Heinrich Jung

List of Publications by Year
in descending order

64 papers	3,441 citations	159585 30 h-index	138484 58 g-index
66 all docs	66 docs citations	66 times ranked	2506 citing authors

#	Article	IF	Citations
1	DeerAnalysis2006â€”a comprehensive software package for analyzing pulsed ELDOR data. Applied Magnetic Resonance, 2006, 30, 473-498.	1.2	941
2	Use of site-directed fluorescence labeling to study proximity relationships in the lactose permease of Escherichia coli. Biochemistry, 1993, 32, 12273-12278.	2.5	146
3	Assessing Oligomerization of Membrane Proteins by Four-Pulse DEER: pH-Dependent Dimerization of NhaA Na+/H+ Antiporter of E. coli. Biophysical Journal, 2005, 89, 1328-1338.	0.5	133
4	Properties and purification of an active biotinylated lactose permease from Escherichia coli.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 6934-6938.	7.1	122
5	Purification and Reconstitution of an Osmosensor:â€‰ Transporter ProP of <i>Escherichia</i> <i>coli</i> Senses and Responds to Osmotic Shifts. Biochemistry, 1999, 38, 1676-1684.	2.5	120
6	Osmosensor and Osmoregulator Properties of the Betaine Carrier BetP from Corynebacterium glutamicum in Proteoliposomes. Journal of Biological Chemistry, 2000, 275, 735-741.	3.4	107
7	High-Resolution Structure of a Na+/H+ Antiporter Dimer Obtained by Pulsed Electron Paramagnetic Resonance Distance Measurements. Biophysical Journal, 2007, 93, 3675-3683.	0.5	101
8	The sodium/substrate symporter family: structural and functional features. FEBS Letters, 2002, 529, 73-77.	2.8	90
9	Initial Steps of Photosystem II de Novo Assembly and Preloading with Manganese Take Place in Biogenesis Centers in <i>Synechocystis</i>. Plant Cell, 2012, 24, 660-675.	6.6	86
10	Interresidual Distance Determination by Four-Pulse Double Electron-Electron Resonance in an Integral Membrane Protein: The Na+/Proline Transporter PutP of Escherichia coli. Biophysical Journal, 2004, 86, 2551-2557.	0.5	81
11	Cysteine 148 in the Lactose Permease of Escherichia coli Is a Component of a Substrate Binding Site. 1. Site-Directed Mutagenesis Studies. Biochemistry, 1994, 33, 12160-12165.	2.5	77
12	Dynamics of Lactose Permease of Escherichia coli Determined by Site-Directed Fluorescence Labeling. Biochemistry, 1994, 33, 3980-3985.	2.5	77
13	Unidirectional Reconstitution and Characterization of Purified Na+/Proline Transporter ofEscherichiacoliâ€. Biochemistry, 1998, 37, 11083-11088.	2.5	77
14	Role of glycine residues in the structure and function of lactose permease, an Escherichia coli membrane transport protein. Biochemistry, 1995, 34, 1030-1039.	2.5	58
15	Topology of the Na+/Proline Transporter of Escherichia coli. Journal of Biological Chemistry, 1998, 273, 26400-26407.	3.4	58
16	Towards the molecular mechanism of Na+/solute symport in prokaryotes. Biochimica Et Biophysica Acta - Bioenergetics, 2001, 1505, 131-143.	1.0	50
17	Purification and properties of carnitine dehydratase from Escherichia coli â€” a new enzyme of carnitine metabolization. Lipids and Lipid Metabolism, 1989, 1003, 270-276.	2.6	46
18	What's new with lactose permease. Journal of Bioenergetics and Biomembranes, 1993, 25, 627-636.	2.3	46

