

Ralf Reski

List of Publications by Year in descending order

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Version: 2024-02-01

210
papers

13,329
citations

16451

64
h-index

30922

102
g-index

231
all docs

231
docs citations

231
times ranked

10960
citing authors

#	ARTICLE	IF	CITATIONS
1	Viral suppressor of <sc>RNA</sc> silencing in vascular plants also interferes with the development of the bryophyte <sc><i>Physcomitrella patens</i></sc>. Plant, Cell and Environment, 2022, 45, 220-235.	5.7	3
2	Autopolyploidization affects transcript patterns and gene targeting frequencies in Physcomitrella. Plant Cell Reports, 2022, 41, 153-173.	5.6	5
3	O-methylated N-glycans Distinguish Mosses from Vascular Plants. Biomolecules, 2022, 12, 136.	4.0	8
4	A synthetic protein as efficient multitarget regulator against complement over-activation. Communications Biology, 2022, 5, 152.	4.4	9
5	Unexpected Arabinosylation after Humanization of Plant Protein N-Glycosylation. Frontiers in Bioengineering and Biotechnology, 2022, 10, 838365.	4.1	6
6	Process Engineering of Biopharmaceutical Production in Moss Bioreactors via Model-Based Description and Evaluation of Phytohormone Impact. Frontiers in Bioengineering and Biotechnology, 2022, 10, 837965.	4.1	5
7	Recombinant Spider Silk: Promises and Bottlenecks. Frontiers in Bioengineering and Biotechnology, 2022, 10, 835637.	4.1	35
8	Spindle motility skews division site determination during asymmetric cell division in Physcomitrella. Nature Communications, 2022, 13, 2488.	12.8	7
9	The mosaic oat genome gives insights into a uniquely healthy cereal crop. Nature, 2022, 606, 113-119.	27.8	70
10	Axenic <i>in vitro</i> cultivation of 19 peat moss (<i>Sphagnum</i> L.) species as a resource for basic biology, biotechnology, and paludiculture. New Phytologist, 2021, 229, 861-876.	7.3	28
11	Automated and semi-automated enhancement, segmentation and tracing of cytoskeletal networks in microscopic images: A review. Computational and Structural Biotechnology Journal, 2021, 19, 2106-2120.	4.1	16
12	Biopolymer segmentation from CLSM microscopy images using a convolutional neural network. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000188.	0.2	2
13	Function of the HYDROXYCINNAMOYL-CoA:SHIKIMATE HYDROXYCINNAMOYL TRANSFERASE is evolutionarily conserved in embryophytes. Plant Cell, 2021, 33, 1472-1491.	6.6	45
14	Natural Products from Bryophytes: From Basic Biology to Biotechnological Applications. Critical Reviews in Plant Sciences, 2021, 40, 191-217.	5.7	33
15	Polyploidization within the Funariaceae” a key principle behind speciation, sporophyte reduction and the high variance of spore diameters?. Bryophyte Diversity and Evolution, 2021, 43, .	1.1	9
16	Expression of a human cDNA in moss results in spliced mRNAs and fragmentary protein isoforms. Communications Biology, 2021, 4, 964.	4.4	12
17	Medium optimization for biomass production of three peat moss (Sphagnum L.) species using fractional factorial design and response surface methodology. Bioresource Technology Reports, 2021, 15, 100729.	2.7	3
18	Convergence of sphingolipid desaturation across over 500 million years of plant evolution. Nature Plants, 2021, 7, 219-232.	9.3	31

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19	Testing a novel biotechnological passive sampler for monitoring atmospheric PAH pollution. Journal of Hazardous Materials, 2020, 381, 120949.	12.4	17
20	Mosses in biotechnology. Current Opinion in Biotechnology, 2020, 61, 21-27.	6.6	39
21	Stable Protein Sialylation in Physcomitrella. Frontiers in Plant Science, 2020, 11, 610032.	3.6	21
22	A NanoFE simulation-based surrogate machine learning model to predict mechanical functionality of protein networks from live confocal imaging. Computational and Structural Biotechnology Journal, 2020, 18, 2774-2788.	4.1	6
23	Chloroplasts require glutathione reductase to balance reactive oxygen species and maintain efficient photosynthesis. Plant Journal, 2020, 103, 1140-1154.	5.7	47
24	Editorial overview: Plant biotechnology. Current Opinion in Biotechnology, 2020, 61, iii-v.	6.6	0
25	Development of a method for protonema proliferation of peat moss (<i>Sphagnum squarrosum</i>) through regeneration analysis. New Phytologist, 2019, 221, 1160-1171.	7.3	10
26	Biosurface properties and lead adsorption in a clone of <i>Sphagnum palustre</i> (Mosses): Towards a unified protocol of biomonitoring of airborne heavy metal pollution. Chemosphere, 2019, 236, 124375.	8.2	15
27	Recombinant Production of MFHR1, A Novel Synthetic Multitarget Complement Inhibitor, in Moss Bioreactors. Frontiers in Plant Science, 2019, 10, 260.	3.6	24
28	Critical Evaluation of Strategies for the Production of Blood Coagulation Factors in Plant-Based Systems. Frontiers in Plant Science, 2019, 10, 261.	3.6	10
29	Single-cell transcriptome analysis of <i>Physcomitrella</i> leaf cells during reprogramming using microcapillary manipulation. Nucleic Acids Research, 2019, 47, 4539-4553.	14.5	39
30	ABA-Induced Vegetative Diaspore Formation in <i>Physcomitrella patens</i> . Frontiers in Plant Science, 2019, 10, 315.	3.6	30
31	The plastid skeleton: a source of ideas in the nano range. , 2019, , 163-166.		3
32	Das Plastidenskelett: ein Ideengeber im Nanobereich. , 2019, , 163-166.		0
33	Evolutionary approaches to explorative design methods in architecture. , 2019, , 134-141.		0
34	Evolutionary Ansätze für explorative Entwurfsmethoden in der Architektur. , 2019, , 134-141.		0
35	The <i>Physcomitrella patens</i> gene atlas project: large-scale RNA-seq based expression data. Plant Journal, 2018, 95, 168-182.	5.7	115
36	RecQ Helicases Function in Development, DNA Repair, and Gene Targeting in <i>Physcomitrella patens</i> . Plant Cell, 2018, 30, 717-736.	6.6	44

