Dietrich H Nies

List of Publications by Year
in descending order

102 papers	12,156 citations	31976 53 h-index	36028 97 g-index
127 all docs	127 docs citations	127 times ranked	9554 citing authors

#	Article	IF	Citations
1	Microbial heavy-metal resistance. Applied Microbiology and Biotechnology, 1999, 51, 730-750.	3.6	2,035
2	Efflux-mediated heavy metal resistance in prokaryotes. FEMS Microbiology Reviews, 2003, 27, 313-339.	8.6	1,214
3	Ion efflux systems involved in bacterial metal resistances. Journal of Industrial Microbiology, 1995, 14, 186-199.	0.9	462
4	Molecular Analysis of the Copper-Transporting Efflux System CusCFBA of <i>Escherichia coli</i>. Journal of Bacteriology, 2003, 185, 3804-3812.	2.2	462
5	The RND permease superfamily: an ancient, ubiquitous and diverse family that includes human disease and development proteins. Journal of Molecular Microbiology and Biotechnology, 1999, 1, 107-25.	1.0	337
6	Insights into Genome Plasticity and Pathogenicity of the Plant Pathogenic Bacterium Xanthomonas campestris pv. vesicatoria Revealed by the Complete Genome Sequence. Journal of Bacteriology, 2005, 187, 7254-7266.	2.2	321
7	Mechanisms of gold biomineralization in the bacterium <i>Cupriavidus metallidurans</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17757-17762.	7.1	283
8	Expression and nucleotide sequence of a plasmid-determined divalent cation efflux system from Alcaligenes eutrophus.. Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 7351-7355.	7.1	271
9	The cobalt, zinc, and cadmium efflux system CzcABC from Alcaligenes eutrophus functions as a cation-proton antiporter in Escherichia coli. Journal of Bacteriology, 1995, 177, 2707-2712.	2.2	267
10	Contribution of Copper Ion Resistance to Survival of <i>Escherichia coli</i> on Metallic Copper Surfaces. Applied and Environmental Microbiology, 2008, 74, 977-986.	3.1	253
11	CzcD Is a Heavy Metal Ion Transporter Involved in Regulation of Heavy Metal Resistance in <i>Ralstonia</i> sp. Strain CH34. Journal of Bacteriology, 1999, 181, 6876-6881.	2.2	205
12	FieF (YiiP) from Escherichia coli mediates decreased cellular accumulation of iron and relieves iron stress. Archives of Microbiology, 2005, 183, 9-18.	2.2	205
13	Plasmid-determined inducible efflux is responsible for resistance to cadmium, zinc, and cobalt in Alcaligenes eutrophus. Journal of Bacteriology, 1989, 171, 896-900.	2.2	196
14	The Metal Permease ZupT from Escherichia coli Is a Transporter with a Broad Substrate Spectrum. Journal of Bacteriology, 2005, 187, 1604-1611.	2.2	196
15	Glutathione and Transition-Metal Homeostasis in<i>Escherichia coli</i>. Journal of Bacteriology, 2008, 190, 5431-5438.	2.2	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	2.2	184
17	The product of the ybdE gene of the Escherichia coli chromosome is involved in detoxification of silver ions. Microbiology (United Kingdom), 2001, 147, 965-972.	1.8	177
18	Energetics and Topology of CzcA, a Cation/Proton Antiporter of the Resistance-Nodulation-Cell Division Protein Family. Journal of Biological Chemistry, 1999, 274, 26065-26070.	3.4	174

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19	Survival of bacteria on metallic copper surfaces in a hospital trial. Applied Microbiology and Biotechnology, 2010, 87, 1875-1879.	3.6	160
20	Cupriavidus metallidurans: evolution of a metal-resistant bacterium. Antonie Van Leeuwenhoek, 2009, 96, 115-139.	1.7	155
21	ZitB (YbgR), a Member of the Cation Diffusion Facilitator Family, Is an Additional Zinc Transporter in Escherichia coli. Journal of Bacteriology, 2001, 183, 4664-4667.	2.2	154
22	Heavy metal-resistant bacteria as extremophiles: molecular physiology and biotechnological use of Ralstonia sp. CH34. Extremophiles, 2000, 4, 77-82.	2.3	146
23	Nucleotide sequence and expression of a plasmid-encoded chromate resistance determinant from Alcaligenes eutrophus.. Journal of Biological Chemistry, 1990, 265, 5648-5653.	3.4	146
