Ruud Verkerk

List of Publications by Citations

95 papers	3,521 citations	31 h-index	57 g-index
95 ext. papers	3,951 ext. citations	6.3 avg, IF	5.29 L-index

#	Paper	IF	Citations
95	Glucosinolates in Brassica vegetables: the influence of the food supply chain on intake, bioavailability and human health. *Molecular Nutrition and Food Research*, **2009**, 53 Suppl 2, S219	5.9	419
94	The nutritional significance, biosynthesis and bioavailability of glucosinolates in human foods **2000**, 80, 967-984		326
93	Thermal degradation of glucosinolates in red cabbage. *Food Chemistry*, **2006**, 95, 19-29	8.5	184
92	Post-harvest increase of indolyl glucosinolates in response to chopping and storage of Brassica vegetables. *Journal of the Science of Food and Agriculture*, **2001**, 81, 953-958	4.3	150
91	Glucosinolates and myrosinase activity in red cabbage (Brassica oleracea L. var. Capitata f. rubra DC.) after various microwave treatments. *Journal of Agricultural and Food Chemistry*, **2004**, 52, 7318-23	5.7	145
90	Mapping strategy for resistance genes in tomato based on RFLPs between cultivars: Cf9 (resistance to Cladosporium fulvum) on chromosome 1. *Theoretical and Applied Genetics*, **1992**, 84, 106-12	6	144
89	RFLP markers linked to the root knot nematode resistance gene Mi in tomato. *Theoretical and Applied Genetics*, **1991**, 81, 661-7	6	89
88	Predictive modelling of health aspects in the food production chain: a case study on glucosinolates in cabbage. *Trends in Food Science and Technology*, **2000**, 11, 174-181	15.3	86
87	Chemoprevention of 2-amino-3-methylimidazo[4,5-f]quinoline (IQ)-induced colonic and hepatic preneoplastic lesions in the F344 rat by cruciferous vegetables administered simultaneously with the carcinogen. *Carcinogenesis*, **2003**, 24, 255-61	4.6	71
86	Characterization and mapping of a gene controlling shoot regeneration in tomato. *Plant Journal*, **1993**, 3, 131-141	6.9	70
85	Consumer-driven food product development. *Trends in Food Science and Technology*, **2006**, 17, 184-190	15.3	69
84	A mechanistic perspective on process-induced changes in glucosinolate content in Brassica vegetables: a review. *Critical Reviews in Food Science and Nutrition*, **2015**, 55, 823-38	11.5	68
83	Quantitative trait loci for glucosinolate accumulation in Brassica rapa leaves. *New Phytologist*, **2008**, 179, 1017-1032	9.8	62
82	Mapping of QTLs for glandular trichome densities and Trialeurodes vaporariorum (greenhouse whitefly) resistance in an F2 from Lycopersicon esculentum Lycopersicon hirsutum f. glabratum. *Heredity*, **1995**, 75, 425-433	3.6	61
81	Optimizing isothiocyanate formation during enzymatic glucosinolate breakdown by adjusting pH value, temperature and dilution in Brassica vegetables and Arabidopsis thaliana. *Scientific Reports*, **2017**, 7, 40807	4.9	58
80	Localization of genes for bacterial canker resistance in Lycopersicon peruvianum using RFLPs. *Theoretical and Applied Genetics*, **1995**, 90, 444-50	6	56
79	Evaluation of different cooking conditions on broccoli (Brassica oleracea var. italica) to improve the nutritional value and consumer acceptance. *Plant Foods for Human Nutrition*, **2014**, 69, 228-34	3.9	55

