Jianzhong Sun

List of Publications by Year
in descending order

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99 papers	5,171 citations	101384 36 h-index	98622 67 g-index
104 all docs	104 docs citations	104 times ranked	3473 citing authors

#	Article	IF	Citations
1	A critical review on the treatment of dye-containing wastewater: Ecotoxicological and health concerns of textile dyes and possible remediation approaches for environmental safety. Ecotoxicology and Environmental Safety, 2022, 231, 113160.	2.9	879
2	Current advances and future perspectives of 3D printing natural-derived biopolymers. Carbohydrate Polymers, 2019, 207, 297-316.	5.1	270
3	Degradation of conventional plastic wastes in the environment: A review on current status of knowledge and future perspectives of disposal. Science of the Total Environment, 2021, 771, 144719.	3.9	258
4	3D printing with cellulose materials. Cellulose, 2018, 25, 4275-4301.	2.4	204
5	Plastic wastes biodegradation: Mechanisms, challenges and future prospects. Science of the Total Environment, 2021, 780, 146590.	3.9	173
6	Environmental fate of tetracycline antibiotics: degradation pathway mechanisms, challenges, and perspectives. Environmental Sciences Europe, 2021, 33, .	2.6	142
7	Lignin valorization: Status, challenges and opportunities. Bioresource Technology, 2022, 347, 126696.	4.8	136
8	Biodegradation of alkaline lignin by Bacillus ligniniphilus L1. Biotechnology for Biofuels, 2017, 10, 44.	6.2	129
9	Ecofriendly biodegradation of Reactive Black 5 by newly isolated Sterigmatomyces halophilus SSA1575, valued for textile azo dye wastewater processing and detoxification. Scientific Reports, 2020, 10, 12370.	1.6	107
10	Effective bio-pretreatment of sawdust waste with a novel microbial consortium for enhanced biomethanation. Bioresource Technology, 2017, 238, 425-432.	4.8	103
11	Processing nanocellulose to bulk materials: a review. Cellulose, 2019, 26, 7585-7617.	2.4	98
12	Nanobiotechnological advancements in agriculture and food industry: Applications, nanotoxicity, and future perspectives. Science of the Total Environment, 2021, 792, 148359.	3.9	92
13	Recent Development of Extremophilic Bacteria and Their Application in Biorefinery. Frontiers in Bioengineering and Biotechnology, 2020, 8, 483.	2.0	84
14	Performance of a Newly Isolated Salt-Tolerant Yeast Strain Sterigmatomyces halophilus SSA-1575 for Azo Dye Decolorization and Detoxification. Frontiers in Microbiology, 2020, 11, 1163.	1.5	83
15	The endophytic bacteria isolated from elephant grass (Pennisetum purpureum Schumach) promote plant growth and enhance salt tolerance of Hybrid Pennisetum. Biotechnology for Biofuels, 2016, 9, 190.	6.2	80
16	Construction of a new lipase- and xylanase-producing oleaginous yeast consortium capable of reactive azo dye degradation and detoxification. Bioresource Technology, 2020, 313, 123631.	4.8	67
17	Valorizing lignin-like dyes and textile dyeing wastewater by a newly constructed lipid-producing and lignin modifying oleaginous yeast consortium valued for biodiesel and bioremediation. Journal of Hazardous Materials, 2021, 403, 123575.	6.5	65
18	Screening and characterizing of xylanolytic and xylose-fermenting yeasts isolated from the wood-feeding termite, Reticulitermes chinensis. PLoS ONE, 2017, 12, e0181141.	1.1	65

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19	Screening and construction of a novel microbial consortium SSA-6 enriched from the gut symbionts of wood-feeding termite, Coptotermes formosanus and its biomass-based biorefineries. Fuel, 2019, 236, 1128-1145.	3.4	60
20	Construction of a novel cold-adapted oleaginous yeast consortium valued for textile azo dye wastewater processing and biorefinery. Fuel, 2021, 285, 119050.	3.4	59
21	Stimuli-responsive cellulose nanomaterials for smart applications. Carbohydrate Polymers, 2020, 235, 115933.	5.1	57