24	TolC Is Involved in Enterobactin Efflux across the Outer Membrane of Escherichia coli. Journal of Bacteriology, 2005, 187, 6701-6707.	2.2	140
25	Switch or Funnel: How RND-Type Transport Systems Control Periplasmic Metal Homeostasis. Journal of Bacteriology, 2011, 193, 2381-2387.	2.2	139
26	Nucleotide sequence and expression of a plasmid-encoded chromate resistance determinant from Alcaligenes eutrophus. Journal of Biological Chemistry, 1990, 265, 5648-53.	3.4	132
27	Cloning and expression of plasmid genes encoding resistances to chromate and cobalt in Alcaligenes eutrophus. Journal of Bacteriology, 1989, 171, 5065-5070.	2.2	128
28	Regulation of the <i>cnr</i> Cobalt and Nickel Resistance Determinant from <i>Ralstonia</i> sp. Strain CH34. Journal of Bacteriology, 2000, 182, 1390-1398.	2.2	126
29	The Chromosomally Encoded Cation Diffusion Facilitator Proteins DmeF and FieF from <i>Wautersia metallidurans</i> CH34 Are Transporters of Broad Metal Specificity. Journal of Bacteriology, 2004, 186, 8036-8043.	2.2	121
30	Characteristics of Zinc Transport by Two Bacterial Cation Diffusion Facilitators from Ralstonia metallidurans CH34 and Escherichia coli. Journal of Bacteriology, 2004, 186, 7499-7507.	2.2	119
31	New functions for the three subunits of the CzcCBA cation-proton antiporter. Journal of Bacteriology, 1997, 179, 6871-6879.	2.2	117
32	Interplay of the Czc System and Two P-Type ATPases in Conferring Metal Resistance to <i>Ralstonia metallidurans</i>. Journal of Bacteriology, 2003, 185, 4354-4361.	2.2	117
33	New genes involved in chromate resistance inRalstonia metallidurans strain CH34. Archives of Microbiology, 2002, 179, 15-25.	2.2	114
34	Role of the Extracytoplasmic Function Protein Family Sigma Factor RpoE in Metal Resistance of <i>Escherichia coli</i>. Journal of Bacteriology, 2005, 187, 2297-2307.	2.2	111
35	<i>Alcaligenes eutrophus</i> as a Bacterial Chromate Sensor. Applied and Environmental Microbiology, 1998, 64, 453-458.	3.1	107
36	Cadmium Toxicity in Glutathione Mutants of<i>Escherichia coli</i>. Journal of Bacteriology, 2008, 190, 5439-5454.	2.2	104

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37	Twoâ€component regulatory system involved in transcriptional control of heavyâ€metal homoeostasis in <i>Alcaligenes eutrophus</i>. Molecular Microbiology, 1997, 23, 493-503.	2.5	102
38	CzcP is a novel efflux system contributing to transition metal resistance in<i>Cupriavidus metallidurans</i>CH34. Molecular Microbiology, 2009, 73, 601-621.	2.5	99
39	Characterization of the ZAT1p zinc transporter from Arabidopsis thaliana in microbial model organisms and reconstituted proteoliposomes. Planta, 2002, 214, 783-791.	3.2	97
40	Transcriptional Organization of the <i>czc</i> Heavy-Metal Homeostasis Determinant from <i>Alcaligenes eutrophus</i>. Journal of Bacteriology, 1999, 181, 2385-2393.	2.2	97
41	Metal ion uptake by a plasmid-free metal-sensitive Alcaligenes eutrophus strain. Journal of Bacteriology, 1989, 171, 4073-4075.	2.2	92
42	A Transporter in the Endoplasmic Reticulum of Schizosaccharomyces pombe Cells Mediates Zinc Storage and Differentially Affects Transition Metal Tolerance. Journal of Biological Chemistry, 2002, 277, 18215-18221.	3.4	90
43	CHR, a Novel Family of Prokaryotic Proton Motive Force-Driven Transporters Probably Containing Chromate/Sulfate Antiporters. Journal of Bacteriology, 1998, 180, 5799-5802.	2.2	90
44	How Cells Control Zinc Homeostasis. Science, 2007, 317, 1695-1696.	12.6	80
45	The biological chemistry of the transition metal â€œtransportomeâ€• of Cupriavidus metallidurans. Metallomics, 2016, 8, 481-507.	2.4	75
46	Influence of Copper Resistance Determinants on Gold Transformation by Cupriavidus metallidurans Strain CH34. Journal of Bacteriology, 2013, 195, 2298-2308.	2.2	66
47	Functional analysis of theEscherichia colizinc transporter ZitB. FEMS Microbiology Letters, 2002, 215, 273-278.	1.8	63