78	Dealing with variability in food production chains: a tool to enhance the sensitivity of epidemiological studies on phytochemicals. *European Journal of Nutrition*, **2003**, 42, 67-72	5.2	49
77	Effect of water content and temperature on glucosinolate degradation kinetics in broccoli (Brassica oleracea var. italica). *Food Chemistry*, **2012**, 132, 2037-2045	8.5	48
76	An improved method of partially digesting plant megabase DNA suitable for YAC cloning: application to the construction of a 5.5 genome equivalent YAC library of tomato. *Plant Journal*, **1996**, 9, 125-33	6.9	48
75	The mapping of phytochrome genes and photomorphogenic mutants of tomato. *Theoretical and Applied Genetics*, **1997**, 94, 115-22	6	47
74	Health-promoting compounds in cape gooseberry (Physalis peruviana L.): Review from a supply chain perspective. *Trends in Food Science and Technology*, **2016**, 57, 83-92	15.3	47
73	Isothiocyanates from Brassica Vegetables-Effects of Processing, Cooking, Mastication, and Digestion. *Molecular Nutrition and Food Research*, **2018**, 62, e1701069	5.9	45
72	Differences in Thermal Stability of Glucosinolates in Five Brassica Vegetables. *Czech Journal of Food Sciences*, **2009**, 27, S85-S88	1.3	44
71	The effect of pulsed electric fields on carotenoids bioaccessibility: The role of tomato matrix. *Food Chemistry*, **2018**, 240, 415-421	8.5	42
70	Effects of processing conditions on glucosinolates in cruciferous vegetables. *Cancer Letters*, **1997**, 114, 193-4	9.9	42
69	An RFLP linkage map of Lycopersicon peruvianum. *Theoretical and Applied Genetics*, **1994**, 89, 1007-13	6	42
68	Acid phosphatase-1(1), a tightly linked molecular marker for root-knot nematode resistance in tomato: from protein to gene, using PCR and degenerate primers containing deoxyinosine. *Plant Molecular Biology*, **1991**, 16, 647-61	4.6	38
67	In vivo formation and bioavailability of isothiocyanates from glucosinolates in broccoli as affected by processing conditions. *Molecular Nutrition and Food Research*, **2014**, 58, 1447-56	5.9	37
66	Effect of boiling on the content of ascorbigen, indole-3-carbinol, indole-3-acetonitrile, and 3,3'-diindolylmethane in fermented cabbage. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 2334-8	5.7	37
65	Interaction of bread and berry polyphenols affects starch digestibility and polyphenols bio-accessibility. *Journal of Functional Foods*, **2020**, 68, 103924	5.1	32
64	Effect of water content and temperature on inactivation kinetics of myrosinase in broccoli (Brassica oleracea var. italica). *Food Chemistry*, **2014**, 163, 197-201	8.5	31
63	Protective effects of Brussels sprouts towards B[a]P-induced DNA damage: a model study with the single-cell gel electrophoresis (SCGE)/Hep G2 assay. *Food and Chemical Toxicology*, **2002**, 40, 1077-83	4.7	31
62	Modelling the fate of glucosinolates during thermal processing of Brassica vegetables. *LWT - Food Science and Technology*, **2012**, 49, 178-183	5.4	30
61	Local processing and nutritional composition of indigenous fruits: The case of monkey orange (Strychnos spp.) from Southern Africa. *Food Reviews International*, **2017**, 33, 123-142	5.5	29

60	Kinetics of changes in glucosinolate concentrations during long-term cooking of white cabbage (Brassica oleracea L. ssp. capitata f. alba). *Journal of Agricultural and Food Chemistry*, **2008**, 56, 2068-73	5.7	29
59	An improved, rapid in vitro method to measure antioxidant activity. Application On selected flavonoids and apple juice. *Journal of Agricultural and Food Chemistry*, **2000**, 48, 4116-22	5.7	29
58	Food as Pharma? The Case of Glucosinolates. *Current Pharmaceutical Design*, **2017**, 23, 2697-2721	3.3	28
57	Rapid estimation of glucosinolate thermal degradation rate constants in leaves of Chinese kale and broccoli (Brassica oleracea) in two seasons. *Journal of Agricultural and Food Chemistry*, **2012**, 60, 7859-65	5.7	26
56	Impacts of thermal and non-thermal processing on structure and functionality of pectin in fruit- and vegetable- based products: A review. *Carbohydrate Polymers*, **2020**, 250, 116890	10.3	26
55	Glucosinolate content of blanched cabbage (Brassica oleracea var. capitata) fermented by the probiotic strain Lactobacillus paracasei LMG-P22043. *Food Research International*, **2013**, 54, 706-710	7	25
54	Osmotic dehydration of mango: Effect of vacuum impregnation, high pressure, pectin methylesterase and ripeness on quality. *LWT - Food Science and Technology*, **2018**, 98, 179-186	5.4	24
53	Kinetics of thermal degradation of vitamin C in marula fruit (Sclerocarya birrea subsp. caffra) as compared to other selected tropical fruits. *LWT - Food Science and Technology*, **2012**, 49, 188-191	5.4	24
52	Perspectives of molecular marker assisted breeding for earliness in tomato. *Euphytica*, **1994**, 79, 279-286	2.1	24
51	A metabolomics approach to identify factors influencing glucosinolate thermal degradation rates in Brassica vegetables. *Food Chemistry*, **2014**, 155, 287-97	8.5	23
50	Thermal stability of phytochemicals, HMF and antioxidant activity in cape gooseberry (Physalis peruviana L.). *Journal of Functional Foods*, **2017**, 32, 46-57	5.1	22
49	Comparison of the degradation and leaching kinetics of glucosinolates during processing of four Brassicaceae (broccoli, red cabbage, white cabbage, Brussels sprouts). *Innovative Food Science and Emerging Technologies*, **2014**, 25, 58-66	6.8	21
48	Overexpression of the MYB29 transcription factor affects aliphatic glucosinolate synthesis in Brassica oleracea. *Plant Molecular Biology*, **2019**, 101, 65-79	4.6	19
47	Studying consumer behaviour related to the quality of food: A case on vegetable preparation affecting sensory and health attributes. *Trends in Food Science and Technology*, **2013**, 33, 139-145	15.3	19
46	Improvement of traditional processing of local monkey orange (Strychnos spp.) fruits to enhance nutrition security in Zimbabwe. *Food Security*, **2017**, 9, 621-633	6.7	19
45	Effect of Vacuum Frying on Quality Attributes of Fruits. *Food Engineering Reviews*, **2018**, 10, 154-164	6.5	17
44	Evaluating the effect of storage conditions on the shelf life of cape gooseberry (Physalis peruviana L.). *LWT - Food Science and Technology*, **2017**, 80, 523-530	5.4	15
43	Stir-Frying of Chinese Cabbage and Pakchoi Retains Health-Promoting Glucosinolates. *Plant Foods for Human Nutrition*, **2017**, 72, 439-444	3.9	15

