

Dietrich H Nies

List of Publications by Year in descending order

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102
papers

12,156
citations

31902

53
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35952

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127
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127
docs citations

127
times ranked

9554
citing authors

#	ARTICLE	IF	CITATIONS
1	Microbial heavy-metal resistance. <i>Applied Microbiology and Biotechnology</i> , 1999, 51, 730-750.	1.7	2,035
2	Efflux-mediated heavy metal resistance in prokaryotes. <i>FEMS Microbiology Reviews</i> , 2003, 27, 313-339.	3.9	1,214
3	Ion efflux systems involved in bacterial metal resistances. <i>Journal of Industrial Microbiology</i> , 1995, 14, 186-199.	0.9	462
4	Molecular Analysis of the Copper-Transporting Efflux System CusCFBA of <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2003, 185, 3804-3812.	1.0	462
5	The RND permease superfamily: an ancient, ubiquitous and diverse family that includes human disease and development proteins. <i>Journal of Molecular Microbiology and Biotechnology</i> , 1999, 1, 107-25.	1.0	337
6	Insights into Genome Plasticity and Pathogenicity of the Plant Pathogenic Bacterium <i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> Revealed by the Complete Genome Sequence. <i>Journal of Bacteriology</i> , 2005, 187, 7254-7266.	1.0	321
7	Mechanisms of gold biomineralization in the bacterium <i>Cupriavidus metallidurans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 17757-17762.	3.3	283
8	Expression and nucleotide sequence of a plasmid-determined divalent cation efflux system from <i>Alcaligenes eutrophus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1989, 86, 7351-7355.	3.3	271
9	The cobalt, zinc, and cadmium efflux system CzcABC from <i>Alcaligenes eutrophus</i> functions as a cation-proton antiporter in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 1995, 177, 2707-2712.	1.0	267
10	Contribution of Copper Ion Resistance to Survival of <i>Escherichia coli</i> on Metallic Copper Surfaces. <i>Applied and Environmental Microbiology</i> , 2008, 74, 977-986.	1.4	253
11	CzcD Is a Heavy Metal Ion Transporter Involved in Regulation of Heavy Metal Resistance in <i>Ralstonia</i> sp. Strain CH34. <i>Journal of Bacteriology</i> , 1999, 181, 6876-6881.	1.0	205
12	FieF (YiiP) from <i>Escherichia coli</i> mediates decreased cellular accumulation of iron and relieves iron stress. <i>Archives of Microbiology</i> , 2005, 183, 9-18.	1.0	205
13	Plasmid-determined inducible efflux is responsible for resistance to cadmium, zinc, and cobalt in <i>Alcaligenes eutrophus</i> . <i>Journal of Bacteriology</i> , 1989, 171, 896-900.	1.0	196
14	The Metal Permease ZupT from <i>Escherichia coli</i> Is a Transporter with a Broad Substrate Spectrum. <i>Journal of Bacteriology</i> , 2005, 187, 1604-1611.	1.0	196
15	Glutathione and Transition-Metal Homeostasis in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2008, 190, 5431-5438.	1.0	186
16	CzcR and CzcD, gene products affecting regulation of resistance to cobalt, zinc, and cadmium (czc) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.0	184
17	The product of the ybdE gene of the <i>Escherichia coli</i> chromosome is involved in detoxification of silver ions. <i>Microbiology (United Kingdom)</i> , 2001, 147, 965-972.	0.7	177
18	Energetics and Topology of CzcA, a Cation/Proton Antiporter of the Resistance-Nodulation-Cell Division Protein Family. <i>Journal of Biological Chemistry</i> , 1999, 274, 26065-26070.	1.6	174

