Thomas Wichard

List of Publications by Year
in descending order

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88	4,424	94433	110387
papers	citations	37 h-index	64 g-index

96	96	96	3622
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Aldehyde suppression of copepod recruitment in blooms of a ubiquitous planktonic diatom. Nature, 2004, 429, 403-407.	27.8	373
2	Growth and Thallus Morphogenesis of Ulva mutabilis (Chlorophyta) Depends on A Combination of Two Bacterial Species Excreting Regulatory Factors. Journal of Phycology, 2012, 48, 1433-1447.	2.3	180
3	Storage and bioavailability of molybdenum in soils increased by organic matter complexation. Nature Geoscience, 2009, 2, 625-629.	12.9	176
4	The green seaweed Ulva: a model system to study morphogenesis. Frontiers in Plant Science, 2015, 6, 72.	3.6	173
5	Survey of the Chemical Defence Potential of Diatoms: Screening of Fifty Species for Î±,Î²,Î³,Î´-unsaturated aldehydes. Journal of Chemical Ecology, 2005, 31, 949-958.	1.8	158
6	Offshore macroalgae biomass for bioenergy production: Environmental aspects, technological achievements and challenges. Renewable and Sustainable Energy Reviews, 2017, 75, 35-45.	16.4	149
7	Exploring bacteria-induced growth and morphogenesis in the green macroalga order Ulvales (Chlorophyta). Frontiers in Plant Science, 2015, 6, 86.	3.6	141
8	Uptake of molybdenum and vanadium byÂaÂnitrogen-fixing soil bacterium usingÂsiderophores. Nature Geoscience, 2008, 1, 243-246.	12.9	137
9	Insights into the Evolution of Multicellularity from the Sea Lettuce Genome. Current Biology, 2018, 28, 2921-2933.e5.	3.9	134
10	Multiple roles of siderophores in free-living nitrogen-fixing bacteria. BioMetals, 2009, 22, 573-581.	4.1	131
11	Age and nutrient limitation enhance polyunsaturated aldehyde production in marine diatoms. Phytochemistry, 2007, 68, 2059-2067.	2.9	125
12	Macroalgalâ€“bacterial interactions: Role of dimethylsulfoniopropionate in microbial gardening by Ulva (Chlorophyta). Molecular Ecology, 2018, 27, 1808-1819.	3.9	101
13	Essential metals for nitrogen fixation in a freeâ€living N₂â€fixing bacterium: chelation, homeostasis and high use efficiency. Environmental Microbiology, 2011, 13, 1395-1411.	3.8	93
14	Determination and quantification of Î±,Î²,Î³,Î´-unsaturated aldehydes as pentafluorobenzyl-oxime derivates in diatom cultures and natural phytoplankton populations: application in marine field studies. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2005, 814, 155-161.	2.3	90
15	A Multifunctional Lipoxygenase with Fatty Acid Hydroperoxide Cleaving Activity from the Moss Physcomitrella patens. Journal of Biological Chemistry, 2005, 280, 7588-7596.	3.4	89
16	Lipid and Fatty Acid Composition of Diatoms Revisited: Rapid Wound-Activated Change of Food Quality Parameters Influences Herbivorous Copepod Reproductive Success. ChemBioChem, 2007, 8, 1146-1153.	2.6	86
17	Macroalgal Morphogenesis Induced by Waterborne Compounds and Bacteria in Coastal Seawater. PLoS ONE, 2016, 11, e0146307.	2.5	85
18	Cytotoxicity of diatom-derived oxylipins in organisms belonging to different phyla. Journal of Experimental Biology, 2004, 207, 2935-2946.	1.7	81

