

J Mark Cock

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

130
papers

5,573
citations

40
h-index

72
g-index

139
ext. papers

6,567
ext. citations

7.2
avg, IF

5.29
L-index

#	Paper	IF	Citations
130	The Ectocarpus genome and the independent evolution of multicellularity in brown algae. <i>Nature</i> , 2010 , 465, 617-21	50.4	645
129	The cell wall polysaccharide metabolism of the brown alga Ectocarpus siliculosus. Insights into the evolution of extracellular matrix polysaccharides in Eukaryotes. <i>New Phytologist</i> , 2010 , 188, 82-97	9.8	297
128	A large family of genes that share homology with CLAVATA3. <i>Plant Physiology</i> , 2001 , 126, 939-42	6.6	282
127	Genome structure and metabolic features in the red seaweed Chondrus crispus shed light on evolution of the Archaeplastida. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 5247-52	11.5	239
126	The S-locus receptor kinase is inhibited by thioredoxins and activated by pollen coat proteins. <i>Nature</i> , 2001 , 410, 220-3	50.4	208
125	BIGPETALp, a bHLH transcription factor is involved in the control of Arabidopsis petal size. <i>EMBO Journal</i> , 2006 , 25, 3912-20	13	142
124	HECTAR: a method to predict subcellular targeting in heterokonts. <i>BMC Bioinformatics</i> , 2008 , 9, 393	3.6	141
123	Central and storage carbon metabolism of the brown alga Ectocarpus siliculosus: insights into the origin and evolution of storage carbohydrates in Eukaryotes. <i>New Phytologist</i> , 2010 , 188, 67-81	9.8	129
122	Characterization of the S locus genes, SLG and SRK, of the Brassica S3 haplotype: identification of a membrane-localized protein encoded by the S locus receptor kinase gene. <i>Plant Journal</i> , 1995 , 7, 429-40	6.9	114
121	Global expression analysis of the brown alga Ectocarpus siliculosus (Phaeophyceae) reveals large-scale reprogramming of the transcriptome in response to abiotic stress. <i>Genome Biology</i> , 2009 , 10, R66	18.3	113
120	PROPOSAL OF ECTOCARPUS SILICULOSUS (ECTOCARPALES, PHAEOPHYCEAE) AS A MODEL ORGANISM FOR BROWN ALGAL GENETICS AND GENOMICS ^{1,2} . <i>Journal of Phycology</i> , 2004 , 40, 1079-1088	3	112
119	Development and physiology of the brown alga Ectocarpus siliculosus: two centuries of research. <i>New Phytologist</i> , 2008 , 177, 319-332	9.8	103
118	Interaction of calmodulin, a sorting nexin and kinase-associated protein phosphatase with the Brassica oleracea S locus receptor kinase. <i>Plant Physiology</i> , 2003 , 133, 919-29	6.6	96
117	A haploid system of sex determination in the brown alga Ectocarpus sp. <i>Current Biology</i> , 2014 , 24, 1945-57	5.7	93
116	Complex life cycles of multicellular eukaryotes: new approaches based on the use of model organisms. <i>Gene</i> , 2007 , 406, 152-70	3.8	92
115	Both the adaxial and abaxial epidermal layers of the rose petal emit volatile scent compounds. <i>Planta</i> , 2007 , 226, 853-66	4.7	80
114	Copper stress proteomics highlights local adaptation of two strains of the model brown alga Ectocarpus siliculosus. <i>Proteomics</i> , 2010 , 10, 2074-88	4.8	77

