

Frithjof C KÃ¼pper

List of Publications by Year in descending order

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107
papers

6,122
citations

81900

39
h-index

74163

75
g-index

112
all docs

112
docs citations

112
times ranked

7412
citing authors

#	ARTICLE	IF	CITATIONS
1	The Ectocarpus genome and the independent evolution of multicellularity in brown algae. <i>Nature</i> , 2010, 465, 617-621.	27.8	774
2	DNA barcoding of oomycetes with cytochrome <i>c</i> oxidase subunit I and internal transcribed spacer. <i>Molecular Ecology Resources</i> , 2011, 11, 1002-1011.	4.8	504
3	Photolysis of iron siderophore chelates promotes bacterial-algal mutualism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 17071-17076.	7.1	446
4	Iodide accumulation provides help with an inorganic antioxidant impacting atmospheric chemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 6954-6958.	7.1	318
5	Commemorating Two Centuries of Iodine Research: An Interdisciplinary Overview of Current Research. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11598-11620.	13.8	299
6	HEAVY METAL-INDUCED INHIBITION OF PHOTOSYNTHESIS: TARGETS OF IN VIVO HEAVY METAL CHLOROPHYLL FORMATION1. <i>Journal of Phycology</i> , 2002, 38, 429-441.	2.3	176
7	Integrating chytrid fungal parasites into plankton ecology: research gaps and needs. <i>Environmental Microbiology</i> , 2017, 19, 3802-3822.	3.8	171
8	Complexation and Toxicity of Copper in Higher Plants. I. Characterization of Copper Accumulation, Speciation, and Toxicity in <i>Crassula helmsii</i> as a New Copper Accumulator. <i>Plant Physiology</i> , 2009, 151, 702-714.	4.8	134
9	Oligoalginate recognition and oxidative burst play a key role in natural and induced resistance of sporophytes of laminariales. <i>Journal of Chemical Ecology</i> , 2002, 28, 2057-2081.	1.8	127
10	Iodine and Halocarbon Response of <i>Laminaria digitata</i> to Oxidative Stress and Links to Atmospheric New Particle Production. <i>Environmental Chemistry</i> , 2005, 2, 282.	1.5	126
11	Environmental Barcoding Reveals Massive Dinoflagellate Diversity in Marine Environments. <i>PLoS ONE</i> , 2010, 5, e13991.	2.5	112
12	Free Fatty Acids and Methyl Jasmonate Trigger Defense Reactions in <i>Laminaria digitata</i> . <i>Plant and Cell Physiology</i> , 2009, 50, 789-800.	3.1	109
13	Zoosporic parasites infecting marine diatoms – A black box that needs to be opened. <i>Fungal Ecology</i> , 2016, 19, 59-76.	1.6	109
14	Evaluating the Ribosomal Internal Transcribed Spacer (ITS) as a Candidate Dinoflagellate Barcode Marker. <i>PLoS ONE</i> , 2012, 7, e42780.	2.5	92
15	Copper-induced inhibition of photosynthesis: limiting steps of in vivo copper chlorophyll formation in <i>Scenedesmus quadricauda</i> . <i>Functional Plant Biology</i> , 2003, 30, 1187.	2.1	91
16	Photoreactivity of Iron(III)-Aerobactin: Photoproduct Structure and Iron(III) Coordination. <i>Inorganic Chemistry</i> , 2006, 45, 6028-6033.	4.0	91
17	Detection of Differential Host Susceptibility to the Marine Oomycete Pathogen <i>Eurychasma dicksonii</i> by Real-Time PCR: Not All Algae Are Equal. <i>Applied and Environmental Microbiology</i> , 2009, 75, 322-328.	3.1	88
18	Early events in the perception of lipopolysaccharides in the brown alga <i>Laminaria digitata</i> include an oxidative burst and activation of fatty acid oxidation cascades. <i>Journal of Experimental Botany</i> , 2006, 57, 1991-1999.	4.8	87

