

# Bernard Kloareg

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11687614/publications.pdf>

Version: 2024-02-01

98  
papers

8,737  
citations

44069

48  
h-index

42399

92  
g-index

98  
all docs

98  
docs citations

98  
times ranked

6447  
citing authors

#	ARTICLE	IF	CITATIONS
1	Role and Evolution of the Extracellular Matrix in the Acquisition of Complex Multicellularity in Eukaryotes: A Macroalgal Perspective. <i>Genes</i> , 2021, 12, 1059.	2.4	34
2	Presence of Exogenous Sulfate Is Mandatory for Tip Growth in the Brown Alga <i>Ectocarpus subulatus</i> . <i>Frontiers in Plant Science</i> , 2020, 11, 1277.	3.6	7
3	A review about brown algal cell walls and fucose-containing sulfated polysaccharides: Cell wall context, biomedical properties and key research challenges. <i>Carbohydrate Polymers</i> , 2017, 175, 395-408.	10.2	217
4	Arabinogalactan proteins have deep roots in eukaryotes: identification of genes and epitopes in brown algae and their role in <i>Fucus serratus</i> embryo development. <i>New Phytologist</i> , 2016, 209, 1428-1441.	7.3	87
5	Kelps feature systemic defense responses: insights into the evolution of innate immunity in multicellular eukaryotes. <i>New Phytologist</i> , 2014, 204, 567-576.	7.3	21
6	Chemical and enzymatic fractionation of cell walls from Fucales: insights into the structure of the extracellular matrix of brown algae. <i>Annals of Botany</i> , 2014, 114, 1203-1216.	2.9	219
7	Genome structure and metabolic features in the red seaweed <i>Chondrus crispus</i> shed light on evolution of the Archaeplastida. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 5247-5252.	7.1	307
8	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
9	The <i>Ectocarpus</i> Genome and Brown Algal Genomics. <i>Advances in Botanical Research</i> , 2012, 64, 141-184.	1.1	18
10	Evolution and Diversity of Plant Cell Walls: From Algae to Flowering Plants. <i>Annual Review of Plant Biology</i> , 2011, 62, 567-590.	18.7	613
11	Up-Regulation of Lipoxygenase, Phospholipase, and Oxylipin-Production in the Induced Chemical Defense of the Red Alga <i>Gracilaria chilensis</i> against Epiphytes. <i>Journal of Chemical Ecology</i> , 2011, 37, 677-686.	1.8	46
12	Central and storage carbon metabolism of the brown alga <i>Ectocarpus siliculosus</i> : insights into the origin and evolution of storage carbohydrates in Eukaryotes. <i>New Phytologist</i> , 2010, 188, 67-81.	7.3	172
13	The cell wall polysaccharide metabolism of the brown alga <i>Ectocarpus siliculosus</i> . Insights into the evolution of extracellular matrix polysaccharides in Eukaryotes. <i>New Phytologist</i> , 2010, 188, 82-97.	7.3	381
14	The <i>Ectocarpus</i> genome and the independent evolution of multicellularity in brown algae. <i>Nature</i> , 2010, 465, 617-621.	27.8	774
15	DEFENSE EVOLUTION IN THE GRACILARIACEAE (RHODOPHYTA): SUBSTRATE-REGULATED OXIDATION OF AGAR OLIGOSACCHARIDES IS MORE ANCIENT THAN THE OLIGOAGAR-ACTIVATED OXIDATIVE BURST1. <i>Journal of Phycology</i> , 2010, 46, 958-968.	2.3	16
16	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
17	The family 6 carbohydrate-binding modules have coevolved with their appended catalytic modules toward similar substrate specificity. <i>Glycobiology</i> , 2009, 19, 615-623.	2.5	36
18	The Cyclization of the 3,6-Anhydro-Galactose Ring of Î <sup>1</sup> -Carrageenan Is Catalyzed by Two d-Galactose-2,6-Sulfurylases in the Red Alga <i>Chondrus crispus</i> . <i>Plant Physiology</i> , 2009, 151, 1609-1616.	4.8	50