113	Auxin metabolism and function in the multicellular brown alga <i>Ectocarpus siliculosus</i> . <i>Plant Physiology</i> , 2010 , 153, 128-44	6.6	76
112	Life-cycle-generation-specific developmental processes are modified in the immediate upright mutant of the brown alga <i>Ectocarpus siliculosus</i> . <i>Development (Cambridge)</i> , 2008 , 135, 1503-12	6.6	76
111	Making inroads into plant receptor kinase signalling pathways. <i>Trends in Plant Science</i> , 2003 , 8, 231-7	13.1	72
110	Plastid genomes of two brown algae, <i>Ectocarpus siliculosus</i> and <i>Fucus vesiculosus</i> : further insights on the evolution of red-algal derived plastids. <i>BMC Evolutionary Biology</i> , 2009 , 9, 253	3	71
109	Analysis of gene expression in rose petals using expressed sequence tags. <i>FEBS Letters</i> , 2002 , 515, 35-8	3.8	70
108	OUROBOROS is a master regulator of the gametophyte to sporophyte life cycle transition in the brown alga <i>Ectocarpus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 11518-23	11.5	69
107	Receptor kinase signalling in plants and animals: distinct molecular systems with mechanistic similarities. <i>Current Opinion in Cell Biology</i> , 2002 , 14, 230-6	9	69
106	Sexual dimorphism and the evolution of sex-biased gene expression in the brown alga <i>ectocarpus</i> . <i>Molecular Biology and Evolution</i> , 2015 , 32, 1581-97	8.3	68
105	Scent evolution in Chinese roses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 5927-32	11.5	68
104	The S15 self-incompatibility haplotype in <i>Brassica oleracea</i> includes three S gene family members expressed in stigmas. <i>Plant Cell</i> , 1999 , 11, 971-86	11.6	64
103	Two large <i>Arabidopsis thaliana</i> gene families are homologous to the <i>Brassica</i> gene superfamily that encodes pollen coat proteins and the male component of the self-incompatibility response. <i>Plant Molecular Biology</i> , 2001 , 46, 17-34	4.6	61
102	Biosynthesis of the major scent components 3,5-dimethoxytoluene and 1,3,5-trimethoxybenzene by novel rose O-methyltransferases. <i>FEBS Letters</i> , 2002 , 523, 113-8	3.8	60
101	The S locus receptor kinase gene encodes a soluble glycoprotein corresponding to the SKR extracellular domain in <i>Brassica oleracea</i> . <i>Plant Journal</i> , 1995 , 8, 827-34	6.9	59
100	Role of petal-specific orcinol O-methyltransferases in the evolution of rose scent. <i>Plant Physiology</i> , 2006 , 140, 18-29	6.6	55
99	A sequence-tagged genetic map for the brown alga <i>Ectocarpus siliculosus</i> provides large-scale assembly of the genome sequence. <i>New Phytologist</i> , 2010 , 188, 42-51	9.8	51
98	Regulation of glutamine synthetase genes in leaves of <i>Phaseolus vulgaris</i> . <i>Plant Molecular Biology</i> , 1991 , 17, 761-71	4.6	51
97	The FTO gene, implicated in human obesity, is found only in vertebrates and marine algae. <i>Journal of Molecular Evolution</i> , 2008 , 66, 80-4	3.1	50
96	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	2.2	50

