Jules Beekwilder

List of Publications by Year in Descending Order

126 papers	6,465 citations	44 h-index	77 g-index
127 ext. papers	7,596 ext. citations	6.1 avg, IF	5.65 L-index

#	Paper	IF	Citations
126	Integrating structure-based machine learning and co-evolution to investigate specificity in plant sesquiterpene synthases. *PLoS Computational Biology*, **2021**, 17, e1008197	5	1
125	Several geranylgeranyl diphosphate synthase isoforms supply metabolic substrates for carotenoid biosynthesis in tomato. *New Phytologist*, **2021**, 231, 255-272	9.8	14
124	Inactivation of the germacrene A synthase genes by CRISPR/Cas9 eliminates the biosynthesis of sesquiterpene lactones in Cichorium intybus L. *Plant Biotechnology Journal*, **2021**, 19, 2442-2453	11.6	2
123	The transition of Rhodobacter sphaeroides into a microbial cell factory. *Biotechnology and Bioengineering*, **2021**, 118, 531-541	4.9	7
122	The application of a biostimulant based on tannins affects root architecture and improves tolerance to salinity in tomato plants. *Scientific Reports*, **2021**, 11, 354	4.9	26
121	The santalene synthase from Cinnamomum camphora: Reconstruction of a sesquiterpene synthase from a monoterpene synthase. *Archives of Biochemistry and Biophysics*, **2020**, 695, 108647	4.1	5
120	MYB5-like and bHLH influence flavonoid composition in pomegranate. *Plant Science*, **2020**, 298, 110563	5.3	12
119	Functional replacement of isoprenoid pathways in Rhodobacter sphaeroides. *Microbial Biotechnology*, **2020**, 13, 1082-1093	6.3	9
118	Novel routes towards bioplastics from plants: elucidation of the methylperillate biosynthesis pathway from Salvia dorisiana trichomes. *Journal of Experimental Botany*, **2020**, 71, 3052-3065	7	7
117	Plant Aromatic Prenyltransferases: Tools for Microbial Cell Factories. *Trends in Biotechnology*, **2020**, 38, 917-934	15.1	17
116	Analysis of wild tomato introgression lines elucidates the genetic basis of transcriptome and metabolome variation underlying fruit traits and pathogen response. *Nature Genetics*, **2020**, 52, 1111-1121	36.3	35
115	Silencing of germacrene A synthase genes reduces guaianolide oxalate content in L. *GM Crops and Food*, **2020**, 11, 54-66	2.7	4
114	Metabolic flux ratio analysis by parallel C labeling of isoprenoid biosynthesis in Rhodobacter sphaeroides. *Metabolic Engineering*, **2020**, 57, 228-238	9.7	7
113	Growth-uncoupled isoprenoid synthesis in. *Biotechnology for Biofuels*, **2020**, 13, 123	7.8	9
112	Glucosinolate variability between turnip organs during development. *PLoS ONE*, **2019**, 14, e0217862	3.7	6
111	Toward Developing a Yeast Cell Factory for the Production of Prenylated Flavonoids. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 13478-13486	5.7	27
110	A MYB Triad Controls Primary and Phenylpropanoid Metabolites for Pollen Coat Patterning. *Plant Physiology*, **2019**, 180, 87-108	6.6	21