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37	The single berberine bridge enzyme homolog of <i>Physcomitrella patens</i> is a cellobiose oxidase. <i>FEBS Journal</i> , 2018, 285, 1923-1943.	4.7	17
38	The loss of SMG1 causes defects in quality control pathways in <i>Physcomitrella patens</i> . <i>Nucleic Acids Research</i> , 2018, 46, 5822-5836.	14.5	24
39	Enabling the water-to-land transition. <i>Nature Plants</i> , 2018, 4, 67-68.	9.3	31
40	The MFHR1 Fusion Protein Is a Novel Synthetic Multitarget Complement Inhibitor with Therapeutic Potential. <i>Journal of the American Society of Nephrology: JASN</i> , 2018, 29, 1141-1153.	6.1	28
41	The <i>Physcomitrella patens</i> chromosome-scale assembly reveals moss genome structure and evolution. <i>Plant Journal</i> , 2018, 93, 515-533.	5.7	406
42	Feature-based Classification of Protein Networks using Confocal Microscopy Imaging and Machine Learning. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800246.	0.2	1
43	Moss-made complement therapeutics. <i>Molecular Immunology</i> , 2018, 102, 209.	2.2	0
44	Host Cell Proteome of <i>Physcomitrella patens</i> Harbors Proteases and Protease Inhibitors under Bioproduction Conditions. <i>Journal of Proteome Research</i> , 2018, 17, 3749-3760.	3.7	19
45	<i>Physcomitrella patens</i> , a versatile synthetic biology chassis. <i>Plant Cell Reports</i> , 2018, 37, 1409-1417.	5.6	50
46	Computational 3D imaging to quantify structural components and assembly of protein networks. <i>Acta Biomaterialia</i> , 2018, 69, 206-217.	8.3	14
47	Quantitative moss cell biology. <i>Current Opinion in Plant Biology</i> , 2018, 46, 39-47.	7.1	17
48	Cytological analysis and structural quantification of FtsZ1-2 and FtsZ2-1 network characteristics in <i>Physcomitrella patens</i> . <i>Scientific Reports</i> , 2018, 8, 11165.	3.3	14
49	<i>Sphagnum palustre</i> clone vs native <i>Pseudoscleropodium purum</i> : A first trial in the field to validate the future of the moss bag technique. <i>Environmental Pollution</i> , 2017, 225, 323-328.	7.5	29
50	Strigolactone biosynthesis is evolutionarily conserved, regulated by phosphate starvation and contributes to resistance against phytopathogenic fungi in a moss, <i>Physcomitrella patens</i> . <i>New Phytologist</i> , 2017, 216, 455-468.	7.3	121
51	A phenol-enriched cuticle is ancestral to lignin evolution in land plants. <i>Nature Communications</i> , 2017, 8, 14713.	12.8	157
52	Moss-Produced, Glycosylation-Optimized Human Factor H for Therapeutic Application in Complement Disorders. <i>Journal of the American Society of Nephrology: JASN</i> , 2017, 28, 1462-1474.	6.1	43
53	Dithiol disulphide exchange in redox regulation of chloroplast enzymes in response to evolutionary and structural constraints. <i>Plant Science</i> , 2017, 255, 1-11.	3.6	38
54	Treatment of experimental C3 Glomerulopathy by human complement factor H produced in glycosylation-optimized <i>Physcomitrella patens</i> . <i>Molecular Immunology</i> , 2017, 89, 120.	2.2	8