42	Modelling the level of the major glucosinolates in broccoli as affected by controlled atmosphere and temperature. *Postharvest Biology and Technology*, **2009**, 53, 1-10	6.2	15
41	The kinetic of key phytochemical compounds of non-heading and heading leafy Brassica oleracea landraces as affected by traditional cooking methods. *Journal of the Science of Food and Agriculture*, **2016**, 96, 4772-4784	4.3	15
40	Analysing the antioxidant activity of food products: processing and matrix effects. *Toxicology in Vitro*, **1999**, 13, 797-9	3.6	14
39	Tea polyphenols as a strategy to control starch digestion in bread: the effects of polyphenol type and gluten. *Food and Function*, **2020**, 11, 5933-5943	6.1	13
38	Pitfalls in the desulphation of glucosinolates in a high-throughput assay. *Food Chemistry*, **2012**, 134, 2355-61	5.9	13
37	The state of the art of food ingredients' naturalness evaluation: A review of proposed approaches and their relation with consumer trends. *Trends in Food Science and Technology*, **2020**, 106, 434-444	15.3	13
36	Bioavailability of Isothiocyanates From Broccoli Sprouts in Protein, Lipid, and Fiber Gels. *Molecular Nutrition and Food Research*, **2018**, 62, e1700837	5.9	12
35	Quantitative trait loci analysis of non-enzymatic glucosinolate degradation rates in Brassica oleracea during food processing. *Theoretical and Applied Genetics*, **2013**, 126, 2323-34	6	12
34	Sensory and health properties of steamed and boiled carrots (Daucus carota ssp. sativus). *International Journal of Food Sciences and Nutrition*, **2014**, 65, 809-15	3.7	11
33	Liposome-mediated transfer of YAC DNA to tobacco cells. *Plant Molecular Biology Reporter*, **1997**, 15, 170-178	1.7	11
32	Retention of glucosinolates during fermentation of Brassica juncea: a case study on production of sayur asin. *European Food Research and Technology*, **2015**, 240, 559-565	3.4	10
31	A research approach for quality based design of healthy foods: Dried broccoli as a case study. *Trends in Food Science and Technology*, **2013**, 30, 178-184	15.3	10
30	Modelling the kinetics of osmotic dehydration of mango: Optimizing process conditions and pre-treatment for health aspects. *Journal of Food Engineering*, **2020**, 280, 109985	6	9
29	Biofumigation using a wild Brassica oleracea accession with high glucosinolate content affects beneficial soil invertebrates. *Plant and Soil*, **2015**, 394, 155-163	4.2	9
28	A review of the proximate composition and nutritional value of Marula (Sclerocarya birrea subsp. caffra). *Phytochemistry Reviews*, **2014**, 13, 881-892	7.7	9
27	Food science meets plant science: A case study on improved nutritional quality by breeding for glucosinolate retention during food processing. *Trends in Food Science and Technology*, **2014**, 35, 61-68	15.3	8
26	The effect of temperature and time on the quality of naturally fermented marula (Sclerocarya birrea subsp. Caffra) juice. *LWT - Food Science and Technology*, **2013**, 53, 70-75	5.4	7
25	The pivotal role of moisture content in the kinetic modelling of the quality attributes of vacuum fried chips. *Innovative Food Science and Emerging Technologies*, **2020**, 59, 102251	6.8	7

