

Matthijs Dekker

List of Publications by Year in descending order

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129
papers

6,361
citations

76196
40
h-index

79541
73
g-index

129
all docs

129
docs citations

129
times ranked

5669
citing authors

#	ARTICLE	IF	CITATIONS
1	Glucosinolates in Brassica vegetables: The influence of the food supply chain on intake, bioavailability and human health. <i>Molecular Nutrition and Food Research</i> , 2009, 53, S219.	1.5	490
2	The nutritional significance, biosynthesis and bioavailability of glucosinolates in human foods. , 2000, 80, 967-984.		388
3	Activity and Concentration of Polyphenolic Antioxidants in Apple: Effect of Cultivar, Harvest Year, and Storage Conditions. <i>Journal of Agricultural and Food Chemistry</i> , 2001, 49, 3606-3613.	2.4	311
4	Thermal degradation of glucosinolates in red cabbage. <i>Food Chemistry</i> , 2006, 95, 19-29.	4.2	227
5	Activity and Concentration of Polyphenolic Antioxidants in Apple Juice. 1. Effect of Existing Production Methods. <i>Journal of Agricultural and Food Chemistry</i> , 2002, 50, 7211-7219.	2.4	214
6	To cook or not to cook: A means-end study of motives for choice of meal solutions. <i>Food Quality and Preference</i> , 2007, 18, 77-88.	2.3	181
7	Post-harvest increase of indolyl glucosinolates in response to chopping and storage of Brassica vegetables. <i>Journal of the Science of Food and Agriculture</i> , 2001, 81, 953-958.	1.7	168
8	Glucosinolates and Myrosinase Activity in Red Cabbage (<i>Brassica oleracea</i> L. Var. <i>Capitata</i> f. <i>rubra</i> DC.) after Various Microwave Treatments. <i>Journal of Agricultural and Food Chemistry</i> , 2004, 52, 7318-7323.	2.4	166
9	Sandwich-Architected Poly(lactic acid)-Graphene Composite Food Packaging Films. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 9994-10004.	4.0	146
10	Enzyme recovery by liquid-liquid extraction using reversed micelles. <i>The Chemical Engineering Journal</i> , 1986, 33, B27-B33.	0.4	143
11	Isolating enzymes by reversed micelles. <i>Analytical Biochemistry</i> , 1989, 178, 217-226.	1.1	132
12	An overview of means-end theory: potential application in consumer-oriented food product design. <i>Trends in Food Science and Technology</i> , 2004, 15, 403-415.	7.8	122
13	A consumer-oriented classification system for home meal replacements. <i>Food Quality and Preference</i> , 2001, 12, 229-242.	2.3	113
14	Predictive modelling of migration from packaging materials into food products for regulatory purposes. <i>Trends in Food Science and Technology</i> , 2002, 13, 102-109.	7.8	113
15	Protein transfer from an aqueous phase into reversed micelles. The effect of protein size and charge distribution. <i>FEBS Journal</i> , 1989, 184, 627-633.	0.2	106
16	Monitoring the Quality of Perishable Foods: Opportunities for Intelligent Packaging. <i>Critical Reviews in Food Science and Nutrition</i> , 2014, 54, 645-654.	5.4	105
17	Predictive modelling of health aspects in the food production chain: a case study on glucosinolates in cabbage. <i>Trends in Food Science and Technology</i> , 2000, 11, 174-181.	7.8	102
18	Activity and Concentration of Polyphenolic Antioxidants in Apple Juice. 3. Stability during Storage. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 1073-1080.	2.4	102