95	Further analysis of the interactions between the Brassica S receptor kinase and three interacting proteins (ARC1, THL1 and THL2) in the yeast two-hybrid system. <i>Plant Molecular Biology</i> , 2001 , 45, 365-76	4.6	50
94	The Algal Revolution. <i>Trends in Plant Science</i> , 2017 , 22, 726-738	13.1	48
93	Re-annotation, improved large-scale assembly and establishment of a catalogue of noncoding loci for the genome of the model brown alga <i>Ectocarpus</i> . <i>New Phytologist</i> , 2017 , 214, 219-232	9.8	46
92	Expression of glutamine synthetase genes in roots and nodules of <i>Phaseolus vulgaris</i> following changes in the ammonium supply and infection with various <i>Rhizobium</i> mutants. <i>Plant Molecular Biology</i> , 1990 , 14, 549-60	4.6	42
91	Evolution and regulation of complex life cycles: a brown algal perspective. <i>Current Opinion in Plant Biology</i> , 2014 , 17, 1-6	9.9	41
90	Role of endoreduplication and apomeiosis during parthenogenetic reproduction in the model brown alga <i>Ectocarpus</i> . <i>New Phytologist</i> , 2010 , 188, 111-21	9.8	40
89	How to cultivate <i>Ectocarpus</i> . <i>Cold Spring Harbor Protocols</i> , 2012 , 2012, 258-61	1.2	39
88	Antisense suppression of thioredoxin h mRNA in <i>Brassica napus</i> cv. Westar pistils causes a low level constitutive pollen rejection response. <i>Plant Molecular Biology</i> , 2004 , 55, 619-30	4.6	38
87	Evolution and maintenance of haploid-diploid life cycles in natural populations: The case of the marine brown alga <i>Ectocarpus</i> . <i>Evolution; International Journal of Organic Evolution</i> , 2015 , 69, 1808-22	3.8	36
86	Reinstatement of <i>Ectocarpus crouaniorum</i> Thuret in Le Jolis as a third common species of <i>Ectocarpus</i> (Ectocarpales, Phaeophyceae) in Western Europe, and its phenology at Roscoff, Brittany. <i>Phycological Research</i> , 2010 , 58, 157-170	1.3	35
85	Comparison of the expression patterns of two small gene families of S gene family receptor kinase genes during the defence response in <i>Brassica oleracea</i> and <i>Arabidopsis thaliana</i> . <i>Gene</i> , 2002 , 282, 215-25	3.8	35
84	UV Chromosomes and Haploid Sexual Systems. <i>Trends in Plant Science</i> , 2018 , 23, 794-807	13.1	34
83	<i>Ectocarpus</i> : a model organism for the brown algae. <i>Cold Spring Harbor Protocols</i> , 2012 , 2012, 193-8	1.2	33
82	Natural antisense transcripts of the S locus receptor kinase gene and related sequences in <i>Brassica oleracea</i> . <i>Molecular Genetics and Genomics</i> , 1997 , 255, 514-24		33
81	Convergent recruitment of TALE homeodomain life cycle regulators to direct sporophyte development in land plants and brown algae. <i>ELife</i> , 2019 , 8,	8.9	33
80	The <i>Ectocarpus</i> genome sequence: insights into brown algal biology and the evolutionary diversity of the eukaryotes. <i>New Phytologist</i> , 2010 , 188, 1-4	9.8	32
79	Multiple gene movements into and out of haploid sex chromosomes. <i>Genome Biology</i> , 2017 , 18, 104	18.3	31
78	Intrahaplotype polymorphism at the Brassica S locus. <i>Genetics</i> , 2001 , 159, 811-22	4	31

77	Phylogeny and Evolution of the Brown Algae. <i>Critical Reviews in Plant Sciences</i> , 2020 , 39, 281-321	5.6	31
76	microRNAs and the evolution of complex multicellularity: identification of a large, diverse complement of microRNAs in the brown alga <i>Ectocarpus</i> . <i>Nucleic Acids Research</i> , 2015 , 43, 6384-98	20.1	28
75	Ecological and evolutionary genomics of marine photosynthetic organisms. <i>Molecular Ecology</i> , 2013 , 22, 867-907	5.7	27
74	Proteomics analysis of heterogeneous flagella in brown algae (stramenopiles). <i>Protist</i> , 2014 , 165, 662-752	5.5	26
73	High-density genetic map and identification of QTLs for responses to temperature and salinity stresses in the model brown alga <i>Ectocarpus</i> . <i>Scientific Reports</i> , 2017 , 7, 43241	4.9	25
72	Algal models in plant biology. <i>Journal of Experimental Botany</i> , 2011 , 62, 2425-30	7	25
71	Characterization of GDP-mannose dehydrogenase from the brown alga <i>Ectocarpus siliculosus</i> providing the precursor for the alginate polymer. <i>Journal of Biological Chemistry</i> , 2011 , 286, 16707-15	5.4	24
70	Development of PCR-Based Markers to Determine the Sex of Kelps. <i>PLoS ONE</i> , 2015 , 10, e0140535	3.7	23
69	A W-box is required for full expression of the SA-responsive gene SFR2. <i>Gene</i> , 2005 , 344, 181-92	3.8	22
68	A nuclear gene with many introns encoding ammonium-inducible chloroplastic NADP-specific glutamate dehydrogenase(s) in <i>Chlorella sorokiniana</i> . <i>Plant Molecular Biology</i> , 1991 , 17, 1023-44	4.6	22
67	Brown algae. <i>Current Biology</i> , 2011 , 21, R573-5	6.3	21
66	EARLY DEVELOPMENT PATTERN OF THE BROWN ALGA <i>ECTOCARPUS SILICULOSUS</i> (ECTOCARPALES, PHAEOPHYCEAE) SPOROPHYTE(1). <i>Journal of Phycology</i> , 2008 , 44, 1269-81	3	21
65	Gene silencing in <i>Fucus</i> embryos: developmental consequences of RNAi-mediated cytoskeletal disruption. <i>Journal of Phycology</i> , 2013 , 49, 819-29	3	20
64	Genetic diversity of <i>Ectocarpus</i> (Ectocarpales, Phaeophyceae) in Peru and northern Chile, the area of origin of the genome-sequenced strain. <i>New Phytologist</i> , 2010 , 188, 30-41	9.8	19
63	The <i>Ectocarpus</i> IMMEDIATE UPRIGHT gene encodes a member of a novel family of cysteine-rich proteins with an unusual distribution across the eukaryotes. <i>Development (Cambridge)</i> , 2017 , 144, 409-418	6.6	18
62	Biotic interactions as drivers of algal origin and evolution. <i>New Phytologist</i> , 2017 , 216, 670-681	9.8	18
61	Microarray estimation of genomic inter-strain variability in the genus <i>Ectocarpus</i> (Phaeophyceae). <i>BMC Molecular Biology</i> , 2011 , 12, 2	4.5	18
60	Production and emission of volatile compounds by petal cells. <i>Plant Signaling and Behavior</i> , 2007 , 2, 525-6	5.5	18

