

# Aitao Li

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

2,175  
citations

230014

27  
h-index

263392

45  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1964  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bioorthogonal catalytic nanozyme-mediated lysosomal membrane leakage for targeted drug delivery. <i>Theranostics</i> , 2022, 12, 1132-1147.	4.6	24
2	Molecular Basis for a Toluene Monooxygenase to Govern Substrate Selectivity. <i>ACS Catalysis</i> , 2022, 12, 2831-2839.	5.5	11
3	A Chemoenzymatic Strategy for the Synthesis of Steroid Drugs Enabled by P450 Monooxygenase-Mediated Steroidal Core Modification. <i>ACS Catalysis</i> , 2022, 12, 2907-2914.	5.5	33
4	Recent advances in the sustainable production of $\alpha,\omega$ -C6 bifunctional compounds enabled by chemo-/biocatalysts. <i>Green Chemistry</i> , 2022, 24, 4270-4303.	4.6	13
5	Exploring the Potential of Cytochrome P450 CYP109B1 Catalyzed Regio- and Stereoselective Steroid Hydroxylation. <i>Frontiers in Chemistry</i> , 2021, 9, 649000.	1.8	10
6	Pervasive cooperative mutational effects on multiple catalytic enzyme traits emerge via long-range conformational dynamics. <i>Nature Communications</i> , 2021, 12, 1621.	5.8	72
7	PfAgo-based detection of SARS-CoV-2. <i>Biosensors and Bioelectronics</i> , 2021, 177, 112932.	5.3	66
8	Active-site engineering of $\alpha$ -transaminase from <i>Ochrobactrum anthropi</i> for preparation of L-2-aminobutyric acid. <i>BMC Biotechnology</i> , 2021, 21, 55.	1.7	5
9	Wastewater-powered high-value chemical synthesis in a hybrid bioelectrochemical system. <i>IScience</i> , 2021, 24, 103401.	1.9	7
10	Die zentrale Rolle der Methodenentwicklung in der gerichteten Evolution selektiver Enzyme. <i>Angewandte Chemie</i> , 2020, 132, 13304-13333.	1.6	42
11	The Crucial Role of Methodology Development in Directed Evolution of Selective Enzymes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13204-13231.	7.2	278
12	Bacterial cytochrome P450-catalyzed regio- and stereoselective steroid hydroxylation enabled by directed evolution and rational design. <i>Bioresources and Bioprocessing</i> , 2020, 7, .	2.0	60
13	One-pot biocatalytic route from cycloalkanes to $\alpha,\omega$ -dicarboxylic acids by designed <i>Escherichia coli</i> consortia. <i>Nature Communications</i> , 2020, 11, 5035.	5.8	60
14	Biosynthesis of organic molecules via artificial cascade reactions based on cytochrome P450 monooxygenases. <i>Green Synthesis and Catalysis</i> , 2020, 1, 52-59.	3.7	27
15	One-pot biosynthesis of 1,6-hexanediol from cyclohexane by <i>de novo</i> designed cascade biocatalysis. <i>Green Chemistry</i> , 2020, 22, 7476-7483.	4.6	30
16	Reductive Amination of Biobased Levulinic Acid to Unnatural Chiral $\beta$ -Amino Acid Using an Engineered Amine Dehydrogenase. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17054-17061.	3.2	24
17	A single digestion, single-stranded oligonucleotide mediated PCR-independent site-directed mutagenesis method. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 3993-4003.	1.7	5
18	Regio- and Stereoselective Steroid Hydroxylation at C7 by Cytochrome P450 Monooxygenase Mutants. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12499-12505.	7.2	83