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55	Selfing in Haploid Plants and Efficacy of Selection: Codon Usage Bias in the Model Moss <i>Physcomitrella patens</i> . <i>Genome Biology and Evolution</i> , 2017, 9, 1528-1546.	2.5	21
56	Microscopy of <i>Physcomitrella patens</i> sperm cells. <i>Plant Methods</i> , 2017, 13, 33.	4.3	13
57	Approaches to Characterize Organelle, Compartment, or Structure Purity. <i>Methods in Molecular Biology</i> , 2017, 1511, 13-28.	0.9	4
58	The mitochondrial proteome of the moss <i>Physcomitrella patens</i> . <i>Mitochondrion</i> , 2017, 33, 38-44.	3.4	5
59	Alternation of generations – unravelling the underlying molecular mechanism of a 165-year-old botanical observation. <i>Plant Biology</i> , 2016, 18, 549-551.	3.8	19
60	Spatio-temporal patterning of arginyl-tRNA protein transferase (<scp>ATE</scp>) contributes to gametophytic development in a moss. <i>New Phytologist</i> , 2016, 209, 1014-1027.	7.3	35
61	Chloroplast FBPase and SBPase are thioredoxin-linked enzymes with similar architecture but different evolutionary histories. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 6779-6784.	7.1	60
62	Identification of Targets and Interaction Partners of Arginyl-tRNA Protein Transferase in the Moss <i>Physcomitrella patens</i> . <i>Molecular and Cellular Proteomics</i> , 2016, 15, 1808-1822.	3.8	25
63	Best options for the exposure of traditional and innovative moss bags: A systematic evaluation in three European countries. <i>Environmental Pollution</i> , 2016, 214, 362-373.	7.5	61
64	The Polycomb group protein CLF emerges as a specific tri-methylase of H3K27 regulating gene expression and development in <i>Physcomitrella patens</i> . <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2016, 1859, 860-870.	1.9	17
65	Molecular and chemical characterization of a <i>Sphagnum palustre</i> clone: Key steps towards a standardized and sustainable moss bag technique. <i>Ecological Indicators</i> , 2016, 71, 388-397.	6.3	29
66	Origin and function of stomata in the moss <i>Physcomitrella patens</i> . <i>Nature Plants</i> , 2016, 2, 16179.	9.3	138
67	A single homeobox gene triggers phase transition, embryogenesis and asexual reproduction. <i>Nature Plants</i> , 2016, 2, 15209.	9.3	116
68	Analysis of confocal microscopy image data of <i>Physcomitrella</i> chloroplasts to reveal adaptation principles leading to structural stability at the nanoscale. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2016, 16, 69-70.	0.2	4
69	Genetic analysis of <i>Physcomitrella patens</i> identifies ABSCISIC ACID NON-RESPONSIVE (ANR), a regulator of ABA responses unique to basal land plants and required for desiccation tolerance. <i>Plant Cell</i> , 2016, 28, tpc.00091.2016.	6.6	98
70	Chemical and structural characterization of copper adsorbed on mosses (Bryophyta). <i>Journal of Hazardous Materials</i> , 2016, 308, 343-354.	12.4	20
71	Implications of plant glycans in the development of innovative vaccines. <i>Expert Review of Vaccines</i> , 2016, 15, 915-925.	4.4	26
72	The Genome of the Model Moss <i>Physcomitrella patens</i> . <i>Advances in Botanical Research</i> , 2016, 78, 97-140.	1.1	9

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73	Metal and proton adsorption capacities of natural and cloned Sphagnum mosses. <i>Journal of Colloid and Interface Science</i> , 2016, 461, 326-334.	9.4	34
74	Can mosses serve as model organisms for forest research?. <i>Annals of Forest Science</i> , 2016, 73, 135-146.	2.0	13
75	Analysis of Physcomitrella Chloroplasts to Reveal Adaptation Principles Leading to Structural Stability at the Nano-Scale. <i>Biologically-inspired Systems</i> , 2016, , 261-275.	0.2	6
76	Evolutionary Processes as Models for Exploratory Design. <i>Biologically-inspired Systems</i> , 2016, , 295-318.	0.2	3
77	Moss-made pharmaceuticals: from bench to bedside. <i>Plant Biotechnology Journal</i> , 2015, 13, 1191-1198.	8.3	95
78	Mitochondrial Dynamics and the ER: The Plant Perspective. <i>Frontiers in Cell and Developmental Biology</i> , 2015, 3, 78.	3.7	49
79	Clonal in vitro propagation of peat mosses (<i>Sphagnum</i> L.) as novel green resources for basic and applied research. <i>Plant Cell, Tissue and Organ Culture</i> , 2015, 120, 1037-1049.	2.3	42
80	An Env-derived multi-epitope HIV chimeric protein produced in the moss <i>Physcomitrella patens</i> is immunogenic in mice. <i>Plant Cell Reports</i> , 2015, 34, 425-433.	5.6	31
81	Matrix solid phase dispersion method for determination of polycyclic aromatic hydrocarbons in moss. <i>Journal of Chromatography A</i> , 2015, 1406, 19-26.	3.7	20
82	Stomatal Guard Cells Co-opted an Ancient ABA-Dependent Desiccation Survival System to Regulate Stomatal Closure. <i>Current Biology</i> , 2015, 25, 928-935.	3.9	154
83	DNA METHYLTRANSFERASE 1 is involved in mCG and mCCG DNA methylation and is essential for sporophyte development in <i>Physcomitrella patens</i> . <i>Plant Molecular Biology</i> , 2015, 88, 387-400.	3.9	45
84	Insights from the cold transcriptome of <i>Physcomitrella patens</i> : global specialization pattern of conserved transcriptional regulators and identification of orphan genes involved in cold acclimation. <i>New Phytologist</i> , 2015, 205, 869-881.	7.3	84
85	Gene Targeting for Precision Glyco-Engineering: Production of Biopharmaceuticals Devoid of Plant-Typical Glycosylation in Moss Bioreactors. <i>Methods in Molecular Biology</i> , 2015, 1321, 213-224.	0.9	19
86	Applied Bryology - Bryotechnology. <i>Bryophyte Diversity and Evolution</i> , 2015, 31, 22.	1.1	12
87	Plasma Membrane-Targeted PIN Proteins Drive Shoot Development in a Moss. <i>Current Biology</i> , 2014, 24, 2776-2785.	3.9	133
88	Evolution and communication of subcellular compartments. <i>Plant Signaling and Behavior</i> , 2014, 9, e28993.	2.4	10
89	The potential of <i>Physcomitrella patens</i> as a platform for the production of plant-based vaccines. <i>Expert Review of Vaccines</i> , 2014, 13, 203-212.	4.4	15
90	ppdb: plant promoter database version 3.0. <i>Nucleic Acids Research</i> , 2014, 42, D1188-D1192.	14.5	61

