Susanne Neugart

List of Publications by Year
in descending order

77 papers	3,224 citations	126907 33 h-index	168389 53 g-index
78 all docs	78 docs citations	78 times ranked	3849 citing authors

#	Article	IF	Citations
1	UV-A radiation effects on higher plants: Exploring the known unknown. Plant Science, 2017, 255, 72-81.	3.6	220
2	Are Neglected Plants the Food for the Future?. Critical Reviews in Plant Sciences, 2016, 35, 106-119.	5.7	149
3	Comparative Evaluation of Total Antioxidant Capacities of Plant Polyphenols. Molecules, 2016, 21, 208.	3.8	146
4	UVB and UVA as eustressors in horticultural and agricultural crops. Scientia Horticulturae, 2018, 234, 370-381.	3.6	120
5	Genotypic and climatic influences on the concentration and composition of flavonoids in kale (Brassica oleracea var. sabellica). Food Chemistry, 2010, 119, 1293-1299.	8.2	106
6	Identification of complex, naturally occurring flavonoid glycosides in kale (Brassica oleracea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 ionization multiâ€stage mass spectrometry. Rapid Communications in Mass Spectrometry, 2010, 24, 2009-2022.	1.5	105
7	Genotypic and Climatic Influence on the Antioxidant Activity of Flavonoids in Kale (Brassica oleracea) Tj ETQq1 1 0.784314 rgBT /Over	5.2	99
8	Assessing the response of plant flavonoids to UV radiation: an overview of appropriate techniques. Phytochemistry Reviews, 2015, 14, 273-297.	6.5	98
9	The hydroxycinnamic acid content of barley and brewersâ€™ spent grain (BSG) and the potential to incorporate phenolic extracts of BSG as antioxidants into fruit beverages. Food Chemistry, 2013, 141, 2567-2574.	8.2	91
10	The intrinsic quality of brassicaceous vegetables: How secondary plant metabolites are affected by genetic, environmental, and agronomic factors. Scientia Horticulturae, 2018, 233, 460-478.	3.6	91
11	Indigenous leafy vegetables of Eastern Africa â€" A source of extraordinary secondary plant metabolites. Food Research International, 2017, 100, 411-422.	6.2	88
12	Effect of UV-B radiation on morphology, phenolic compound production, gene expression, and subsequent drought stress responses in chili pepper (Capsicum annuum L.). Plant Physiology and Biochemistry, 2019, 134, 94-102.	5.8	86
13	Post-harvest UV-B irradiation induces changes of phenol contents and corresponding biosynthetic gene expression in peaches and nectarines. Food Chemistry, 2014, 163, 51-60.	8.2	75
14	Singlet oxygen scavenging by leaf flavonoids contributes to sunlight acclimation in Tilia platyphyllos. Environmental and Experimental Botany, 2014, 100, 1-9.	4.2	71
15	Structurally different flavonol glycosides and hydroxycinnamic acid derivatives respond differently to moderate UVâ€B radiation exposure. Physiologia Plantarum, 2012, 145, 582-593.	5.2	69
16	A perspective on ecologically relevant plant-UV research and its practical application. Photochemical and Photobiological Sciences, 2019, 18, 970-988.	2.9	69
17	Impact of cold atmospheric pressure plasma on physiology and flavonol glycoside profile of peas (Pisum sativum â€˜Salamancaâ€™). Food Research International, 2015, 76, 132-141.	6.2	67
18	Interaction of Moderate UV-B Exposure and Temperature on the Formation of Structurally Different Flavonol Glycosides and Hydroxycinnamic Acid Derivatives in Kale (Brassica oleracea var.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 57	5.2	65