22	Coupling azo dye degradation and biodiesel production by manganese-dependent peroxidase producing oleaginous yeasts isolated from wood-feeding termite gut symbionts. Biotechnology for Biofuels, 2021, 14, 61.	6.2	56
23	Insight into Depolymerization Mechanism of Bacterial Laccase for Lignin. ACS Sustainable Chemistry and Engineering, 2020, 8, 12920-12933.	3.2	53
24	Pharmaceutical Potential of a Novel Chitosan Derivative Schiff Base with Special Reference to Antibacterial, Anti-Biofilm, Antioxidant, Anti-Inflammatory, Hemocompatibility and Cytotoxic Activities. Pharmaceutical Research, 2019, 36, 5.	1.7	52
25	Synthesis, characterization and biomedical applications of a novel Schiff base on methyl acrylate-functionalized chitosan bearing p-nitrobenzaldehyde groups. International Journal of Biological Macromolecules, 2019, 122, 833-843.	3.6	50
26	Construction of novel microbial consortia CS-5 and BC-4 valued for the degradation of catalpa sawdust and chlorophenols simultaneously with enhancing methane production. Bioresource Technology, 2020, 301, 122720.	4.8	50
27	Enhanced digestion of bio-pretreated sawdust using a novel bacterial consortium: Microbial community structure and methane-producing pathways. Fuel, 2019, 254, 115604.	3.4	49
28	Cellulose Nanofibrils Filled Poly(Lactic Acid) Biocomposite Filament for FDM 3D Printing. Molecules, 2020, 25, 2319.	1.7	49
29	Physico-chemical pretreatment and fungal biotreatment for park wastes and cattle dung for biogas production. SpringerPlus, 2015, 4, 712.	1.2	47
30	Envisioning the era of 3D printing: a conceptual model for the fashion industry. Fashion and Textiles, 2017, 4, .	1.3	47
31	Enhanced anaerobic digestion performance by two artificially constructed microbial consortia capable of woody biomass degradation and chlorophenols detoxification. Journal of Hazardous Materials, 2020, 389, 122076.	6.5	47
32	Performance of Meyerozyma caribbica as a novel manganese peroxidase-producing yeast inhabiting wood-feeding termite gut symbionts for azo dye decolorization and detoxification. Science of the Total Environment, 2022, 806, 150665.	3.9	47
33	Stimuli induced cellulose nanomaterials alignment and its emerging applications: A review. Carbohydrate Polymers, 2020, 230, 115609.	5.1	46
34	Phytochemical analysis and assessment of antioxidant and antimicrobial activities of some medicinal plant species from Egyptian flora. Journal of Applied Biomedicine, 2018, 16, 289-300.	0.6	45
35	Bacterial chemotaxis: a way forward to aromatic compounds biodegradation. Environmental Sciences Europe, 2020, 32, .	2.6	42
36	Valorisation of wheat straw and bioethanol production by a novel xylanase- and cellulase-producing Streptomyces strain isolated from the wood-feeding termite, Microcerotermes species. Fuel, 2022, 310, 122333.	3.4	42

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37	Effective thermal pretreatment of water hyacinth (Eichhornia crassipes) for the enhancement of biomethanation: VITÂ® gene probe technology for microbial community analysis with special reference to methanogenic Archaea. Journal of Environmental Chemical Engineering, 2019, 7, 102853.	3.3	41
38	Ultrasonic emulsification assisted immobilized Burkholderia cepacia lipase catalyzed transesterification of soybean oil for biodiesel production in a novel reactor design. Renewable Energy, 2019, 135, 1025-1034.	4.3	40
39	Genomics and biochemistry investigation on the metabolic pathway of milled wood and alkali lignin-derived aromatic metabolites of Comamonas serinivorans SP-35. Biotechnology for Biofuels, 2018, 11, 338.	6.2	39
40	Bacillus ligniniphilus sp. nov., an alkaliphilic and halotolerant bacterium isolated from sediments of the South China Sea. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 1712-1717.	0.8	37