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19	A RP-HPLC method for the determination of tea catechins. <i>Cancer Letters</i> , 1997, 114, 171-172.	3.2	89
20	A Mechanistic Perspective on Process-Induced Changes in Glucosinolate Content in Brassica Vegetables: A Review. <i>Critical Reviews in Food Science and Nutrition</i> , 2015, 55, 823-838.	5.4	89
21	Mass transfer rate of protein extraction with reversed micelles. <i>Chemical Engineering Science</i> , 1990, 45, 2949-2957.	1.9	88
22	Quality function deployment in the food industry: a review. <i>Trends in Food Science and Technology</i> , 2000, 11, 306-314.	7.8	86
23	Optimizing isothiocyanate formation during enzymatic glucosinolate breakdown by adjusting pH value, temperature and dilution in Brassica vegetables and Arabidopsis thaliana. <i>Scientific Reports</i> , 2017, 7, 40807.	1.6	84
24	Health-promoting compounds in cape gooseberry (<i>Physalis peruviana</i> L.): Review from a supply chain perspective. <i>Trends in Food Science and Technology</i> , 2016, 57, 83-92.	7.8	82
25	Impacts of thermal and non-thermal processing on structure and functionality of pectin in fruit- and vegetable- based products: A review. <i>Carbohydrate Polymers</i> , 2020, 250, 116890.	5.1	75
26	Evaluation of Different Cooking Conditions on Broccoli (<i>Brassica oleracea</i> var. <i>italica</i>) to Improve the Nutritional Value and Consumer Acceptance. <i>Plant Foods for Human Nutrition</i> , 2014, 69, 228-234.	1.4	69
27	Leaching and degradation kinetics of glucosinolates during boiling of Brassica oleracea vegetables and the formation of their breakdown products. <i>Food Chemistry</i> , 2018, 263, 240-250.	4.2	66
28	Modeling and optimization of the reversed micellar extraction of α -amylase. <i>AIChE Journal</i> , 1989, 35, 321-324.	1.8	65
29	Effect of temperature on the reversed micellar extraction of enzymes. <i>The Chemical Engineering Journal</i> , 1991, 46, B69-B74.	0.4	63
30	Activity and Concentration of Polyphenolic Antioxidants in Apple Juice. 2. Effect of Novel Production Methods. <i>Journal of Agricultural and Food Chemistry</i> , 2004, 52, 2840-2848.	2.4	62
31	Isothiocyanates from Brassica Vegetables—Effects of Processing, Cooking, Mastication, and Digestion. <i>Molecular Nutrition and Food Research</i> , 2018, 62, e1701069.	1.5	62
32	A non-destructive ammonium detection method as indicator for freshness for packed fish: Application on cod. <i>Journal of Food Engineering</i> , 2012, 110, 254-261.	2.7	60
33	Effect of water content and temperature on glucosinolate degradation kinetics in broccoli (<i>Brassica</i>) Tj ETQq1 1 0.784314 rgBT / Over 4.2 55	4.2	55
34	Dealing with variability in food production chains: a tool to enhance the sensitivity of epidemiological studies on phytochemicals. <i>European Journal of Nutrition</i> , 2003, 42, 67-72.	1.8	54
35	Influence of solvent absorption on the migration of Irganox 1076 from LDPE. <i>Food Additives and Contaminants</i> , 2002, 19, 176-183.	2.0	53
36	Differences in Thermal Stability of Glucosinolates in Five Brassica Vegetables. <i>Czech Journal of Food Sciences</i> , 2009, 27, S85-S88.	0.6	50

