Dietmar KÃ¼ltz

List of Publications by Year
in descending order

85 papers	6,742 citations	101543 36 h-index	62596 80 g-index
94 all docs	94 docs citations	94 times ranked	7961 citing authors

#	Article	IF	Citations
1	Physiological mechanisms of stress-induced evolution. Journal of Experimental Biology, 2022, 225, .	1.7	14
2	Prediction and Experimental Validation of a New Salinity-Responsive Cis-Regulatory Element (CRE) in a Tilapia Cell Line. Life, 2022, 12, 787.	2.4	0
3	Proteomic changes associated with predatorâ€induced morphological defences in oysters. Molecular Ecology, 2022, 31, 4254-4270.	3.9	1
4	An efficient vector-based CRISPR/Cas9 system in an Oreochromis mossambicus cell line using endogenous promoters. Scientific Reports, 2021, 11, 7854.	3.3	12
5	A dataâ€independent acquisition (DIA) assay library for quantitation of environmental effects on the kidney proteome of <i>Oreochromis niloticus</i>. Molecular Ecology Resources, 2021, 21, 2486-2503.	4.8	9
6	Nonlinear effects of environmental salinity on the gill transcriptome versus proteome of Oreochromis niloticus modulate epithelial cell turnover. Genomics, 2021, 113, 3235-3249.	2.9	11
7	Defining biological stress and stress responses based on principles of physics. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 350-358.	1.9	38
8	An osmolality/salinity-responsive enhancer 1 (OSRE1) in intron 1 promotes salinity induction of tilapia glutamine synthetase. Scientific Reports, 2020, 10, 12103.	3.3	9
9	Proteomics of Osmoregulatory Responses in Threespine Stickleback Gills. Integrative and Comparative Biology, 2020, 60, 304-317.	2.0	8
10	Introduction to the special issue: Comparative biology of cellular stress responses in animals. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 345-349.	1.9	10
11	The cellular stress response in fish exposed to salinity fluctuations. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 421-435.	1.9	91
12	Evolution of cellular stress response mechanisms. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 359-378.	1.9	63
13	Identification of key proteins involved in stickleback environmental adaptation with system-level analysis. Physiological Genomics, 2020, 52, 531-548.	2.3	2
14	Early-life exposure to the endocrine disruptor 17-Î±-ethinylestradiol induces delayed effects in adult brain, liver and ovotestis proteomes of a self-fertilizing fish. Journal of Proteomics, 2019, 194, 112-124.	2.4	18
15	Diversity of resistance mechanisms in carbapenem-resistant Enterobacteriaceae at a health care system in Northern California, from 2013 to 2016. Diagnostic Microbiology and Infectious Disease, 2019, 93, 250-257.	1.8	52
16	Development of a Gill Assay Library for Ecological Proteomics of Threespine Sticklebacks (Gasterosteus aculeatus). Molecular and Cellular Proteomics, 2018, 17, 2146-2163.	3.8	22
17	Contrasting seasonal and aseasonal environments across stages of the annual cycle in the rufousâ€collared sparrow, <i>Zonotrichia capensis</i>: Differences in endocrine function, proteome and body condition. Journal of Animal Ecology, 2018, 87, 1364-1382.	2.8	4
18	Osmolality/salinity-responsive enhancers (OSREs) control induction of osmoprotective genes in euryhaline fish. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2729-E2738.	7.1	24

#	Article	IF	Citations
19	Skeletal stiffening in an amphibious fish out of water is a response to increased body weight. Journal of Experimental Biology, 2017, 220, 3621-3631.	1.7	25
20	Tgm1-like transglutaminases in tilapia (Oreochromis mossambicus). PLoS ONE, 2017, 12, e0177016.	2.5	8
21	Population-specific renal proteomes of marine and freshwater three-spined sticklebacks. Journal of Proteomics, 2016, 135, 112-131.	2.4	14
22	Populationâ€specific plasma proteomes of marine and freshwater threeâ€spined sticklebacks (<i>Gasterosteus aculeatus</i>). Proteomics, 2015, 15, 3980-3992.	2.2	15
23	Physiological mechanisms used by fish to cope with salinity stress. Journal of Experimental Biology, 2015, 218, 1907-1914.	1.7	265
24	Alterations in the proteome of the respiratory tract in response to single and multiple exposures to naphthalene. Proteomics, 2015, 15, 2655-2668.	2.2	6
25	Direct Ionic Regulation of the Activity of Myo-Inositol Biosynthesis Enzymes in Mozambique Tilapia. PLoS ONE, 2015, 10, e0123212.	2.5	12
26	Sublethal Effects of CuO Nanoparticles on Mozambique Tilapia (Oreochromis mossambicus) Are Modulated by Environmental Salinity. PLoS ONE, 2014, 9, e88723.	2.5	45
27	Derivation and Osmotolerance Characterization of Three Immortalized Tilapia (Oreochromis) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	2.5	40
28	The Physiological Responses of Green Sturgeon (<i>Acipenser medirostris</i>) to Potential Global Climate Change Stressors. Physiological and Biochemical Zoology, 2014, 87, 456-463.	1.5	9
29	Osmotic regulation and tissue localization of the <i>myo</i>â€inositol biosynthesis pathway in tilapia (<i>Oreochromis mossambicus</i>) larvae. Journal of Experimental Zoology, 2014, 321, 457-466.	1.2	17
30	New Frontiers for Organismal Biology. BioScience, 2013, 63, 464-471.	4.9	30
31	Salinity-induced activation of the <i>myo</i>-inositol biosynthesis pathway in tilapia gill epithelium. Journal of Experimental Biology, 2013, 216, 4626-38.	1.7	28
32	Tilapia (<i>Oreochromis mossambicus</i>) brain cells respond to hyperosmotic challenge by inducing<i>myo</i>-inositol biosynthesis. Journal of Experimental Biology, 2013, 216, 4615-25.	1.7	29
33	Quantitative Molecular Phenotyping of Gill Remodeling in a Cichlid Fish Responding to Salinity Stress. Molecular and Cellular Proteomics, 2013, 12, 3962-3975.	3.8	58
34	Consumption of Lysozyme-Rich Milk Can Alter Microbial Fecal Populations. Applied and Environmental Microbiology, 2012, 78, 6153-6160.	3.1	87
35	The Combinatorial Nature of Osmosensing in Fishes. Physiology, 2012, 27, 259-275.	3.1	78
36	Osmosensing. Fish Physiology, 2012, 32, 45-68.	0.8	12

