Jian Dong Cui

List of Publications by Year in descending order

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77 papers	4,111 citations	101384 36 h-index	118652 62 g-index
82 all docs	82 docs citations	82 times ranked	3301 citing authors

#	Article	IF	Citations
1	Recent progress in multienzymes co-immobilization and multienzyme system applications. Chemical Engineering Journal, 2019, 373, 1254-1278.	6.6	257
2	Production and use of immobilized lipases in/on nanomaterials: A review from the waste to biodiesel production. International Journal of Biological Macromolecules, 2020, 152, 207-222.	3.6	226
3	Optimization protocols and improved strategies of cross-linked enzyme aggregates technology: current development and future challenges. Critical Reviews in Biotechnology, 2015, 35, 15-28.	5.1	212
4	Organicâ€“inorganic hybrid nanoflowers: A novel host platform for immobilizing biomolecules. Coordination Chemistry Reviews, 2017, 352, 249-263.	9.5	194
5	Mesoporous Metalâ€“Organic Framework with Well-Defined Cruciate Flower-Like Morphology for Enzyme Immobilization. ACS Applied Materials & Interfaces, 2017, 9, 10587-10594.	4.0	173
6	Optimization protocols and improved strategies for metal-organic frameworks for immobilizing enzymes: Current development and future challenges. Coordination Chemistry Reviews, 2018, 370, 22-41.	9.5	162
7	â€œSmartâ€•chemistry and its application in peroxidase immobilization using different support materials. International Journal of Biological Macromolecules, 2018, 119, 278-290.	3.6	150
8	Metal-organic frameworks with different dimensionalities: An ideal host platform for enzyme@MOF composites. Coordination Chemistry Reviews, 2022, 454, 214327.	9.5	124
9	Surfactant-activated lipase hybrid nanoflowers with enhanced enzymatic performance. Scientific Reports, 2016, 6, 27928.	1.6	103
10	A facile construction of bacterial cellulose/ZnO nanocomposite films and their photocatalytic and antibacterial properties. International Journal of Biological Macromolecules, 2019, 132, 692-700.	3.6	100
11	Shielding effects of Fe3+-tannic acid nanocoatings for immobilized enzyme on magnetic Fe3O4@silica core shell nanosphere. Chemical Engineering Journal, 2018, 343, 629-637.	6.6	93
12	Silica encapsulated catalase@metal-organic framework composite: A highly stable and recyclable biocatalyst. Chemical Engineering Journal, 2018, 351, 506-514.	6.6	93
13	Hybrid Cross-Linked Lipase Aggregates with Magnetic Nanoparticles: A Robust and Recyclable Biocatalysis for the Epoxidation of Oleic Acid. Journal of Agricultural and Food Chemistry, 2016, 64, 7179-7187.	2.4	89
14	Three-dimensional ordered magnetic macroporous metal-organic frameworks for enzyme immobilization. Journal of Colloid and Interface Science, 2021, 590, 436-445.	5.0	89
15	Co-immobilization multienzyme nanoreactor with co-factor regeneration for conversion of CO2. International Journal of Biological Macromolecules, 2020, 155, 110-118.	3.6	82
16	Biotechnological production and applications ofCordyceps militaris, a valued traditional Chinese medicine. Critical Reviews in Biotechnology, 2015, 35, 475-484.	5.1	78
17	The antimicrobial effects and mechanism of Îµ-poly-lysine against Staphylococcus aureus. Bioresources and Bioprocessing, 2019, 6, .	2.0	78
18	Enhanced enzymatic performance of immobilized lipase on metal organic frameworks with superhydrophobic coating for biodiesel production. Journal of Colloid and Interface Science, 2021, 602, 426-436.	5.0	78