#	ARTICLE	IF	CITATIONS
19	Release and transformations of inorganic iodine by marine macroalgae. <i>Estuarine, Coastal and Shelf Science</i> , 2009, 82, 406-414.	2.1	46
20	Development and physiology of the brown alga <i>Ectocarpus siliculosus</i> : two centuries of research. <i>New Phytologist</i> , 2008, 177, 319-332.	7.3	128
21	Different regulation of haloperoxidation during agar oligosaccharide-activated defence mechanisms in two related red algae, <i>Gracilaria</i> sp. and <i>Gracilaria chilensis</i> . <i>Journal of Experimental Botany</i> , 2007, 58, 4365-4372.	4.8	36
22	Alpha-Agarases Define a New Family of Glycoside Hydrolases, Distinct from Beta-Agarase Families. <i>Applied and Environmental Microbiology</i> , 2007, 73, 4691-4694.	3.1	57
23	Degradation of $\beta$ -carrageenan by <i>Pseudoalteromonas carrageenovora</i> $\beta$ -carrageenase: a new family of glycoside hydrolases unrelated to $\beta$ - and $\beta$ -carrageenases. <i>Biochemical Journal</i> , 2007, 404, 105.	3.7	38
24	Degradation of $\beta$ -carrageenan by <i>Pseudoalteromonas carrageenovora</i> $\beta$ -carrageenase: a new family of glycoside hydrolases unrelated to $\beta$ - and $\beta$ -carrageenases. <i>Biochemical Journal</i> , 2007, 404, 105-114.	3.7	83
25	Cloning and biochemical characterization of the fucanase FcnA: definition of a novel glycoside hydrolase family specific for sulfated fucans. <i>Glycobiology</i> , 2006, 16, 1021-1032.	2.5	95
26	AN EXPRESSED SEQUENCE TAG ANALYSIS OF THALLUS AND REGENERATING PROTOPLASTS OF <i>CHONDRUS CRISPUS</i> (GIGARTINALES, RHODOPHYCEAE)1. <i>Journal of Phycology</i> , 2006, 42, 104-112.	2.3	50
27	Isolation and Culture of a Marine Bacterium Degrading the Sulfated Fucans from Marine Brown Algae. <i>Marine Biotechnology</i> , 2006, 8, 27-39.	2.4	87
28	The endo- $\beta$ -agarases AgaA and AgaB from the marine bacterium <i>Zobellia galactanivorans</i> : two paralogous enzymes with different molecular organizations and catalytic behaviours. <i>Biochemical Journal</i> , 2005, 385, 703-713.	3.7	130
29	DISSECTION OF TWO DISTINCT DEFENSE-RELATED RESPONSES TO AGAR OLIGOSACCHARIDES IN <i>GRACILARIA CHILENSIS</i> (RHODOPHYTA) AND <i>GRACILARIA CONFERTA</i> (RHODOPHYTA)1. <i>Journal of Phycology</i> , 2005, 41, 863-873.	2.3	43
30	Apoplastic oxidation of L-asparagine is involved in the control of the green algal endophyte <i>Acrochaete operculata</i> Correa & Nielsen by the red seaweed <i>Chondrus crispus</i> Stackhouse. <i>Journal of Experimental Botany</i> , 2005, 56, 1317-1326.	4.8	37
31	The Innate Immunity of a Marine Red Alga Involves Oxylipins from Both the Eicosanoid and Octadecanoid Pathways. <i>Plant Physiology</i> , 2004, 135, 1838-1848.	4.8	137
32	Inheritance of organelles in artificial hybrids of the isogamous multicellular chromist alga <i>Ectocarpus siliculosus</i> (Phaeophyceae). <i>European Journal of Phycology</i> , 2004, 39, 235-242.	2.0	53
33	PROPOSAL OF <i>ECTOCARPUS SILICULOSUS</i> (ECTOCARPALES, PHAEOPHYCEAE) AS A MODEL ORGANISM FOR BROWN ALGAL GENETICS AND GENOMICS. <i>Journal of Phycology</i> , 2004, 40, 1079-1088.	2.3	144
34	A survey of iodine content in <i>Laminaria digitata</i> . <i>Botanica Marina</i> , 2004, 47, .	1.2	44
35	Sulfated Fucan Oligosaccharides Elicit Defense Responses in Tobacco and Local and Systemic Resistance Against Tobacco Mosaic Virus. <i>Molecular Plant-Microbe Interactions</i> , 2003, 16, 115-122.	2.6	169
36	The Structural Bases of the Processive Degradation of $\beta$ -Carrageenan, a Main Cell Wall Polysaccharide of Red Algae. <i>Journal of Molecular Biology</i> , 2003, 334, 421-433.	4.2	60

