Sacco C De Vries

List of Publications by Year
in descending order

117 papers	11,631 citations	25034 57 h-index	28297 105 g-index
118 all docs	118 docs citations	118 times ranked	10155 citing authors

#	Article	IF	Citations
1	The Arabidopsis<i>Somatic Embryogenesis Receptor Kinase 1</i>Gene Is Expressed in Developing Ovules and Embryos and Enhances Embryogenic Competence in Culture. Plant Physiology, 2001, 127, 803-816.	4.8	604
2	The <i>Arabidopsis</i> Leucine-Rich Repeat Receptorâ€“Like Kinases BAK1/SERK3 and BKK1/SERK4 Are Required for Innate Immunity to Hemibiotrophic and Biotrophic Pathogens. Plant Cell, 2011, 23, 2440-2455.	6.6	578
3	Heterodimerization and Endocytosis of Arabidopsis Brassinosteroid Receptors BRI1 and AtSERK3 (BAK1). Plant Cell, 2004, 16, 3216-3229.	6.6	444
4	Endocytic and Secretory Traffic in <i>Arabidopsis</i> Merge in the Trans-Golgi Network/Early Endosome, an Independent and Highly Dynamic Organelle. Plant Cell, 2010, 22, 1344-1357.	6.6	435
5	The CUP-SHAPED COTYLEDON3 Gene Is Required for Boundary and Shoot Meristem Formation in Arabidopsis. Plant Cell, 2003, 15, 1563-1577.	6.6	429
6	The BRI1-Associated Kinase 1, BAK1, Has a Brassinolide-Independent Role in Plant Cell-Death Control. Current Biology, 2007, 17, 1116-1122.	3.9	356
7	Structural Basis for DNA Binding Specificity by the Auxin-Dependent ARF Transcription Factors. Cell, 2014, 156, 577-589.	28.9	348
8	Lipid Transfer Protein: A Pan-Allergen in Plant-Derived Foods That Is Highly Resistant to Pepsin Digestion. International Archives of Allergy and Immunology, 2000, 122, 20-32.	2.1	307
9	Brassinosteroids inhibit pathogen-associated molecular patternâ€“triggered immune signaling independent of the receptor kinase BAK1. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 303-308.	7.1	303
10	The Arabidopsis thaliana SOMATIC EMBRYOGENESIS RECEPTOR-LIKE KINASES1 and 2 Control Male Sporogenesis. Plant Cell, 2005, 17, 3337-3349.	6.6	289
11	One for all: the receptor-associated kinase BAK1. Trends in Plant Science, 2009, 14, 535-541.	8.8	281
12	SPEECHLESS integrates brassinosteroid and stomata signalling pathways. Nature Cell Biology, 2012, 14, 548-554.	10.3	277
13	The Arabidopsis SOMATIC EMBRYOGENESIS RECEPTOR-LIKE KINASE1 Protein Complex Includes BRASSINOSTEROID-INSENSITIVE1. Plant Cell, 2006, 18, 626-638.	6.6	249
14	N-Acetylglucosamine and Glucosamine-Containing Arabinogalactan Proteins Control Somatic Embryogenesis. Plant Physiology, 2001, 125, 1880-1890.	4.8	223
15	The Leucine-Rich Repeat Receptor Kinase BIR2 Is a Negative Regulator of BAK1 in Plant Immunity. Current Biology, 2014, 24, 134-143.	3.9	219
16	The Host Defense Proteome of Human and Bovine Milk. PLoS ONE, 2011, 6, e19433.	2.5	210
17	Acquisition of embryogenic potential in carrot cell-suspension cultures. Planta, 1988, 176, 196-204.	3.2	207
18	The Arabidopsis kinase-associated protein phosphatase controls internalization of the somatic embryogenesis receptor kinase 1. Genes and Development, 2002, 16, 1707-1720.	5.9	182