#	Article	IF	Citations
37	The proteomic response of sea squirts (genus Ciona) to acute heat stress: A global perspective on the thermal stability of proteins. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2011, 6, 322-334.	1.0	35
38	A novel GRAIL E3 ubiquitin ligase promotes environmental salinity tolerance in euryhaline tilapia. Biochimica Et Biophysica Acta - General Subjects, 2011, 1810, 439-445.	2.4	14
39	The Ecoresponsive Genome of <i>Daphnia pulex</i>. Science, 2011, 331, 555-561.	12.6	1,086
40	A proteomic analysis of green and white sturgeon larvae exposed to heat stress and selenium. Science of the Total Environment, 2010, 408, 3176-3188.	8.0	53
41	Rapid changes in plasma cortisol, osmolality, and respiration in response to salinity stress in tilapia (Oreochromis mossambicus). Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2010, 157, 260-265.	1.8	84
42	Compensatory proteome adjustments imply tissue-specific structural and metabolic reorganization following episodic hypoxia or anoxia in the epaulette shark (Hemiscyllium ocellatum). Physiological Genomics, 2010, 42, 93-114.	2.3	42
43	A novel tilapia prolactin receptor is functionally distinct from its paralog. Journal of Experimental Biology, 2009, 212, 2007-2015.	1.7	53
44	Salinity stress results in rapid cell cycle changes of tilapia (<i>Oreochromis mossambicus</i>) gill epithelial cells. Journal of Experimental Zoology, 2009, 311A, 80-90.	1.2	20
45	Osmo- and ionoregulatory responses of green sturgeon (Acipenser medirostris) to salinity acclimation. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2009, 179, 383-390.	1.5	54
46	Prolonged apoptosis in mitochondria-rich cells of tilapia (Oreochromis mossambicus) exposed to elevated salinity. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2009, 179, 535-542.	1.5	30
47	Mechanisms of seawater acclimation in a primitive, anadromous fish, the green sturgeon. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2009, 179, 903-920.	1.5	47
48	Morphology of the rectal gland of the spiny dogfish (Squalus acanthias) shark in response to feeding. Canadian Journal of Zoology, 2009, 87, 440-452.	1.0	12
49	Salinity-dependent changes in Na+/K+-ATPase content of mitochondria-rich cells contribute to differences in thermal tolerance of Mozambique tilapia. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2008, 178, 249-256.	1.5	45
50	Natural feeding influences protein expression in the dogfish shark rectal gland: A proteomic analysis. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2008, 3, 118-127.	1.0	16
51	<i>In Vitro</i> Biologic Activities of the Antimicrobials Triclocarban, Its Analogs, and Triclosan in Bioassay Screens: Receptor-Based Bioassay Screens. Environmental Health Perspectives, 2008, 116, 1203-1210.	6.0	312
52	Functional genomics and proteomics of the cellular osmotic stress response in `non-model' organisms. Journal of Experimental Biology, 2007, 210, 1593-1601.	1.7	78
53	Evaluation of Cytotoxicity Attributed to Thimerosal on Murine and Human Kidney Cells. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2007, 70, 2092-2095.	2.3	7
54	Specific TSC22 domain transcripts are hypertonically induced and alternatively spliced to protect mouse kidney cells during osmotic stress. FEBS Journal, 2007, 274, 109-124.	4.7	53