109	Tissue specific expression and genomic organization of bitter sesquiterpene lactone biosynthesis in Cichorium intybus L. (Asteraceae). *Industrial Crops and Products*, **2019**, 129, 253-260	5.9	4
108	An analysis of characterized plant sesquiterpene synthases. *Phytochemistry*, **2019**, 158, 157-165	4	19
107	-galactosidase A1.1 can functionally complement human -galactosidase A deficiency associated with Fabry disease. *Journal of Biological Chemistry*, **2018**, 293, 10042-10058	5.4	11
106	Engineering storage capacity for volatile sesquiterpenes in Nicotiana benthamiana leaves. *Plant Biotechnology Journal*, **2018**, 16, 1997-2006	11.6	12
105	Methyl Perillate as a Highly Functionalized Natural Starting Material for Terephthalic Acid. *ChemistryOpen*, **2018**, 7, 201-203	2.3	4
104	The effect of isabelin, a sesquiterpene lactone from Ambrosia artemisiifolia on soil microorganisms and human pathogens. *FEMS Microbiology Letters*, **2018**, 365,	2.9	3
103	Effect of dietary fiber (inulin) addition on phenolics and in vitro bioaccessibility of tomato sauce. *Food Research International*, **2018**, 106, 129-135	7	31
102	Engineering de novo anthocyanin production in Saccharomyces cerevisiae. *Microbial Cell Factories*, **2018**, 17, 103	6.4	41
101	Transcription Factor-Mediated Control of Anthocyanin Biosynthesis in Vegetative Tissues. *Plant Physiology*, **2018**, 176, 1862-1878	6.6	27
100	Identification of the Bisabolol Synthase in the Endangered Candeia Tree ((DC) McLeisch). *Frontiers in Plant Science*, **2018**, 9, 1340	6.2	8
99	Fungal volatile compounds induce production of the secondary metabolite Sodorifen in Serratia plymuthica PRI-2C. *Scientific Reports*, **2017**, 7, 862	4.9	65
98	Identification of major loci and genomic regions controlling acid and volatile content in tomato fruit: implications for flavor improvement. *New Phytologist*, **2017**, 215, 624-641	9.8	39
97	Prunus Fruit Juices **2017**, 59-77		
96	Industrial processing versus home processing of tomato sauce: Effects on phenolics, flavonoids and in vitro bioaccessibility of antioxidants. *Food Chemistry*, **2017**, 220, 51-58	8.5	44
95	Processing black mulberry into jam: effects on antioxidant potential and in vitro bioaccessibility. *Journal of the Science of Food and Agriculture*, **2017**, 97, 3106-3113	4.3	30
94	A Review on the Effect of Drying on Antioxidant Potential of Fruits and Vegetables. *Critical Reviews in Food Science and Nutrition*, **2016**, 56 Suppl 1, S110-29	11.5	112
93	Biotechnological production of limonene in microorganisms. *Applied Microbiology and Biotechnology*, **2016**, 100, 2927-38	5.7	80
92	Fruit Antioxidants during Vinegar Processing: Changes in Content and in Vitro Bio-Accessibility. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	32

91	Genome-Wide Identification of BAHD Acyltransferases and Characterization of HQT-like Enzymes Involved in Caffeoylquinic Acid Synthesis in Globe Artichoke. *Frontiers in Plant Science*, **2016**, 7, 1424	6.2	23
90	A Single Arabidopsis Gene Encodes Two Differentially Targeted Geranylgeranyl Diphosphate Synthase Isoforms. *Plant Physiology*, **2016**, 172, 1393-1402	6.6	24
89	Accumulation of cynaropicrin in globe artichoke and localization of enzymes involved in its biosynthesis. *Plant Science*, **2015**, 239, 128-36	5.3	30
88	Evaluation of the bioactive properties of avenanthramide analogs produced in recombinant yeast. *BioFactors*, **2015**, 41, 15-27	6.1	32
87	(+)-Valencene production in Nicotiana benthamiana is increased by down-regulation of competing pathways. *Biotechnology Journal*, **2015**, 10, 180-9	5.6	37
86	Exploring the genomic traits of fungus-feeding bacterial genus Collimonas. *BMC Genomics*, **2015**, 16, 1103	4.5	39
85	The effects of juice processing on black mulberry antioxidants. *Food Chemistry*, **2015**, 186, 277-84	8.5	47
84	Capturing of the monoterpene olefin limonene produced in Saccharomyces cerevisiae. *Yeast*, **2015**, 32, 159-71	3.4	53
83	Cytochrome P450s from Cynara cardunculus L. CYP71AV9 and CYP71BL5, catalyze distinct hydroxylations in the sesquiterpene lactone biosynthetic pathway. *Plant Science*, **2014**, 223, 59-68	5.3	39
82	Production of (+)-valencene in the mushroom-forming fungus S. commune. *Applied Microbiology and Biotechnology*, **2014**, 98, 5059-68	5.7	20
81	Orientation of llama antibodies strongly increases sensitivity of biosensors. *Biosensors and Bioelectronics*, **2014**, 60, 130-6	11.8	31
80	An O-methyltransferase modifies accumulation of methylated anthocyanins in seedlings of tomato. *Plant Journal*, **2014**, 80, 695-708	6.9	19
79	Metabolic diversity in apple germplasm. *Plant Breeding*, **2014**, 133, 281-290	2.4	4
78	Valencene synthase from the heartwood of Nootka cypress (Callitropsis nootkatensis) for biotechnological production of valencene. *Plant Biotechnology Journal*, **2014**, 12, 174-82	11.6	80
77	Production of the sesquiterpene (+)-valencene by metabolically engineered Corynebacterium glutamicum. *Journal of Biotechnology*, **2014**, 191, 205-13	3.7	65
76	IdsA is the major geranylgeranyl pyrophosphate synthase involved in carotenogenesis in Corynebacterium glutamicum. *FEBS Journal*, **2014**, 281, 4906-20	5.7	22
75	Control of anthocyanin and non-flavonoid compounds by anthocyanin-regulating MYB and bHLH transcription factors in Nicotiana benthamiana leaves. *Frontiers in Plant Science*, **2014**, 5, 519	6.2	28
74	Polycistronic expression of a β-carotene biosynthetic pathway in Saccharomyces cerevisiae coupled to β-ionone production. *Journal of Biotechnology*, **2014**, 192 Pt B, 383-92	3.7	75