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19	Regio- and Stereoselective Steroid Hydroxylation at C7 by Cytochrome P450 Monooxygenase Mutants. <i>Angewandte Chemie</i> , 2020, 132, 12599-12605.	1.6	19
20	Statistical Analysis of the Benefits of Focused Saturation Mutagenesis in Directed Evolution Based on Reduced Amino Acid Alphabets. <i>ACS Catalysis</i> , 2019, 9, 7769-7778.	5.5	40
21	Engineering an Alcohol Dehydrogenase for Balancing Kinetics in NADPH Regeneration with 1,4-Butanediol as a Cosubstrate. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15706-15714.	3.2	7
22	Chemical and Biocatalytic Routes to Arbutin. <i>Molecules</i> , 2019, 24, 3303.	1.7	26
23	<i>Pyrococcus furiosus</i> Argonaute-mediated nucleic acid detection. <i>Chemical Communications</i> , 2019, 55, 13219-13222.	2.2	76
24	Chemo- and Regioselective Dihydroxylation of Benzene to Hydroquinone Enabled by Engineered Cytochrome P450 Monooxygenase. <i>Angewandte Chemie</i> , 2019, 131, 774-778.	1.6	22
25	Chemo- and Regioselective Dihydroxylation of Benzene to Hydroquinone Enabled by Engineered Cytochrome P450 Monooxygenase. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 764-768.	7.2	62
26	P450-Catalyzed Regio- and Diastereoselective Steroid Hydroxylation: Efficient Directed Evolution Enabled by Mutability Landscaping. <i>ACS Catalysis</i> , 2018, 8, 3395-3410.	5.5	128
27	Bioamination of alkane with ammonium by an artificially designed multienzyme cascade. <i>Metabolic Engineering</i> , 2018, 47, 184-189.	3.6	35
28	Beating Bias in the Directed Evolution of Proteins: Combining High-Fidelity on-Chip Solid-Phase Gene Synthesis with Efficient Gene Assembly for Combinatorial Library Construction. <i>ChemBioChem</i> , 2018, 19, 221-228.	1.3	39
29	Chemo- and Regioselective Dihydroxylation of Benzene to Hydroquinone Enabled by Engineered Cytochrome P450 Monooxygenase. <i>Angewandte Chemie</i> , 2018, 131, 930.	1.6	0
30	Boosting the efficiency of site-saturation mutagenesis for a difficult-to-randomize gene by a two-step PCR strategy. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 6095-6103.	1.7	30
31	Engineering P450 <sup>LaMO</sup> stereospecificity and product selectivity for selective C-H oxidation of tetralin-like alkylbenzenes. <i>Catalysis Science and Technology</i> , 2018, 8, 4638-4644.	2.1	17
32	Solid-Phase Gene Synthesis for Mutant Library Construction: The Future of Directed Evolution?. <i>ChemBioChem</i> , 2018, 19, 2023-2032.	1.3	24
33	Rapid and Error-Free Site-Directed Mutagenesis by a PCR-Free <i>In Vitro</i> CRISPR/Cas9-Mediated Mutagenic System. <i>ACS Synthetic Biology</i> , 2018, 7, 2236-2244.	1.9	25
34	Hinge-Type Dimerization of Proteins by a Tetracysteine Peptide of High Pairing Specificity. <i>Biochemistry</i> , 2018, 57, 3658-3664.	1.2	18
35	A redox-mediated Kemp eliminase. <i>Nature Communications</i> , 2017, 8, 14876.	5.8	44
36	Preparation of Structurally Diverse Chiral Alcohols by Engineering Ketoreductase CgKR1. <i>ACS Catalysis</i> , 2017, 7, 7174-7181.	5.5	74

#	ARTICLE	IF	CITATIONS
37	One-pot conversion of biomass-derived xylose to furfuralcohol by a chemo-enzymatic sequential acid-catalyzed dehydration and bioreduction. <i>Green Chemistry</i> , 2017, 19, 3844-3850.	4.6	72
38	Whole-Cell-Catalyzed Multiple Regio- and Stereoselective Functionalizations in Cascade Reactions Enabled by Directed Evolution. <i>Angewandte Chemie</i> , 2016, 128, 12205-12208.	1.6	33
39	Whole-Cell-Catalyzed Multiple Regio- and Stereoselective Functionalizations in Cascade Reactions Enabled by Directed Evolution. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 12026-12029.	7.2	79
40	Structure-Guided Triple-Code Saturation Mutagenesis: Efficient Tuning of the Stereoselectivity of an Epoxide Hydrolase. <i>ACS Catalysis</i> , 2016, 6, 1590-1597.	5.5	110
41	Analysis of Enantioselective Biotransformations Using a Few Hundred Cells on an Integrated Microfluidic Chip. <i>Journal of the American Chemical Society</i> , 2016, 138, 2102-2105.	6.6	28
42	Temperature-responsive nanobiocatalysts with an upper critical solution temperature for high performance biotransformation and easy catalyst recycling: efficient hydrolysis of cellulose to glucose. <i>Green Chemistry</i> , 2015, 17, 1194-1203.	4.6	44
43	Integrating interfacial self-assembly and electrostatic complexation at an aqueous interface for capsule synthesis and enzyme immobilization. <i>Journal of Materials Chemistry A</i> , 2014, 2, 1672-1676.	5.2	34
44	Asymmetric epoxidation of alkenes and benzylic hydroxylation with P450 <sub>tol</sub> monooxygenase from <i>Rhodococcus coprophilus</i> TC-2. <i>Chemical Communications</i> , 2014, 50, 8771.	2.2	49
45	Engineered P450 <sub>pyr</sub> monooxygenase for asymmetric epoxidation of alkenes with unique and high enantioselectivity. <i>Chemical Communications</i> , 2013, 49, 11572.	2.2	47
46	Enantioselective Hydrolysis of Racemic and <i>Meso</i> -Epoxides with Recombinant <i>Escherichia coli</i> Expressing Epoxide Hydrolase from <i>Sphingomonas</i> sp. HXN-200: Preparation of Epoxides and Vicinal Diols in High <i>ee</i> and High Concentration. <i>ACS Catalysis</i> , 2013, 3, 752-759.	5.5	69
47	Whole-cell based solvent-free system for one-pot production of biodiesel from waste grease. <i>Bioresource Technology</i> , 2012, 114, 725-729.	4.8	48
48	Asymmetric trans-dihydroxylation of cyclic olefins by enzymatic or chemo-enzymatic sequential epoxidation and hydrolysis in one-pot. <i>Green Chemistry</i> , 2011, 13, 2452.	4.6	23