#	Article	IF	Citations
19	The lactose permease meets Frankenstein. Journal of Experimental Biology, 1994, 196, 183-95.	1.7	45
20	Aspartate 55 in the Na+/Proline Permease ofEscherichia colils Essential for Na+-Coupled Proline Uptakeâ€. Biochemistry, 1997, 36, 4631-4636.	2.5	44
21	A Conserved Aspartate Residue, Asp187, Is Important for Na+-Dependent Proline Binding and Transport by the Na+/Proline Transporter of Escherichia coli. Biochemistry, 1998, 37, 13800-13806.	2.5	44
22	CaiT of Escherichia coli, a New Transporter Catalyzing l-Carnitine/Î³-Butyrobetaine Exchange. Journal of Biological Chemistry, 2002, 277, 39251-39258.	3.4	44
23	Ser57 in the Na+/Proline Permease of Escherichia coli is Critical for High-Affinity Proline Uptake. FEBS Journal, 1996, 239, 732-736.	0.2	40
24	Backbone Structure of Transmembrane Domain IX of the Na+/Proline Transporter PutP of Escherichia coli. Biophysical Journal, 2009, 96, 217-225.	0.5	38
25	A conformational change in the lactose permease of <i>Escherichia coli</i> is induced by ligand binding or membrane potential. Protein Science, 1994, 3, 1052-1057.	7.6	34
26	Spin Labeling Analysis of Structure and Dynamics of the Na+/Proline Transporter ofEscherichia coliâ€. Biochemistry, 2000, 39, 4831-4837.	2.5	34
27	Membrane Topology of Helixes VII and XI in the Lactose Permease of Escherichia coli Studied by lacY-phoA Fusion Analysis and Site-Directed Spectroscopy. Biochemistry, 1995, 34, 14909-14917.	2.5	32
28	L-Carnitine metabolization and osmotic stress response inEscherichia coli. Journal of Basic Microbiology, 1990, 30, 409-413.	3.3	31
29	Regulation of L-carnitine metabolism inEscherichia coli. Journal of Basic Microbiology, 1987, 27, 131-137.	3.3	30
30	Crotonobetaine reductase fromEscherichia coli ? a new inducible enzyme of anaerobic metabolization of L(-)-carnitine. Antonie Van Leeuwenhoek, 1994, 65, 63-69.	1.7	30
31	Sites Important for Na+ and Substrate Binding in the Na+/Proline Transporter of Escherichia coli, a Member of the Na+/Solute Symporter Family. Journal of Biological Chemistry, 2002, 277, 8790-8796.	3.4	30
32	Oligomeric Structure of the Carnitine Transporter CaiT from Escherichia coli. Journal of Biological Chemistry, 2006, 281, 4795-4801.	3.4	30
33	Cooperation in Microbial Populations: Theory and Experimental Model Systems. Journal of Molecular Biology, 2019, 431, 4599-4644.	4.2	30
34	Transmembrane Domain II of the Na+/Proline Transporter PutP of Escherichia coli Forms Part of a Conformationally Flexible, Cytoplasmic Exposed Aqueous Cavity within the Membrane. Journal of Biological Chemistry, 2003, 278, 42942-42949.	3.4	29
35	The Na+/L-proline transporter PutP. Frontiers in Bioscience - Landmark, 2012, 17, 745.	3.0	29
36	L-Carnitine uptake byEscherichia coli. Journal of Basic Microbiology, 1990, 30, 507-514.	3.3	27