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19	Influence of Light and Temperature on Gene Expression Leading to Accumulation of Specific Flavonol Glycosides and Hydroxycinnamic Acid Derivatives in Kale (Brassica oleracea var. sabellica). Frontiers in Plant Science, 2016, 7, 326.	3.6	61
20	Identification of complex, naturally occurring flavonoid glycosides in Vicia faba and Pisum sativum leaves by HPLC-DAD-ESI-MSn and the genotypic effect on their flavonoid profile. Food Research International, 2015, 76, 114-121.	6.2	59
21	How do cryptochromes and UVR8 interact in natural and simulated sunlight?. Journal of Experimental Botany, 2019, 70, 4975-4990.	4.8	57
22	Highly glycosylated and acylated flavonols isolated from kale (Brassica oleracea var. sabellica) â€" Structureâ€"antioxidant activity relationship. Food Research International, 2012, 47, 80-89.	6.2	53
23	Environmental Factors Correlated with the Metabolite Profile of Vitis vinifera cv. Pinot Noir Berry Skins along a European Latitudinal Gradient. Journal of Agricultural and Food Chemistry, 2016, 64, 8722-8734.	5.2	52
24	Effects of Developmental Stages and Reduced UVB and Low UV Conditions on Plant Secondary Metabolite Profiles in Pak Choi (Brassica rapa subsp. chinensis). Journal of Agricultural and Food Chemistry, 2018, 66, 1678-1692.	5.2	47
25	The effect of temperature and radiation on flavonol aglycones and flavonol glycosides of kale (Brassica oleracea var. sabellica). Food Chemistry, 2012, 133, 1456-1465.	8.2	46
26	Nutritional compound analysis and morphological characterization of spider plant (Cleome) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 T	6.2	45
27	The role of plant processing for the cancer preventive potential of Ethiopian kale (Brassica carinata). Food and Nutrition Research, 2017, 61, 1271527.	2.6	44
28	Mutual Interaction of Phenolic Compounds and Microbiota: Metabolism of Complex Phenolic Apigenin-C- and Kaempferol-O-Derivatives by Human Fecal Samples. Journal of Agricultural and Food Chemistry, 2018, 66, 485-497.	5.2	42
29	Sustainable food protein supply reconciling human and ecosystem health: A Leibniz Position. Global Food Security, 2020, 25, 100367.	8.1	41
30	Thermal-induced changes of kaleâ€™s antioxidant activity analyzed by HPLCâ€"UV/Vis-online-TEAC detection. Food Chemistry, 2013, 138, 857-865.	8.2	39
31	A Guide to the Variability of Flavonoids in Brassica oleracea. Molecules, 2017, 22, 252.	3.8	38
32	Influence of a Selenium Biofortification on Antioxidant Properties and Phenolic Compounds of Apples (Malus domestica). Antioxidants, 2020, 9, 187.	5.1	36
33	Environmental plasticity of Pinot noir grapevine leaves: A transâ€European study of morphological and biochemical changes along a 1,500â€km latitudinal climatic gradient. Plant, Cell and Environment, 2017, 40, 2790-2805.	5.7	34
34	Bread Enriched With Legume Microgreens and Leavesâ€"Ontogenetic and Baking-Driven Changes in the Profile of Secondary Plant Metabolites. Frontiers in Chemistry, 2018, 6, 322.	3.6	32
35	Recent progress in the use of Ã¢â‚¬Ëœomics technologies in brassicaceous vegetables. Frontiers in Plant Science, 2015, 6, 244.	3.6	30
36	Chlorogenic acid versus amaranth's caffeoylisocitric acid â€" Gut microbial degradation of caffeic acid derivatives. Food Research International, 2017, 100, 375-384.	6.2	30

