Klaas Vandepoele

List of Publications by Year in descending order

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		17440	12272
141	20,243	63	133
papers	citations	h-index	g-index
167	167	167	26824
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	PLAZA 5.0: extending the scope and power of comparative and functional genomics in plants. Nucleic Acids Research, 2022, 50, D1468-D1474.	14.5	95
2	JASPAR 2022: the 9th release of the open-access database of transcription factor binding profiles. Nucleic Acids Research, 2022, 50, D165-D173.	14.5	902
3	Spatiotemporal expression profile of novel and known small RNAs throughout rice plant development focussing on seed tissues. BMC Genomics, 2022, 23, 44.	2.8	4
4	Chromosome-scale assembly and annotation of the perennial ryegrass genome. BMC Genomics, 2022, 23, .	2.8	17
5	Canonical correlations reveal adaptive loci and phenotypic responses to climate in perennial ryegrass. Molecular Ecology Resources, 2021, 21, 849-870.	4.8	20
6	Mating type specific transcriptomic response to sex inducing pheromone in the pennate diatom <i>Seminavis robusta </i> . ISME Journal, 2021, 15, 562-576.	9.8	17
7	Gene expression during bacterivorous growth of a widespread marine heterotrophic flagellate. ISME Journal, 2021, 15, 154-167.	9.8	13
8	Comparative genomics reveals new functional insights in uncultured MAST species. ISME Journal, 2021, 15, 1767-1781.	9.8	18
9	Evolutionary Genomics of Sex-Related Chromosomes at the Base of the Green Lineage. Genome Biology and Evolution, 2021, 13, .	2.5	5
10	Integrative inference of transcriptional networks in Arabidopsis yields novel ROS signalling regulators. Nature Plants, 2021, 7, 500-513.	9.3	43
11	Diurnal transcript profiling of the diatom <i>Seminavis robusta</i> reveals adaptations to a benthic lifestyle. Plant Journal, 2021, 107, 315-336.	5.7	15
12	Subfunctionalization of Paralog Transcription Factors Contributes to Regulation of Alkaloid Pathway Branch Choice in Catharanthus roseus. Frontiers in Plant Science, 2021, 12, 687406.	3.6	10
13	TRAPID 2.0: a web application for taxonomic and functional analysis of <i>de novo </i> transcriptomes. Nucleic Acids Research, 2021, 49, e101-e101.	14.5	21
14	Mitotic recombination between homologous chromosomes drives genomic diversity in diatoms. Current Biology, 2021, 31, 3221-3232.e9.	3.9	29
15	Chromatin accessibility landscapes activated by cell-surface and intracellular immune receptors. Journal of Experimental Botany, 2021, 72, 7927-7941.	4.8	14
16	Multiâ€omics networkâ€based functional annotation of unknown Arabidopsis genes. Plant Journal, 2021, 108, 1193-1212.	5.7	39
17	Light intensity and spectral composition drive reproductive success in the marine benthic diatom Seminavis robusta. Scientific Reports, 2021, 11, 17560.	3.3	4
18	Comment on †Hayai-Annotation Plants: an ultrafast and comprehensive functional gene annotation system in plants': the importance of taking the GO graph structure into account. Bioinformatics, 2021, 36, 5558-5560.	4.1	2

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19	A network-based comparative framework to study conservation and divergence of proteomes in plant phylogenies. Nucleic Acids Research, 2021, 49, e3-e3.	14.5	5
20	Comparative transcriptomics enables the identification of functional orthologous genes involved in early leaf growth. Plant Biotechnology Journal, 2020, 18, 553-567.	8.3	24
21	Inference of plant gene regulatory networks using data-driven methods: A practical overview. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2020, 1863, 194447.	1.9	28