73	Valencene oxidase CYP706M1 from Alaska cedar (Callitropsis nootkatensis). *FEBS Letters*, **2014**, 588, 1001-7	3.8	37
72	Evidence for a hydrogen-sink mechanism of (+)catechin-mediated emission reduction of the ruminant greenhouse gas methane. *Metabolomics*, **2014**, 10, 179-189	4.7	32
71	Metabolic engineering for the microbial production of carotenoids and related products with a focus on the rare C50 carotenoids. *Applied Microbiology and Biotechnology*, **2014**, 98, 4355-68	5.7	68
70	Investigating the transport dynamics of anthocyanins from unprocessed fruit and processed fruit juice from sour cherry (Prunus cerasus L.) across intestinal epithelial cells. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 11434-41	5.7	23
69	Biosynthesis of antinutritional alkaloids in solanaceous crops is mediated by clustered genes. *Science*, **2013**, 341, 175-9	33.3	342
68	Antibody orientation on biosensor surfaces: a minireview. *Analyst, The*, **2013**, 138, 1619-27	5	291
67	The metabolite chemotype of Nicotiana benthamiana transiently expressing artemisinin biosynthetic pathway genes is a function of CYP71AV1 type and relative gene dosage. *New Phytologist*, **2013**, 199, 352-366	9.8	55
66	Differences in acidity of apples are probably mainly caused by a malic acid transporter gene on LG16. *Tree Genetics and Genomes*, **2013**, 9, 475-487	2.1	40
65	Changes in polyphenol content during production of grape juice concentrate. *Food Chemistry*, **2013**, 139, 521-6	8.5	57
64	Construction of a multifunctional enzyme complex via the strain-promoted azide-alkyne cycloaddition. *Bioconjugate Chemistry*, **2013**, 24, 987-96	6.3	28
63	Industrial processing effects on phenolic compounds in sour cherry (Prunus cerasus L.) fruit. *Food Research International*, **2013**, 53, 218-225	7	48
62	Changes in sour cherry (Prunus cerasus L.) antioxidants during nectar processing and in vitro gastrointestinal digestion. *Journal of Functional Foods*, **2013**, 5, 1402-1413	5.1	47
61	The effect of uniform capture molecule orientation on biosensor sensitivity: dependence on analyte properties. *Biosensors and Bioelectronics*, **2013**, 40, 219-26	11.8	59
60	Evaluation of glucosinolate variation in a collection of turnip (Brassica rapa) germplasm by the analysis of intact and desulfo glucosinolates. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 3984-93	5.7	44
59	In vitro callus-induction in globe artichoke (Cynara cardunculus L. var. scolymus) as a system for the production of caffeoylquinic acids. *Journal of Horticultural Science and Biotechnology*, **2013**, 88, 537-542	1.9	13
58	Non-smoky glycosyltransferase1 prevents the release of smoky aroma from tomato fruit. *Plant Cell*, **2013**, 25, 3067-78	11.6	64
57	16 kDa heat shock protein from heat-inactivated Mycobacterium tuberculosis is a homodimer - suitability for diagnostic applications with specific llama VHH monoclonals. *PLoS ONE*, **2013**, 8, e64040	3.7	7
56	The flavonoid pathway in tomato seedlings: transcript abundance and the modeling of metabolite dynamics. *PLoS ONE*, **2013**, 8, e68960	3.7	9