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37	Brassica-enriched wheat bread: Unraveling the impact of ontogeny and breadmaking on bioactive secondary plant metabolites of pak choi and kale. Food Chemistry, 2019, 295, 412-422.	8.2	28
38	Different Narrow-Band Light Ranges Alter Plant Secondary Metabolism and Plant Defense Response to Aphids. Journal of Chemical Ecology, 2016, 42, 989-1003.	1.8	26
39	Responses of flavonoid profile and associated gene expression to solar blue and UV radiation in two accessions of Vicia faba L. from contrasting UV environments. Photochemical and Photobiological Sciences, 2019, 18, 434-447.	2.9	26
40	Nitrogen split dose fertilization, plant age and frost effects on phytochemical content and sensory properties of curly kale (Brassica oleracea L. var. sabellica). Food Chemistry, 2016, 197, 530-538.	8.2	25
41	Toxicity, Antioxidant Activity, and Phytochemicals of Basil (Ocimum basilicum L.) Leaves Cultivated in Southern Punjab, Pakistan. Foods, 2022, 11, 1239.	4.3	25
42	Arabidopsis thaliana root and root exudate metabolism is altered by the growth-promoting bacterium Kosakonia radicincitans DSM 16656T. Plant and Soil, 2017, 419, 557-573.	3.7	24
43	Precultivation of young seedlings under different color shades modifies the accumulation of phenolic compounds in Cichorium leaves in later growth phases. Environmental and Experimental Botany, 2019, 165, 30-38.	4.2	24
44	Low and moderate photosynthetically active radiation affects the flavonol glycosides and hydroxycinnamic acid derivatives in kale (Brassica oleracea var. sabellica) dependent on two low temperatures. Plant Physiology and Biochemistry, 2013, 72, 161-168.	5.8	22
45	Can narrow-bandwidth light from UV-A to green alter secondary plant metabolism and increase Brassica plant defenses against aphids?. PLoS ONE, 2017, 12, e0188522.	2.5	22
46	Natural diversity of hydroxycinnamic acid derivatives, flavonoid glycosides, carotenoids and chlorophylls in leaves of six different amaranth species. Food Chemistry, 2018, 267, 376-386.	8.2	22
47	Flavonoid Glycosides and Hydroxycinnamic Acid Derivatives in Baby Leaf Rapeseed From White and Yellow Flowering Cultivars With Repeated Harvest in a 2-Years Field Study. Frontiers in Plant Science, 2019, 10, 355.	3.6	22
48	Identification of novel saponins in vegetable amaranth and characterization of their hemolytic activity. Food Research International, 2015, 78, 361-368.	6.2	21
49	Intercropping Induces Changes in Specific Secondary Metabolite Concentration in Ethiopian Kale (Brassica carinata) and African Nightshade (Solanum scabrum) under Controlled Conditions. Frontiers in Plant Science, 2017, 8, 1700.	3.6	20
50	Influence of Cultivar and Fertilizer Approach on Curly Kale (Brassica oleracea L. var.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td Concentration. Journal of Agricultural and Food Chemistry, 2014, 62, 11393-11402.	5.2	19
51	Selected Plant Metabolites Involved in Oxidation-Reduction Processes during Bud Dormancy and Ontogenetic Development in Sweet Cherry Buds (Prunus avium L.). Molecules, 2018, 23, 1197.	3.8	18
52	Assessment of hyperspectral indicators related to the content of phenolic compounds and multispectral fluorescence records in chicory leaves exposed to various light environments. Plant Physiology and Biochemistry, 2020, 154, 429-438.	5.8	18
53	African Nightshade (Solanum scabrum Mill.): Impact of Cultivation and Plant Processing on Its Health Promoting Potential as Determined in a Human Liver Cell Model. Nutrients, 2018, 10, 1532.	4.1	17
54	Effects of light-emitting diode treatments on Brevicoryne brassicae performance mediated by secondary metabolites in Brussels sprouts. Journal of Plant Diseases and Protection, 2016, 123, 321-330.	2.9	16