41	Transcriptome analysis of the digestive system of a wood-feeding termite (Coptotermes formosanus) revealed a unique mechanism for effective biomass degradation. Biotechnology for Biofuels, 2018, 11, 24.	6.2	37
42	Evaluation of the kinematic viscosity in biodiesel production with waste vegetable oil, ultrasonic irradiation and enzymatic catalysis: A comparative study in two-reactors. Fuel, 2018, 227, 448-456.	3.4	37
43	Harnessing microbial wealth for lignocellulose biomass valorization through secretomics: a review. Biotechnology for Biofuels, 2021, 14, 154.	6.2	37
44	Drug resistance profile and molecular characterization of extended spectrum beta-lactamase (ESI²L)-producing Pseudomonas aeruginosa isolated from burn wound infections. Essential oils and their potential for utilization. Microbial Pathogenesis, 2018, 116, 301-312.	1.3	36
45	Characterization of cold adapted and ethanol tolerant Î²-glucosidase from Bacillus cellulosilyticus and its application for directed hydrolysis of cellobiose to ethanol. International Journal of Biological Macromolecules, 2018, 109, 872-879.	3.6	36
46	Development of Cellulose Nanofibril/Casein-Based 3D Composite Hemostasis Scaffold for Potential Wound-Healing Application. ACS Applied Materials & Interfaces, 2022, 14, 3792-3808.	4.0	36
47	Structure and Properties of Polylactic Acid Biocomposite Films Reinforced with Cellulose Nanofibrils. Molecules, 2020, 25, 3306.	1.7	35
48	Functionalization of nanocellulose applied with biological molecules for biomedical application: A review. Carbohydrate Polymers, 2022, 285, 119208.	5.1	35
49	Efficacy of metal oxide nanoparticles as novel antimicrobial agents against multi-drug and multi-virulent Staphylococcus aureus isolates from retail raw chicken meat and giblets. International Journal of Food Microbiology, 2021, 344, 109116.	2.1	29
50	Description of Comamonas serinivorans sp. nov., isolated from wheat straw compost. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 4141-4146.	0.8	27
51	Valorization Potential of a Novel Bacterial Strain, Bacillus altitudinis RSP75, towards Lignocellulose Bioconversion: An Assessment of Symbiotic Bacteria from the Stored Grain Pest, Tribolium castaneum. Microorganisms, 2021, 9, 1952.	1.6	27
52	Biodegradation of creosote-treated wood by two novel constructed microbial consortia for the enhancement of methane production. Bioresource Technology, 2021, 323, 124544.	4.8	26
53	Exploring new marine bacterial species, Alcaligenes faecalis Alca F2018 valued for bioconversion of shrimp chitin to chitosan for concomitant biotechnological applications. International Journal of Biological Macromolecules, 2022, 196, 35-45.	3.6	26
54	Scaled-up biodiesel synthesis from Chinese Tallow Kernel oil catalyzed by Burkholderia cepacia lipase through ultrasonic assisted technology: A non-edible and alternative source of bio energy. Ultrasonics Sonochemistry, 2019, 58, 104658.	3.8	25

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55	Construction of a novel microbial consortium valued for the effective degradation and detoxification of creosote-treated sawdust along with enhanced methane production. Journal of Hazardous Materials, 2021, 418, 126091.	6.5	25
56	Decoding lignin valorization pathways in the extremophilicBacillus ligniniphilusL1 for vanillin biosynthesis. Green Chemistry, 2021, 23, 9554-9570.	4.6	25
57	Extremophiles and extremozymes in lignin bioprocessing. Renewable and Sustainable Energy Reviews, 2022, 157, 112069.	8.2	25
58	Recent advances in the life cycle assessment of biodiesel production linked to azo dye degradation using yeast symbionts of termite guts: A critical review. Energy Reports, 2022, 8, 7557-7581.	2.5	24
59	Biosynthesis of Silver Nanoparticles by Marine Actinobacterium Nocardiopsis dassonvillei and Exploring Their Therapeutic Potentials. Frontiers in Microbiology, 2021, 12, 705673.	1.5	23