55	Correlation of rutin accumulation with 3-O-glucosyl transferase and phenylalanine ammonia-lyase activities during the ripening of tomato fruit. *Plant Foods for Human Nutrition*, **2012**, 67, 371-6	3.9	4
54	Genetic mapping and characterization of the globe artichoke (+)-germacrene A synthase gene, encoding the first dedicated enzyme for biosynthesis of the bitter sesquiterpene lactone cynaropicrin. *Plant Science*, **2012**, 190, 1-8	5.3	35
53	De novo production of the flavonoid naringenin in engineered Saccharomyces cerevisiae. *Microbial Cell Factories*, **2012**, 11, 155	6.4	235
52	The mQTL hotspot on linkage group 16 for phenolic compounds in apple fruits is probably the result of a leucoanthocyanidin reductase gene at that locus. *BMC Research Notes*, **2012**, 5, 618	2.3	11
51	Genetic analysis of metabolites in apple fruits indicates an mQTL hotspot for phenolic compounds on linkage group 16. *Journal of Experimental Botany*, **2012**, 63, 2895-908	7	59
50	Polyphenol identification based on systematic and robust high-resolution accurate mass spectrometry fragmentation. *Analytical Chemistry*, **2011**, 83, 409-16	7.8	92
49	Procyanidins in fruit from Sour cherry (Prunus cerasus) differ strongly in chainlength from those in Laurel cherry (Prunus lauracerasus) and Cornelian cherry (Cornus mas). *Journal of Berry Research*, **2011**, 1, 137-146	2	28
48	Reconstitution of the costunolide biosynthetic pathway in yeast and Nicotiana benthamiana. *PLoS ONE*, **2011**, 6, e23255	3.7	70
47	A broad set of different llama antibodies specific for a 16 kDa heat shock protein of Mycobacterium tuberculosis. *PLoS ONE*, **2011**, 6, e26754	3.7	17
46	Affinity of Avr2 for tomato cysteine protease Rcr3 correlates with the Avr2-triggered Cf-2-mediated hypersensitive response. *Molecular Plant Pathology*, **2011**, 12, 21-30	5.7	19
45	Biosynthesis and localization of parthenolide in glandular trichomes of feverfew (Tanacetum parthenium L. Schulz Bip.). *Phytochemistry*, **2011**, 72, 1739-50	4	74
44	A chicory cytochrome P450 mono-oxygenase CYP71AV8 for the oxidation of (+)-valencene. *FEBS Letters*, **2011**, 585, 178-82	3.8	69
43	Self-assembled functional organic monolayers on oxide-free copper. *Langmuir*, **2011**, 27, 8126-33	4	14
42	Co-evolution of insect proteases and plant protease inhibitors. *Current Protein and Peptide Science*, **2011**, 12, 437-47	2.8	40
41	GLYCOALKALOID METABOLISM1 is required for steroidal alkaloid glycosylation and prevention of phytotoxicity in tomato. *Plant Cell*, **2011**, 23, 4507-25	11.6	154
40	Nicotiana benthamiana as a production platform for artemisinin precursors. *PLoS ONE*, **2010**, 5, e14222	3.7	119
39	The effect of industrial food processing on potentially health-beneficial tomato antioxidants. *Critical Reviews in Food Science and Nutrition*, **2010**, 50, 919-30	11.5	82
38	Production of novel antioxidative phenolic amides through heterologous expression of the plant's chlorogenic acid biosynthesis genes in yeast. *Metabolic Engineering*, **2010**, 12, 223-32	9.7	30

37	Characterization of Rhamnosidases from Lactobacillus plantarum and Lactobacillus acidophilus. *Applied and Environmental Microbiology*, **2009**, 75, 3447-54	4.8	62
36	Isolation and mapping of a C3ϑH gene (CYP98A49) from globe artichoke, and its expression upon UV-C stress. *Plant Cell Reports*, **2009**, 28, 963-74	5.1	35
35	Bioactive compounds in berries relevant to human health. *Nutrition Reviews*, **2009**, 67 Suppl 1, S145-50	6.4	144
34	Antioxidants, phenolic compounds, and nutritional quality of different strawberry genotypes. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 696-704	5.7	322
33	Stress-induced biosynthesis of dicaffeoylquinic acids in globe artichoke. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 8641-9	5.7	93
32	Changes in antioxidant and metabolite profiles during production of tomato paste. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 964-73	5.7	231
31	The impact of the absence of aliphatic glucosinolates on insect herbivory in Arabidopsis. *PLoS ONE*, **2008**, 3, e2068	3.7	178
30	Stable recombinant alpaca antibodies for detection of Tulip virus X. *European Journal of Plant Pathology*, **2008**, 121, 477-485	2.1	15
29	Cloning and characterisation of a maize carotenoid cleavage dioxygenase (ZmCCD1) and its involvement in the biosynthesis of apocarotenoids with various roles in mutualistic and parasitic interactions. *Planta*, **2008**, 228, 789-801	4.7	77
28	Plant Protease Inhibitors: Functional Evolution for Defense **2008**, 235-251		6
27	Metabolism of carotenoids and apocarotenoids during ripening of raspberry fruit. *BioFactors*, **2008**, 34, 57-66	6.1	21
26	Microbial production of natural raspberry ketone. *Biotechnology Journal*, **2007**, 2, 1270-9	5.6	69
25	Expression of plant flavor genes in Lactococcus lactis. *Applied and Environmental Microbiology*, **2007** , 73, 1544-52	4.8	33
24	Production of resveratrol in recombinant microorganisms. *Applied and Environmental Microbiology*, **2006**, 72, 5670-2	4.8	163
23	Isoprenoid biosynthesis in Artemisia annua: cloning and heterologous expression of a germacrene A synthase from a glandular trichome cDNA library. *Archives of Biochemistry and Biophysics*, **2006**, 448, 3-12	4.1	102
22	Response of the digestive system of Helicoverpa zea to ingestion of potato carboxypeptidase inhibitor and characterization of an uninhibited carboxypeptidase B. *Insect Biochemistry and Molecular Biology*, **2006**, 36, 654-64	4.5	26
21	Identification and characterization of digestive serine proteases from inhibitor-resistant Helicoverpa zea larval midgut. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2006**, 833, 26-32	3.2	11
20	Antioxidants in raspberry: on-line analysis links antioxidant activity to a diversity of individual metabolites. *Journal of Agricultural and Food Chemistry*, **2005**, 53, 3313-20	5.7	151