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37	An intervention study on the effect of matcha tea, in drink and snack bar formats, on mood and cognitive performance. <i>Food Research International</i> , 2017, 99, 72-83.	2.9	49
38	Effects of processing conditions on glucosinolates in cruciferous vegetables. <i>Cancer Letters</i> , 1997, 114, 193-194.	3.2	48
39	Sulforaphane formation and bioaccessibility are more affected by steaming time than meal composition during in vitro digestion of broccoli. <i>Food Chemistry</i> , 2017, 214, 580-586.	4.2	47
40	In vivo formation and bioavailability of isothiocyanates from glucosinolates in broccoli as affected by processing conditions. <i>Molecular Nutrition and Food Research</i> , 2014, 58, 1447-1456.	1.5	44
41	Flavonoids as bioactive components in apple products. <i>Cancer Letters</i> , 1997, 114, 107-108.	3.2	41
42	Exploring the use of consumer collages in product design. <i>Trends in Food Science and Technology</i> , 2003, 14, 17-31.	7.8	41
43	Effect of water content and temperature on inactivation kinetics of myrosinase in broccoli (Brassica) Tj ETQq1 1 0.784314 rgBT /Overlock 10	4.2	41
44	Effect of Green Tea Phytochemicals on Mood and Cognition. <i>Current Pharmaceutical Design</i> , 2017, 23, 2876-2905.	0.9	41
45	Food as Pharma? The Case of Glucosinolates. <i>Current Pharmaceutical Design</i> , 2017, 23, 2697-2721.	0.9	38
46	Feasibility study for the development of certified reference materials for specific migration testing. Part 2: Estimation of diffusion parameters and comparison of experimental and predicted data. <i>Food Additives and Contaminants</i> , 2005, 22, 173-184.	2.0	37
47	An Improved, Rapid in Vitro Method To Measure Antioxidant Activity. Application on Selected Flavonoids and Apple Juice. <i>Journal of Agricultural and Food Chemistry</i> , 2000, 48, 4116-4122.	2.4	35
48	Kinetics of thermal degradation of vitamin C in marula fruit (<i>Sclerocarya birrea</i> subsp. <i>caffra</i>) as compared to other selected tropical fruits. <i>LWT - Food Science and Technology</i> , 2012, 49, 188-191.	2.5	35
49	Osmotic dehydration of mango: Effect of vacuum impregnation, high pressure, pectin methylesterase and ripeness on quality. <i>LWT - Food Science and Technology</i> , 2018, 98, 179-186.	2.5	35
50	Modelling the fate of glucosinolates during thermal processing of Brassica vegetables. <i>LWT - Food Science and Technology</i> , 2012, 49, 178-183.	2.5	34
51	Thermal stability of phytochemicals, HMF and antioxidant activity in cape gooseberry (<i>Physalis</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.6	34
52	Options for reducing food waste by quality-controlled logistics using intelligent packaging along the supply chain. <i>Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment</i> , 2017, 34, 1672-1680.	1.1	34
53	Fat content and storage conditions are key factors on the partitioning and activity of carvacrol in antimicrobial packaging. <i>Food Packaging and Shelf Life</i> , 2020, 24, 100500.	3.3	34
54	Formation of flavonoids and chlorogenic acid in apples as affected by crop load. <i>Scientia Horticulturae</i> , 2001, 91, 227-237.	1.7	32