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91	Glyco-engineering for biopharmaceutical production in moss bioreactors. <i>Frontiers in Plant Science</i> , 2014, 5, 346.	3.6	39
92	Quantitative Analysis of the Mitochondrial and Plastid Proteomes of the Moss <i>Physcomitrella patens</i> Reveals Protein Macrocompartmentation and Microcompartmentation. <i>Plant Physiology</i> , 2014, 164, 2081-2095.	4.8	61
93	Molecular evidence for convergent evolution and allopolyploid speciation within the <i>Physcomitrium-Physcomitrella</i> species complex. <i>BMC Evolutionary Biology</i> , 2014, 14, 158.	3.2	48
94	Design and Characterization of a Modular Membrane Protein Anchor to Functionalize the Moss <i>Physcomitrella patens</i> with Extracellular Catalytic and/or Binding Activities. <i>ACS Synthetic Biology</i> , 2014, 3, 990-994.	3.8	5
95	Balanced activity of microRNA166/165 and its target transcripts from the class III homeodomain-leucine zipper family regulates root growth in <i>Arabidopsis thaliana</i> . <i>Plant Cell Reports</i> , 2014, 33, 945-953.	5.6	83
96	High contents of very long-chain polyunsaturated fatty acids in different moss species. <i>Plant Cell Reports</i> , 2014, 33, 245-254.	5.6	48
97	Isopentenyltransferase-1 (IPT1) knockout in <i>Physcomitrella</i> together with phylogenetic analyses of IPTs provide insights into evolution of plant cytokinin biosynthesis. <i>Journal of Experimental Botany</i> , 2014, 65, 2533-2543.	4.8	57
98	A red light-controlled synthetic gene expression switch for plant systems. <i>Molecular BioSystems</i> , 2014, 10, 1679-1688.	2.9	89
99	Large-scale gene expression profiling data for the model moss <i>Physcomitrella patens</i> aid understanding of developmental progression, culture and stress conditions. <i>Plant Journal</i> , 2014, 79, 530-539.	5.7	82
100	Reannotation and extended community resources for the genome of the non-seed plant <i>Physcomitrella patens</i> provide insights into the evolution of plant gene structures and functions. <i>BMC Genomics</i> , 2013, 14, 498.	2.8	170
101	The Plant Ontology as a Tool for Comparative Plant Anatomy and Genomic Analyses. <i>Plant and Cell Physiology</i> , 2013, 54, e1-e1.	3.1	131
102	<i>Physcomitrella</i> PpORS, Basal to Plant Type III Polyketide Synthases in Phylogenetic Trees, Is a Very Long Chain ϵ^2 -Oxoalkylresorcinol Synthase. <i>Journal of Biological Chemistry</i> , 2013, 288, 2767-2777.	3.4	19
103	A gene responsible for prolyl-hydroxylation of moss-produced recombinant human erythropoietin. <i>Scientific Reports</i> , 2013, 3, 3019.	3.3	50
104	System for Stable \hat{I}^2 -Estradiol-Inducible Gene Expression in the Moss <i>Physcomitrella patens</i> . <i>PLoS ONE</i> , 2013, 8, e77356.	2.5	71
105	Involvement of a Class III Peroxidase and the Mitochondrial Protein TSPO in Oxidative Burst Upon Treatment of Moss Plants with a Fungal Elicitor. <i>Molecular Plant-Microbe Interactions</i> , 2012, 25, 363-371.	2.6	66
106	DICER-LIKE3 Activity in <i>Physcomitrella patens</i> DICER-LIKE4 Mutants Causes Severe Developmental Dysfunction and Sterility. <i>Molecular Plant</i> , 2012, 5, 1281-1294.	8.3	45
107	Biosynthesis of allene oxides in <i>Physcomitrella patens</i> . <i>BMC Plant Biology</i> , 2012, 12, 228.	3.6	39
108	The relevance of compartmentation for cysteine synthesis in phototrophic organisms. <i>Protoplasma</i> , 2012, 249, 147-155.	2.1	22