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19	Survival of bacteria on metallic copper surfaces in a hospital trial. <i>Applied Microbiology and Biotechnology</i> , 2010, 87, 1875-1879.	1.7	160
20	Cupriavidus metallidurans: evolution of a metal-resistant bacterium. <i>Antonie Van Leeuwenhoek</i> , 2009, 96, 115-139.	0.7	155
21	ZitB (YbgR), a Member of the Cation Diffusion Facilitator Family, Is an Additional Zinc Transporter in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2001, 183, 4664-4667.	1.0	154
22	Heavy metal-resistant bacteria as extremophiles: molecular physiology and biotechnological use of <i>Ralstonia</i> sp. CH34. <i>Extremophiles</i> , 2000, 4, 77-82.	0.9	146
23	Nucleotide sequence and expression of a plasmid-encoded chromate resistance determinant from <i>Alcaligenes eutrophus</i> . <i>Journal of Biological Chemistry</i> , 1990, 265, 5648-5653.	1.6	146
24	TolC Is Involved in Enterobactin Efflux across the Outer Membrane of <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2005, 187, 6701-6707.	1.0	140
25	Switch or Funnel: How RND-Type Transport Systems Control Periplasmic Metal Homeostasis. <i>Journal of Bacteriology</i> , 2011, 193, 2381-2387.	1.0	139
26	Nucleotide sequence and expression of a plasmid-encoded chromate resistance determinant from <i>Alcaligenes eutrophus</i> . <i>Journal of Biological Chemistry</i> , 1990, 265, 5648-53.	1.6	132
27	Cloning and expression of plasmid genes encoding resistances to chromate and cobalt in <i>Alcaligenes eutrophus</i> . <i>Journal of Bacteriology</i> , 1989, 171, 5065-5070.	1.0	128
28	Regulation of the <i>cnr</i> Cobalt and Nickel Resistance Determinant from <i>Ralstonia</i> sp. Strain CH34. <i>Journal of Bacteriology</i> , 2000, 182, 1390-1398.	1.0	126
29	The Chromosomally Encoded Cation Diffusion Facilitator Proteins DmeF and FieF from <i>Wautersia metallidurans</i> CH34 Are Transporters of Broad Metal Specificity. <i>Journal of Bacteriology</i> , 2004, 186, 8036-8043.	1.0	121
30	Characteristics of Zinc Transport by Two Bacterial Cation Diffusion Facilitators from <i>Ralstonia metallidurans</i> CH34 and <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2004, 186, 7499-7507.	1.0	119
31	New functions for the three subunits of the CzcCBA cation-proton antiporter. <i>Journal of Bacteriology</i> , 1997, 179, 6871-6879.	1.0	117
32	Interplay of the Czc System and Two P-Type ATPases in Conferring Metal Resistance to <i>Ralstonia metallidurans</i> . <i>Journal of Bacteriology</i> , 2003, 185, 4354-4361.	1.0	117
33	New genes involved in chromate resistance in <i>Ralstonia metallidurans</i> strain CH34. <i>Archives of Microbiology</i> , 2002, 179, 15-25.	1.0	114
34	Role of the Extracytoplasmic Function Protein Family Sigma Factor RpoE in Metal Resistance of <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2005, 187, 2297-2307.	1.0	111
35	<i>Alcaligenes eutrophus</i> as a Bacterial Chromate Sensor. <i>Applied and Environmental Microbiology</i> , 1998, 64, 453-458.	1.4	107
36	Cadmium Toxicity in Glutathione Mutants of <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2008, 190, 5439-5454.	1.0	104