22	Evolution of vascular plants through redeployment of ancient developmental regulators. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 733-740.	7.1	21
23	Neoproterozoic origin and multiple transitions to macroscopic growth in green seaweeds. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2551-2559.	7.1	85
24	Comprehensive and Functional Analysis of Horizontal Gene Transfer Events in Diatoms. Molecular Biology and Evolution, 2020, 37, 3243-3257.	8.9	28
25	The medium-size noncoding RNA transcriptome of Ostreococcus tauri, the smallest living eukaryote, reveals a large family of small nucleolar RNAs displaying multiple genomic expression strategies. NAR Genomics and Bioinformatics, 2020, 2, Iqaa080.	3.2	1
26	Light Regulation of LHCX Genes in the Benthic Diatom Seminavis robusta. Frontiers in Marine Science, 2020, 7, .	2.5	12
27	Distinctive Growth and Transcriptional Changes of the Diatom Seminavis robusta in Response to Quorum Sensing Related Compounds. Frontiers in Microbiology, 2020, 11, 1240.	3.5	21
28	The Seminavis robusta genome provides insights into the evolutionary adaptations of benthic diatoms. Nature Communications, 2020, 11 , 3320.	12.8	55
29	Identification and evolution of gene regulatory networks: insights from comparative studies in plants. Current Opinion in Plant Biology, 2020, 54, 42-48.	7.1	43
30	Virus-host coexistence in phytoplankton through the genomic lens. Science Advances, 2020, 6, eaay2587.	10.3	30
31	Understanding genetic control of root system architecture in soybean: Insights into the genetic basis of lateral root number. Plant, Cell and Environment, 2019, 42, 212-229.	5 . 7	36
32	A new evolutionary model for the vertebrate actin family including two novel groups. Molecular Phylogenetics and Evolution, 2019, 141, 106632.	2.7	10
33	Associated Bacteria Affect Sexual Reproduction by Altering Gene Expression and Metabolic Processes in a Biofilm Inhabiting Diatom. Frontiers in Microbiology, 2019, 10, 1790.	3.5	21
34	Capturing the phosphorylation and protein interaction landscape of the plant TOR kinase. Nature Plants, 2019, 5, 316-327.	9.3	205
35	Neofunctionalization of Mitochondrial Proteins and Incorporation into Signaling Networks in Plants. Molecular Biology and Evolution, 2019, 36, 974-989.	8.9	17
36	Gene space completeness in complex plant genomes. Current Opinion in Plant Biology, 2019, 48, 9-17.	7.1	16

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37	Enhanced Maps of Transcription Factor Binding Sites Improve Regulatory Networks Learned from Accessible Chromatin Data. Plant Physiology, 2019, 181, 412-425.	4.8	24
38	Curse: building expression atlases and co-expression networks from public RNA-Seq data. Bioinformatics, 2019, 35, 2880-2881.	4.1	25
39	Overcoming challenges in variant calling: exploring sequence diversity in candidate genes for plant development in perennial ryegrass (<i>Lolium perenne</i>). DNA Research, 2019, 26, 1-12.	3.4	14
40	A widespread alternative squalene epoxidase participates in eukaryote steroid biosynthesis. Nature Microbiology, 2019, 4, 226-233.	13.3	64
41	GS ^{yellow} , a Multifaceted Tag for Functional Protein Analysis in Monocot and Dicot Plants. Plant Physiology, 2018, 177, 447-464.	4.8	19
42	JASPAR 2018: update of the open-access database of transcription factor binding profiles and its web framework. Nucleic Acids Research, 2018, 46, D260-D266.	14.5	1,232
43	PLAZA 4.0: an integrative resource for functional, evolutionary and comparative plant genomics. Nucleic Acids Research, 2018, 46, D1190-D1196.	14.5	460
44	TF2Network: predicting transcription factor regulators and gene regulatory networks in Arabidopsis using publicly available binding site information. Nucleic Acids Research, 2018, 46, e31-e31.	14.5	107