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109	Moss-based production of asialo-erythropoietin devoid of Lewis A and other plant-typical carbohydrate determinants. <i>Plant Biotechnology Journal</i> , 2012, 10, 851-861.	8.3	74
110	Glycoprotein production in moss bioreactors. <i>Plant Cell Reports</i> , 2012, 31, 453-460.	5.6	57
111	Metabolite profiling of the moss <i>Physcomitrella patens</i> reveals evolutionary conservation of osmoprotective substances. <i>Plant Cell Reports</i> , 2012, 31, 427-436.	5.6	78
112	Production of biologically active recombinant human factor H in <i>Physcomitrella</i> . <i>Plant Biotechnology Journal</i> , 2011, 9, 373-383.	8.3	86
113	PpASCL, a moss ortholog of anther-specific chalcone synthase-like enzymes, is a hydroxyalkylpyrone synthase involved in an evolutionarily conserved sporopollenin biosynthesis pathway. <i>New Phytologist</i> , 2011, 192, 855-868.	7.3	48
114	<i>MicroRNA534a</i> control of <i>BLADE-ON-PETIOLE 1</i> and <i>2</i> mediates juvenile-to-adult gametophyte transition in <i>Physcomitrella patens</i> . <i>Plant Journal</i> , 2011, 65, 661-674.	5.7	29
115	Simultaneous isolation of pure and intact chloroplasts and mitochondria from moss as the basis for sub-cellular proteomics. <i>Plant Cell Reports</i> , 2011, 30, 205-215.	5.6	53
116	Plant biotechnology in support of the Millennium Goals. <i>Plant Cell Reports</i> , 2011, 30, 245-247.	5.6	4
117	Plant biotechnology in support of the Millennium Goals II. <i>Plant Cell Reports</i> , 2011, 30, 677-679.	5.6	4
118	A Novel Calcium Binding Site in the Slow Vacuolar Cation Channel TPC1 Senses Luminal Calcium Levels. <i>Plant Cell</i> , 2011, 23, 2696-2707.	6.6	93
119	Genome-Wide Phylogenetic Comparative Analysis of Plant Transcriptional Regulation: A Timeline of Loss, Gain, Expansion, and Correlation with Complexity. <i>Genome Biology and Evolution</i> , 2010, 2, 488-503.	2.5	174
120	Microarray analysis of the moss <i>Physcomitrella patens</i> reveals evolutionarily conserved transcriptional regulation of salt stress and abscisic acid signalling. <i>Plant Molecular Biology</i> , 2010, 72, 27-45.	3.9	110
121	Identification and characterization of NAGNAG alternative splicing in the moss <i>Physcomitrella patens</i> . <i>BMC Plant Biology</i> , 2010, 10, 76.	3.6	13
122	Targeted knock-out of a gene encoding sulfite reductase in the moss <i>Physcomitrella patens</i> affects gametophytic and sporophytic development. <i>FEBS Letters</i> , 2010, 584, 2271-2278.	2.8	18
123	The moss <i>Physcomitrella patens</i> contains cyclopentenones but no jasmonates: mutations in allene oxide cyclase lead to reduced fertility and altered sporophyte morphology. <i>New Phytologist</i> , 2010, 188, 740-749.	7.3	125
124	THE SPECIATION HISTORY OF THE <i>PHYSCOMITRIUM-PHYSCOMITRELLA</i> SPECIES COMPLEX. <i>Evolution; International Journal of Organic Evolution</i> , 2010, 64, 217-231.	2.3	59
125	Overexpression of the Arabidopsis Gene <i>UPRIGHT ROSETTE</i> Reveals a Homeostatic Control for Indole-3-Acetic Acid. <i>Plant Physiology</i> , 2010, 153, 1311-1320.	4.8	22
126	Transcriptional Control of Gene Expression by MicroRNAs. <i>Cell</i> , 2010, 140, 111-122.	28.9	431