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37	Metabolism of d(+)-carnitine by Escherichia coli. Applied Microbiology and Biotechnology, 1991, 35, 393-395.	3.6	27
38	Role of Conserved Arg40 and Arg117 in the Na+/Proline Transporter ofEscherichia coliâ€. Biochemistry, 1999, 38, 13523-13529.	2.5	27
39	Role of Ser-340 and Thr-341 in Transmembrane Domain IX of the Na+/Proline Transporter PutP of Escherichia coli in Ligand Binding and Transport. Journal of Biological Chemistry, 2008, 283, 4921-4929.	3.4	26
40	Homology Model of the Na+/Proline Transporter PutP of Escherichia coli and Its Functional Implications. Journal of Molecular Biology, 2011, 406, 59-74.	4.2	23
41	Topology and function of the Na+/proline transporter of Escherichia coli, a member of the Na+/solute cotransporter family. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1365, 60-64.	1.0	21
42	Function of Transmembrane Domain IX in the Na+/Proline Transporter PutP. Journal of Molecular Biology, 2008, 382, 884-893.	4.2	20
43	Interactions mediated by a public good transiently increase cooperativity in growing Pseudomonas putida metapopulations. Scientific Reports, 2018, 8, 4093.	3.3	20
44	Charge Translocation During Cosubstrate Binding in the Na+/Proline Transporter of E.coli. Journal of Molecular Biology, 2004, 343, 931-942.	4.2	19
45	Extracellular Loop 4 of the Proline Transporter PutP Controls the Periplasmic Entrance to Ligand Binding Sites. Structure, 2014, 22, 769-780.	3.3	19
46	PvdRTâ€OpmQ and MdtABCâ€OpmB efflux systems are involved in pyoverdine secretion in <i>Pseudomonas putida</i> KT2440. Environmental Microbiology Reports, 2019, 11, 98-106.	2.4	19
47	Identification of a Second Substrate-binding Site in Solute-Sodium Symporters. Journal of Biological Chemistry, 2015, 290, 127-141.	3.4	18
48	Prokaryotic Solute/Sodium Symporters: Versatile Functions and Mechanisms of a Transporter Family. International Journal of Molecular Sciences, 2021, 22, 1880.	4.1	18
49	Secondary Transport of Amino Acids in Prokaryotes. Journal of Membrane Biology, 2006, 213, 119-133.	2.1	17
50	Characterization of the type III export signal of the flagellar hook scaffolding protein FlgD of Escherichia coli. Archives of Microbiology, 2006, 186, 307-316.	2.2	17
51	Non-Selective Evolution of Growing Populations. PLoS ONE, 2015, 10, e0134300.	2.5	17
52	Synthesis of l-carnitine by microorganisms and isolated enzymes. Advances in Biochemical Engineering/Biotechnology, 1993, 50, 21-44.	1.1	14
53	The Sodium/Proline Transporter PutP of Helicobacter pylori. PLoS ONE, 2013, 8, e83576.	2.5	14
54	Transport and kinase activities of CbrA of Pseudomonas putida KT2440. Scientific Reports, 2020, 10, 5400.	3.3	10

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55	Glu-311 in External Loop 4 of the Sodium/Proline Transporter PutP Is Crucial for External Gate Closure. Journal of Biological Chemistry, 2016, 291, 4998-5008.	3.4	9
56	Core Transmembrane Domain 6 Plays a Pivotal Role in the Transport Cycle of the Sodium/Proline Symporter PutP. Journal of Biological Chemistry, 2016, 291, 26208-26215.	3.4	9
57	Resistance to Bipyridyls Mediated by the TtgABC Efflux System in Pseudomonas putida KT2440. Frontiers in Microbiology, 2020, 11, 1974.	3.5	8
58	A New Mechanism of Phosphoregulation in Signal Transduction Pathways. Science Signaling, 2009, 2, pe71.	3.6	6
59	Involvement of MexS and MexEF-OprN in Resistance to Toxic Ion Chelators in Pseudomonas putida KT2440. Microorganisms, 2020, 8, 1782.	3.6	5
60	HutT functions as the major Lâ€histidine transporter in <i>Pseudomonas putida</i> KT2440. FEBS Letters, 2021, 595, 2113-2126.	2.8	5
61	Comparison of the functional properties of trimeric and monomeric CaiT of Escherichia coli. Scientific Reports, 2019, 9, 3787.	3.3	4
62	Involvement of the MxtR/ErdR (CrbS/CrbR) Two-Component System in Acetate Metabolism in Pseudomonas putida KT2440. Microorganisms, 2021, 9, 1558.	3.6	4
63	Helix packing in the C-terminal half of lactose permease. Advances in Cellular and Molecular Biology of Membranes and Organelles, 1995, 4, 129-144.	0.3	3
64	Sodium/Substrate Transport. , 0, , 47-75.		2