60	Bacterial membrane transporter systems for aromatic compounds: Regulation, engineering, and biotechnological applications. Biotechnology Advances, 2022, 59, 107952.	6.0	23
61	Sustainable cellulose nanomaterials for environmental remediation - Achieving clean air, water, and energy: A review. Carbohydrate Polymers, 2022, 285, 119251.	5.1	23
62	The effects of water hyacinth pretreated digestate on Lupinus termis L. seedlings under salinity stress: A complementary study. Journal of Environmental Chemical Engineering, 2019, 7, 103159.	3.3	22
63	Kinetic thermal behavior of nanocellulose filled polylactic acid filament for fused filament fabrication 3D printing. Journal of Applied Polymer Science, 2020, 137, 48374.	1.3	22
64	Lycium shawii Roem. & Schult.: A new bioactive antimicrobial and antioxidant agent to combat multi-drug/pan-drug resistant pathogens of wound burn infections. Journal of Traditional and Complementary Medicine, 2020, 10, 13-25.	1.5	21
65	Molecular characterization of virulence and drug resistance genes-producing Escherichia coli isolated from chicken meat: Metal oxide nanoparticles as novel antibacterial agents. Microbial Pathogenesis, 2020, 143, 104164.	1.3	21
66	Wood-feeding termite gut symbionts as an obscure yet promising source of novel manganese peroxidase-producing oleaginous yeasts intended for azo dye decolorization and biodiesel production. Biotechnology for Biofuels, 2021, 14, 229.	6.2	21
67	Recent Progress on the Characterization of Cellulose Nanomaterials by Nanoscale Infrared Spectroscopy. Nanomaterials, 2021, 11, 1353.	1.9	20
68	Dye Decoloring Peroxidase Structure, Catalytic Properties and Applications: Current Advancement and Futurity. Catalysts, 2021, 11, 955.	1.6	20
69	Woodâ€‘feeding termites as an obscure yet promising source of bacteria for biodegradation and detoxification of creosote-treated wood along with methane production enhancement. Bioresource Technology, 2021, 338, 125521.	4.8	20
70	Identification and expression analysis of Sorghum bicolor gibberellin oxidase genes with varied gibberellin levels involved in regulation of stem biomass. Industrial Crops and Products, 2020, 145, 111951.	2.5	19
71	Evaluation and characterization of the cellulolytic bacterium, Bacillus pumilus SL8 isolated from the gut of oriental leafworm Spodoptera litura: An assessment of its potential value for lignocellulose bioconversion. Environmental Technology and Innovation, 2022, 27, 102459.	3.0	19
72	Exploring the potential of a newly constructed manganese peroxidase-producing yeast consortium for tolerating lignin degradation inhibitors while simultaneously decolorizing and detoxifying textile azo dye wastewater. Bioresource Technology, 2022, 351, 126861.	4.8	17

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73	Syzygium aromaticum L.: Traditional herbal medicine against cagA and vacA toxin genes-producing drug resistant Helicobacter pylori. Journal of Traditional and Complementary Medicine, 2020, 10, 366-377.	1.5	16
74	Evaluation of cellulose degrading bacteria isolated from the gut-system of cotton bollworm, Helicoverpa armigera and their potential values in biomass conversion. PeerJ, 0, 9, e11254.	0.9	16
75	Description of Leucobacter holotrichiae sp. nov., isolated from the gut of Holotrichia oblita larvae. International Journal of Systematic and Evolutionary Microbiology, 2016, 66, 1857-1861.	0.8	16
76	Highly thermostable GH51 Î±-arabinofuranosidase from Hungateiclostridium clariflavum DSM 19732. Applied Microbiology and Biotechnology, 2019, 103, 3783-3793.	1.7	15
77	Polysaccharide-based hemostats: recent developments, challenges, and future perspectives. Cellulose, 2021, 28, 8899-8937.	2.4	14
78	Could termites be hiding a goldmine of obscure yet promising yeasts for energy crisis solutions based on aromatic wastes? AÂcritical state-of-the-artÂreview. , 2022, 15, 35.		14