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127	Regulation of stem cell maintenance by the Polycomb protein FIE has been conserved during land plant evolution. <i>Development (Cambridge)</i> , 2009, 136, 2433-2444.	2.5	133
128	Dead end for auxin conjugates in <i>Physcomitrella</i> ?. <i>Plant Signaling and Behavior</i> , 2009, 4, 116-118.	2.4	23
129	Targeted Gene Knockouts Reveal Overlapping Functions of the Five <i>Physcomitrella patens</i> FtsZ Isoforms in Chloroplast Division, Chloroplast Shaping, Cell Patterning, Plant Development, and Gravity Sensing. <i>Molecular Plant</i> , 2009, 2, 1359-1372.	8.3	44
130	Challenges to our current view on chloroplasts. <i>Biological Chemistry</i> , 2009, 390, 731-738.	2.5	22
131	The evolution of nuclear auxin signalling. <i>BMC Evolutionary Biology</i> , 2009, 9, 126.	3.2	115
132	Auxin-binding proteins without KDEL sequence in the moss <i>Funaria hygrometrica</i> . <i>Plant Cell Reports</i> , 2009, 28, 1747-1758.	5.6	14
133	Functional cross-kingdom conservation of mammalian and moss (<i>Physcomitrella patens</i>) transcription, translation and secretion machineries. <i>Plant Biotechnology Journal</i> , 2009, 7, 73-86.	8.3	41
134	Moss (<i>Physcomitrella patens</i>) GH3 proteins act in auxin homeostasis. <i>New Phytologist</i> , 2009, 181, 323-338.	7.3	129
135	Prediction of dual protein targeting to plant organelles. <i>New Phytologist</i> , 2009, 183, 224-236.	7.3	73
136	Current achievements in the production of complex biopharmaceuticals with moss bioreactors. <i>Bioprocess and Biosystems Engineering</i> , 2008, 31, 3-9.	3.4	89
137	Exploring plant biodiversity: the <i>Physcomitrella</i> genome and beyond. <i>Trends in Plant Science</i> , 2008, 13, 542-549.	8.8	132
138	The <i>Physcomitrella</i> Genome Reveals Evolutionary Insights into the Conquest of Land by Plants. <i>Science</i> , 2008, 319, 64-69.	12.6	1,712
139	A sequence-anchored genetic linkage map for the moss, <i>Physcomitrella patens</i> . <i>Plant Journal</i> , 2008, 56, 855-866.	5.7	42
140	A P _{11B} -type Ca ²⁺ -ATPase is essential for stress adaptation in <i>Physcomitrella patens</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 19555-19560.	7.1	116
141	Specific Gene Silencing by Artificial MicroRNAs in <i>Physcomitrella patens</i> : An Alternative to Targeted Gene Knockouts. <i>Plant Physiology</i> , 2008, 148, 684-693.	4.8	109
142	PlanTAPDB, a Phylogeny-Based Resource of Plant Transcription-Associated Proteins. <i>Plant Physiology</i> , 2007, 143, 1452-1466.	4.8	79
143	The Putative Moss 3'-Phosphoadenosine-5'-phosphosulfate Reductase Is a Novel Form of Adenosine-5'-phosphosulfate Reductase without an Iron-Sulfur Cluster. <i>Journal of Biological Chemistry</i> , 2007, 282, 22930-22938.	3.4	37
144	A mitochondrial protein homologous to the mammalian peripheral-type benzodiazepine receptor is essential for stress adaptation in plants. <i>Plant Journal</i> , 2007, 51, 1004-1018.	5.7	83

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145	Filamentous temperature-sensitive Z (FtsZ) isoforms specifically interact in the chloroplasts and in the cytosol of <i>Physcomitrella patens</i> . <i>New Phytologist</i> , 2007, 176, 299-310.	7.3	30
146	Evidence for the rapid expansion of microRNA-mediated regulation in early land plant evolution. <i>BMC Plant Biology</i> , 2007, 7, 13.	3.6	108
147	Evolutionary conservation of plant gibberellin signalling pathway components. <i>BMC Plant Biology</i> , 2007, 7, 65.	3.6	93
148	An ancient genome duplication contributed to the abundance of metabolic genes in the moss <i>Physcomitrella patens</i> . <i>BMC Evolutionary Biology</i> , 2007, 7, 130.	3.2	171
149	The role of the novel adenosine 5'-phosphosulfate reductase in regulation of sulfate assimilation of <i>Physcomitrella patens</i> . <i>Plant Molecular Biology</i> , 2007, 65, 667-676.	3.9	15
150	Dating the early evolution of plants: detection and molecular clock analyses of orthologs. <i>Molecular Genetics and Genomics</i> , 2007, 278, 393-402.	2.1	103
151	Moss bioreactors producing improved biopharmaceuticals. <i>Current Opinion in Biotechnology</i> , 2007, 18, 393-398.	6.6	73
152	Rapid Alteration of the Phosphoproteome in the Moss <i>Physcomitrella patens</i> after Cytokinin Treatment. <i>Journal of Proteome Research</i> , 2006, 5, 2283-2293.	3.7	32
153	Biosynthesis of C9-aldehydes in the moss <i>Physcomitrella patens</i> . <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2006, 1761, 301-312.	2.4	54
154	Moss Systems Biology en Route: Phytohormones in <i>Physcomitrella</i> Development. <i>Plant Biology</i> , 2006, 8, 397-406.	3.8	135
155	Identification of genic moss SSR markers and a comparative analysis of twenty-four algal and plant gene indices reveal species-specific rather than group-specific characteristics of microsatellites. <i>BMC Plant Biology</i> , 2006, 6, 9.	3.6	78
156	High throughput metabolic screen of <i>Physcomitrella</i> transformants. <i>Bryologist</i> , 2006, 109, 247-256.	0.6	12
157	The mechanism of gene targeting in <i>Physcomitrella patens</i> : homologous recombination, concatenation and multiple integration. <i>Nucleic Acids Research</i> , 2006, 34, 6205-6214.	14.5	126
158	Enhanced recovery of a secreted recombinant human growth factor using stabilizing additives and by co-expression of human serum albumin in the moss <i>Physcomitrella patens</i> . <i>Plant Biotechnology Journal</i> , 2005, 3, 331-340.	8.3	68
159	Gene clusters involved in anaerobic benzoate degradation of <i>Geobacter metallireducens</i> . <i>Molecular Microbiology</i> , 2005, 58, 1238-1252.	2.5	147
160	Protein encoding genes in an ancient plant: analysis of codon usage, retained genes and splice sites in a moss, <i>Physcomitrella patens</i> . <i>BMC Genomics</i> , 2005, 6, 43.	2.8	56
161	Isolation and characterisation of three moss-derived beta-tubulin promoters suitable for recombinant expression. <i>Current Genetics</i> , 2005, 47, 111-120.	1.7	33
162	From axenic spore germination to molecular farming. <i>Plant Cell Reports</i> , 2005, 23, 513-521.	5.6	36