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19	Arabidopsis SOMATIC EMBRYOGENESIS RECEPTOR KINASE Proteins Serve Brassinosteroid-Dependent and -Independent Signaling Pathways Â. Plant Physiology, 2008, 148, 611-619.	4.8	175
20	POLAR-guided signalling complex assembly and localization drive asymmetric cell division. Nature, 2018, 563, 574-578.	27.8	167
21	Plant Embryogenesis. Critical Reviews in Plant Sciences, 1997, 16, 535-576.	5.7	159
22	Somatic Embryogenesis in Arabidopsis thaliana Is Facilitated by Mutations in Genes Repressing Meristematic Cell Divisions. Genetics, 1998, 149, 549-563.	2.9	158
23	Tackling Drought Stress: RECEPTOR-LIKE KINASES Present New Approaches. Plant Cell, 2012, 24, 2262-2278.	6.6	155
24	The PAS fold. FEBS Journal, 2004, 271, 1198-1208.	0.2	151
25	PICKLE Acts throughout the Plant to Repress Expression of Embryonic Traits and May Play a Role in Gibberellin-Dependent Responses. Plant Physiology, 2004, 134, 995-1005.	4.8	148
26	Early events in higher-plant embryogenesis. Plant Molecular Biology, 1993, 22, 367-377.	3.9	139
27	Diversity of abundant mRNA sequences and patterns of protein synthesis in etiolated and greened pea seedlings. Planta, 1982, 156, 129-135.	3.2	136
28	Diploid apomicts of the <i>Boechera holboellii</i> complex display large-scale chromosome substitutions and aberrant chromosomes. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14026-14031.	7.1	136
29	Tunicamycin-inhibited carrot somatic embryogenesis can be restored by secreted cationic peroxidase isoenzymes. Planta, 1991, 184, 478-486.	3.2	128
30	Sexual and Apomictic Reproduction in Hieracium subgenus Pilosella Are Closely Interrelated Developmental Pathways. Plant Cell, 2003, 15, 1524-1537.	6.6	126
31	Subcellular Localization and Oligomerization of the Arabidopsis thaliana Somatic Embryogenesis Receptor Kinase 1 Protein. Journal of Molecular Biology, 2001, 309, 641-655.	4.2	117
32	Description of somatic-embryo-forming single cells in carrot suspension cultures employing video cell tracking. Planta, 1994, 194, 565-572.	3.2	116
33	Gene-expression programs in embryogenic and non-embryogenic carrot cultures. Planta, 1988, 176, 205-211.	3.2	114
34	Expression Pattern of the Carrot EP3Endochitinase Genes in Suspension Cultures and in Developing Seeds1. Plant Physiology, 1998, 117, 43-53.	4.8	113
35	Profiling of promoter occupancy by PPARÎ± in human hepatoma cells via ChIP-chip analysis. Nucleic Acids Research, 2010, 38, 2839-2850.	14.5	112
36	Role of Threonines in the Arabidopsis thaliana Somatic Embryogenesis Receptor Kinase 1 Activation Loop in Phosphorylation. Journal of Biological Chemistry, 2001, 276, 41263-41269.	3.4	107