#	ARTICLE	IF	CITATIONS
37	Characterization of Mannuronan C-5-Epimerase Genes from the Brown Alga <i>Laminaria digitata</i> Â. <i>Plant Physiology</i> , 2003, 133, 726-735.	4.8	89
38	The Three-dimensional Structures of Two Î <sup>2</sup> -Agarases. <i>Journal of Biological Chemistry</i> , 2003, 278, 47171-47180.	3.4	120
39	The Brown Algal Kelp <i>Laminaria digitata</i> Features Distinct Bromoperoxidase and Iodoperoxidase Activities. <i>Journal of Biological Chemistry</i> , 2003, 278, 23545-23552.	3.4	94
40	The mitochondrial genome of the brown alga <i>Laminaria digitata</i> : a comparative analysis. <i>European Journal of Phycology</i> , 2002, 37, 163-172.	2.0	57
41	Biotic interactions of marine algae. <i>Current Opinion in Plant Biology</i> , 2002, 5, 308-317.	7.1	168
42	A Signal Released by an Endophytic Attacker Acts as a Substrate for a Rapid Defensive Reaction of the Red Alga <i>Chondrus crispus</i> . <i>ChemBioChem</i> , 2002, 3, 1260-1263.	2.6	25
43	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
44	Cell Cycle in the <i>Fucus</i> Zygote Parallels a Somatic Cell Cycle but Displays a Unique Translational Regulation of Cyclin-Dependent Kinases. <i>Plant Cell</i> , 2001, 13, 585.	6.6	0
45	The Complete Sequence of a Brown Algal Mitochondrial Genome, the Ectocarpale <i>Pylaiella littoralis</i> (L.) Kjellm.. <i>Journal of Molecular Evolution</i> , 2001, 53, 80-88.	1.8	68
46	CLONAL PROPAGATION OF LAMINARIA DIGITATA (PHAEOPHYCEAE) SPOROPHYTES THROUGH A DIPLOID CELL-FILAMENT SUSPENSION. <i>Journal of Phycology</i> , 2001, 37, 411-417.	2.3	26
47	STRUCTURE-ACTIVITY RELATIONSHIPS OF OLIGOAGAR ELICITORS TOWARD GRACILARIA CONFERTA (RHODOPHYTA). <i>Journal of Phycology</i> , 2001, 37, 418-426.	2.3	49
48	A rapid method for the separation and analysis of carrageenan oligosaccharides released by iota- and kappa-carrageenase. <i>Carbohydrate Research</i> , 2001, 331, 101-106.	2.3	50
49	Title is missing!. <i>Journal of Applied Phycology</i> , 2001, 13, 185-193.	2.8	40
50	The Î <sup>9</sup> -carrageenase of <i>P. carrageenovora</i> Features a Tunnel-Shaped Active Site. <i>Structure</i> , 2001, 9, 513-525.	3.3	193
51	The Î <sup>1</sup> -Carrageenase of <i>Alteromonas fortis</i> . <i>Journal of Biological Chemistry</i> , 2001, 276, 40202-40209.	3.4	71
52	Oligoguluronates Elicit an Oxidative Burst in the Brown Algal Kelp <i>Laminaria digitata</i> . <i>Plant Physiology</i> , 2001, 125, 278-291.	4.8	189
53	Cell Cycle in the <i>Fucus</i> Zygote Parallels a Somatic Cell Cycle but Displays a Unique Translational Regulation of Cyclin-Dependent Kinases. <i>Plant Cell</i> , 2001, 13, 585-598.	6.6	23
54	Cell cycle-dependent control of polarised development by a cyclin-dependent kinase-like protein in the <i>Fucus</i> zygote. <i>Development (Cambridge)</i> , 2001, 128, 4383-4392.	2.5	8