#	ARTICLE	IF	CITATIONS
163	EST Sequencing from Embryogenic <i>Cyclamen persicum</i> Cell Cultures Identifies a High Proportion of Transcripts Homologous to Plant Genes Involved in Somatic Embryogenesis. <i>Journal of Plant Growth Regulation</i> , 2005, 24, 102-115.	5.1	37
164	<i>Physcomitrella patens</i> is highly tolerant against drought, salt and osmotic stress. <i>Planta</i> , 2005, 220, 384-394.	3.2	205
165	Control of growth and differentiation of bioreactor cultures of <i>Physcomitrella</i> by environmental parameters. <i>Plant Cell, Tissue and Organ Culture</i> , 2005, 81, 307-311.	2.3	8
166	Cloning and expression of the tobacco CHLM sequence encoding Mg protoporphyrin IX methyltransferase and its interaction with Mg chelatase. <i>Plant Molecular Biology</i> , 2005, 57, 679-691.	3.9	47
167	Use of endogenous signal sequences for transient production and efficient secretion by moss (<i>Physcomitrella patens</i>) cells. <i>BMC Biotechnology</i> , 2005, 5, 30.	3.3	39
168	Effect of Ploidy Level on Growth, Differentiation, and Morphology in <i>Physcomitrella patens</i> . <i>Bryologist</i> , 2005, 108, 27-35.	0.6	29
169	A fast and flexible PEG-mediated transient expression system in plants for high level expression of secreted recombinant proteins. <i>Journal of Biotechnology</i> , 2005, 119, 332-342.	3.8	31
170	Moss (<i>Physcomitrella patens</i>) functional genomics -- Gene discovery and tool development, with implications for crop plants and human health. <i>Briefings in Functional Genomics & Proteomics</i> , 2005, 4, 48-57.	3.8	22
171	Isolation and Characterization of ALDH11A5, a Novel Non-Phosphorylating GAPDH cDNA from <i>Physcomitrella patens</i> *. <i>Bryologist</i> , 2004, 107, 385-387.	0.6	9
172	Targeted knockouts of <i>Physcomitrella</i> lacking plant-specific immunogenic N-glycans. <i>Plant Biotechnology Journal</i> , 2004, 2, 517-523.	8.3	221
173	Dual targeting of plastid division protein FtsZ to chloroplasts and the cytoplasm. <i>EMBO Reports</i> , 2004, 5, 889-894.	4.5	56
174	The moss bioreactor. <i>Current Opinion in Plant Biology</i> , 2004, 7, 166-170.	7.1	102
175	A novel aspartic proteinase is targeted to the secretory pathway and to the vacuole in the moss <i>Physcomitrella patens</i> . <i>European Journal of Cell Biology</i> , 2004, 83, 145-152.	3.6	34
176	<i>Physcomitrella patens</i> . <i>Current Biology</i> , 2004, 14, R261-R262.	3.9	24
177	An improved and highly standardised transformation procedure allows efficient production of single and multiple targeted gene-knockouts in a moss, <i>Physcomitrella patens</i> . <i>Current Genetics</i> , 2004, 44, 339-347.	1.7	109
178	Diversification of fts Z During Early Land Plant Evolution. <i>Journal of Molecular Evolution</i> , 2004, 58, 154-162.	1.8	33
179	Quantitative promoter analysis in <i>Physcomitrella patens</i> : a set of plant vectors activating gene expression within three orders of magnitude. <i>BMC Biotechnology</i> , 2004, 4, 13.	3.3	87
180	An efficient protocol for the identification of protein phosphorylation in a seedless plant, sensitive enough to detect members of signalling cascades. <i>Electrophoresis</i> , 2004, 25, 1149-1159.	2.4	48