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19	Temperature-related changes in polar cyanobacterial mat diversity and toxin production. <i>Nature Climate Change</i> , 2012, 2, 356-360.	18.8	81
20	Brunsvicamides Aâ€™C:â€‰% Sponge-Related Cyanobacterial Peptides with Mycobacterium tuberculosis Protein Tyrosine Phosphatase Inhibitory Activity. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 4871-4878.	6.4	78
21	Vibrioferrin, an Unusual Marine Siderophore: Iron Binding, Photochemistry, and Biological Implications. <i>Inorganic Chemistry</i> , 2009, 48, 11451-11458.	4.0	77
22	Boron Binding by a Siderophore Isolated from Marine Bacteria Associated with the Toxic Dinoflagellate <i>Gymnodinium catenatum</i> . <i>Journal of the American Chemical Society</i> , 2007, 129, 478-479.	13.7	70
23	Petrobactin Sulfonate, a New Siderophore Produced by the Marine Bacterium <i>Marinobacter hydrocarbonoclasticus</i> . <i>Journal of Natural Products</i> , 2004, 67, 1897-1899.	3.0	66
24	Barcoding Tetrahymena: Discriminating Species and Identifying Unknowns Using the Cytochrome c Oxidase Subunit I (cox-1) Barcode. <i>Protist</i> , 2011, 162, 2-13.	1.5	65
25	Seasonal variation of polyphenolics in <i>Ascophyllum nodosum</i> (Phaeophyceae). <i>European Journal of Phycology</i> , 2009, 44, 331-338.	2.0	64
26	Photometric Method for the Quantification of Chlorophylls and Their Derivatives in Complex Mixtures: Fitting with Gauss-Peak Spectra. <i>Analytical Biochemistry</i> , 2000, 286, 247-256.	2.4	60
27	X-ray absorption spectroscopic studies on model compounds for biological iodine and bromine. <i>Journal of Synchrotron Radiation</i> , 2005, 12, 85-93.	2.4	57
28	The Development, Ultrastructural Cytology, and Molecular Phylogeny of the Basal Oomycete <i>Eurychasma dicksonii</i> , Infecting the Filamentous Phaeophyte Algae <i>Ectocarpus siliculosus</i> and <i>Pylaiella littoralis</i> . <i>Protist</i> , 2008, 159, 299-318.	1.5	57
29	Involvement of Reactive Oxygen Species and Reactive Nitrogen Species in the Wound Response of <i>Dasycladus vermicularis</i> . <i>Chemistry and Biology</i> , 2006, 13, 353-364.	6.0	52
30	Potential roles for recently discovered chytrid parasites in the dynamics of harmful algal blooms. <i>Fungal Biology Reviews</i> , 2015, 29, 20-33.	4.7	51
31	Massive occurrence of the heterokont and fungal parasites <i>Anisolpidium</i> , <i>Eurychasma</i> and <i>Chytridium</i> in <i>Pylaiella littoralis</i> (Ectocarpales, Phaeophyceae). <i>Nova Hedwigia</i> , 1999, 69, 381-389.	0.4	51
32	Potent toxins in Arctic environments â€“ Presence of saxitoxins and an unusual microcystin variant in Arctic freshwater ecosystems. <i>Chemico-Biological Interactions</i> , 2013, 206, 423-431.	4.0	49
33	In vivo speciation studies and antioxidant properties of bromine in <i>Laminaria digitata</i> reinforce the significance of iodine accumulation for kelps. <i>Journal of Experimental Botany</i> , 2013, 64, 2653-2664.	4.8	49
34	Boron and Marine Life: A New Look at an Enigmatic Bioelement. <i>Marine Biotechnology</i> , 2009, 11, 431-440.	2.4	48
35	Release and transformations of inorganic iodine by marine macroalgae. <i>Estuarine, Coastal and Shelf Science</i> , 2009, 82, 406-414.	2.1	46
36	Barcoding of Cryptic Stages of Marine Brown Algae Isolated from Incubated Substratum Reveals High Diversity in Acinetosporaceae (Ectocarpales, Phaeophyceae)1. <i>Cryptogamie, Algologie</i> , 2015, 36, 3.	0.9	45