19	Identification and recombinant expression of a novel chymotrypsin from Spodoptera exigua. *Insect Biochemistry and Molecular Biology*, **2005**, 35, 1073-82	4.5	37
18	FRUIT FLAVOR FORMATION IN WILD AND CULTIVATED STRAWBERRY. *Acta Horticulturae*, **2005**, 233-236	0.3	3
17	Identification and dietary relevance of antioxidants from raspberry. *BioFactors*, **2005**, 23, 197-205	6.1	79
16	Structural basis of the resistance of an insect carboxypeptidase to plant protease inhibitors. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 16602-7	11.5	52
15	Functional characterization of enzymes forming volatile esters from strawberry and banana. *Plant Physiology*, **2004**, 135, 1865-78	6.6	258
14	Properties of purified gut trypsin from Helicoverpa zea, adapted to proteinase inhibitors. *FEBS Journal*, **2003**, 270, 10-9		84
13	Cloning, functional expression in Pichia pastoris, and purification of potato cystatin and multicystatin. *Journal of Bioscience and Bioengineering*, **2003**, 95, 118-23	3.3	11
12	Selection by phage display of a variant mustard trypsin inhibitor toxic against aphids. *Plant Journal*, **2003**, 33, 557-66	6.9	51
11	Effects of cysteine protease inhibitors on oviposition rate of the western flower thrips, Frankliniella occidentalis. *Journal of Insect Physiology*, **2002**, 48, 701-706	2.4	22
10	Cloning of the chrysanthemum UEP1 promoter and comparative expression in florets and leaves of Dendranthema grandiflora. *Transgenic Research*, **2002**, 11, 437-45	3.3	26
9	Policy Response to Technological Developments. *Journal of New Seeds*, **2002**, 4, 89-102		1
8	Phage display selects for amylases with improved low pH starch-binding. *Journal of Biotechnology*, **2002**, 96, 103-18	3.7	27
7	Functional expression on bacteriophage of the mustard trypsin inhibitor MTI-2. *Biochemical and Biophysical Research Communications*, **2001**, 280, 813-7	3.4	26
6	Characterization of potato proteinase inhibitor II reactive site mutants. *FEBS Journal*, **2000**, 267, 1975-84		37
5	A phagemid vector using the E. coli phage shock promoter facilitates phage display of toxic proteins. *Gene*, **1999**, 228, 23-31	3.8	33
4	Secondary structure model for the first three domains of Q beta RNA. Control of A-protein synthesis. *Journal of Molecular Biology*, **1996**, 256, 8-19	6.5	24
3	An oligonucleotide hybridization assay for the identification and enumeration of F-specific RNA phages in surface water. *Journal of Applied Bacteriology*, **1996**, 80, 179-86		48
2	Secondary structure model for the last two domains of single-stranded RNA phage Q beta. *Journal of Molecular Biology*, **1995**, 247, 903-17	6.5	46

1	Interaction of lipophorin with the plasma membrane of locust flight muscles. *Biological Chemistry Hoppe-Seyler*, **1990**, 371, 159-65	6