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37	Visualization of BRI1 and BAK1(SERK3) Membrane Receptor Heterooligomers during Brassinosteroid Signaling Â Â. Plant Physiology, 2013, 162, 1911-1925.	4.8	104
38	Competition between the facultatively chemolithotrophic Thiobacillus A2, an obligately chemolithotrophic Thiobacillus and a heterotrophic spirillum for inorganic and organic substrates. Archives of Microbiology, 1979, 121, 241-249.	2.2	95
39	The BRASSINOSTEROID INSENSITIVE1â€“LIKE3 Signalosome Complex Regulates <i>Arabidopsis</i> Root Development Â Â. Plant Cell, 2013, 25, 3377-3388.	6.6	94
40	The Arabidopsis Leucine-Rich Repeat Receptor Kinase BIR3 Negatively Regulates BAK1 Receptor Complex Formation and Stabilizes BAK1. Plant Cell, 2017, 29, 2285-2303.	6.6	94
41	Expression pattern of the Arabidopsis thaliana AtEP3 / AtchitIV endochitinase gene. Planta, 2001, 212, 556-567.	3.2	93
42	Molecular cytogenetics and DNA sequence analysis of an apomixis-linked BAC in Paspalum simplex reveal a non pericentromere location and partial microcolinearity with rice. Theoretical and Applied Genetics, 2006, 112, 1179-1191.	3.6	90
43	Proteomics-based identification of low-abundance signaling and regulatory protein complexes in native plant tissues. Nature Protocols, 2012, 7, 2144-2158.	12.0	90
44	Cell Plate Restricted Association of DRP1A and PIN Proteins Is Required for Cell Polarity Establishment in Arabidopsis. Current Biology, 2011, 21, 1055-1060.	3.9	89
45	A relationship between seed development, Arabinogalactan-proteins (AGPs) and the AGP mediated promotion of somatic embryogenesis. Physiologia Plantarum, 2002, 114, 637-644.	5.2	83
46	Promotive and inhibitory effects of diverse arabinogalactan proteins on Daucus carota L. somatic embryogenesis. Planta, 1997, 203, 188-195.	3.2	81
47	Carrot arabinogalactan proteins are interlinked with pectins. Physiologia Plantarum, 2006, 128, 18-28.	5.2	78
48	Cell-Specific Expression of the Carrot EP2 Lipid Transfer Protein Gene. Plant Cell, 1991, 3, 907.	6.6	77
49	Fluorescence Fluctuation Analysis of Arabidopsis thaliana Somatic Embryogenesis Receptor-Like Kinase and Brassinosteroid Insensitive 1 Receptor Oligomerization. Biophysical Journal, 2008, 94, 1052-1062.	0.5	77
50	On the Origin of SERKs: Bioinformatics Analysis of the Somatic Embryogenesis Receptor Kinases. Molecular Plant, 2015, 8, 762-782.	8.3	74
51	Lipid Transfer Protein: A Pan-Allergen in Plant-Derived Foods That Is Highly Resistant to Pepsin Digestion. International Archives of Allergy and Immunology, 2001, 124, 67-69.	2.1	73
52	How Accurate and Safe Is the Diagnosis of Hazelnut Allergy by Means of Commercial Skin Prick Test Reagents?. International Archives of Allergy and Immunology, 2003, 132, 132-140.	2.1	72
53	Characterzation of chitinases able to rescue somatic embryos of the temperature-sensitive carrot variantts11. Plant Molecular Biology, 1996, 31, 631-645.	3.9	70
54	Calcium increases the yield of somatic embryos in carrot embryogenic suspension cultures. Plant Cell Reports, 1990, 9, 221-223.	5.6	68

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55	Somatic embryogenesis from Arabidopsis shoot apical meristem mutants. Planta, 2002, 214, 829-836.	3.2	68
56	In vivo imaging of MADS-box transcription factor interactions. Journal of Experimental Botany, 2006, 57, 33-42.	4.8	63
57	The Arabidopsis SERK1 protein interacts with the AAA-ATPase AtCDC48, the 14-3-3 protein GF14Î» and the PP2C phosphatase KAPP. Planta, 2005, 221, 394-405.	3.2	61
58	A Carrot Somatic Embryo Mutant Is Rescued by Chitinase. Plant Cell, 1992, 4, 425.	6.6	59
59	Cloning and expression of the Escherichia coli recA gene in Bacillus subtilis. Gene, 1983, 25, 301-308.	2.2	58
60	Rhizobium Lipooligosaccharides Rescue a Carrot Somatic Embryo Mutant. Plant Cell, 1993, 5, 615.	6.6	58
61	Identification of <i>in vitro</i> phosphorylation sites in the <i>Arabidopsis thaliana</i> somatic embryogenesis receptorâ€like kinases. Proteomics, 2009, 9, 368-379.	2.2	57
62	The Arabidopsis Somatic Embryogenesis Receptor Kinase 1 Gene Is Expressed in Developing Ovules and Embryos and Enhances Embryogenic Competence in Culture. Plant Physiology, 2001, 127, 803-816.	4.8	54
63	Characterization of the non-specific lipid transfer protein EP2 from carrot (Daucus carota L.). Molecular and Cellular Biochemistry, 1993, 123, 159-166.	3.1	52
64	Proteomics Analysis of the Zebrafish Skeletal Extracellular Matrix. PLoS ONE, 2014, 9, e90568.	2.5	50
65	Signal molecules involved in plant embryogenesis. Plant Molecular Biology, 1994, 26, 1305-1313.	3.9	49
66	The SERK1 gene is expressed in procambium and immature vascular cells. Journal of Experimental Botany, 2007, 58, 2887-2896.	4.8	48
67	Ectopic expression of LLAG1, an AGAMOUS homologue from lily (Lilium longiflorum Thunb.) causes floral homeotic modifications in Arabidopsis. Journal of Experimental Botany, 2004, 55, 1391-1399.	4.8	47
68	In Vivo Hexamerization and Characterization of the Arabidopsis AAA ATPase CDC48A Complex Using Folˆrster Resonance Energy Transfer-Fluorescence Lifetime Imaging Microscopy and Fluorescence Correlation Spectroscopy. Plant Physiology, 2007, 145, 339-350.	4.8	47
69	Heterogeneity and Cell Type-Specific Localization of a Cell Wall Glycoprotein from Carrot Suspension Cells. Plant Physiology, 1991, 96, 705-712.	4.8	45
70	The Arabidopsis thaliana AAA protein CDC48A interacts in vivo with the somatic embryogenesis receptor-like kinase 1 receptor at the plasma membrane. Journal of Structural Biology, 2006, 156, 62-71.	2.8	44
71	AtLTP1 luciferase expression during carrot somatic embryogenesis. Plant Journal, 1997, 12, 1213-1221.	5.7	38
72	Transient reduction in secreted 32 kD chitinase prevents somatic embryogenesis in the carrot (Daucus) Tj ETQq0 0 0 rgBT /Overlock 10	2.1	37