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19	Tailoring enzyme microenvironment: State-of-the-art strategy to fulfill the quest for efficient bio-catalysis. International Journal of Biological Macromolecules, 2019, 130, 186-196.	3.6	76
20	Cross-Linked Enzyme Aggregates of Phenylalanine Ammonia Lyase: Novel Biocatalysts for Synthesis of L-Phenylalanine. Applied Biochemistry and Biotechnology, 2012, 167, 835-844.	1.4	69
21	Self-assembly of activated lipase hybrid nanoflowers with superior activity and enhanced stability. Biochemical Engineering Journal, 2020, 158, 107582.	1.8	67
22	Activated magnetic lipase-inorganic hybrid nanoflowers: A highly active and recyclable nanobiocatalyst for biodiesel production. Renewable Energy, 2021, 171, 825-832.	4.3	67
23	Hierarchical micro- and mesoporous ZIF-8 with coreâ€“shell superstructures using colloidal metal sulfates as soft templates for enzyme immobilization. Journal of Colloid and Interface Science, 2022, 610, 709-718.	5.0	64
24	Environmental impact of lignocellulosic wastes and their effective exploitation as smart carriers â€“ A drive towards greener and eco-friendlier biocatalytic systems. Science of the Total Environment, 2020, 722, 137903.	3.9	62
25	Immobilized carbonic anhydrase on mesoporous cruciate flower-like metal organic framework for promoting CO2 sequestration. International Journal of Biological Macromolecules, 2018, 117, 189-198.	3.6	61
26	Biodegradation of polyvinyl alcohol using cross-linked enzyme aggregates of degrading enzymes from Bacillus niacini. International Journal of Biological Macromolecules, 2019, 124, 10-16.	3.6	58
27	Carbonic Anhydrase@ZIF-8 Hydrogel Composite Membrane with Improved Recycling and Stability for Efficient CO₂ Capture. Journal of Agricultural and Food Chemistry, 2019, 67, 3372-3379.	2.4	54
28	Enzymes@ZIF-8 Nanocomposites with Protection Nanocoating: Stability and Acid-Resistant Evaluation. Polymers, 2019, 11, 27.	2.0	52
29	Harnessing the biocatalytic attributes and applied perspectives of nanoengineered laccasesâ€”A review. International Journal of Biological Macromolecules, 2021, 166, 352-373.	3.6	52
30	Biotechnological production and applications of microbial phenylalanine ammonia lyase: a recent review. Critical Reviews in Biotechnology, 2014, 34, 258-268.	5.1	49
31	Hybrid Magnetic Cross-Linked Enzyme Aggregates of Phenylalanine Ammonia Lyase from Rhodotorula glutinis. PLoS ONE, 2014, 9, e97221.	1.1	49
32	A Simple Technique of Preparing Stable CLEAs of Phenylalanine Ammonia Lyase Using Co-aggregation with Starch and Bovine Serum Albumin. Applied Biochemistry and Biotechnology, 2013, 170, 1827-1837.	1.4	47
33	Bimetal based inorganic-carbonic anhydrase hybrid hydrogel membrane for CO2 capture. Journal of CO2 Utilization, 2020, 39, 101171.	3.3	42
34	Enzyme shielding by mesoporous organosilica shell on Fe3O4@silica yolk-shell nanospheres. International Journal of Biological Macromolecules, 2018, 117, 673-682.	3.6	41
35	Encapsulation of Spherical Cross-Linked Phenylalanine Ammonia Lyase Aggregates in Mesoporous Biosilica. Journal of Agricultural and Food Chemistry, 2017, 65, 618-625.	2.4	40
36	Biopolymers and nanostructured materials to develop pectinases-based immobilized nano-biocatalytic systems for biotechnological applications. Food Research International, 2021, 140, 109979.	2.9	38