48	Determinants Encoding Resistance to Several Heavy Metals in Newly Isolated Copper-Resistant Bacteria. Applied and Environmental Microbiology, 1991, 57, 3079-3085.	3.1	62
49	The RcnRA (YohLM) system of Escherichia coli: A connection between nickel, cobalt and iron homeostasis. BioMetals, 2007, 20, 759-771.	4.1	60
50	Identification of a regulatory pathway that controls the heavy-metal resistance system Czc via promoter czcNp in Ralstonia metallidurans. Archives of Microbiology, 2004, 182, 109-18.	2.2	58
51	Contributions of Five Secondary Metal Uptake Systems to Metal Homeostasis of Cupriavidus metallidurans CH34. Journal of Bacteriology, 2011, 193, 4652-4663.	2.2	58
52	Control of Expression of a Periplasmic Nickel Efflux Pump by Periplasmic Nickel Concentrations. BioMetals, 2005, 18, 437-448.	4.1	57
53	Geobiological Cycling of Gold: From Fundamental Process Understanding to Exploration Solutions. Minerals (Basel, Switzerland), 2013, 3, 367-394.	2.0	54
54	Contribution of Extracytoplasmic Function Sigma Factors to Transition Metal Homeostasis in <i>Cupriavidus metallidurans</i> Strain CH34. Journal of Molecular Microbiology and Biotechnology, 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. Journal of Molecular Microbiology and Biotechnology, 2006, 11, 82-93.	1.0	52
56	First step towards a quantitative model describing Czc-mediated heavy metal resistance in Ralstonia metallidurans. Biodegradation, 2003, 14, 153-168.	3.0	51
57	Incidence and function of sigma factors in Ralstonia metallidurans and other bacteria. Archives of Microbiology, 2004, 181, 255-268.	2.2	44
58	A fresh view of the cell biology of copper in enterobacteria. Molecular Microbiology, 2013, 87, 447-454.	2.5	43
59	Proteomic responses to gold(<scp>iii</scp>)-toxicity in the bacterium Cupriavidus metallidurans CH34. Metallomics, 2016, 8, 1204-1216.	2.4	42
60	Bacterial Transition Metal Homeostasis. , 2007, , 117-142.		39
61	Genomic analysis of zinc homeostasis inMycobacterium tuberculosis. FEMS Microbiology Letters, 2008, 287, 1-7.	1.8	37
62	Genomic analyses of metal resistance genes in three plant growth promoting bacteria of legume plants in Northwest mine tailings, China. Journal of Environmental Sciences, 2015, 27, 179-187.	6.1	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 Escherichia coli Strain F11. Journal of Biological Chemistry, 2011, 286, 25317-25330.	3.4	34
65	Synergistic Toxicity of Copper and Gold Compounds in Cupriavidus metallidurans. Applied and Environmental Microbiology, 2017, 83, .	3.1	33
66	Synergistic goldâ€"copper detoxification at the core of gold biomineralisation in<i>Cupriavidus metallidurans</i>. Metallomics, 2018, 10, 278-286.	2.4	33
67	Deletion of the zupT gene for a zinc importer influences zinc pools in Cupriavidus metallidurans CH34. Metallomics, 2014, 6, 421.	2.4	31
68	Genomic Analyses of Transport Proteins in<i>Ralstonia metallidurans</i>. Comparative and Functional Genomics, 2005, 6, 17-56.	2.0	30
69	Interplay between seven secondary metal uptake systems is required for full metal resistance of Cupriavidus metallidurans. Metallomics, 2016, 8, 313-326.	2.4	29
70	Sandwich Hybridization Assay for Sensitive Detection of Dynamic Changes in mRNA Transcript Levels in Crude Escherichia coli Cell Extracts in Response to Copper Ions. Applied and Environmental Microbiology, 2008, 74, 7463-7470.	3.1	28
71	High-Level Resistance to Cobalt and Nickel but Probably No Transenvelope Efflux: Metal Resistance in the Cuban Serratia marcescens Strain C-1. Microbial Ecology, 2007, 53, 123-133.	2.8	27
72	The ABC-transporter AtmA is involved in nickel and cobalt resistance of Cupriavidus metallidurans strain CH34. Antonie Van Leeuwenhoek, 2009, 96, 183-191.	1.7	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.	3.1	25