#	ARTICLE	IF	CITATIONS
55	CELL WALL BIOLOGY IN RED ALGAE: DIVIDE AND CONQUER. <i>Journal of Phycology</i> , 2000, 36, 793-797.	2.3	20
56	Expression, purification, crystallization and preliminary X-ray analysis of the $\hat{1}^1$ -carrageenase from <i>Alteromonas fortis</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2000, 56, 766-768.	2.5	23
57	Characterisation of complementary DNAs from the expressed sequence tag analysis of life cycle stages of <i>Laminaria digitata</i> (Phaeophyceae). <i>Plant Molecular Biology</i> , 2000, 43, 503-513.	3.9	64
58	Linear $\hat{1}^2$ -1,3 Glucans Are Elicitors of Defense Responses in Tobacco. <i>Plant Physiology</i> , 2000, 124, 1027-1038.	4.8	445
59	$\hat{1}^1$ -Carrageenases Constitute a Novel Family of Glycoside Hydrolases, Unrelated to That of $\hat{1}^2$ -Carrageenases. <i>Journal of Biological Chemistry</i> , 2000, 275, 35499-35505.	3.4	113
60	Inhibition of the Establishment of Zygotic Polarity by Protein Tyrosine Kinase Inhibitors Leads to an Alteration of Embryo Pattern in <i>Fucus</i> . <i>Developmental Biology</i> , 2000, 219, 165-182.	2.0	30
61	Expression, purification, crystallization and preliminary X-ray analysis of the $\hat{1}^2$ -carrageenase from <i>Pseudoalteromonas carrageenovora</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1999, 55, 918-920.	2.5	24
62	ISOLATION AND CHARACTERIZATION OF SIX cDNAs INVOLVED IN CARBON METABOLISM IN LAMINARIA DIGITATA (PHAEOPHYCEAE). <i>Journal of Phycology</i> , 1999, 35, 1237-1245.	2.3	13
63	Oligosaccharide recognition signals and defence reactions in marine plant-microbe interactions. <i>Current Opinion in Microbiology</i> , 1999, 2, 276-283.	5.1	111
64	Sulfated Oligosaccharides Mediate the Interaction between a Marine Red Alga and Its Green Algal Pathogenic Endophyte. <i>Plant Cell</i> , 1999, 11, 1635-1650.	6.6	123
65	MRNA expression in mitochondria of the red alga <i>Chondrus crispus</i> requires a unique RNA-processing mechanism, internal cleavage of upstream tRNAs at pyrimidine 48 1 1 Edited by M. Yaniv. <i>Journal of Molecular Biology</i> , 1999, 288, 579-584.	4.2	6
66	Purification and determination of the action pattern of <i>Haliotis tuberculata</i> laminarinase. <i>Carbohydrate Research</i> , 1998, 310, 283-289.	2.3	30
67	Transcription initiation and RNA processing in the mitochondria of the red alga <i>Chondrus crispus</i> : convergence in the evolution of transcription mechanisms in mitochondria. <i>Journal of Molecular Biology</i> , 1998, 283, 549-557.	4.2	19
68	The Reverse-Transcriptase-Like Proteins Encoded by Group II Introns in the Mitochondrial Genome of the Brown Alga <i>Pylaiella littoralis</i> Belong to Two Different Lineages Which Apparently Coevolved with the Group II Ribosyme Lineages. <i>Journal of Molecular Evolution</i> , 1997, 44, 33-42.	1.8	44
69	NMR spectroscopy analysis of oligoguluronates and oligomannuronates prepared by acid or enzymatic hydrolysis of homopolymeric blocks of alginic acid. Application to the determination of the substrate specificity of <i>Haliotis tuberculata</i> alginate lyase. <i>Carbohydrate Research</i> , 1996, 289, 11-23.	2.3	129
70	Parthenogenesis and apospory in the Laminariales: A flow cytometry analysis. <i>European Journal of Phycology</i> , 1996, 31, 369-380.	2.0	48
71	Processing and Hydrolytic Mechanism of the <i>cgkA</i> -Encoded kappa-Carrageenase of <i>Alteromonas carrageenovora</i> . <i>FEBS Journal</i> , 1995, 228, 971-975.	0.2	19
72	Structural features and phylogeny of the actin gene of <i>Chondrus crispus</i> (Gigartinales, Rhodophyta). <i>Current Genetics</i> , 1995, 28, 164-172.	1.7	24