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55	Improving internal communication between marketing and technology functions for successful new food product development. <i>Trends in Food Science and Technology</i> , 2014, 37, 106-114.	7.8	32
56	Kinetics of Changes in Glucosinolate Concentrations during Long-Term Cooking of White Cabbage (<i>Brassica oleracea</i> L. ssp. <i>capitata</i> f. <i>alba</i>). <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 2068-2073.	2.4	31
57	Glucosinolate content of blanched cabbage (<i>Brassica oleracea</i> var. <i>capitata</i>) fermented by the probiotic strain <i>Lactobacillus paracasei</i> LMG-P22043. <i>Food Research International</i> , 2013, 54, 706-710.	2.9	31
58	A metabolomics approach to identify factors influencing glucosinolate thermal degradation rates in <i>Brassica</i> vegetables. <i>Food Chemistry</i> , 2014, 155, 287-297.	4.2	31
59	Protein extraction using reversed micelles. <i>Pure and Applied Chemistry</i> , 1992, 64, 1765-1770.	0.9	30
60	Simulations on the prediction of cod (<i>Gadus morhua</i>) freshness from an intelligent packaging sensor concept. <i>Food Packaging and Shelf Life</i> , 2015, 3, 47-55.	3.3	29
61	Dietary phytochemical PEITC restricts tumor development via modulation of epigenetic writers and erasers. <i>Scientific Reports</i> , 2017, 7, 40569.	1.6	29
62	Non-destructive sensing of the freshness of packed cod fish using conductivity and pH electrodes. <i>Journal of Food Engineering</i> , 2014, 124, 80-85.	2.7	28
63	Effect of Vacuum Frying on Quality Attributes of Fruits. <i>Food Engineering Reviews</i> , 2018, 10, 154-164.	3.1	28
64	Using particle size and fat content to control the release of Allyl isothiocyanate from ground mustard seeds for its application in antimicrobial packaging. <i>Food Chemistry</i> , 2020, 308, 125573.	4.2	28
65	Development of a moisture-activated antimicrobial film containing ground mustard seeds and its application on meat in active packaging system. <i>Food Packaging and Shelf Life</i> , 2021, 30, 100753.	3.3	28
66	Rapid Estimation of Glucosinolate Thermal Degradation Rate Constants in Leaves of Chinese Kale and Broccoli (<i>Brassica oleracea</i>) in Two Seasons. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 7859-7865.	2.4	27
67	Mathematical models for the trimethylamine (TMA) formation on packed cod fish fillets at different temperatures. <i>Food Research International</i> , 2014, 56, 272-278.	2.9	27
68	Comparison of the degradation and leaching kinetics of glucosinolates during processing of four Brassicaceae (broccoli, red cabbage, white cabbage, Brussels sprouts). <i>Innovative Food Science and Emerging Technologies</i> , 2014, 25, 58-66.	2.7	25
69	Evaluating the effect of storage conditions on the shelf life of cape gooseberry (<i>Physalis peruviana</i>) Tj ETQq1 1 0.784314 rgBJ ₃ /Overlock	2.5	23
70	Stir-Frying of Chinese Cabbage and Pakchoi Retains Health-Promoting Glucosinolates. <i>Plant Foods for Human Nutrition</i> , 2017, 72, 439-444.	1.4	22
71	Concentration of aqueous extracts of defatted soy flour by ultrafiltration. <i>Journal of Food Engineering</i> , 2003, 58, 135-141.	2.7	21
72	Studying consumer behaviour related to the quality of food: A case on vegetable preparation affecting sensory and health attributes. <i>Trends in Food Science and Technology</i> , 2013, 33, 139-145.	7.8	21

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73	Physiologically Based Modeling of Food Digestion and Intestinal Microbiota: State of the Art and Future Challenges. An INFOGEST Review. <i>Annual Review of Food Science and Technology</i> , 2021, 12, 149-167.	5.1	21
74	Application of fluidised particles as turbulence promoters in ultrafiltration. <i>Journal of Membrane Science</i> , 2002, 208, 157-169.	4.1	19
75	Surface color distribution analysis by computer vision compared to sensory testing: Vacuum fried fruits as a case study. <i>Food Research International</i> , 2021, 143, 110230.	2.9	19
76	Application of hydrogenase in biotechnological conversions. <i>Biochimie</i> , 1986, 68, 201-209.	1.3	18
77	Bioavailability of Isothiocyanates From Broccoli Sprouts in Protein, Lipid, and Fiber Gels. <i>Molecular Nutrition and Food Research</i> , 2018, 62, e1700837.	1.5	18
78	Modelling the kinetics of osmotic dehydration of mango: Optimizing process conditions and pre-treatment for health aspects. <i>Journal of Food Engineering</i> , 2020, 280, 109985.	2.7	18
79	Additive diffusion from LDPE slabs into contacting solvents as a function of solvent absorption. <i>Journal of Applied Polymer Science</i> , 2003, 90, 1609-1617.	1.3	17
80	Modelling of simultaneous two-sided migration into water and olive oil from nylon food packaging. <i>European Food Research and Technology</i> , 2005, 220, 156-162.	1.6	17
81	Protein extration from an aqueous phase into a reversed micellar phase: Effect of water content and reversed micellar composition. <i>Biotechnology and Bioengineering</i> , 1995, 46, 375-387.	1.7	16
82	Detection of T-DNA transfer to plant cells by <i>A. tumefaciens</i> virulence mutants using agroinfection. <i>Molecular Genetics and Genomics</i> , 1986, 205, 411-416.	2.4	15
83	Analysing the Antioxidant Activity of Food Products: Processing and Matrix Effects. <i>Toxicology in Vitro</i> , 1999, 13, 797-799.	1.1	15
84	Direct measurement of additive migration from low-density polyethylene as a function of space and time. <i>Journal of Applied Polymer Science</i> , 2002, 86, 3185-3190.	1.3	15
85	Alternative fatty food simulants and diffusion kinetics of nylon 12 food packaging. <i>Food Additives and Contaminants</i> , 2003, 20, 949-959.	2.0	15
86	A review of the proximate composition and nutritional value of Marula (<i>Sclerocarya birrea</i> subsp.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	3.1	15
87	Nutritional and Physicochemical Quality of Vacuum-Fried Mango Chips Is Affected by Ripening Stage, Frying Temperature, and Time. <i>Frontiers in Nutrition</i> , 2020, 7, 95.	1.6	15
88	Pitfalls in the desulphation of glucosinolates in a high-throughput assay. <i>Food Chemistry</i> , 2012, 134, 2355-2361.	4.2	14
89	Bulk storage of mango (<i>Mangifera indica</i> L.) and pineapple (<i>Ananas comosus</i> L.) pulp: effect of pulping and storage temperature on phytochemicals and antioxidant activity. <i>Journal of the Science of Food and Agriculture</i> , 2019, 99, 5157-5167.	1.7	14
90	MEASUREMENT OF FIRMNESS OF FRESH-CUT SLICED TOMATO USING PUNCTURE TESTS ? STUDIES ON SAMPLE SIZE, PROBE SIZE AND DIRECTION OF PUNCTURE. <i>Journal of Texture Studies</i> , 2007, 38, 601-618.	1.1	13