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19	Gramibactin is a bacterial siderophore with a diazeniumdiolate ligand system. Nature Chemical Biology, 2018, 14, 841-843.	8.0	73
20	GAMETOGENESIS AND GAMETE RELEASE OFULVA MUTABILISANDULVA LACTUCA(CHLOROPHYTA): REGULATORY EFFECTS AND CHEMICAL CHARACTERIZATION OF THE â€œSWARMING INHIBITORâ€• Journal of Phycology, 2010, 46, 248-259.	2.3	72
21	Colloquium on diatom-copepod interactions. Marine Ecology - Progress Series, 2005, 286, 293-305.	1.9	68
22	Bacteria-induced morphogenesis of Ulva intestinalis and Ulva mutabilis (Chlorophyta): a contribution to the lottery theory. FEMS Microbiology Ecology, 2017, 93, .	2.7	66
23	Furthering knowledge of seaweed growth and development to facilitate sustainable aquaculture. New Phytologist, 2017, 216, 967-975.	7.3	64
24	Role of Chemical Mediators in Aquatic Interactions across the Prokaryoteâ€“Eukaryote Boundary. Journal of Chemical Ecology, 2018, 44, 1008-1021.	1.8	61
25	Cultivating the Macroalgal Holobiont: Effects of Integrated Multi-Trophic Aquaculture on the Microbiome of Ulva rigida (Chlorophyta). Frontiers in Marine Science, 2020, 7, .	2.5	61
26	Regulation of gametogenesis and zoosporogenesis in Ulva linza (Chlorophyta): comparison with Ulva mutabilis and potential for laboratory culture. Frontiers in Plant Science, 2015, 6, 15.	3.6	57
27	Role of the Siderophore Azotobactin in the Bacterial Acquisition of Nitrogenase Metal Cofactors. Environmental Science & Technology, 2009, 43, 7218-7224.	10.0	56
28	Macroalgalâ€“bacterial interactions: identification and role of thallusin in morphogenesis of the seaweed Ulva (Chlorophyta). Journal of Experimental Botany, 2020, 71, 3340-3349.	4.8	56
29	Biosynthesis of C9-aldehydes in the moss Physcomitrella patensâ˜†. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2006, 1761, 301-312.	2.4	54
30	Iron-organic matter complexes accelerate microbial iron cycling in an iron-rich fen. Science of the Total Environment, 2019, 646, 972-988.	8.0	52
31	Unprecedented Lipoxygenase/Hydroperoxide Lyase Pathways in the MossPhyscomitrella patens. Angewandte Chemie - International Edition, 2005, 44, 158-161.	13.8	49
32	Influence of diatoms on copepod reproduction. II. Uncorrelated effects of diatom-derived Î±,Î²,Î³,Î´-unsaturated aldehydes and polyunsaturated fatty acids on Calanus helgolandicus in the field. Progress in Oceanography, 2008, 77, 30-44.	3.2	48
33	Catechol Siderophores Control Tungsten Uptake and Toxicity in the Nitrogen-Fixing Bacterium Azotobacter vinelandii. Environmental Science & Technology, 2008, 42, 2408-2413.	10.0	44
34	Formation of Halogenated Medium Chain Hydrocarbons by a Lipoxygenase/Hydroperoxide Hololyase-Mediated Transformation in Planktonic Microalgae. Journal of the American Chemical Society, 2006, 128, 7114-7115.	13.7	43
35	Transformation of Ulva mutabilis (Chlorophyta) by vector plasmids integrating into the genome. Journal of Phycology, 2015, 51, 963-979.	2.3	43
36	Phytoplankton Cell Lysis Associated with Polyunsaturated Aldehyde Release in the Northern Adriatic Sea. PLoS ONE, 2014, 9, e85947.	2.5	42