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73	Proteomics insights into plant signaling and development. Proteomics, 2011, 11, 744-755.	2.2	37
74	The carrot secreted glycoprotein gene EP1 is expressed in the epidermis and has sequence homology to Brassica S-locus glycoproteins. Plant Journal, 1993, 4, 855-862.	5.7	36
75	Expression of the JIM8 cell wall epitope in carrot somatic embryogenesis. Planta, 1996, 200, 167-173.	3.2	36
76	AtSERK1 expression precedes and coincides with early somatic embryogenesis in Arabidopsis thaliana. Plant Physiology and Biochemistry, 2008, 46, 709-714.	5.8	36
77	A Mathematical Model for BRASSINOSTEROID INSENSITIVE1-Mediated Signaling in Root Growth and Hypocotyl Elongation Â. Plant Physiology, 2012, 160, 523-532.	4.8	35
78	Nodulin gene expression during soybean (Glycine max) nodule development. Plant Molecular Biology, 1987, 8, 395-403.	3.9	34
79	Signalling in plant embryos during the establishment of the polar axis. Seminars in Cell and Developmental Biology, 1999, 10, 157-164.	5.0	34
80	Quantification of the Brassinosteroid Insensitive1 Receptor in Planta Â Â. Plant Physiology, 2011, 156, 1691-1700.	4.8	33
81	Visualization of BRI1 and SERK3/BAK1 Nanoclusters in Arabidopsis Roots. PLoS ONE, 2017, 12, e0169905.	2.5	33
82	Plant embryogenesis. Current Biology, 2017, 27, R870-R873.	3.9	32
83	Plasma Membrane Receptor Complexes. Plant Physiology, 2008, 147, 1560-1564.	4.8	31
84	Petunia hybrida homologues of shaggy/zeste-white 3 expressed in female and male reproductive organs. Plant Journal, 1995, 7, 897-911.	5.7	30
85	Pattern Formation in the Arabidopsis Embryo Revealed by Position-Specific Lipid Transfer Protein Gene Expression. Plant Cell, 1996, 8, 783.	6.6	28
86	Substrate Utilization by Suspension Cultures and Somatic Embryos of Daucus carota L. Measured by 13C NMR. Plant Physiology, 1988, 88, 1332-1337.	4.8	25
87	The secretory nature of the lesion of carrot cell variant ts11, rescuable by endochitinase. Planta, 1997, 203, 381-389.	3.2	21
88	Membrane Trafficking: Intracellular Highways and Country Roads. Plant Physiology, 2008, 147, 1451-1453.	4.8	21
89	Expression of the Daucus carota somatic embryogenesis receptor kinase (DcSERK) protein in insect cells. Biochimie, 2001, 83, 415-421.	2.6	19
90	Plant Embryogenesis. Critical Reviews in Plant Sciences, 1997, 16, 535-576.	5.7	18

