Biotechnology for Biofuels</i> , 2017, 10, 133.   | 6.2 | 51        |
| 34 | Genetic diversity of catechol 1,2-dioxygenase in the fecal microbial metagenome. <i>Journal of Basic Microbiology</i> , 2017, 57, 883-895.   | 1.8 | 8         |
| 35 | Distinctive molecular and biochemical characteristics of a glycoside hydrolase family 20 $\beta$ -N-acetylglucosaminidase and salt tolerance. <i>BMC Biotechnology</i> , 2017, 17, 37.   | 1.7 | 17        |
| 36 | NaCl-, protease-tolerant and cold-active endoglucanase from <i>Paenibacillus</i> sp. YD236 isolated from the feces of <i>Bos frontalis</i> . <i>SpringerPlus</i> , 2016, 5, 746.   | 1.2 | 18        |

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|----|--|-----|-----------|
| 37 | Characterization of a novel low-temperature-active, alkaline and sucrose-tolerant invertase. <i>Scientific Reports</i> , 2016, 6, 32081.   | 1.6 | 22        |
| 38 | Characterization of a NaCl-tolerant $\hat{1}^2$ -N-acetylglucosaminidase from <i>Sphingobacterium</i> sp. HWLB1. <i>Extremophiles</i> , 2016, 20, 547-557.   | 0.9 | 20        |
| 39 | A novel surfactant-, NaCl-, and protease-tolerant $\hat{1}^2$ -mannanase from <i>Bacillus</i> sp. HJ14. <i>Folia Microbiologica</i> , 2016, 61, 233-242.   | 1.1 | 13        |
| 40 | The 340-cavity in neuraminidase provides new opportunities for influenza drug development: A molecular dynamics simulation study. <i>Biochemical and Biophysical Research Communications</i> , 2016, 470, 130-136.   | 1.0 | 6         |
| 41 | Characterization of a Glycoside Hydrolase Family 27 $\hat{1}^{\pm}$ -Galactosidase from <i>Pontibacter</i> Reveals Its Novel Salt-Protease Tolerance and Transglycosylation Activity. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 2315-2324. | 2.4 | 19        |
| 42 | Characterization of two glycoside hydrolase family 36 $\hat{1}^{\pm}$ -galactosidases: Novel transglycosylation activity, lead-zinc tolerance, alkaline and multiple pH optima, and low-temperature activity. <i>Food Chemistry</i> , 2016, 194, 156-166.      | 4.2 | 29        |
| 43 | Molecular and Biochemical Characterization of a Novel Xylanase from <i>Massilia</i> sp. RBM26 Isolated from the Feces of <i>Rhinopithecus bieti</i> . <i>Journal of Microbiology and Biotechnology</i> , 2016, 26, 9-19.                                       | 0.9 | 34        |
| 44 | Identification and Characterization of a New Alkaline SGNH Hydrolase from a Thermophilic Bacterium <i>Bacillus</i> sp. K91. <i>Journal of Microbiology and Biotechnology</i> , 2016, 26, 730-738.  | 0.9 | 8         |
| 45 | Properties of a Newly Identified Esterase from <i>Bacillus</i> sp. K91 and Its Novel Function in Diisobutyl Phthalate Degradation. <i>PLoS ONE</i> , 2015, 10, e0119216.   | 1.1 | 44        |
| 46 | A large-scale screen reveals genes that mediate electrotaxis in <i>Dictyostelium discoideum</i> . <i>Science Signaling</i> , 2015, 8, ra50.  | 1.6 | 39        |
| 47 | Characterization of an exo-inulinase from <i>Arthrobacter</i> : A novel NaCl-tolerant exo-inulinase with high molecular mass. <i>Bioengineered</i> , 2015, 6, 99-105.  | 1.4 | 10        |
| 48 | Characterization of <i>Sphingomonas</i> sp. JB13 exo-inulinase: a novel detergent-, salt-, and protease-tolerant exo-inulinase. <i>Extremophiles</i> , 2015, 19, 383-393.  | 0.9 | 20        |
| 49 | Molecular and Biochemical Characterization of a Novel Multidomain Xylanase from <i>Arthrobacter</i> sp. GN16 Isolated from the Feces of <i>Grus nigricollis</i> . <i>Applied Biochemistry and Biotechnology</i> , 2015, 175, 573-588.                          | 1.4 | 10        |
| 50 | Molecular and biochemical characterizations of a new low-temperature active mannanase. <i>Folia Microbiologica</i> , 2015, 60, 483-492.  | 1.1 | 17        |