#	ARTICLE	IF	CITATIONS
55	Osmotic stress sensing and signaling in animals. FEBS Journal, 2007, 274, 5781-5781.	4.7	21
56	Osmotic stress sensing and signaling in fishes. FEBS Journal, 2007, 274, 5790-5798.	4.7	173
57	Proteomic identification of processes and pathways characteristic of osmoregulatory tissues in spiny dogfish shark (Squalus acanthias). Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2006, 1, 328-343.	1.0	16
58	Identification and pathway analysis of immediate hyperosmotic stress responsive molecular mechanisms in tilapia (Oreochromis mossambicus) gill. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2006, 1, 344-356.	1.0	44
59	Constitutive and inducible stress proteins dominate the proteome of the murine inner medullary collecting duct-3 (mIMCD3) cell line. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 1007-1020.	2.3	25
60	Regulation of osmotic stress transcription factor 1 (Ostf1) in tilapia(Oreochromis mossambicus) gill epithelium during salinity stress. Journal of Experimental Biology, 2006, 209, 3257-3265.	1.7	57
61	Ultrasound detection and characterization of polycystic kidney disease in a mouse model. Comparative Medicine, 2006, 56, 215-21.	1.0	5
62	MOLECULAR AND EVOLUTIONARY BASIS OF THE CELLULAR STRESS RESPONSE. Annual Review of Physiology, 2005, 67, 225-257.	13.1	1,247
63	DNA damage signals facilitate osmotic stress adaptation. American Journal of Physiology - Renal Physiology, 2005, 289, F504-F505.	2.7	29
64	Nek8 Mutation Causes Overexpression of Galectin-1, Sorcin, and Vimentin and Accumulation of the Major Urinary Protein in Renal Cysts of jck Mice. Molecular and Cellular Proteomics, 2005, 4, 1009-1018.	3.8	43
65	Rapid hyperosmotic coinduction of two tilapia (Oreochromis mossambicus) transcription factors in gill cells. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 927-932.	7.1	99
66	Laser scanning cytometry and tissue microarray analysis of salinity effects on killifish chloride cells. Journal of Experimental Biology, 2004, 207, 1729-1739.	1.7	16
67	Gadd45 Proteins Induce G2/M Arrest and Modulate Apoptosis in Kidney Cells Exposed to Hyperosmotic Stress. Journal of Biological Chemistry, 2004, 279, 39075-39084.	3.4	78
68	Hyperosmolality triggers oxidative damage in kidney cells. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9177-9178.	7.1	34
69	Hypertonicity and TonEBP promote development of the renal concentrating system. American Journal of Physiology - Renal Physiology, 2004, 287, F876-F877.	2.7	12
70	TeleostFh14-3-3a protein protects xenopus oocytes from hyperosmolality. Journal of Experimental Zoology Part A, Comparative Experimental Biology, 2003, 299A, 103-109.	1.3	13
71	Evolution of the cellular stress proteome: from monophyletic origin to ubiquitous function. Journal of Experimental Biology, 2003, 206, 3119-3124.	1.7	292
72	Three GADD45 isoforms contribute to hypertonic stress phenotype of murine renal inner medullary cells. American Journal of Physiology - Renal Physiology, 2002, 283, F1020-F1029.	2.7	25

#	Article	IF	Citations
73	Mitogen-activated protein kinases are in vivo transducers of osmosensory signals in fish gill cells. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2001, 129, 821-829.	1.6	103
74	Cellular osmoregulation: beyond ion transport and cell volume. Zoology, 2001, 104, 198-208.	1.2	29
75	Maintenance of genomic integrity in mammalian kidney cells exposed to hyperosmotic stress. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2001, 130, 421-428.	1.8	41
76	Evolution of Osmosensory MAP Kinase Signaling Pathways. American Zoologist, 2001, 41, 743-757.	0.7	4
77	Protection of Renal Inner Medullary Epithelial Cells from Apoptosis by Hypertonic Stress-induced p53 Activation. Journal of Biological Chemistry, 2000, 275, 18243-18247.	3.4	99
78	Osmotic regulation of DNA activity and the cell cycle. Cell and Molecular Response To Stress, 2000, 1, 157-179.	0.4	14
79	Phylogenetic and Functional Classification of Mitogen- and Stress-Activated Protein Kinases. Journal of Molecular Evolution, 1998, 46, 571-588.	1.8	181
80	Hyperosmolality Causes Growth Arrest of Murine Kidney Cells. Journal of Biological Chemistry, 1998, 273, 13645-13651.	3.4	179
81	Distinct Regulation of Osmoprotective Genes in Yeast and Mammals. Journal of Biological Chemistry, 1997, 272, 13165-13170.	3.4	91
82	REGULATION OF GENE EXPRESSION BY HYPERTONICITY. Annual Review of Physiology, 1997, 59, 437-455.	13.1	355
83	Osmotic regulation of gene expression. FASEB Journal, 1996, 10, 1598-1606.	0.5	158
84	Mitochondria-rich (MR) cells and the activities of the and carbonic anhydrase in the gill and opercular epithelium of Oreochromis mossambicus adapted to various salinities. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1992, 102, 293-301.	0.2	45
85	Proteomic Analysis of the Renal Inner Medulla and Collecting Ducts. , 0, , 39-51.		0