45	The <i>Physcomitrella patens</i> chromosomeâ€scale assembly reveals moss genome structure and evolution. Plant Journal, 2018, 93, 515-533.	5.7	406
46	Ensemble gene function prediction database reveals genes important for complex I formation in <i>Arabidopsis thaliana </i> New Phytologist, 2018, 217, 1521-1534.	7.3	27
47	Gearing up to handle the mosaic nature of life in the quest for orthologs. Bioinformatics, 2018, 34, 323-329.	4.1	36
48	Insights into the Evolution of Multicellularity from the Sea Lettuce Genome. Current Biology, 2018, 28, 2921-2933.e5.	3.9	134
49	KIRA1 and ORESARA1 terminate flower receptivity by promoting cell death in the stigma of Arabidopsis. Nature Plants, 2018, 4, 365-375.	9.3	88
50	Genome Analyses of the Microalga Picochlorum Provide Insights into the Evolution of Thermotolerance in the Green Lineage. Genome Biology and Evolution, 2018, 10, 2347-2365.	2.5	36
51	Phylogenomic analysis of gene coâ€expression networks reveals the evolution of functional modules. Plant Journal, 2017, 90, 447-465.	5.7	97
52	The Transcription Factor MYB29 Is a Regulator of <i>ALTERNATIVE OXIDASE1a</i> . Plant Physiology, 2017, 173, 1824-1843.	4.8	46
53	The transcriptional repressor complex FRS7-FRS12 regulates flowering time and growth in Arabidopsis. Nature Communications, 2017, 8, 15235.	12.8	54
54	Evolutionary relationships and expression analysis of EUL domain proteins in rice (Oryza sativa). Rice, 2017, 10, 26.	4.0	31

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55	Genomeâ€wide characterization of differential transcript usage in <i>Arabidopsis thaliana</i> Journal, 2017, 92, 1218-1231.	5 . 7	31
56	The Plastid Genome in Cladophorales Green Algae Is Encoded by Hairpin Chromosomes. Current Biology, 2017, 27, 3771-3782.e6.	3.9	45
57	The mutation <i>nrpb1â€A325V</i> in the largest subunit of <scp>RNA</scp> polymerase <scp>II</scp> suppresses compromised growth of <i>Arabidopsis</i> plants deficient in a function of the general transcription factor <scp>IIF</scp> . Plant Journal, 2017, 89, 730-745.	5 . 7	2
58	A Guide to the PLAZA 3.0 Plant Comparative Genomic Database. Methods in Molecular Biology, 2017, 1533, 183-200.	0.9	11
59	PhyD3: a phylogenetic tree viewer with extended phyloXML support for functional genomics data visualization. Bioinformatics, 2017, 33, 2946-2947.	4.1	142
60	A Collection of Conserved Noncoding Sequences to Study Gene Regulation in Flowering Plants. Plant Physiology, 2016, 171, 2586-2598.	4.8	39
61	Functional characterization of the Arabidopsis transcription factor bZIP29 reveals its role in leaf and root development. Journal of Experimental Botany, 2016, 67, 5825-5840.	4.8	78
62	Are We There Yet? Reliably Estimating the Completeness of Plant Genome Sequences. Plant Cell, 2016, 28, 1759-1768.	6.6	89
63	BLSSpeller: exhaustive comparative discovery of conserved <i>cis</i> regulatory elements. Bioinformatics, 2015, 31, 3758-3766.	4.1	14
64	Small-scale gene duplications played a major role in the recent evolution of wheat chromosome 3B. Genome Biology, 2015 , 16 , 188 .	8.8	76
65	PLAZA 3.0: an access point for plant comparative genomics. Nucleic Acids Research, 2015, 43, D974-D981.	14.5	329
66	An update on LNCipedia: a database for annotated human IncRNA sequences. Nucleic Acids Research, 2015, 43, D174-D180.	14.5	298
67	Selection for Improved Energy Use Efficiency and Drought Tolerance in Canola Results in Distinct Transcriptome and Epigenome Changes. Plant Physiology, 2015, 168, 1338-1350.	4.8	49