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37	Two-component regulatory system involved in transcriptional control of heavy-metal homeostasis in <i>Alcaligenes eutrophus</i> . <i>Molecular Microbiology</i> , 1997, 23, 493-503.	1.2	102
38	CzcP is a novel efflux system contributing to transition metal resistance in <i>Cupriavidus metallidurans</i> CH34. <i>Molecular Microbiology</i> , 2009, 73, 601-621.	1.2	99
39	Characterization of the ZAT1p zinc transporter from <i>Arabidopsis thaliana</i> in microbial model organisms and reconstituted proteoliposomes. <i>Planta</i> , 2002, 214, 783-791.	1.6	97
40	Transcriptional Organization of the <i>czc</i> Heavy-Metal Homeostasis Determinant from <i>Alcaligenes eutrophus</i> . <i>Journal of Bacteriology</i> , 1999, 181, 2385-2393.	1.0	97
41	Metal ion uptake by a plasmid-free metal-sensitive <i>Alcaligenes eutrophus</i> strain. <i>Journal of Bacteriology</i> , 1989, 171, 4073-4075.	1.0	92
42	A Transporter in the Endoplasmic Reticulum of <i>Schizosaccharomyces pombe</i> Cells Mediates Zinc Storage and Differentially Affects Transition Metal Tolerance. <i>Journal of Biological Chemistry</i> , 2002, 277, 18215-18221.	1.6	90
43	CHR, a Novel Family of Prokaryotic Proton Motive Force-Driven Transporters Probably Containing Chromate/Sulfate Antiporters. <i>Journal of Bacteriology</i> , 1998, 180, 5799-5802.	1.0	90
44	How Cells Control Zinc Homeostasis. <i>Science</i> , 2007, 317, 1695-1696.	6.0	80
45	The biological chemistry of the transition metal transportome of <i>Cupriavidus metallidurans</i> . <i>Metallomics</i> , 2016, 8, 481-507.	1.0	75
46	Influence of Copper Resistance Determinants on Gold Transformation by <i>Cupriavidus metallidurans</i> Strain CH34. <i>Journal of Bacteriology</i> , 2013, 195, 2298-2308.	1.0	66
47	Functional analysis of the <i>Escherichia coli</i> zinc transporter ZitB. <i>FEMS Microbiology Letters</i> , 2002, 215, 273-278.	0.7	63
48	Determinants Encoding Resistance to Several Heavy Metals in Newly Isolated Copper-Resistant Bacteria. <i>Applied and Environmental Microbiology</i> , 1991, 57, 3079-3085.	1.4	62
49	The RcnRA (YohLM) system of <i>Escherichia coli</i> : A connection between nickel, cobalt and iron homeostasis. <i>BioMetals</i> , 2007, 20, 759-771.	1.8	60
50	Identification of a regulatory pathway that controls the heavy-metal resistance system Czc via promoter <i>czcNp</i> in <i>Ralstonia metallidurans</i> . <i>Archives of Microbiology</i> , 2004, 182, 109-18.	1.0	58
51	Contributions of Five Secondary Metal Uptake Systems to Metal Homeostasis of <i>Cupriavidus metallidurans</i> CH34. <i>Journal of Bacteriology</i> , 2011, 193, 4652-4663.	1.0	58
52	Control of Expression of a Periplasmic Nickel Efflux Pump by Periplasmic Nickel Concentrations. <i>BioMetals</i> , 2005, 18, 437-448.	1.8	57
53	Geobiological Cycling of Gold: From Fundamental Process Understanding to Exploration Solutions. <i>Minerals (Basel, Switzerland)</i> , 2013, 3, 367-394.	0.8	54
54	Contribution of Extracytoplasmic Function Sigma Factors to Transition Metal Homeostasis in <i>Cupriavidus metallidurans</i> Strain CH34. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2007, 12, 227-240.	1.0	53