#	ARTICLE	IF	CITATIONS
73	Complete Sequence of the Mitochondrial DNA of the Rhodophyte <i>Chondrus crispus</i> (Gigartinales). Gene Content and Genome Organization. <i>Journal of Molecular Biology</i> , 1995, 250, 484-495.	4.2	134
74	Free or silica-bound oligokappa-carrageenans elicit laminarinase activity in <i>Rubus</i> cells and protoplasts. <i>Plant Science</i> , 1995, 110, 27-35.	3.6	49
75	Processing and Hydrolytic Mechanism of the <i>cgkA</i> -Encoded kappa-Carrageenase of <i>Alteromonas carrageenovora</i> . <i>FEBS Journal</i> , 1995, 228, 971-975.	0.2	33
76	Photosynthesis and photoinhibition in protoplasts of the marine brown alga <i>Laminaria saccharina</i> . <i>Journal of Experimental Botany</i> , 1994, 45, 211-220.	4.8	33
77	The evolutionary origin of red algae as deduced from the nuclear genes encoding cytosolic and chloroplast glyceraldehyde-3-phosphate dehydrogenases from <i>Chondrus crispus</i> . <i>Journal of Molecular Evolution</i> , 1994, 38, 319-327.	1.8	49
78	Physical map and gene organization of the mitochondrial genome of <i>Chondrus crispus</i> (Rhodophyta). <i>Trends in Plant Science</i> , 1994, 10, 39-40.	3.9	10
79	NMR spectroscopic investigation of agarose oligomers produced by an $\hat{I}$ -agarase. <i>Carbohydrate Research</i> , 1994, 253, 69-77.	2.3	42
80	The gene encoding the kappa-carrageenase of <i>Alteromonas carrageenovora</i> is related to $\hat{I}$ -1,3-1,4-glucanases. <i>Gene</i> , 1994, 139, 105-109.	2.2	78
81	Nucleotide sequence of the <i>cox3</i> gene from <i>Chondrus crispus</i> : evidence that UGA encodes tryptophan and evolutionary implications. <i>Nucleic Acids Research</i> , 1994, 22, 1400-1403.	14.5	39
82	The GAPDH gene system of the red alga <i>Chondrus crispus</i> : promotor structures, intron/exon organization, genomic complexity and differential expression of genes. <i>Plant Molecular Biology</i> , 1993, 23, 981-994.	3.9	32
83	Purification and characterization of the alpha-agarase from <i>Alteromonas agarlyticus</i> (Cataldi) comb. nov., strain CJ1B. <i>FEBS Journal</i> , 1993, 214, 599-607.	0.2	154
84	Seaweed liquid fertilizer from <i>Ascophyllum nodosum</i> contains elicitors of plant $\hat{I}$ -glycanases. <i>Journal of Applied Phycology</i> , 1993, 5, 343-349.	2.8	42
85	Cell Wall and Rhizoid Polarity in <i>Pelvetia</i> Embryos. <i>Developmental Biology</i> , 1993, 160, 303-314.	2.0	22
86	Isolation and regeneration of protoplasts from <i>Porphyra dentata</i> and <i>Porphyra crispata</i> . <i>European Journal of Phycology</i> , 1993, 28, 277-283.	2.0	32
87	Explant exenisation for tissue culture in marine macroalgae. <i>Chinese Journal of Oceanology and Limnology</i> , 1992, 10, 268-275.	0.7	17
88	Detection of Vanadate-Dependent Bromoperoxidases in Protoplasts from the Brown Algae <i>Laminaria digitata</i> and <i>L. saccharina</i> . <i>Journal of Plant Physiology</i> , 1991, 137, 520-524.	3.5	17
89	Structure et propri��t��s d'��change des parois cellulaires des Algues brunes. Implications ��cophysiolgiques. <i>Bulletin De La Soci��t�� Botanique De France Actualit��s Botaniques</i> , 1991, 138, 305-318.	0.0	4
90	Purification and characterization of a new k-carrageenase from a marine Cytophaga-like bacterium. <i>FEBS Journal</i> , 1991, 201, 241-247.	0.2	82

#	ARTICLE	IF	CITATIONS
91	STUDIES OF VANDADIUM-BROMOPEROXIDASE USING SURFACE AND CORTICAL PROTOPLASTS OF MACROCYSTIS PYRIEFERA (PHAEOPHYTA)1. Journal of Phycology, 1990, 26, 589-592.	2.3	16
92	Fractionation and analysis of fucans from brown algae. Phytochemistry, 1990, 29, 2441-2445.	2.9	107
93	Mass production of viable protoplasts from <i>Macrocystis pyrifera</i> (L.) C. Ag. (Phaeophyta). Plant Science, 1989, 62, 105-112.	3.6	58
94	Isolation Conditions for High Yields of Protoplasts from <i>Laminaria saccharina</i> and <i>L. digitata</i> (Phaeophyceae). Journal of Experimental Botany, 1989, 40, 1237-1246.	4.8	81
95	Ion-Exchange Properties of Isolated Cell Walls of Brown Algae: The Interstitial Solution. Journal of Experimental Botany, 1987, 38, 1652-1662.	4.8	23
96	Isolation and Analysis of the Cell Walls of Brown Algae: <i>Fucus spiralis</i> , <i>F. ceranoides</i> , <i>F. vesiculosus</i> , <i>F. serratus</i> , <i>Bifurcaria bifurcata</i> and <i>Laminaria digitata</i> . Journal of Experimental Botany, 1987, 38, 1573-1580.	4.8	159
97	Isolation of protoplasts from zygotes of <i>Fucus distichus</i> (L.) powell (Phaeophyta). Plant Science, 1987, 50, 189-194.	3.6	37
98	Polyanionic characteristics of purified sulphated homofucans from brown algae. International Journal of Biological Macromolecules, 1986, 8, 380-386.	7.5	112