68	Dynamic Changes in ANGUSTIFOLIA3 Complex Composition Reveal a Growth Regulatory Mechanism in the Maize Leaf. Plant Cell, 2015, 27, 1605-1619.	6.6	154
69	Evolutionary trails of plant steroid genes. Trends in Plant Science, 2015, 20, 301-308.	8.8	19
70	A Repressor Protein Complex Regulates Leaf Growth in Arabidopsis. Plant Cell, 2015, 27, 2273-2287.	6.6	118
71	Functional Analysis of Arabidopsis TETRASPANIN Gene Family in Plant Growth and Development. Plant Physiology, 2015, 169, pp.01310.2015.	4.8	29
72	An improved toolbox to unravel the plant cellular machinery by tandem affinity purification of Arabidopsis protein complexes. Nature Protocols, 2015, 10, 169-187.	12.0	160

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73	CoExpNetViz: Comparative Co-Expression Networks Construction and Visualization Tool. Frontiers in Plant Science, 2015, 6, 1194.	3.6	93
74	Drought Tolerance Conferred to Sugarcane by Association with Gluconacetobacter diazotrophicus: A Transcriptomic View of Hormone Pathways. PLoS ONE, 2014, 9, e114744.	2.5	187
75	A DNA-binding-site landscape and regulatory network analysis for NAC transcription factors in <i>Arabidopsis thaliana</i> . Nucleic Acids Research, 2014, 42, 7681-7693.	14.5	84
76	<pre><scp>SHUGOSHIN</scp>s and <scp>PATRONUS</scp> protect meiotic centromere cohesion in <i><scp>A</scp>rabidopsis thaliana</i><plant 2014,="" 77,="" 782-794.<="" journal,="" pre=""></plant></pre>	5.7	34
77	MAGIC: access portal to a cross-platform gene expression compendium for maize. Bioinformatics, 2014, 30, 1316-1318.	4.1	2
78	A Functional and Evolutionary Perspective on Transcription Factor Binding in <i>Arabidopsis thaliana</i> . Plant Cell, 2014, 26, 3894-3910.	6.6	102
79	A Generic Tool for Transcription Factor Target Gene Discovery in Arabidopsis Cell Suspension Cultures Based on Tandem Chromatin Affinity Purification. Plant Physiology, 2014, 164, 1122-1133.	4.8	43
80	Structural and functional partitioning of bread wheat chromosome 3B. Science, 2014, 345, 1249721.	12.6	542
81	Inference of Transcriptional Networks in <i>Arabidopsis</i> through Conserved Noncoding Sequence Analysis. Plant Cell, 2014, 26, 2729-2745.	6.6	57
82	ANGUSTIFOLIA3 Binds to SWI/SNF Chromatin Remodeling Complexes to Regulate Transcription during <i>Arabidopsis</i> Leaf Development. Plant Cell, 2014, 26, 210-229.	6.6	219
83	A Parallel, Distributed-Memory Framework for Comparative Motif Discovery. Lecture Notes in Computer Science, 2014, , 268-277.	1.3	1
84	Molecular and Physiological Analysis of Growth-Limiting Drought Stress in Brachypodium distachyon Leaves. Molecular Plant, 2013, 6, 311-322.	8.3	94
85	ERF115 Controls Root Quiescent Center Cell Division and Stem Cell Replenishment. Science, 2013, 342, 860-863.	12.6	263
86	TRAPID: an efficient online tool for the functional and comparative analysis of de novo RNA-Seq transcriptomes. Genome Biology, 2013, 14, R134.	9.6	108
87	Convergent gene loss following gene and genome duplications creates single-copy families in flowering plants. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2898-2903.	7.1	351
88	The Membrane-Bound NAC Transcription Factor ANACO13 Functions in Mitochondrial Retrograde Regulation of the Oxidative Stress Response in <i>Arabidopsis</i>	6.6	293
89	picoâ€ <scp>PLAZA</scp> , a genome database of microbial photosynthetic eukaryotes. Environmental Microbiology, 2013, 15, 2147-2153.	3.8	87
90	i-ADHoRe 3.0â€"fast and sensitive detection of genomic homology in extremely large data sets. Nucleic Acids Research, 2012, 40, e11-e11.	14.5	192