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55	Amaranthâ€™s 2-Caffeoylisocitric Acidâ€”An Anti-Inflammatory Caffeic Acid Derivative That Impairs NF-ÎºB Signaling in LPS-Challenged RAW 264.7 Macrophages. Nutrients, 2019, 11, 571.	4.1	16
56	Effects of Amaranthus cruentus L. on aflatoxin B1- and oxidative stress-induced DNA damage in human liver (HepG2) cells. Food Bioscience, 2018, 26, 42-48.	4.4	15
57	Flavonoid Glycosides in Brassica Species Respond to UV-B Depending on Exposure Time and Adaptation Time. Molecules, 2021, 26, 494.	3.8	15
58	UV-B Pre-treatment Alters Phenolics Response to Monilinia fructicola Infection in a Structure-Dependent Way in Peach Skin. Frontiers in Plant Science, 2018, 9, 1598.	3.6	14
59	Boiling and steaming induced changes in secondary metabolites in three different cultivars of pak choi (Brassica rapa subsp. chinensis). Journal of Food Composition and Analysis, 2019, 82, 103232.	3.9	14
60	Different irradiances of UV and PAR in the same ratios alter the flavonoid profiles of Arabidopsis thaliana wild types and UV-signalling pathway mutants. Photochemical and Photobiological Sciences, 2019, 18, 1685-1699.	2.9	14
61	Mixed cropping with maize combined with moderate UV-B radiations lead to enhanced flavonoid production and root growth in faba bean. Journal of Plant Interactions, 2012, 7, 333-340.	2.1	13
62	Are Raw Brassica Vegetables Healthier Than Cooked Ones? A Randomized, Controlled Crossover Intervention Trial on the Health-Promoting Potential of Ethiopian Kale. Nutrients, 2018, 10, 1622.	4.1	13
63	Effect of Solid Biological Waste Compost on the Metabolite Profile of Brassica rapa ssp. chinensis. Frontiers in Plant Science, 2018, 9, 305.	3.6	13
64	Narrow-Banded UVB Affects the Stability of Secondary Plant Metabolites in Kale (Brassica oleracea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Approach for Producing Functional Foods. Foods, 2019, 8, 427.	4.3	12
65	Application of supplemental UVâ€B radiation in preâ€harvest to enhance healthâ€promoting compounds accumulation in green and red lettuce. Journal of Food Processing and Preservation, 2019, 43, e14213.	2.0	12
66	Aqueous and gaseous plasma applications for the treatment of mung bean seeds. Scientific Reports, 2021, 11, 19681.	3.3	10
67	Blue Light Treatment but Not Green Light Treatment After Pre-exposure to UV-B Stabilizes Flavonoid Glycoside Changes and Corresponding Biological Effects in Three Different Brassicaceae Sprouts. Frontiers in Plant Science, 2020, 11, 611247.	3.6	9
68	UV-B Elicitation of Secondary Plant Metabolites. Springer Series in Materials Science, 2016, , 387-414.	0.6	9
69	Interactions of Ascorbic Acid, 5-Caffeoylquinic Acid, and Quercetin-3-Rutinoside in the Presence and Absence of Iron during Thermal Processing and the Influence on Antioxidant Activity. Molecules, 2021, 26, 7698.	3.8	9
70	Subsequent treatment of leafy vegetables with low doses of UVB-radiation does not provoke cytotoxicity, genotoxicity, or oxidative stress in a human liver cell model. Food Bioscience, 2021, 43, 101327.	4.4	8
71	The transgenerational effects of solar short-UV radiation differed in two accessions of Vicia faba L. from contrasting UV environments. Journal of Plant Physiology, 2020, 248, 153145.	3.5	6
72	Rapid adjustment in epidermal <scp>UV</scp> sunscreen: Comparison of optical measurement techniques and response to changing solar <scp>UV</scp> radiation conditions. Physiologia Plantarum, 2021, 173, 725-735.	5.2	6

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73	The Function of Flavonoids in the Diurnal Rhythm under Rapidly Changing UV Conditionsâ€"A Model Study on Okra. Plants, 2021, 10, 2268.	3.5	6
74	Ultraviolet-B radiation exposure lowers the antioxidant capacity in the Arabidopsis thaliana pdx1.3-1 mutant and leads to glucosinolate biosynthesis alteration in both wild type and mutant. Photochemical and Photobiological Sciences, 2020, 19, 217-228.	2.9	5
75	Relationship between Phenolic Compounds, Antioxidant Properties, and the Allergenic Protein Mal d 1 in Different Selenium-Biofortified Apple Cultivars (Malus domestica). Molecules, 2021, 26, 2647.	3.8	5
76	Editorial: Ultraviolet Radiation: Friend or Foe for Plants?. Frontiers in Plant Science, 2020, 11, 541.	3.6	4
77	Zusammenhang zwischen phenolischen Verbindungen, antioxidativen Eigenschaften und dem allergenen Protein Mal d 1 in verschiedenen Selenâ€biofortifizierten Apfelsorten. Lebensmittelchemie, 2021, 75, S1-067.	0.0	0