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91	The effect of temperature and time on the quality of naturally fermented marula (<i>Sclerocarya birrea</i>) Tj ETQq1 1 0.784314 rgBT ₁₃ /Over	2.5	13
92	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.	7.8	13
93	Consumer preference for dried mango attributes: A conjoint study among Dutch, Chinese, and Indonesian consumers. Journal of Food Science, 2020, 85, 3527-3535.	1.5	13
94	Stochastic modelling of migration from polyolefins. Journal of the Science of Food and Agriculture, 2005, 85, 909-916.	1.7	12
95	Quantitative trait loci analysis of non-enzymatic glucosinolate degradation rates in <i>Brassica oleracea</i> during food processing. Theoretical and Applied Genetics, 2013, 126, 2323-2334.	1.8	12
96	Consumer behaviour towards vegetables: a study on domestic processing of broccoli and carrots by Dutch households. Journal of Human Nutrition and Dietetics, 2015, 28, 219-225.	1.3	12
97	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.	2.7	12
98	Packaging Design Using Mustard Seeds as a Natural Antimicrobial: A Study on Inhibition of <i>Pseudomonas fragi</i> in Liquid Medium. Foods, 2020, 9, 789.	1.9	12
99	Sensory and health properties of steamed and boiled carrots (<i>Daucus carota</i> ssp. <i>sativus</i>). International Journal of Food Sciences and Nutrition, 2014, 65, 809-815.	1.3	11
100	Multiresponse kinetic modelling of the formation, release, and degradation of allyl isothiocyanate from ground mustard seeds to improve active packaging. Journal of Food Engineering, 2021, 292, 110370.	2.7	11
101	Retention of glucosinolates during fermentation of <i>Brassica juncea</i> : a case study on production of sayur asin. European Food Research and Technology, 2015, 240, 559-565.	1.6	10
102	Exploring consumers' health perception across cultures in the early stages of new product development. British Food Journal, 2019, 121, 2116-2131.	1.6	10
103	Volatile antimicrobial absorption in food gel depends on the food matrix characteristics. Food Hydrocolloids, 2020, 107, 105933.	5.6	10
104	Carvacrol release from PLA to a model food emulsion: Impact of oil droplet size. Food Control, 2020, 114, 107247.	2.8	10
105	Modelling and optimization of high-pressure homogenization of not-from-concentrate juice: Achieving better juice quality using sustainable production. Food Chemistry, 2022, 370, 131058.	4.2	10
106	The effect of chewing on oral glucoraphanin hydrolysis in raw and steamed broccoli. Journal of Functional Foods, 2018, 45, 306-312.	1.6	9
107	Consumption of fresh <i>Centella asiatica</i> improves short term alertness and contentedness in healthy females. Journal of Functional Foods, 2021, 77, 104337.	1.6	9
108	What does it take to go global? The role of quality alignment and complexity in designing international food supply chains. Supply Chain Management, 2021, 26, 467-480.	3.7	9