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91	Molecular cloning of pea mRNAs encoding a shoot-specific polypeptide and light-induced polypeptides. Plant Molecular Biology, 1983, 2, 295-303.	3.9	17
92	A shoot-specific mRNA from pea: nucleotide sequence and regulation as compared to light-induced mRNAs. Plant Molecular Biology, 1985, 4, 95-102.	3.9	17
93	Different arabinogalactan proteins are present in carrot (Daucus carota) cell culture medium and in seeds. Physiologia Plantarum, 2004, 122, 181-189.	5.2	17
94	A Proteomics Approach to Membrane Trafficking. Plant Physiology, 2008, 147, 1584-1589.	4.8	17
95	Polarized outgrowth of hyphae by constant electrical fields during reversion of Schizophyllum commune protoplasts. Experimental Mycology, 1982, 6, 95-98.	1.6	16
96	Nonselective Chemical Inhibition of Sec7 Domain-Containing ARF GTPase Exchange Factors. Plant Cell, 2018, 30, 2573-2593.	6.6	16
97	Advances in Understanding Brassinosteroid Signaling. Science's STKE: Signal Transduction Knowledge Environment, 2006, 2006, pe36-pe36.	3.9	15
98	14-3-3 Proteins in Plant Brassinosteroid Signaling. Developmental Cell, 2007, 13, 162-164.	7.0	15
99	Sequence diversity of polysomal mRNAs in roots and shoots of etiolated and greened pea seedlings. Planta, 1983, 158, 42-50.	3.2	14
100	Purification, immunological characterization and cDNA cloning of a 47 kDa glycoprotein secreted by carrot suspension cells. Plant Molecular Biology, 1995, 27, 901-910.	3.9	14
101	Making embryos in plants. Trends in Plant Science, 1998, 3, 451-452.	8.8	14
102	A Comparison of In Vitro and In Vivo Asexual Embryogenesis. Methods in Molecular Biology, 2016, 1359, 3-23.	0.9	14
103	A Mathematical Model for the Coreceptors SOMATIC EMBRYOGENESIS RECEPTOR-LIKE KINASE1 and SOMATIC EMBRYOGENESIS RECEPTOR-LIKE KINASE3 in BRASSINOSTEROID INSENSITIVE1-Mediated Signaling Â. Plant Physiology, 2013, 163, 1472-1481.	4.8	13
104	Changes in the tissue-specific prevalence of translatable mRNAs in transgenic tobacco shoots containing the T-DNA cytokinin gene. Plant Molecular Biology, 1988, 11, 625-631.	3.9	11
105	The Arabidopsis thaliana SERK1 Kinase Domain Spontaneously Refolds to an Active State In Vitro. PLoS ONE, 2012, 7, e50907.	2.5	9
106	Parental Contribution to Plant Embryos. Plant Cell, 2000, 12, 461-463.	6.6	8
107	Suspensor-derived somatic embryogenesis in Arabidopsis. Development (Cambridge), 2020, 147, .	2.5	8
108	Fluorescence Correlation Spectroscopy and Fluorescence Recovery After Photobleaching to Study Receptor Kinase Mobility In Planta. Methods in Molecular Biology, 2011, 779, 225-242.	0.9	6

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109	Computational modelling of the <scp>BRI1</scp> receptor system. Plant, Cell and Environment, 2013, 36, 1728-1737.	5.7	6
110	Use of the SSLP-based method for detection of rare apomictic events in a sexual AtSERK1 transgenic Arabidopsis population. Sexual Plant Reproduction, 2006, 19, 73-82.	2.2	3
111	Plant receptor complexes. Science Signaling, 2015, 8, fs15.	3.6	2
112	Transcriptional Analysis of serk1 and serk3 Coreceptor Mutants. Plant Physiology, 2016, 172, 2516-2529.	4.8	2
113	Identification of Brassinosteroid Signaling Complexes by Coimmunoprecipitation and Mass Spectrometry. Methods in Molecular Biology, 2017, 1564, 145-154.	0.9	2
114	Symposia on Plant (Protein) Phosphorylation. Frontiers in Plant Science, 2012, 3, 201.	3.6	1
115	Isolation of genes specifically expressed in<i>Petunia hybrida</i>ovules and isolated embryo sacs. Acta Botanica Gallica, 1993, 140, 717-717.	0.9	0
116	Parental Contribution to Plant Embryos. Plant Cell, 2000, 12, 461.	6.6	0
117	Precision positioning with peptides. Nature, 2015, 522, 424-425.	27.8	0