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37	A survey of iodine content in <i>Laminaria digitata</i> . <i>Botanica Marina</i> , 2004, 47, .	1.2	44
38	The inhibition of TNF- α -induced NF- κ B activation by marine natural products. <i>Biochemical Pharmacology</i> , 2009, 78, 592-606.	4.4	44
39	<i>Pythium polare</i> , a new heterothallic oomycete causing brown discolouration of <i>Sanionia uncinata</i> in the Arctic and Antarctic. <i>Fungal Biology</i> , 2012, 116, 756-768.	2.5	42
40	Borate Binding to Siderophores: Structure and Stability. <i>Journal of the American Chemical Society</i> , 2007, 129, 12263-12271.	13.7	39
41	Ferric Stability Constants of Representative Marine Siderophores: Marinobactins, Aquachelins, and Petrobactin. <i>Inorganic Chemistry</i> , 2009, 48, 11466-11473.	4.0	38
42	Seaweed biodiversity in the south-western Antarctic Peninsula: surveying macroalgal community composition in the Adelaide Island/Marguerite Bay region over a 35-year time span. <i>Polar Biology</i> , 2014, 37, 1607-1619.	1.2	37
43	Chytridiomycosis of Marine Diatoms—The Role of Stress Physiology and Resistance in Parasite-Host Recognition and Accumulation of Defense Molecules. <i>Marine Drugs</i> , 2017, 15, 26.	4.6	34
44	Effects of eukaryotic pathogens (Chytridiomycota and Oomycota) on marine benthic diatom communities in the Solthörn tidal flat (southern North Sea, Germany). <i>European Journal of Phycology</i> , 2016, 51, 253-269.	2.0	33
45	A Molecular Insight into Algal-Oomycete Warfare: cDNA Analysis of <i>Ectocarpus siliculosus</i> Infected with the Basal Oomycete <i>Eurychasma dicksonii</i> . <i>PLoS ONE</i> , 2011, 6, e24500.	2.5	33
46	Eukaryotic pathogens (Chytridiomycota and Oomycota) infecting marine microphytobenthic diatoms — a methodological comparison. <i>Journal of Phycology</i> , 2014, 50, 1009-1019.	2.3	31
47	Environmental effects on arsenosugars and arsenolipids in <i>Ectocarpus</i> (Phaeophyta). <i>Environmental Chemistry</i> , 2016, 13, 21.	1.5	31
48	Arctic marine phyto-benthos of northern Baffin Island. <i>Journal of Phycology</i> , 2016, 52, 532-549.	2.3	31
49	Bromine is an Endogenous Component of a Vanadium Bromoperoxidase. <i>Journal of the American Chemical Society</i> , 2005, 127, 15340-15341.	13.7	30
50	Infection of the brown alga <i>Ectocarpus siliculosus</i> by the oomycete <i>Eurychasma dicksonii</i> induces oxidative stress and halogen metabolism. <i>Plant, Cell and Environment</i> , 2016, 39, 259-271.	5.7	30
51	<i>Maulinia braseltonii</i> sp. nov. (Rhizaria, Phytomyxea, Phagomyxida): A Cyst-forming Parasite of the Bull Kelp <i>Durvillaea</i> spp. (Stramenopila, Phaeophyceae, Fucales). <i>Protist</i> , 2017, 168, 468-480.	1.5	30
52	The Culture Collection of Algae and Protozoa (CCAP): A biological resource for protistan genomics. <i>Gene</i> , 2007, 406, 51-57.	2.2	29
53	Key aspects of the iodine metabolism in brown algae: a brief critical review. <i>Metallomics</i> , 2019, 11, 756-764.	2.4	29
54	The current state of DNA barcoding of macroalgae in the Mediterranean Sea: presently lacking but urgently required. <i>Botanica Marina</i> , 2020, 63, 253-272.	1.2	27