| 51 | Metagenomic analysis of the <i>Rhinopithecus bieti</i> fecal microbiome reveals a broad diversity of bacterial and glycoside hydrolase profiles related to lignocellulose degradation. <i>BMC Genomics</i> , 2015, 16, 174.                                    | 1.2 | 60        |
| 52 | Kinetic and thermodynamic characterization of a novel low-temperature-active xylanase from <i>Arthrobacter</i> sp. GN16 isolated from the feces of <i>Grus nigricollis</i> . <i>Bioengineered</i> , 2015, 6, 111-114.  | 1.4 | 8         |
| 53 | Cold-active and NaCl-tolerant exo-inulinase from a cold-adapted <i>Arthrobacter</i> sp. MN8 and its potential for use in the production of fructose at low temperatures. <i>Journal of Bioscience and Bioengineering</i> , 2015, 119, 267-274.                 | 1.1 | 17        |
| 54 | A novel low-temperature-active exo-inulinase identified based on Molecular-Activity strategy from <i>Sphingobacterium</i> sp. GN25 isolated from feces of <i>Grus nigricollis</i> . <i>Process Biochemistry</i> , 2014, 49, 1656-1663.                         | 1.8 | 20        |

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|----|--|-----|-----------|
| 55 | A thermo-halo-tolerant and proteinase-resistant endoxylanase from <i>Bacillus</i> sp. HJ14. <i>Folia Microbiologica</i> , 2014, 59, 423-431.   | 1.1 | 17        |
| 56 | Enhancing lipid productivity by co-cultivation of <i>Chlorella</i> sp. U4341 and <i>Monoraphidium</i> sp. FXY-10. <i>Journal of Bioscience and Bioengineering</i> , 2014, 118, 72-77.  | 1.1 | 62        |
| 57 | Heterologous expression and characterization of a malathion-hydrolyzing carboxylesterase from a thermophilic bacterium, <i>Alicyclobacillus tengchongensis</i> . <i>Biotechnology Letters</i> , 2013, 35, 1283-1289.                                     | 1.1 | 30        |
| 58 | Metagenomic Analysis of the Pygmy Loris Fecal Microbiome Reveals Unique Functional Capacity Related to Metabolism of Aromatic Compounds. <i>PLoS ONE</i> , 2013, 8, e56565.  | 1.1 | 82        |
| 59 | De novo sequencing and analysis of the termite mushroom ( <i>Termitomyces albuminosus</i> ) transcriptome to discover putative genes involved in bioactive component biosynthesis. <i>Journal of Bioscience and Bioengineering</i> , 2012, 114, 228-231. | 1.1 | 17        |
| 60 | Isolation of a novel strain of <i>Monoraphidium</i> sp. and characterization of its potential application as biodiesel feedstock. <i>Bioresource Technology</i> , 2012, 121, 256-262.  | 4.8 | 122       |
| 61 | Characterization of a family 3 polysaccharide lyase with broad temperature adaptability, thermo-alkali stability, and ethanol tolerance. <i>Biotechnology and Bioprocess Engineering</i> , 2012, 17, 729-738.  | 1.4 | 4         |
| 62 | A novel xylanase with tolerance to ethanol, salt, protease, SDS, heat, and alkali from actinomycete <i>Lechevalieria</i> sp. HJ3. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2012, 39, 965-975.                                       | 1.4 | 25        |
| 63 | Novel low-temperature-active, salt-tolerant and proteases-resistant endo-1,4- $\beta$ -mannanase from a new <i>Sphingomonas</i> strain. <i>Journal of Bioscience and Bioengineering</i> , 2012, 113, 568-574.  | 1.1 | 25        |
| 64 | Molecular and Biochemical Characterization of a Novel Intracellular Low-Temperature-Active Xylanase. <i>Journal of Microbiology and Biotechnology</i> , 2012, 22, 501-509.   | 0.9 | 16        |
| 65 | Cloning, Heterologous Expression, and Characterization of Novel Protease-Resistant $\beta$ -Galactosidase from New <i>Sphingomonas</i> Strain. <i>Journal of Microbiology and Biotechnology</i> , 2012, 22, 1532-1539.                                   | 0.9 | 15        |
| 66 | Deletion of the Loop Linking Two Domains of Exo-Inulinase InuAMN8 Diminished the Enzymatic Thermo-Halo-Alcohol Tolerance. <i>Frontiers in Microbiology</i> , 0, 13, .  | 1.5 | 0         |