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37	Effects of Îµ-Poly-l-lysine on the cell wall of Saccharomyces cerevisiae and its involved antimicrobial mechanism. International Journal of Biological Macromolecules, 2018, 118, 2230-2236.	3.6	37
38	Design and bio-applications of biological metal-organic frameworks. Korean Journal of Chemical Engineering, 2019, 36, 1949-1964.	1.2	36
39	Preparation of spherical cross-linked lipase aggregates with improved activity, stability and reusability characteristic in water-in-ionic liquid microemulsion. Journal of Chemical Technology and Biotechnology, 2017, 92, 1785-1793.	1.6	35
40	Combination of multi-enzyme expression fine-tuning and co-substrates addition improves phenyllactic acid production with an Escherichia coli whole-cell biocatalyst. Bioresource Technology, 2019, 287, 121423.	4.8	32
41	A facile technique to prepare cross-linked enzyme aggregates of bovine pancreatic lipase using bovine serum albumin as an additive. Korean Journal of Chemical Engineering, 2016, 33, 610-615.	1.2	30
42	Acid-resistant enzyme@MOF nanocomposites with mesoporous silica shells for enzymatic applications in acidic environments. Journal of Biotechnology, 2019, 306, 54-61.	1.9	30
43	Mesoporous phenylalanine ammonia lyase microspheres with improved stability through calcium carbonate templating. International Journal of Biological Macromolecules, 2017, 98, 887-896.	3.6	29
44	Efficient Immobilization of Enzymes on Amino Functionalized MIL-125-NH2 Metal Organic Framework. Biotechnology and Bioprocess Engineering, 2022, 27, 135-144.	1.4	29
45	Production of l-phenylalanine from trans-cinnamic acids by high-level expression of phenylalanine ammonia lyase gene from Rhodosporidium toruloides in Escherichia coli. Biochemical Engineering Journal, 2008, 42, 193-197.	1.8	28
46	Comparison of culture methods on exopolysaccharide production in the submerged culture of Cordyceps militaris and process optimization. Letters in Applied Microbiology, 2011, 52, 123-128.	1.0	28
47	Mesoporous CLEAs-silica composite microparticles with high activity and enhanced stability. Scientific Reports, 2015, 5, 14203.	1.6	26
48	Paper-based biosensor based on phenylalnine ammonia lyase hybrid nanoflowers for urinary phenylalanine measurement. International Journal of Biological Macromolecules, 2021, 166, 601-610.	3.6	26
49	Evaluation of Metal Ions and Surfactants Effect on Cell Growth and Exopolysaccharide Production in Two-Stage Submerged Culture of Cordyceps militaris. Applied Biochemistry and Biotechnology, 2012, 168, 1394-1404.	1.4	25
50	Immobilization of Cross-Linked Phenylalanine Ammonia Lyase Aggregates in Microporous Silica Gel. PLoS ONE, 2013, 8, e80581.	1.1	25
51	Simple Technique for Preparing Stable and Recyclable Cross-Linked Enzyme Aggregates with Crude-Pored Microspherical Silica Core. Industrial & Engineering Chemistry Research, 2014, 53, 16176-16182.	1.8	24
52	Nanostructured materials as a host matrix to develop robust peroxidases-based nanobiocatalytic systems. International Journal of Biological Macromolecules, 2020, 162, 1906-1923.	3.6	24
53	Glutamate Oxidase-Integrated Biomimetic Metalâ€“Organic Framework Hybrids as Cascade Nanozymes for Ultrasensitive Glutamate Detection. Journal of Agricultural and Food Chemistry, 2022, 70, 3785-3794.	2.4	22
54	Production of Extracellular Water-Insoluble Polysaccharide from Pseudomonas sp.. Journal of Agricultural and Food Chemistry, 2012, 60, 4865-4871.	2.4	21