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91	Dissecting Plant Genomes with the PLAZA Comparative Genomics Platform Â. Plant Physiology, 2012, 158, 590-600.	4.8	238
92	Gene functionalities and genome structure in Bathycoccus prasinos reflect cellular specializations at the base of the green lineage. Genome Biology, 2012, 13, R74.	9.6	143
93	Systematic Identification of Functional Plant Modules through the Integration of Complementary Data Sources Â. Plant Physiology, 2012, 159, 884-901.	4.8	108
94	Tetraspanin genes in plants. Plant Science, 2012, 190, 9-15.	3.6	30
95	Identification of cis-regulatory elements specific for different types of reactive oxygen species in Arabidopsis thaliana. Gene, 2012, 499, 52-60.	2.2	36
96	Metagenomes of the Picoalga Bathycoccus from the Chile Coastal Upwelling. PLoS ONE, 2012, 7, e39648.	2.5	58
97	Identification of putative cancer genes through data integration and comparative genomics between plants and humans. Cellular and Molecular Life Sciences, 2012, 69, 2041-2055.	5.4	10
98	Comparative coâ€expression analysis in plant biology. Plant, Cell and Environment, 2012, 35, 1787-1798.	5.7	83
99	ROS signaling: the new wave?. Trends in Plant Science, 2011, 16, 300-309.	8.8	1,911
100	A greedy, graph-based algorithm for the alignment of multiple homologous gene lists. Bioinformatics, 2011, 27, 749-756.	4.1	24
101	Plastid gene expression and plant development require a plastidic protein of the mitochondrial transcription termination factor family. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6674-6679.	7.1	134
102	Comparative Network Analysis Reveals That Tissue Specificity and Gene Function Are Important Factors Influencing the Mode of Expression Evolution in Arabidopsis and Rice Â. Plant Physiology, 2011, 156, 1316-1330.	4.8	100
103	The MCM-Binding Protein ETG1 Aids Sister Chromatid Cohesion Required for Postreplicative Homologous Recombination Repair. PLoS Genetics, 2010, 6, e1000817.	3.5	58
104	PLAZA: A Comparative Genomics Resource to Study Gene and Genome Evolution in Plants. Plant Cell, 2010, 21, 3718-3731.	6.6	243
105	Genome-wide analysis of the diatom cell cycle unveils a novel type of cyclins involved in environmental signaling. Genome Biology, 2010, 11, R17.	9.6	91
106	Unraveling Transcriptional Control in Arabidopsis Using cis-Regulatory Elements and Coexpression Networks Å Å. Plant Physiology, 2009, 150, 535-546.	4.8	197
107	Predicting protein-protein interactions in Arabidopsis thaliana through integration of orthology, gene ontology and co-expression. BMC Genomics, 2009, 10, 288.	2.8	120
108	Unravelling cis-Regulatory Elements in the Genome of the Smallest Photosynthetic Eukaryote: Phylogenetic Footprinting in Ostreococcus. Journal of Molecular Evolution, 2009, 69, 249-259.	1.8	10

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109	Quantitative RNA expression analysis with Affymetrix Tiling 1.0R arrays identifies new E2F target genes. Plant Journal, 2009, 57, 184-194.	5.7	65
110	The flowering world: a tale of duplications. Trends in Plant Science, 2009, 14, 680-688.	8.8	277
111	The Mouse Thymosin Beta 15 Gene Family Displays Unique Complexity and Encodes A Functional Thymosin Repeat. Journal of Molecular Biology, 2009, 387, 809-825.	4.2	14
112	The Phaeodactylum genome reveals the evolutionary history of diatom genomes. Nature, 2008, 456, 239-244.	27.8	1,458
113	Hydrogen Peroxide-Induced Gene Expression across Kingdoms: A Comparative Analysis. Molecular Biology and Evolution, 2008, 25, 507-516.	8.9	122
114	Whole-genome analysis reveals molecular innovations and evolutionary transitions in chromalveolate species. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 3427-3432.	7.1	53