24	Exploration of heritage food concept. *Trends in Food Science and Technology*, **2021**, 111, 790-797	15.3	7
23	Exploring consumers health perception across cultures in the early stages of new product development. *British Food Journal*, **2019**, 121, 2116-2131	2.8	7
22	Reply to "Dietary glucosinolates and risk of type 2 diabetes in 3 prospective cohort studies". *American Journal of Clinical Nutrition*, **2018**, 108, 425	7	6
21	Predictive modelling of vegetable firmness after thermal pre-treatments and steaming. *Innovative Food Science and Emerging Technologies*, **2014**, 25, 14-18	6.8	6
20	Consumer preference for dried mango attributes: A conjoint study among Dutch, Chinese, and Indonesian consumers. *Journal of Food Science*, **2020**, 85, 3527-3535	3.4	6
19	Nutritional and Physicochemical Quality of Vacuum-Fried Mango Chips Is Affected by Ripening Stage, Frying Temperature, and Time. *Frontiers in Nutrition*, **2020**, 7, 95	6.2	6
18	Monkey orange fruit juice improves the nutritional quality of a maize-based diet. *Food Research International*, **2019**, 116, 870-877	7	6
17	The effect of chewing on oral glucoraphanin hydrolysis in raw and steamed broccoli. *Journal of Functional Foods*, **2018**, 45, 306-312	5.1	5
16	Effect of heat and pectinase maceration on phenolic compounds and physicochemical quality of Strychnos cocculoides juice. *PLoS ONE*, **2018**, 13, e0202415	3.7	5
15	Practices and health perception of preparation of Brassica vegetables: translating survey data to technological and nutritional implications. *International Journal of Food Sciences and Nutrition*, **2015**, 66, 633-41	3.7	4
14	Glucosinolates31-51		4
13	REDUCTION OF GLUCOSINOLATES CONTENT DURING SAYUR ASIN FERMENTATION. *Jurnal Teknologi Dan Industri Pangan*, **2013**, 24, 235-239	0.3	3
12	Surface color distribution analysis by computer vision compared to sensory testing: Vacuum fried fruits as a case study. *Food Research International*, **2021**, 143, 110230	7	3
11	Inhibition of glucosidases by tea polyphenols in rat intestinal extract and Caco-2 cells grown on Transwell. *Food Chemistry*, **2021**, 361, 130047	8.5	3
10	Healthiness, naturalness and sustainability perception of adolescents toward chocolate snack bars. *British Food Journal*, **2022**, 124, 200-218	2.8	3
9	Evaluation of research methods to study domestic food preparation. *British Food Journal*, **2015**, 117, 7-21	2.8	2
8	Re: Fruit and vegetable intake and risk of major chronic disease. *Journal of the National Cancer Institute*, **2005**, 97, 607-8; author reply 608-9	9.7	2
7	Isolation of a 6.2 kb genomic fragment carrying the Adh1 gene of tomato and its expression in transgenic tobacco. *Plant Molecular Biology*, **1993**, 23, 633-7	4.6	2

List of Publications

6	Processing and Preparation of Brassica Vegetables and the Fate of Glucosinolates. *Reference Series in Phytochemistry*, **2017**, 407-429	0.7	2
5	Modelling and optimization of high-pressure homogenization of not-from-concentrate juice: Achieving better juice quality using sustainable production. *Food Chemistry*, **2022**, 370, 131058	8.5	2
4	Micelle separation conditions based on particle size strongly affect carotenoid bioaccessibility assessment from juices after in vitro digestion.. *Food Research International*, **2022**, 151, 110891	7	1
3	Are cereal bars significantly healthier and more natural than chocolate bars? A preliminary assessment in the German market. *Journal of Functional Foods*, **2022**, 89, 104940	5.1	1
2	Liposome-mediated transfer of YAC-DNA to tobacco cells **1998**, 1-15		
1	Processing and Preparation of Brassica Vegetables and the Fate of Glucosinolates **2016**, 1-23		