74	Synthesis of nickelâ€"iron hydrogenase in Cupriavidus metallidurans is controlled by metal-dependent silencing and un-silencing of genomic islands. Metallomics, 2015, 7, 632-649.	2.4	24
75	Characterization of the Î"7 Mutant of Cupriavidus metallidurans with Deletions of Seven Secondary Metal Uptake Systems. MSystems, 2016, 1, .	3.8	24
76	Zinc and ATP Binding of the Hexameric AAA-ATPase PilF from Thermus thermophilus. Journal of Biological Chemistry, 2014, 289, 30343-30354.	3.4	22
77	The zinc repository of Cupriavidus metallidurans. Metallomics, 2014, 6, 2157-2165.	2.4	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.	2.4	21
79	Transition Metal Homeostasis. EcoSal Plus, 2009, 3, .	5.4	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.	2.2	20
81	Response of CnrX from Cupriavidus metallidurans CH34 to nickel binding. Metallomics, 2015, 7, 622-631.	2.4	16
82	The Components of the Unique Zur Regulon of Cupriavidus metallidurans Mediate Cytoplasmic Zinc Handling. Journal of Bacteriology, 2017, 199, .	2.2	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.	2.6	14
84	How iron is transported into magnetosomes. Molecular Microbiology, 2011, 82, 792-796.	2.5	13
85	The third pillar of metal homeostasis in<i>Cupriavidus metallidurans</i>CH34: preferences are controlled by extracytoplasmic function sigma factors. Metallomics, 2019, 11, 291-316.	2.4	13
86	Behind the Shield of Czc: ZntR Controls Expression of the Gene for the Zinc-Exporting P-Type ATPase ZntA in <i>Cupriavidus metallidurans</i>. Journal of Bacteriology, 2021, 203, .	2.2	13
87	Expression of bacterial mercuric ion reductase in Saccharomyces cerevisiae. Journal of Bacteriology, 1992, 174, 1288-1292.	2.2	11
88	Zinc Starvation Response in a Cyanobacterium Revealed. Journal of Bacteriology, 2012, 194, 2407-2412.	2.2	11
89	Interplay between the Zur Regulon Components and Metal Resistance in Cupriavidus metallidurans. Journal of Bacteriology, 2019, 201, .	2.2	9
90	The ancient alarmone ZTP and zinc homeostasis in <i>Bacillus subtilis</i>. Molecular Microbiology, 2019, 112, 741-746.	2.5	8

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91	Preparation, physicochemical characterization and biological evaluation of cefodizime metal ion complexes. Journal of Pharmacy and Pharmacology, 2010, 61, 753-758.	2.4	7
92	A copper site is required for iron transport by the periplasmic proteins P19 and FetP. Metallomics, 2020, 12, 1530-1541.	2.4	5
93	Colonization resistance against genetically modifiedEscherichia coliK12 (W3110) strains is abrogated following broad-spectrum antibiotic treatment and acute ileitis. European Journal of Microbiology and Immunology, 2013, 3, 222-228.	2.8	4
94	Mutant Strains of Escherichia coli and Methicillin-Resistant Staphylococcus aureus Obtained by Laboratory Selection To Survive on Metallic Copper Surfaces. Applied and Environmental Microbiology, 2020, 87, .	3.1	4
95	Loss of Mobile Genomic Islands in Metal-Resistant, Hydrogen-Oxidizing Cupriavidus metallidurans. Applied and Environmental Microbiology, 2022, 88, AEM0204821.	3.1	3
96	Importance of RpoD- and Non-RpoD-Dependent Expression of Horizontally Acquired Genes in Cupriavidus metallidurans. Microbiology Spectrum, 2022, 10, e0012122.	3.0	3
97	Impact of metal ion homeostasis of genetically modifiedEscherichia coliNissle 1917 and K12 (W3110) strains on colonization properties in the murine intestinal tract. European Journal of Microbiology and Immunology, 2013, 3, 229-235.	2.8	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 <i>Serratia marcescens</i> Strains Isolated from Serpentine Deposits. Advanced Materials Research, 2007, 20-21, 521-525.	0.3	1
100	How is a Zinc Ion Correctly Allocated to a Zinc-dependent Protein?. Advances in Environmental Microbiology, 2022, , 579-660.	0.3	1
101	Chemical Constraints for Transition Metal Cation Allocation. Advances in Environmental Microbiology, 2022, , 21-52.	0.3	1
102	Basic Biochemical Roots. , 2014, , 1-13.		0