79	Controlling the Size and Film Strength of Individualized Cellulose Nanofibrils Prepared by Combined Enzymatic Pretreatment and High Pressure Microfluidization. BioResources, 2015, 11, .	0.5	13
80	Growth factor functionalized biodegradable nanocellulose scaffolds for potential wound healing application. Cellulose, 2021, 28, 5643.	2.4	13
81	Nano-biofertilizers: Synthesis, advantages, and applications. , 2021, , 359-370.		12
82	Genome Editing of the Anaerobic Thermophile Thermoanaerobacter ethanolicus Using Thermostable Cas9. Applied and Environmental Microbiology, 2020, 87, .	1.4	10
83	Bacillus ectoiniformans sp. nov., a halotolerant bacterium isolated from deep-sea sediments. International Journal of Systematic and Evolutionary Microbiology, 2016, 66, 616-622.	0.8	9
84	Acidic Versus Alkaline Bacterial Degradation of Lignin Through Engineered Strain E. coli BL21(Lacc): Exploring the Differences in Chemical Structure, Morphology, and Degradation Products. Frontiers in Bioengineering and Biotechnology, 2020, 8, 671.	2.0	8
85	Correction to: Environmental fate of tetracycline antibiotics: degradation pathway mechanisms, challenges, and perspectives. Environmental Sciences Europe, 2021, 33, .	2.6	8
86	A novel Bacillus ligniniphilus catechol 2,3-dioxygenase shows unique substrate preference and metal requirement. Scientific Reports, 2021, 11, 23982.	1.6	8
87	Streptomyces catenulae as a Novel Marine Actinobacterium Mediated Silver Nanoparticles: Characterization, Biological Activities, and Proposed Mechanism of Antibacterial Action. Frontiers in Microbiology, 2022, 13, 833154.	1.5	8
88	Exploring the regionâ€wise diversity and functions of symbiotic bacteria in the gut system of woodâ€feeding termite, Coptotermes formosanus, toward the degradation of cellulose, hemicellulose, and organic dyes. Insect Science, 2022, 29, 1414-1432.	1.5	7
89	Microbial diversity and community structure in deep-sea sediments of South Indian Ocean. Environmental Science and Pollution Research, 2022, 29, 45793-45807.	2.7	7
90	Exploring the potential of benzoic acid derived from the endophytic fungus strain Neurospora crassa SSN01 as a promising antimicrobial agent in wound healing. Microbiological Research, 2022, 262, 127108.	2.5	7

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91	Purification and Characterization of a Hemocyanin (Hemo1) with Potential Lignin-Modification Activities from the Wood-Feeding Termite, Coptotermes formosanus Shiraki. Applied Biochemistry and Biotechnology, 2015, 175, 687-697.	1.4	6
92	Light-driven bio-decolorization of triphenylmethane dyes by a Clostridium thermocellum-CdS biohybrid. Journal of Hazardous Materials, 2022, 431, 128596.	6.5	6
93	Templated synthesis and assembly with sustainable cellulose nanomaterial for functional nanostructure. Cellulose, 2022, 29, 4287-4321.	2.4	6
94	New Insights into the Co-Occurrences of Glycoside Hydrolase Genes among Prokaryotic Genomes through Network Analysis. Microorganisms, 2021, 9, 427.	1.6	5
95	Exploring the potential of Cinnamomum zeylanicum oil against drug resistant Helicobacter pylori-producing cytotoxic genes. Journal of Applied Biomedicine, 2022, 20, 22-36.	0.6	5
96	Preparation, characterization, and oxygen barrier properties of regenerated cellulose/polyvinyl alcohol blend films. BioResources, 2020, 15, 2735-2746.	0.5	4
97	Unveiling the transcriptomic complexity of Miscanthus sinensis using a combination of PacBio long read- and Illumina short read sequencing platforms. BMC Genomics, 2021, 22, 690.	1.2	2
98	CRISPR/Cas genome editing systems in thermophiles: Current status, associated challenges, and future perspectives. Advances in Applied Microbiology, 2022, 118, 1-30.	1.3	2
99	Microalgae as a Renewable Resource for Bioplastic Production. Impact of Meat Consumption on Health and Environmental Sustainability, 2022, , 471-500.	0.4	2