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37	Time Course Exo-Metabolomic Profiling in the Green Marine Macroalga Ulva (Chlorophyta) for Identification of Growth Phase-Dependent Biomarkers. Marine Drugs, 2017, 15, 14.	4.6	42
38	â€œGoodâ€•and â€œbadâ€•diatoms: development, growth and juvenile mortality of the copepod Temora longicornis on diatom diets. Marine Biology, 2008, 154, 719-734.	1.5	39
39	Winter-spring phytoplankton blooms in Dabob Bay, Washington. Progress in Oceanography, 2005, 67, 286-313.	3.2	38
40	Life-history responses of Daphnia pulicaria to diets containing freshwater diatoms: Effects of nutritional quality versus polyunsaturated aldehydes. Limnology and Oceanography, 2005, 50, 449-454.	3.1	37
41	Prevalence and mechanism of polyunsaturated aldehydes production in the green tide forming macroalgal genus Ulva (Ulvales, Chlorophyta). Chemistry and Physics of Lipids, 2014, 183, 100-109.	3.2	37
42	Collapse of Calanus chilensis reproduction in a marine environment with high diatom concentration. Journal of Experimental Marine Biology and Ecology, 2007, 352, 187-199.	1.5	36
43	Using chemical language to shape future marine health. Frontiers in Ecology and the Environment, 2019, 17, 530-537.	4.0	33
44	Influence of diatoms on copepod reproduction. I. Field and laboratory observations related to Calanus helgolandicus egg production. Marine Ecology - Progress Series, 2006, 308, 129-142.	1.9	33
45	Microbiome-Dependent Adaptation of Seaweeds Under Environmental Stresses: A Perspective. Frontiers in Marine Science, 2020, 7, .	2.5	33
46	Direct quantification of bacterial molybdenum and iron metallophores with ultra-high-performance liquid chromatography coupled to time-of-flight mass spectrometry. Journal of Chromatography A, 2013, 1298, 50-60.	3.7	31
47	Influence of diatoms on copepod reproduction. III. Consequences of abnormal oocyte maturation on reproductive factors in Calanus helgolandicus. Marine Biology, 2007, 152, 415-428.	1.5	30
48	Metallophore mapping in complex matrices by metal isotope coded profiling of organic ligands. Analyst, The, 2014, 139, 6096-6099.	3.5	30
49	Morphogenesis of Ulva mutabilis (Chlorophyta) induced by Maribacter species (Bacteroidetes,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.2	30
50	Conspecificity of the model organism Ulva mutabilis and Ulva compressa (Ulvophyceae,) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.3	30
51	Analysis of algal growth- and morphogenesis- promoting factors in an integrated multi-trophic aquaculture system for farming Ulva spp.. Aquaculture Environment Interactions, 2019, 11, 375-391.	1.8	30
52	From model organism to application: Bacteria-induced growth and development of the green seaweed Ulva and the potential of microbe leveraging in algal aquaculture. Seminars in Cell and Developmental Biology, 2023, 134, 69-78.	5.0	29
53	Vanadium Requirements and Uptake Kinetics in the Dinitrogen-Fixing Bacterium Azotobacter vinelandii. Applied and Environmental Microbiology, 2008, 74, 1478-1484.	3.1	28
54	Identification of Metallophores and Organic Ligands in the Chemosphere of the Marine Macroalga Ulva (Chlorophyta) and at Land-Sea Interfaces. Frontiers in Marine Science, 2016, 3, .	2.5	25

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55	Short synthesis of labeled and unlabeled 6Z,9Z,12Z,15-hexadecatetraenoic acid as metabolic probes for biosynthetic studies on diatoms. Chemistry and Physics of Lipids, 2004, 131, 159-166.	3.2	22
56	Metallophore profiling of nitrogen-fixing Frankia spp. to understand metal management in the rhizosphere of actinorhizal plants. Metallomics, 2019, 11, 810-821.	2.4	22
57	Engineering bacteria-seaweed symbioses for modulating the photosynthate content of Ulva (Chlorophyta): Significant for the feedstock of bioethanol production. Algal Research, 2020, 49, 101945.	4.6	22
58	DeltaMS: a tool to track isotopologues in GC- and LC-MS data. Metabolomics, 2018, 14, 41.	3.0	18
59	Effect of organic matter on nitrogenase metal cofactors homeostasis in <scp>A</scp>zotobacter vinelandii under diazotrophic conditions. Environmental Microbiology Reports, 2016, 8, 76-84.	2.4	17
60	In situ monitoring of molecular changes during cell differentiation processes in marine macroalgae through mass spectrometric imaging. Analytical and Bioanalytical Chemistry, 2017, 409, 4893-4903.	3.7	17
61	Iron is not everything: unexpected complex metabolic responses between iron-cycling microorganisms. ISME Journal, 2020, 14, 2675-2690.	9.8	14
62	The sorption behaviour of amine micropollutants on polyethylene microplastics â€“ impact of aging and interactions with green seaweed. Environmental Sciences: Processes and Impacts, 2020, 22, 1678-1687.	3.5	14
63	Cell structure and microtubule organisation during gametogenesis of Ulva mutabilis FÃ¸yn (Chlorophyta). Botanica Marina, 2017, 60, .	1.2	13
64	Rhizobactin B is the preferred siderophore by a novel Pseudomonas isolate to obtain iron from dissolved organic matter in peatlands. BioMetals, 2020, 33, 415-433.	4.1	13
65	Algae induce siderophore biosynthesis in the freshwater bacterium Cupriavidus necator H16. BioMetals, 2019, 32, 77-88.	4.1	11
66	Screening and verification of extranuclear genetic markers in green tide algae from the Yellow Sea. PLoS ONE, 2021, 16, e0250968.	2.5	11
67	Preparation of axenic cultures in Ulva (Chlorophyta). , 2018, , 159-171.		10
68	Impact of elevated CO2 on metal homeostasis and the actinorhizal symbiosis in early successional alder shrubs. Environmental and Experimental Botany, 2015, 109, 168-176.	4.2	9
69	A new glance at the chemosphere of macroalgalâ€“bacterial interactions: In situ profiling of metabolites in symbiosis by mass spectrometry. Beilstein Journal of Organic Chemistry, 2021, 17, 1313-1322.	2.2	9
70	Effects of Reversal of Water Flow in an Arctic Floodplain River on Fluvial Emissions of CO₂ and CH₄. Journal of Geophysical Research G: Biogeosciences, 2022, 127, e2021JG006485.	3.0	9
71	Frankobactin Metallophores Produced by Nitrogen-Fixing Frankia Actinobacteria Function in Toxic Metal Sequestration. Journal of Natural Products, 2021, 84, 1216-1225.	3.0	8
72	Purification of sporulation and swarming inhibitors from Ulva. , 2018, , 139-157.		8