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55	Atypical iron storage in marine brown algae: a multidisciplinary study of iron transport and storage in <i>Ectocarpus siliculosus</i> . <i>Journal of Experimental Botany</i> , 2012, 63, 5763-5772.	4.8	24
56	The Mediterranean deep-water kelp <i>Laminaria rodriguezii</i> is an endangered species in the Adriatic Sea. <i>Marine Biology</i> , 2016, 163, 69.	1.5	24
57	Emission of volatile halogenated compounds, speciation and localization of bromine and iodine in the brown algal genome model <i>Ectocarpus siliculosus</i> . <i>Journal of Biological Inorganic Chemistry</i> , 2018, 23, 1119-1128.	2.6	24
58	The future of marine biodiversity and marine ecosystem functioning in UK coastal and territorial waters (including UK Overseas Territories) – with an emphasis on marine macrophyte communities. <i>Botanica Marina</i> , 2018, 61, 521-535.	1.2	24
59	Single-cell chlorophyll fluorescence kinetic microscopy of <i>Pylaiella littoralis</i> (Phaeophyceae) infected by <i>Chytridium polysiphoniae</i> (Chytridiomycota). <i>European Journal of Phycology</i> , 2006, 41, 395-403.	2.0	22
60	The CCAP KnowledgeBase: linking protistan and cyanobacterial biological resources with taxonomic and molecular data. <i>Systematics and Biodiversity</i> , 2013, 11, 407-413.	1.2	20
61	Ligulate <i>Desmarestia</i> (Desmarestiales, Phaeophyceae) revisited: <i>D. japonica</i> sp. nov. and <i>D. dudresnayi</i> differ from <i>D. ligulata</i> . <i>Journal of Phycology</i> , 2014, 50, 149-166.	2.3	20
62	New record and phylogenetic affinities of the oomycete <i>Olpidiopsis feldmanni</i> infecting <i>Asparagopsis</i> sp. (Rhodophyta). <i>Diseases of Aquatic Organisms</i> , 2015, 117, 45-57.	1.0	19
63	Intracellular eukaryotic pathogens in brown macroalgae in the Eastern Mediterranean, including LSU rRNA data for the oomycete <i>Eurychasma dicksonii</i> . <i>Diseases of Aquatic Organisms</i> , 2013, 104, 1-11.	1.0	17
64	Seasonal periodicity and reproduction of brown algae (Phaeophyceae) at Puerto Deseado (Patagonia). <i>Botanica Marina</i> , 2012, 55, 217-228.	1.2	16
65	Surface-bound iron: a metal ion buffer in the marine brown alga <i>Ectocarpus siliculosus</i> ? <i>Journal of Experimental Botany</i> , 2014, 65, 585-594.	4.8	16
66	Checklist of seaweeds of Cyprus (Mediterranean Sea). <i>Botanica Marina</i> , 2014, 57, 153-166.	1.2	16
67	Different speciation for bromine in brown and red algae, revealed by in vivo X-ray absorption spectroscopic studies. <i>Journal of Phycology</i> , 2014, 50, 652-664.	2.3	15
68	Reproductive morphology and DNA sequences of the brown alga <i>Platysiphon verticillatus</i> support the new combination <i>Platysiphon glacialis</i> . <i>Journal of Phycology</i> , 2015, 51, 910-917.	2.3	15
69	Macroalgal vegetation on a north European artificial reef (Loch Linnhe, Scotland): biodiversity, community types and role of abiotic factors. <i>Journal of Applied Phycology</i> , 2020, 32, 1353-1363.	2.8	15
70	The potential role of kelp forests on iodine speciation in coastal seawater. <i>PLoS ONE</i> , 2017, 12, e0180755.	2.5	15
71	New taxa of the Porphyridiophyceae (Rhodophyta): <i>Timspurckia oligopyrenoides</i> gen. et sp. nov. and <i>Erythrolobus madagascarensis</i> sp. nov. <i>Phycologia</i> , 2010, 49, 604-616.	1.4	14
72	Some aspects of the iodine metabolism of the giant kelp <i>Macrocystis pyrifera</i> (phaeophyceae). <i>Journal of Inorganic Biochemistry</i> , 2017, 177, 82-88.	3.5	14