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109	Modelling the effect of food composition on antimicrobial compound absorption and degradation in an active packaging. <i>Journal of Food Engineering</i> , 2021, 300, 110539.	2.7	9
110	Food science meets plant science: A case study on improved nutritional quality by breeding for glucosinolate retention during food processing. <i>Trends in Food Science and Technology</i> , 2014, 35, 61-68.	7.8	8
111	The effect of pore size on the diffusion of volatile antimicrobials is a key factor to preserve gelled foods. <i>Food Chemistry</i> , 2021, 351, 129316.	4.2	8
112	Thermal Effect, Diffusion, and Leaching of Health-Promoting Phytochemicals in Commercial Canning Process of Mango (<i>Mangifera indica</i> L.) and Pineapple (<i>Ananas comosus</i> L.). <i>Foods</i> , 2021, 10, 46.	1.9	8
113	Improving membrane filtration processes. <i>Trends in Biotechnology</i> , 1995, 13, 129-131.	4.9	7
114	Predictive modelling of vegetable firmness after thermal pre-treatments and steaming. <i>Innovative Food Science and Emerging Technologies</i> , 2014, 25, 14-18.	2.7	6
115	Reply to "Dietary glucosinolates and risk of type 2 diabetes in 3 prospective cohort studies". <i>American Journal of Clinical Nutrition</i> , 2018, 108, 425.	2.2	6
116	A Physiological-Based Model for Simulating the Bioavailability and Kinetics of Sulforaphane from Broccoli Products. <i>Foods</i> , 2021, 10, 2761.	1.9	6
117	Micelle separation conditions based on particle size strongly affect carotenoid bioaccessibility assessment from juices after in vitro digestion. <i>Food Research International</i> , 2022, 151, 110891.	2.9	6
118	Glucosinolates. , 0, , 31-51.		5
119	Differences in moisture sorption characteristics and browning of lesser mealworm (<i>Alphitobius</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.5	5
120	On the use of Bayesian networks to combine raw data from related studies on sensory satiation. <i>Food Quality and Preference</i> , 2012, 26, 119-127.	2.3	4
121	Practices and health perception of preparation of <i>Brassica</i> vegetables: translating survey data to technological and nutritional implications. <i>International Journal of Food Sciences and Nutrition</i> , 2015, 66, 633-641.	1.3	4
122	Processing and Preparation of Brassica Vegetables and the Fate of Glucosinolates. <i>Reference Series in Phytochemistry</i> , 2017, , 407-429.	0.2	4
123	Re: Fruit and Vegetable Intake and Risk of Major Chronic Disease. <i>Journal of the National Cancer Institute</i> , 2005, 97, 607-608.	3.0	3
124	Evaluation of research methods to study domestic food preparation. <i>British Food Journal</i> , 2015, 117, 7-21.	1.6	3
125	REDUCTION OF GLUCOSINOLATES CONTENT DURING SAYUR ASIN FERMENTATION. <i>Jurnal Teknologi Dan Industri Pangan</i> , 2013, 24, 235-239.	0.1	3
126	Reversed Micelles for Protein Purification. , 1993, , 533-544.		2

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127	PROCESSING OF FOODS CONTAINING FLAVONOIDS AND GLUCOSINOLATES; EFFECTS ON COMPOSITION AND BIOACTIVITY. , 1999, , 303-308.		0
128	Bayesian networks to explain the effect of label information on product perception. Procedia Food Science, 2011, 1, 1084-1090.	0.6	0
129	Processing and Preparation of Brassica Vegetables and the Fate of Glucosinolates. , 2016, , 1-23.		0