59	PCR-generated cDNA library of transition-stage maize embryos: cloning and expression of calmodulin genes during early embryogenesis. <i>Plant Molecular Biology</i> , 1995 , 27, 105-13	4.6	18
58	Rapid turnover of life-cycle-related genes in the brown algae. <i>Genome Biology</i> , 2019 , 20, 35	18.3	17
57	Non-cell autonomous regulation of life cycle transitions in the model brown alga <i>Ectocarpus</i> . <i>New Phytologist</i> , 2013 , 197, 503-510	9.8	17
56	The Pseudoautosomal Regions of the U/V Sex Chromosomes of the Brown Alga <i>Ectocarpus</i> Exhibit Unusual Features. <i>Molecular Biology and Evolution</i> , 2015 , 32, 2973-85	8.3	16
55	Characterization of the gene encoding the plastid-located glutamine synthetase of <i>Phaseolus vulgaris</i> : regulation of beta-glucuronidase gene fusions in transgenic tobacco. <i>Plant Molecular Biology</i> , 1992 , 18, 1141-9	4.6	16
54	Diversity and Evolution of Sensor Histidine Kinases in Eukaryotes. <i>Genome Biology and Evolution</i> , 2019 , 11, 86-108	3.9	16
53	Rapid Evolution of microRNA Loci in the Brown Algae. <i>Genome Biology and Evolution</i> , 2017 , 9, 740-749	3.9	15
52	Characterization of newly developed expressed sequence tag-derived microsatellite markers revealed low genetic diversity within and low connectivity between European <i>Saccharina latissima</i> populations. <i>Journal of Applied Phycology</i> , 2016 , 28, 3057-3070	3.2	14
51	Genetic crosses between <i>Ectocarpus</i> strains. <i>Cold Spring Harbor Protocols</i> , 2012 , 2012, 262-5	1.2	13
50	SLR3: a modified receptor kinase gene that has been adapted to encode a putative secreted glycoprotein similar to the S locus glycoprotein. <i>Molecular Genetics and Genomics</i> , 1995 , 248, 151-61		13
49	DISTAG/TBCCd1 Is Required for Basal Cell Fate Determination in. <i>Plant Cell</i> , 2017 , 29, 3102-3122	11.6	12
48	A key role for sex chromosomes in the regulation of parthenogenesis in the brown alga <i>Ectocarpus</i> . <i>PLoS Genetics</i> , 2019 , 15, e1008211	6	11
47	instaGRAAL: chromosome-level quality scaffolding of genomes using a proximity ligation-based scaffold. <i>Genome Biology</i> , 2020 , 21, 148	18.3	11
46	Rapid Induction by Wounding and Bacterial Infection of an S Gene Family Receptor-Like Kinase Gene in <i>Brassica oleracea</i> . <i>Plant Cell</i> , 1997 , 9, 49	11.6	11
45	Origin and evolution of sex-determination systems in the brown algae. <i>New Phytologist</i> , 2019 , 222, 1751-1756	17.56	10
44	Independent Emergence of Complex Multicellularity in the Brown and Red Algae. <i>Advances in Marine Genomics</i> , 2015 , 335-361		10
43	Genetic Diversity in the UV Sex Chromosomes of the Brown Alga. <i>Genes</i> , 2018 , 9,	4.2	10
42	The <i>Ectocarpus</i> Genome and Brown Algal Genomics: The <i>Ectocarpus</i> Genome Consortium. <i>Advances in Botanical Research</i> , 2012 , 64, 141-184	2.2	10