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73	Metabolite profiling reveals insights into the species-dependent cold stress response of the green seaweed holobiont Ulva (Chlorophyta). Environmental and Experimental Botany, 2022, 200, 104913.	4.2	8
74	Culture conditions affect fatty acid content along with wound-activated production of polyunsaturated aldehydes in Thalassiosira rotula (Coscinodiscophyceae). Nova Hedwigia, 2010, 136, 231-248.	0.2	7
75	Transcriptional dynamics of gametogenesis in the green seaweed Ulva mutabilis identifies an RWP-RK transcription factor linked to reproduction. BMC Plant Biology, 2022, 22, 19.	3.6	7
76	Identification of the Hydroxamate Siderophore Ferricrocin in Cladosporium cladosporioides. Natural Product Communications, 2014, 9, 1934578X1400900.	0.5	5
77	Flow cytometric measurements as a proxy for sporulation intensity in the cultured macroalga Ulva (Chlorophyta). Botanica Marina, 2021, 64, 83-92.	1.2	5
78	Polyethylene glycol-mediated transformation in the green macroalga Ulva mutabilis (Chlorophyta). , 2018, , 469-483.		5
79	The APAF1_C/WD40 repeat domain-encoding gene from the sea lettuce Ulva mutabilis sheds light on the evolution of NB-ARC domain-containing proteins in green plants. Planta, 2022, 255, 76.	3.2	5
80	A fast and direct liquid chromatographyâ€mass spectrometry method to detect and quantify polyunsaturated aldehydes and polar oxylipins in diatoms. Limnology and Oceanography: Methods, 2017, 15, 70-79.	2.0	4
81	Genome Sequence of Frankia sp. Strain CH37, a Metallophore-Producing, Nitrogen-Fixing Actinobacterium Isolated from the Sea Buckthorn, Hippophae rhamnoides (Elaeagnaceae). Microbiology Resource Announcements, 2020, 9, .	0.6	4
82	Bisphenol A: Quantification in Complex Matrices and Removal by Anaerobic Sludges. Pollutants, 2021, 1, 194-206.	2.1	4
83	Identification of the hydroxamate siderophore ferricrocin in Cladosporium cladosporioides. Natural Product Communications, 2014, 9, 539-40.	0.5	4
84	Metabolomics of intra- and extracellular metabolites from micro- and macroalgae using GCâ€“MS and LCâ€“MS. , 2018, , 279-300.		3
85	Modeling the growth and sporulation dynamics of the macroalga <i>Ulva</i> in mixed-age populations in cultivation and the formation of green tides. Biogeosciences, 2022, 19, 2263-2271.	3.3	3
86	Phycomorph: macroalgal development and morphogenesis. Botanica Marina, 2017, 60, .	1.2	2
87	Was den Meersalat in Form bringt. Nachrichten Aus Der Chemie, 2017, 65, 870-873.	0.0	1
88	Identification of the new prenyltransferase Ubi-297 from marine bacteria and elucidation of its substrate specificity. Beilstein Journal of Organic Chemistry, 0, 18, 722-731.	2.2	0