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55	Paralogs of Genes Encoding Metal Resistance Proteins in <i>Cupriavidus metallidurans</i> Strain CH34. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2006, 11, 82-93.	1.0	52
56	First step towards a quantitative model describing Czc-mediated heavy metal resistance in <i>Ralstonia metallidurans</i> . <i>Biodegradation</i> , 2003, 14, 153-168.	1.5	51
57	Incidence and function of sigma factors in <i>Ralstonia metallidurans</i> and other bacteria. <i>Archives of Microbiology</i> , 2004, 181, 255-268.	1.0	44
58	A fresh view of the cell biology of copper in enterobacteria. <i>Molecular Microbiology</i> , 2013, 87, 447-454.	1.2	43
59	Proteomic responses to gold(<i>scp</i>)-toxicity in the bacterium <i>Cupriavidus metallidurans</i> CH34. <i>Metallomics</i> , 2016, 8, 1204-1216.	1.0	42
60	Bacterial Transition Metal Homeostasis. , 2007, , 117-142.		39
61	Genomic analysis of zinc homeostasis in <i>Mycobacterium tuberculosis</i> . <i>FEMS Microbiology Letters</i> , 2008, 287, 1-7.	0.7	37
62	Genomic analyses of metal resistance genes in three plant growth promoting bacteria of legume plants in Northwest mine tailings, China. <i>Journal of Environmental Sciences</i> , 2015, 27, 179-187.	3.2	37
63	Two-Component Systems in the Regulation of Heavy Metal Resistance. , 1998, , 77-103.		37
64	Characterization of a Dipartite Iron Uptake System from Uropathogenic <i>Escherichia coli</i> Strain F11. <i>Journal of Biological Chemistry</i> , 2011, 286, 25317-25330.	1.6	34
65	Synergistic Toxicity of Copper and Gold Compounds in <i>Cupriavidus metallidurans</i> . <i>Applied and Environmental Microbiology</i> , 2017, 83, .	1.4	33
66	Synergistic gold-copper detoxification at the core of gold biomineralisation in <i>Cupriavidus metallidurans</i> . <i>Metallomics</i> , 2018, 10, 278-286.	1.0	33
67	Deletion of the <i>zupT</i> gene for a zinc importer influences zinc pools in <i>Cupriavidus metallidurans</i> CH34. <i>Metallomics</i> , 2014, 6, 421.	1.0	31
68	Genomic Analyses of Transport Proteins in <i>Ralstonia metallidurans</i> . <i>Comparative and Functional Genomics</i> , 2005, 6, 17-56.	2.0	30
69	Interplay between seven secondary metal uptake systems is required for full metal resistance of <i>Cupriavidus metallidurans</i> . <i>Metallomics</i> , 2016, 8, 313-326.	1.0	29
70	Sandwich Hybridization Assay for Sensitive Detection of Dynamic Changes in mRNA Transcript Levels in Crude <i>Escherichia coli</i> Cell Extracts in Response to Copper Ions. <i>Applied and Environmental Microbiology</i> , 2008, 74, 7463-7470.	1.4	28
71	High-Level Resistance to Cobalt and Nickel but Probably No Transenvelope Efflux: Metal Resistance in the Cuban <i>Serratia marcescens</i> Strain C-1. <i>Microbial Ecology</i> , 2007, 53, 123-133.	1.4	27
72	The ABC-transporter <i>AtmA</i> is involved in nickel and cobalt resistance of <i>Cupriavidus metallidurans</i> strain CH34. <i>Antonie Van Leeuwenhoek</i> , 2009, 96, 183-191.	0.7	25

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73	Survival of Escherichia coli Cells on Solid Copper Surfaces Is Increased by Glutathione. Applied and Environmental Microbiology, 2014, 80, 7071-7078.	1.4	25
74	Synthesis of nickel-iron hydrogenase in Cupriavidus metallidurans is controlled by metal-dependent silencing and un-silencing of genomic islands. Metallomics, 2015, 7, 632-649.	1.0	24
75	Characterization of the $\hat{\nu}7$ Mutant of Cupriavidus metallidurans with Deletions of Seven Secondary Metal Uptake Systems. MSystems, 2016, 1, .	1.7	24
76	Zinc and ATP Binding of the Hexameric AAA-ATPase PilF from Thermus thermophilus. Journal of Biological Chemistry, 2014, 289, 30343-30354.	1.6	22
77	The zinc repository of Cupriavidus metallidurans. Metallomics, 2014, 6, 2157-2165.	1.0	22
78	Metal sensing and signal transduction by CnrX from Cupriavidus metallidurans CH34: role of the only methionine assessed by a functional, spectroscopic, and theoretical study. Metallomics, 2014, 6, 263-273.	1.0	21
79	Transition Metal Homeostasis. EcoSal Plus, 2009, 3, .	2.1	20
80	FurC Regulates Expression of <i>zupT</i> for the Central Zinc Importer ZupT of Cupriavidus metallidurans. Journal of Bacteriology, 2014, 196, 3461-3471.	1.0	20
81	Response of CnrX from Cupriavidus metallidurans CH34 to nickel binding. Metallomics, 2015, 7, 622-631.	1.0	16
82	The Components of the Unique Zur Regulon of Cupriavidus metallidurans Mediate Cytoplasmic Zinc Handling. Journal of Bacteriology, 2017, 199, .	1.0	16
83	Oligomeric behavior of the RND transporters CusA and AcrB in micellar solution of detergent. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 1567-1573.	1.4	14
84	How iron is transported into magnetosomes. Molecular Microbiology, 2011, 82, 792-796.	1.2	13
85	The third pillar of metal homeostasis in Cupriavidus metallidurans CH34: preferences are controlled by extracytoplasmic function sigma factors. Metallomics, 2019, 11, 291-316.	1.0	13
86	Behind the Shield of Czc: ZntR Controls Expression of the Gene for the Zinc-Exporting P-Type ATPase ZntA in Cupriavidus metallidurans. Journal of Bacteriology, 2021, 203, .	1.0	13
87	Expression of bacterial mercuric ion reductase in Saccharomyces cerevisiae. Journal of Bacteriology, 1992, 174, 1288-1292.	1.0	11
88	Zinc Starvation Response in a Cyanobacterium Revealed. Journal of Bacteriology, 2012, 194, 2407-2412.	1.0	11
89	Interplay between the Zur Regulon Components and Metal Resistance in Cupriavidus metallidurans. Journal of Bacteriology, 2019, 201, .	1.0	9
90	The ancient alarmone ZTP and zinc homeostasis in Bacillus subtilis. Molecular Microbiology, 2019, 112, 741-746.	1.2	8