#	ARTICLE	IF	CITATIONS
181	Mapping of the <i>Physcomitrella patens</i> proteome. <i>Phytochemistry</i> , 2004, 65, 1589-1607.	2.9	37
182	A large plant beta-tubulin family with minimal C-terminal variation but differences in expression. <i>Gene</i> , 2004, 340, 151-160.	2.2	27
183	Loss of GH3 function does not affect phytochrome-mediated development in a moss, <i>Physcomitrella patens</i> . <i>Journal of Plant Physiology</i> , 2004, 161, 823-835.	3.5	49
184	Applied Genomics in <i>Physcomitrella</i> . , 2004, , 51-70.		1
185	Cyclin D-knockout uncouples developmental progression from sugar availability. <i>Plant Molecular Biology</i> , 2003, 53, 227-236.	3.9	36
186	Unique Tissue-Specific Cell Cycle in <i>Physcomitrella</i> . <i>Plant Biology</i> , 2003, 5, 50-58.	3.8	97
187	Effects of nutrients, cell density and culture techniques on protoplast regeneration and early protonema development in a moss, <i>Physcomitrella patens</i> . <i>Journal of Plant Physiology</i> , 2003, 160, 209-212.	3.5	60
188	Confocal Imaging of Calcium Channelsâ€™ Distribution Pattern During Polarity Induction in Moss Protoplasts. <i>Microscopy and Microanalysis</i> , 2003, 9, 400-401.	0.4	0
189	Functional Knockout of the Adenosine 5â€™-Phosphosulfate Reductase Gene in <i>Physcomitrella patens</i> Revives an Old Route of Sulfate Assimilation. <i>Journal of Biological Chemistry</i> , 2002, 277, 32195-32201.	3.4	73
190	Rings and networks: the amazing complexity of FtsZ in chloroplasts. <i>Trends in Plant Science</i> , 2002, 7, 103-105.	8.8	44
191	Moss transcriptome and beyond. <i>Trends in Plant Science</i> , 2002, 7, 535-538.	8.8	102
192	Optimisation of a bioreactor culture of the moss <i>Physcomitrella patens</i> for mass production of protoplasts. <i>Plant Science</i> , 2002, 163, 69-74.	3.6	79
193	Two RpoT genes of <i>Physcomitrella patens</i> encode phage-type RNA polymerases with dual targeting to mitochondria and plastids. <i>Gene</i> , 2002, 290, 95-105.	2.2	91
194	High frequency of phenotypic deviations in <i>Physcomitrella patens</i> plants transformed with a gene-disruption library. <i>BMC Plant Biology</i> , 2002, 2, 6.	3.6	75
195	High-throughput-PCR screen of 15,000 transgenic <i>Physcomitrella</i> plants. <i>Plant Molecular Biology Reporter</i> , 2002, 20, 43-47.	1.8	35
196	Plant functional genomics. <i>Die Naturwissenschaften</i> , 2002, 89, 235-249.	1.6	114
197	Cloning and functional characterisation of an enzyme involved in the elongation of γ -6-polyunsaturated fatty acids from the moss <i>Physcomitrella patens</i> . <i>Plant Journal</i> , 2002, 31, 255-268.	5.7	97
198	Expansins in the bryophyte <i>Physcomitrella patens</i> . <i>Plant Molecular Biology</i> , 2002, 50, 789-802.	3.9	65

#	ARTICLE	IF	CITATIONS
199	Visualization of a Cytoskeleton-like Ftsz Network in Chloroplasts. <i>Journal of Cell Biology</i> , 2000, 151, 945-950.	5.2	102
200	Molecular genetics of <i>Physcomitrella</i> . <i>Planta</i> , 1999, 208, 301-309.	3.2	83
201	Expression of the bacterial <i>ipt</i> gene in <i>Physcomitrella</i> rescues mutations in budding and in plastid division. <i>Planta</i> , 1998, 206, 196-203.	3.2	59
202	Cloning and characterization of an adenosine kinase from <i>Physcomitrella</i> involved in cytokinin metabolism. <i>Plant Journal</i> , 1998, 13, 249-257.	5.7	72
203	Identification of a novel D6-acyl-group desaturase by targeted gene disruption in <i>Physcomitrella patens</i> . <i>Plant Journal</i> , 1998, 15, 39-48.	5.7	193
204	<i>Physcomitrella</i> and <i>Arabidopsis</i> : the David and Goliath of reverse genetics. <i>Trends in Plant Science</i> , 1998, 3, 209-210.	8.8	99
205	Cytokinin affects nuclear- and plastome-encoded energy-converting plastid enzymes. <i>Planta</i> , 1997, 201, 261-272.	3.2	44
206	Cytokinin affects stability of complex plastid transcripts in cytokinin-sensitive moss mutants. <i>Plant Science</i> , 1995, 112, 187-196.	3.6	11
207	Genome analysis of the moss <i>Physcomitrella patens</i> (Hedw.) B.S.G.. <i>Molecular Genetics and Genomics</i> , 1994, 244, 352-359.	2.4	87
208	The plastome-encoded <i>zfpA</i> gene of a moss contains procaryotic as well as eucaryotic promoter consensus sequences and its RNA abundance is modulated by cytokinin. <i>Current Genetics</i> , 1992, 22, 327-333.	1.7	20
209	The first analysed archegoniate mitochondrial gene (<i>COX3</i>) exhibits extraordinary features. <i>Current Genetics</i> , 1991, 20, 319-329.	1.7	17
210	Isolation of nuclear, chloroplast and mitochondrial DNA from the moss <i>Physcomitrella patens</i> . <i>Plant Science</i> , 1989, 61, 235-244.	3.6	16