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73	Rapid Biopolymerisation During Wound Plug Formation in Green Algae. <i>Journal of Adhesion</i> , 2009, 85, 825-838.	3.0	13
74	Comparative Immunofluorescence and Ultrastructural Analysis of Microtubule Organization in <i>Uronema</i> sp., <i>Klebsormidium flaccidum</i> , <i>K. subtilissimum</i> , <i>Stichococcus bacillaris</i> and <i>S. chloranthus</i> (Chlorophyta). <i>Protist</i> , 2011, 162, 315-331.	1.5	13
75	New records and observations of macroalgae and associated pathogens from the Falkland Islands, Patagonia and Tierra del Fuego. <i>Botanica Marina</i> , 2016, 59, 105-121.	1.2	13
76	Effects of environmental parameters on chytrid infection prevalence of four marine diatoms: a laboratory case study. <i>Botanica Marina</i> , 2017, 60, .	1.2	13
77	Halogens in Seaweeds: Biological and Environmental Significance. <i>Phycology</i> , 2022, 2, 132-171.	3.6	12
78	Size-dependent change in body shape and its possible ecological role in the Patagonian squid (<i>Doryteuthis gahi</i>) in the Southwest Atlantic. <i>Marine Biology</i> , 2019, 166, 1.	1.5	11
79	Prostaglandin A ₂ triggers a strong oxidative burst in <i>Laminaria</i> : a novel defense inducer in brown algae?. <i>Algae</i> , 2012, 27, 21-32.	2.3	11
80	Responses of the Mediterranean seagrass <i>Cymodocea nodosa</i> to combined temperature and salinity stress at the ionic, transcriptomic, ultrastructural and photosynthetic levels. <i>Marine Environmental Research</i> , 2022, 175, 105512.	2.5	11
81	Marine benthic algal flora of Ascension Island, South Atlantic. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2017, 97, 681-688.	0.8	10
82	The influence of marine algae on iodine speciation in the coastal ocean. <i>Algae</i> , 2020, 35, 167-176.	2.3	10
83	Morphological, genotypic and metabolomic signatures confirm interfamilial hybridization between the ubiquitous kelps <i>Macrocystis</i> (Arthrothamnaceae) and <i>Lessonia</i> (Lessoniaceae). <i>Scientific Reports</i> , 2020, 10, 8279.	3.3	9
84	<i>Microspongium alariae</i> in <i>Alaria esculenta</i> : a widely-distributed non-parasitic brown algal endophyte that shows cell modifications within its host. <i>Botanica Marina</i> , 2018, 61, 343-354.	1.2	8
85	DNA barcoding of marine algae from Malta: new records from the central Mediterranean. <i>Acta Botanica Croatica</i> , 2021, 80, 176-183.	0.7	8
86	Multigene Phylogeny, Morphological Observation and Re-examination of the Literature Lead to the Description of the Phaeosacciophyceae Classis Nova and Four New Species of the Heterokontophyta SI Clade. <i>Protist</i> , 2020, 171, 125781.	1.5	7
87	Iodine and fluorine concentrations in seaweeds of the Arabian Gulf identified by morphology and DNA barcodes. <i>Botanica Marina</i> , 2020, 63, 509-519.	1.2	7
88	Biogeography pattern of the marine angiosperm <i>Cymodocea nodosa</i> in the eastern Mediterranean Sea related to the quaternary climatic changes. <i>Ecology and Evolution</i> , 2022, 12, .	1.9	7
89	Why two are not enough: degradation of p-toluenesulfonate by a bacterial community from a pristine site in Moorea, French Polynesia. <i>FEMS Microbiology Letters</i> , 2011, 316, 123-129.	1.8	6
90	Recombinant expression and predicted structure of parborlysin, a cytolytic protein from the Antarctic heteronemertine <i>Parborlasia corrugatus</i> . <i>Toxicon</i> , 2015, 108, 32-37.	1.6	6