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91	Preparation, physicochemical characterization and biological evaluation of cefodizime metal ion complexes. <i>Journal of Pharmacy and Pharmacology</i> , 2010, 61, 753-758.	1.2	7
92	A copper site is required for iron transport by the periplasmic proteins P19 and FetP. <i>Metallomics</i> , 2020, 12, 1530-1541.	1.0	5
93	Colonization resistance against genetically modified <i>Escherichia coli</i> K12 (W3110) strains is abrogated following broad-spectrum antibiotic treatment and acute ileitis. <i>European Journal of Microbiology and Immunology</i> , 2013, 3, 222-228.	1.5	4
94	Mutant Strains of <i>Escherichia coli</i> and Methicillin-Resistant <i>Staphylococcus aureus</i> Obtained by Laboratory Selection To Survive on Metallic Copper Surfaces. <i>Applied and Environmental Microbiology</i> , 2020, 87, .	1.4	4
95	Loss of Mobile Genomic Islands in Metal-Resistant, Hydrogen-Oxidizing <i>Cupriavidus metallidurans</i> . <i>Applied and Environmental Microbiology</i> , 2022, 88, AEM0204821.	1.4	3
96	Importance of RpoD- and Non-RpoD-Dependent Expression of Horizontally Acquired Genes in <i>Cupriavidus metallidurans</i> . <i>Microbiology Spectrum</i> , 2022, 10, e0012122.	1.2	3
97	Impact of metal ion homeostasis of genetically modified <i>Escherichia coli</i> Nissle 1917 and K12 (W3110) strains on colonization properties in the murine intestinal tract. <i>European Journal of Microbiology and Immunology</i> , 2013, 3, 229-235.	1.5	2
98	CHAPTER 15. Cross-Talk Between Nickel and Other Metals in Microbial Systems. 2-Oxoglutarate-Dependent Oxygenases, 0, , 306-338.	0.8	2
99	High-Level Resistance to Cobalt and Nickel in Cuban &Serratia marcescens Strains Isolated from Serpentine Deposits. <i>Advanced Materials Research</i> , 2007, 20-21, 521-525.	0.3	1
100	How is a Zinc Ion Correctly Allocated to a Zinc-dependent Protein?. <i>Advances in Environmental Microbiology</i> , 2022, , 579-660.	0.1	1
101	Chemical Constraints for Transition Metal Cation Allocation. <i>Advances in Environmental Microbiology</i> , 2022, , 21-52.	0.1	1
102	Basic Biochemical Roots. , 2014, , 1-13.		0