41	In silico survey of the mitochondrial protein uptake and maturation systems in the brown alga <i>Ectocarpus siliculosus</i> . <i>PLoS ONE</i> , 2011 , 6, e19540	3.7	10
40	Genome-wide comparison of ultraviolet and ethyl methanesulphonate mutagenesis methods for the brown alga <i>Ectocarpus</i> . <i>Marine Genomics</i> , 2015 , 24 Pt 1, 109-13	1.9	9
39	Histone modifications during the life cycle of the brown alga <i>Ectocarpus</i> . <i>Genome Biology</i> , 2021 , 22, 12	18.3	9
38	Genetic regulation of life cycle transitions in the brown alga <i>Ectocarpus</i> . <i>Plant Signaling and Behavior</i> , 2011 , 6, 1858-60	2.5	8
37	Organelle inheritance and genome architecture variation in isogamous brown algae. <i>Scientific Reports</i> , 2020 , 10, 2048	4.9	7
36	RESTRICTION ENZYME ANALYSIS AND CLONING OF HIGH MOLECULAR WEIGHT GENOMIC DNA ISOLATED FROM <i>CHLORELLA SOROKINIANA</i> (CHLOROPHYTA) ¹ . <i>Journal of Phycology</i> , 1990 , 26, 361-367 ²		7
35	Brown Algal Model Organisms. <i>Annual Review of Genetics</i> , 2020 , 54, 71-92	14.5	7
34	Targeted CRISPR-Cas9-based gene knockouts in the model brown alga <i>Ectocarpus</i> . <i>New Phytologist</i> , 2021 , 231, 2077-2091	9.8	7
33	Genomics of brown algae: current advances and future prospects. <i>Genes and Genomics</i> , 2012 , 34, 1-5	2.1	6
32	Role and Evolution of the Extracellular Matrix in the Acquisition of Complex Multicellularity in Eukaryotes: A Macroalgal Perspective. <i>Genes</i> , 2021 , 12,	4.2	6
31	Cell cycles and endocycles in the model brown seaweed, <i>Ectocarpus siliculosus</i> . <i>Plant Signaling and Behavior</i> , 2010 , 5, 1473-5	2.5	5
30	Immunostaining of <i>Ectocarpus</i> cells. <i>Cold Spring Harbor Protocols</i> , 2012 , 2012, 369-72	1.2	5
29	Evolution of life cycles and reproductive traits: insights from the brown algae		5
28	: an evo-devo model for the brown algae. <i>EvoDevo</i> , 2020 , 11, 19	3.2	5
27	Evolution of life cycles and reproductive traits: Insights from the brown algae. <i>Journal of Evolutionary Biology</i> , 2021 , 34, 992-1009	2.3	5
26	Megaviruses: An involvement in phytohormone receptor gene transfer in brown algae?. <i>Gene</i> , 2019 , 704, 149-151	3.8	4
25	A glutamate dehydrogenase gene sequence. <i>Nucleic Acids Research</i> , 1989 , 17, 10500	20.1	4
24	Emergence of <i>Ectocarpus</i> as a Model System to Study the Evolution of Complex Multicellularity in the Brown Algae. <i>Advances in Marine Genomics</i> , 2015 , 153-162		4