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91	<i>Dictyota falklandica</i> sp. nov. (Dictyotales, Phaeophyceae) from the Falkland Islands and southernmost South America. <i>Phycologia</i> , 2019, 58, 640-647.	1.4	6
92	Laminaria kelps impact iodine speciation chemistry in coastal seawater. <i>Estuarine, Coastal and Shelf Science</i> , 2021, 262, 107531.	2.1	6
93	Iodine in Seaweeds – Two Centuries of Research. , 2015, , 591-596.		5
94	Biodiversity of the marine environment around Ascension Island, South Atlantic. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 2017, 97, 643-646.	0.8	5
95	Identifying hotspots of non-indigenous species' high impact in the Maltese islands (Central) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tj 5	3.0	5
96	New records of the rare deep-water alga <i>Sebdenia monnardiana</i> (Rhodophyta) and the alien <i>Dictyota cyanoloma</i> (Phaeophyceae) and the unresolved case of deep-water kelp in the Ionian and Aegean Seas (Greece). <i>Botanica Marina</i> , 2019, 62, 577-586.	1.2	5
97	Managing scientific diving operations in a remote location: the Canadian high Arctic. <i>Diving and Hyperbaric Medicine</i> , 2013, 43, 239-43.	0.5	5
98	Filamentous brown algae infected by the marine, holocarpic oomycete <i>Eurychasma dicksonii</i> . <i>Plant Signaling and Behavior</i> , 2013, 8, e26367.	2.4	4
99	Juvenile morphology of the large Antarctic canopy-forming brown alga, <i>Desmarestia menziesii</i> J. Agardh. <i>Polar Biology</i> , 2019, 42, 2097-2103.	1.2	4
100	Gall disease in the alginophyte <i>Lessonia berteriana</i> : A pathogenic interaction linked with host adulthood in a seasonal-dependant manner. <i>Algal Research</i> , 2019, 39, 101435.	4.6	4
101	The Minute Alga <i>Schizocladia ischiensis</i> (Schizocladiphyceae, Ochrophyta) Isolated by Germling Emergence from 24 m Depth off Rhodes (Greece). <i>Diversity</i> , 2020, 12, 102.	1.7	4
102	Anion binding in biological systems. <i>Journal of Physics: Conference Series</i> , 2009, 190, 012196.	0.4	3
103	Reinstatement of <i>Phrix</i> (Delesseriaceae, Rhodophyta) based on DNA sequence analyses and morpho-anatomical evidence. <i>Phytotaxa</i> , 2018, 334, 215.	0.3	3
104	Assessing watermilfoil invasion effects on native macrophyte communities in North American lakes using a novel approach for macrophyte sampling. <i>Knowledge and Management of Aquatic Ecosystems</i> , 2021, , 1.	1.1	3
105	Reducing Carbon Emissions from the Tourist Accommodation Sector on Non-Interconnected Islands: A Case Study of a Medium-Sized Hotel in Rhodes, Greece. <i>Energies</i> , 2022, 15, 3801.	3.1	2
106	Morphological and molecular evidence for the recognition of <i>Hypoglossum sabahense</i> sp. nov. (Delesseriaceae, Rhodophyta) from Sabah, Malaysia. <i>Algae</i> , 2020, 35, 157-165.	2.3	1
107	Effects of flooding on the Mediterranean <i>Cymodocea nodosa</i> population in relation to environmental degradation. <i>Botanica Marina</i> , 2022, .	1.2	1