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55	Enzyme Shielding in a Large Mesoporous Hollow Silica Shell for Improved Recycling and Stability Based on CaCO₃ Microtemplates and Biomimetic Silicification. Journal of Agricultural and Food Chemistry, 2017, 65, 3883-3890.	2.4	21
56	Optimization of medium for phenylalanine ammonia lyase production in E. coli using response surface methodology. Korean Journal of Chemical Engineering, 2010, 27, 174-178.	1.2	20
57	Bienzyme Magnetic Nanobiocatalyst with Fe³⁺â€“Tannic Acid Film for One-Pot Starch Hydrolysis. Journal of Agricultural and Food Chemistry, 2018, 66, 8753-8760.	2.4	20
58	Optimization of medium on exopolysaccharides production in submerged culture of Cordyceps militaris. Food Science and Biotechnology, 2010, 19, 1567-1571.	1.2	19
59	Magnetic mesoporous enzymeâ€“silica composites with high activity and enhanced stability. Journal of Chemical Technology and Biotechnology, 2016, 91, 1905-1913.	1.6	19
60	Modeling and Optimization of Phenylalanine Ammonia Lyase Stabilization in Recombinant Escherichia coli for the Continuous Synthesis of <scp>l</scp>-Phenylalanine on the Statistical-Based Experimental Designs. Journal of Agricultural and Food Chemistry, 2010, 58, 2795-2800.	2.4	17
61	Stabilization of Phenylalanine Ammonia Lyase from Rhodotorula glutinis by Encapsulation in Polyethyleneimine-Mediated Biomimetic Silica. Applied Biochemistry and Biotechnology, 2015, 176, 999-1011.	1.4	17
62	Influence of amino acids, organic solvents and surfactants for phenylalanine ammonia lyase activity in recombinant Escherichia coli. Letters in Applied Microbiology, 2008, 46, 631-635.	1.0	16
63	Expanding the Biocatalytic Scope of Enzyme-Loaded Polymeric Hydrogels. Gels, 2021, 7, 194.	2.1	15
64	Enhancement of Phenylalanine Ammonia Lyase Production fromRhodotorula Mucilaginosaby Optimization of Culture Conditions in Batch and Fed-Batch. Biotechnology and Biotechnological Equipment, 2012, 26, 3418-3423.	0.5	10
65	Improved biodegradation of polyvinyl alcohol by hybrid nanoflowers of degrading enzymes from Bacillus niacini. Korean Journal of Chemical Engineering, 2020, 37, 1020-1028.	1.2	10
66	Antifungal mechanisms of Îµ-poly-L-Lysine with different molecular weights on Saccharomyces cerevisiae. Korean Journal of Chemical Engineering, 2020, 37, 482-492.	1.2	9
67	Optimal culture condition for the production of phenyalanine ammonia lyase from E. coli. Korean Journal of Chemical Engineering, 2009, 26, 444-448.	1.2	8
68	Silica@lipase hybrid biocatalysts with superior activity by mimetic biomineralization in oil/water two-phase system for hydrolysis of soybean oil. LWT - Food Science and Technology, 2022, 160, 113333.	2.5	6
69	Biodegradable packaging films with Îµ-polylysine/ZIF-L composites. LWT - Food Science and Technology, 2022, 166, 113776.	2.5	5
70	One step separation of Aureobasidium pullulans from Î²â€poly(Lâ€malic acid) fermentation broth by membranes technology. Journal of Chemical Technology and Biotechnology, 2017, 92, 845-853.	1.6	4
71	Metabolomic Analysis of Biosynthesis Mechanism of Îµ-Polylysine Produced by Streptomyces diastatochromogenes. Frontiers in Bioengineering and Biotechnology, 2021, 9, 698022.	2.0	4
72	Production of hydrocortisone by Absidia coerulea in moderate pressure bioconversion system. Korean Journal of Chemical Engineering, 2009, 26, 1084-1089.	1.2	2

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73	Isolation and preliminary identification of a novel microorganism producing aspartame from soil samples. Food Science and Biotechnology, 2010, 19, 367-371.	1.2	2
74	Optimization of Culture Conditions on Mycelial Grown in Submerged Culture of Cordyceps militaris. International Journal of Food Engineering, 2011, 7, .	0.7	2
75	Effects of moderate pressure on premeability and viability of Saccharomyces cerevisiae cells. Korean Journal of Chemical Engineering, 2009, 26, 731-735.	1.2	0
76	10.2478/s11814-009-0180-0. , 2011, 26, 1084.		0
77	Editorial: Enzyme Biocatalysts: Design and Application. Frontiers in Chemistry, 2022, 10, 851857.	1.8	0