23	Cytokinin and Ethylene Cell Signaling Pathways from Prokaryotes to Eukaryotes. <i>Cells</i> , 2020 , 9,	7.9	4
22	Unusual Patterns of Mitochondrial Inheritance in the Brown Alga <i>Ectocarpus</i> . <i>Molecular Biology and Evolution</i> , 2019 , 36, 2778-2789	8.3	3
21	S-locus glycoproteins are expressed along the path of pollen tubes in Brassica pistils. <i>Planta</i> , 1995 , 196, 614	4.7	3
20	Histone modifications during the life cycle of the brown alga <i>Ectocarpus</i>		3
19	Extraction of high-quality genomic DNA from <i>Ectocarpus</i> . <i>Cold Spring Harbor Protocols</i> , 2012 , 2012, 365-8.2		2
18	Genomics of Marine Algae 2010 , 179-211		2
17	Chromosome-level quality scaffolding of brown algal genomes using InstaGRAAL, a proximity ligation-based scaffold		2
16	Rapid Turnover of Life-Cycle-Related Genes in the Brown Algae		2
15	A partially sex-reversed giant kelp sheds light into the mechanisms of sexual differentiation in a UV sexual system. <i>New Phytologist</i> , 2021 , 232, 252-263	9.8	2
14	Chromatin landscape associated with sexual differentiation in a UV sex determination system.. <i>Nucleic Acids Research</i> , 2022 ,	20.1	2
13	Parallelisable non-invasive biomass, fitness and growth measurement of macroalgae and other protists with nephelometry. <i>Algal Research</i> , 2020 , 46, 101762	5	1
12	A Functional S Locus Anther Gene Is Not Required for the Self-Incompatibility Response in Brassica oleracea. <i>Plant Cell</i> , 1997 , 9, 2065	11.6	1
11	Production and Bioassay of a Diffusible Factor That Induces Gametophyte-to-Sporophyte Developmental Reprogramming in the Brown Alga. <i>Bio-protocol</i> , 2020 , 10, e3753	0.9	1
10	Biochemical characteristics of a diffusible factor that induces gametophyte to sporophyte switching in the brown alga <i>Ectocarpus</i> . <i>Journal of Phycology</i> , 2021 , 57, 742-753	3	1
9	Priming of Marine Macrophytes for Enhanced Restoration Success and Food Security in Future Oceans. <i>Frontiers in Marine Science</i> ,8,	4.5	1
8	Alternation of Generations in Plants and Algae 2021 , 631-644		1
7	A partially sex-reversed giant kelp sheds light into the mechanisms of sexual differentiation in a UV sexual system		1
6	Providing a phylogenetic framework for trait-based analyses in brown algae: Phylogenomic tree inferred from 32 nuclear protein-coding sequences.. <i>Molecular Phylogenetics and Evolution</i> , 2022 , 168, 107408	4.1	0

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| 5 | An Efficient Chromatin Immunoprecipitation Protocol for the Analysis of Histone Modification Distributions in the Brown Alga <i>Ectocarpus</i> . <i>Methods and Protocols</i> , 2022 , 5, 36 | 2.5 | 0 |
| 4 | 03-P056 Molecular control of the alternation of generations in the brown alga <i>Ectocarpus</i> : The OUROBOROS mutant exhibits homeotic conversion of the sporophyte into a gametophyte. <i>Mechanisms of Development</i> , 2009 , 126, S83 | 1.7 | |
| 3 | Characterization of three putative receptors homologous to genes of Brassica involved in self-incompatibility. <i>Biology of the Cell</i> , 1995 , 84, 97-97 | 3.5 | |
| 2 | Expression of the extracellular domain of a plant receptor in insect cells using different baculovirus vectors. <i>Biology of the Cell</i> , 1995 , 84, 97-97 | 3.5 | |
| 1 | Alternation of Generations in Plants and Algae 2017 , 1-14 | | |