115	The <i>PRA1</i> Gene Family in Arabidopsis Â. Plant Physiology, 2008, 147, 1735-1749.	4.8	63
116	Novel Plant-specific Cyclin-dependent Kinase Inhibitors Induced by Biotic and Abiotic Stresses. Journal of Biological Chemistry, 2007, 282, 25588-25596.	3.4	139
117	Cold Nights Impair Leaf Growth and Cell Cycle Progression in Maize through Transcriptional Changes of Cell Cycle Genes. Plant Physiology, 2007, 143, 1429-1438.	4.8	193
118	On the origin and evolution of vertebrate and viral profilins. FEBS Letters, 2007, 581, 211-217.	2.8	23
119	A High Quality Draft Consensus Sequence of the Genome of a Heterozygous Grapevine Variety. PLoS ONE, 2007, 2, e1326.	2.5	945
120	How many genes are there in plants (… and why are they there)?. Current Opinion in Plant Biology, 2007, 10, 199-203.	7.1	115
121	Identification of novel regulatory modules in dicotyledonous plants using expression data and comparative genomics. Genome Biology, 2006, 7, R103.	9.6	55
122	The gain and loss of genes during 600 million years of vertebrate evolution. Genome Biology, 2006, 7, R43.	9.6	332
123	Ancient duplication of cereal genomes. New Phytologist, 2005, 165, 658-661.	7.3	43
124	Exploring the Plant Transcriptome through Phylogenetic Profiling Â. Plant Physiology, 2005, 137, 31-42.	4.8	41
125	Genome-Wide Identification of Potential Plant E2F Target Genes. Plant Physiology, 2005, 139, 316-328.	4.8	229
126	Building Genomic Profiles for Uncovering Segmental Homology in the Twilight Zone. Genome Research, 2004, 14, 1095-1106.	5 . 5	62

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127	Major events in the genome evolution of vertebrates: Paranome age and size differ considerably between ray-finned fishes and land vertebrates. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1638-1643.	7.1	489
128	A small CDC25 dual-specificity tyrosine-phosphatase isoform in Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13380-13385.	7.1	105
129	Type II Metacaspases Atmc4 and Atmc9 of Arabidopsis thaliana Cleave Substrates after Arginine and Lysine. Journal of Biological Chemistry, 2004, 279, 45329-45336.	3.4	304
130	Recent developments in computational approaches for uncovering genomic homology. BioEssays, 2004, 26, 1225-1235.	2.5	22
131	Gene duplication and biased functional retention of paralogs in bacterial genomes. Trends in Microbiology, 2004, 12, 148-154.	7.7	150
132	The Quest for Genomic Homology. Current Genomics, 2004, 5, 299-308.	1.6	10
133	Investigating ancient duplication events in the Arabidopsis genome. Journal of Structural and Functional Genomics, 2003, 3, 117-129.	1.2	52
134	Evidence That Rice and Other Cereals Are Ancient Aneuploids. Plant Cell, 2003, 15, 2192-2202.	6.6	212
135	Investigating ancient duplication events in the Arabidopsis genome. , 2003, , 117-129.		27
136	Investigating ancient duplication events in the Arabidopsis genome. Journal of Structural and Functional Genomics, 2003, 3, 117-29.	1.2	32
137	Genome-Wide Analysis of Core Cell Cycle Genes in Arabidopsis. Plant Cell, 2002, 14, 903-916.	6.6	523
138	The Automatic Detection of Homologous Regions (ADHoRe) and Its Application to Microcolinearity Between Arabidopsis and Rice. Genome Research, 2002, 12, 1792-1801.	5.5	127
139	Transcriptome analysis during cell division in plants. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14825-14830.	7.1	140
140	The hidden duplication past of Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13627-13632.	7.1	463
141	Detecting the undetectable: uncovering duplicated segments in Arabidopsis by comparison with rice. Trends in Genetics, 2002, 18, 606-608.	6.7	50