Lei Kai

List of Publications by Year
in descending order

35 papers	964 citations	471061 17 h-index	454577 30 g-index
37 all docs	37 docs citations	37 times ranked	1273 citing authors

#	Article	IF	Citations
1	The enhanced drought tolerance of rice plants under ammonium is related to aquaporin (AQP). Plant Science, 2015, 234, 14-21.	1.7	103
2	Aquaporins and membrane diffusion of CO2 in living organisms. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 1592-1595.	1.1	101
3	Cell-free expression and stable isotope labelling strategies for membrane proteins. Journal of Biomolecular NMR, 2010, 46, 33-43.	1.6	81
4	Overexpression of rice aquaporin OsPIP1;2 improves yield by enhancing mesophyll CO2 conductance and phloem sucrose transport. Journal of Experimental Botany, 2019, 70, 671-681.	2.4	60
5	Co-translational association of cell-free expressed membrane proteins with supplied lipid bilayers. Molecular Membrane Biology, 2013, 30, 75-89.	2.0	54
6	Aquaporin PIP2;1 affects water transport and root growth in rice (Oryza sativa L.). Plant Physiology and Biochemistry, 2019, 139, 152-160.	2.8	51
7	Cell-free protein synthesis in micro compartments: building a minimal cell from biobricks. New Biotechnology, 2017, 39, 199-205.	2.4	50
8	Preparative Scale Production of Functional Mouse Aquaporin 4 Using Different Cell-Free Expression Modes. PLoS ONE, 2010, 5, e12972.	1.1	41
9	Systems for the Cell-Free Synthesis of Proteins. Methods in Molecular Biology, 2012, 800, 201-225.	0.4	37
10	Optimization of culture conditions for production of cis-epoxysuccinic acid hydrolase using response surface methodology. Bioresource Technology, 2008, 99, 5391-5396.	4.8	36
11	Perception, transduction, and integration of nitrogen and phosphorus nutritional signals in the transcriptional regulatory network in plants. Journal of Experimental Botany, 2019, 70, 3709-3717.	2.4	34
12	A refined model of water and CO2 membrane diffusion: Effects and contribution of sterols and proteins. Scientific Reports, 2014, 4, 6665.	1.6	33
13	Artificial Environments for the Co-Translational Stabilization of Cell-Free Expressed Proteins. PLoS ONE, 2013, 8, e56637.	1.1	29
14	Functional Characterization of a Novel Aquaporin from Dictyostelium discoideum Amoebae Implies a Unique Gating Mechanism. Journal of Biological Chemistry, 2012, 287, 7487-7494.	1.6	27
15	Purification and characterization of a thermostable uricase from Microbacterium sp. strain ZZJ4-1. World Journal of Microbiology and Biotechnology, 2008, 24, 401-406.	1.7	19
16	Cellâ€Free Protein Synthesis and Its Perspectives for Assembling Cells from the Bottomâ€Up. Advanced Biology, 2019, 3, e1800322.	3.0	19
17	Cell-Free Protein Synthesis: Chassis toward the Minimal Cell. Cells, 2019, 8, 315.	1.8	19
18	Efficient Expression of Membrane-Bound Water Channel Protein (Aquaporin Z) in Escherichia coli. Protein and Peptide Letters, 2008, 15, 687-691.	0.4	16

#	Article	IF	Citations
19	High-Level Cell-Free Production of Membrane Proteins with Nanodiscs. Methods in Molecular Biology, 2014, 1118, 109-130.	0.4	16
20	Enhanced functional expression of aquaporin Z via fusion of in situ cleavable leader peptides in Escherichia coli cell-free system. Enzyme and Microbial Technology, 2014, 55, 26-30.	1.6	16
21	Light-Induced Printing of Protein Structures on Membranes in Vitro. Nano Letters, 2018, 18, 7133-7140.	4.5	15
22	Temperature-sensitive protein expression in protocells. Chemical Communications, 2019, 55, 6421-6424.	2.2	15
23	Microbial degradation and valorization of poly(ethylene terephthalate) (PET) monomers. World Journal of Microbiology and Biotechnology, 2022, 38, 89.	1.7	15
24	Isolation and characterization of a new bacterium capable of biotransformingcis-epoxysuccinic acid to d(Ã¢Âˆ’)-tartaric acid. FEMS Microbiology Letters, 2007, 267, 214-220.	0.7	12
25	Co-translational Stabilization of Insoluble Proteins in Cell-Free Expression Systems. Methods in Molecular Biology, 2015, 1258, 125-143.	0.4	12
26	Study on the creatinase from Paracoccus sp. strain WB1. Process Biochemistry, 2006, 41, 2072-2077.	1.8	8
27	Expression and characterization of a thermostable sarcosine oxidase (SOX) from Bacillus sp. in Escherichia coli. Applied Microbiology and Biotechnology, 2006, 73, 559-566.	1.7	8
28	Construction of an efficient Escherichia coli cellâ€free system for in vitro expression of several kinds of proteins. Engineering in Life Sciences, 2010, 10, 333-338.	2.0	8
29	Plant Aquaporins and CO2. Signaling and Communication in Plants, 2017, , 255-265.	0.5	8
30	Design of Sealable Custom-Shaped Cell Mimicries Based on Self-Assembled Monolayers on CYTOP Polymer. ACS Applied Materials & Interfaces, 2019, 11, 21372-21380.	4.0	8
31	Purification and characterization of a cis-epoxysuccinic acid hydrolase from Bordetella sp. strain 1â€“3. Protein Expression and Purification, 2010, 69, 16-20.	0.6	6
32	Functional Analysis of Aquaporin Water Permeability Using an Escherichia coli-Based Cell-Free Protein Synthesis System. Frontiers in Bioengineering and Biotechnology, 2020, 8, 1000.	2.0	3
33	Co-Translational Insertion of Aquaporins into Liposome for Functional Analysis via an E. coli Based Cell-Free Protein Synthesis System. Cells, 2019, 8, 1325.	1.8	2
34	Isolation of a homocysteine Î³-lyase-producing bacterium and study of its enzyme production conditions. Journal of Applied Microbiology, 2008, 104, 1042-1050.	1.4	1
35	Advances in Biotechnology for Sustainable Development. BioMed Research International, 2016, 2016, 1-2.	0.9	1