Karl-Heinz Engel

List of Publications by Year
in descending order

94 papers	2,955 citations	136950 32 h-index	182427 51 g-index
94 all docs	94 docs citations	94 times ranked	3357 citing authors

#	Article	IF	Citations
1	Comparison of two GM maize varieties with a near-isogenic non-GM variety using transcriptomics, proteomics and metabolomics. Plant Biotechnology Journal, 2010, 8, 436-451.	8.3	224
2	Content of Î³-Oryzanol and Composition of Steryl Ferulates in Brown Rice (Oryza sativaL.) of European Origin. Journal of Agricultural and Food Chemistry, 2006, 54, 8127-8133.	5.2	128
3	Safety aspects of the production of foods and food ingredients from insects. Molecular Nutrition and Food Research, 2017, 61, 1600520.	3.3	116
4	Toxicity of fluoride: critical evaluation of evidence for human developmental neurotoxicity in epidemiological studies, animal experiments and in vitro analyses. Archives of Toxicology, 2020, 94, 1375-1415.	4.2	109
5	Metabolite Profiling of Germinating Rice Seeds. Journal of Agricultural and Food Chemistry, 2008, 56, 11612-11620.	5.2	104
6	Gut metabolites and bacterial community networks during a pilot intervention study with flaxseeds in healthy adult men. Molecular Nutrition and Food Research, 2015, 59, 1614-1628.	3.3	95
7	Identification and characterization of wheat grain albumin/globulin allergens. Electrophoresis, 1997, 18, 826-833.	2.4	91
8	Mutations of the multi-drug resistance-associated protein ABC transporter gene 5 result in reduction of phytic acid in rice seeds. Theoretical and Applied Genetics, 2009, 119, 75-83.	3.6	89
9	Metabolite profiling of barley: Influence of the malting process. Food Chemistry, 2011, 124, 948-957.	8.2	77
10	Metabolite Profiling of Maize Kernelsâ€”Genetic Modification versus Environmental Influence. Journal of Agricultural and Food Chemistry, 2012, 60, 3005-3012.	5.2	77
11	Disruption of <i>Os<scp>SULTR</scp>3;3</i> reduces phytate and phosphorus concentrations and alters the metabolite profile in rice grains. New Phytologist, 2016, 211, 926-939.	7.3	72
12	Metabolite Profiling of Two Low Phytic Acid (<i>lpa</i>) Rice Mutants. Journal of Agricultural and Food Chemistry, 2007, 55, 11011-11019.	5.2	69
13	Distortion of Genetically Modified Organism Quantification in Processed Foods:Â Influence of Particle Size Compositions and Heat-Induced DNA Degradation. Journal of Agricultural and Food Chemistry, 2005, 53, 9971-9979.	5.2	64
14	Influence of the Input System (Conventional versus Organic Farming) on Metabolite Profiles of Maize (Zea mays) Kernels. Journal of Agricultural and Food Chemistry, 2010, 58, 3022-3030.	5.2	61
15	Metabolite profiling of maize grain: differentiation due to genetics and environment. Metabolomics, 2009, 5, 459-477.	3.0	59
16	Metabolite profiling of colored rice (Oryza sativa L.) grains. Journal of Cereal Science, 2012, 55, 112-119.	3.7	59
17	Simultaneous detection of DNA from 10 food allergens by ligation-dependent probe amplification. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2009, 26, 409-418.	2.3	58
18	Phytosterol oxidation products in enriched foods: Occurrence, exposure, and biological effects. Molecular Nutrition and Food Research, 2015, 59, 1339-1352.	3.3	56

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19	Development of a Real-Time PCR for the Detection of Lupine DNA (Lupinus Species) in Foods. Journal of Agricultural and Food Chemistry, 2008, 56, 4328-4332.	5.2	54
20	A metabolite profiling approach to follow the sprouting process of mung beans (Vigna radiata). Metabolomics, 2011, 7, 102-117.	3.0	53
21	Simultaneous Analysis of Free Phytosterols/Phytostanols and Intact Phytosteryl/Phytostanyl Fatty Acid and Phenolic Acid Esters in Cereals. Journal of Agricultural and Food Chemistry, 2012, 60, 5330-5339.	5.2	51
22	Stereochemical Course of the Generation of 3-Mercaptohexanal and 3-Mercaptohexanol by Î²-Lyase-Catalyzed Cleavage of Cysteine Conjugates. Journal of Agricultural and Food Chemistry, 2004, 52, 110-116.	5.2	47
23	Analysis of steryl esters in cocoa butter by on-line liquid chromatographyâ€“gas chromatography. Journal of Chromatography A, 2001, 918, 341-349.	3.7	43
24	Quantification of DNA from genetically modified organisms in composite and processed foods. Trends in Food Science and Technology, 2006, 17, 490-497.	15.1	41
25	Coupled liquid chromatographyâ€“gas chromatography for the rapid analysis of Î³-oryzanol in rice lipids. Journal of Chromatography A, 2003, 985, 403-410.	3.7	39
26	Assessment of the contents of phytic acid and divalent cations in low phytic acid (lpa) mutants of rice and soybean. Journal of Food Composition and Analysis, 2009, 22, 278-284.	3.9	38
27	A methodology for automated comparative analysis of metabolite profiling data. European Food Research and Technology, 2003, 216, 335-342.	3.3	36
28	Ligation-dependent probe amplification for the simultaneous event-specific detection and relative quantification of DNA from two genetically modified organisms. European Food Research and Technology, 2006, 222, 479-485.	3.3	36
29	Metabolite Profiling of Two Novel Low Phytic Acid (<i>lpa</i>) Soybean Mutants. Journal of Agricultural and Food Chemistry, 2009, 57, 6408-6416.	5.2	36
30	Chirality: An Important Phenomenon Regarding Biosynthesis, Perception, and Authenticity of Flavor Compounds. Journal of Agricultural and Food Chemistry, 2020, 68, 10265-10274.	5.2	36
31	Volatile Constituents of Uncooked Rhubarb (Rheum rhabarbarumL.) Stalks. Journal of Agricultural and Food Chemistry, 2003, 51, 6530-6536.	5.2	35
32	Online LC-GC-Based Analysis of Minor Lipids in Various Tree Nuts and Peanuts. Journal of Agricultural and Food Chemistry, 2013, 61, 11636-11644.	5.2	34
33	Detection of Cashew Nut in Foods by a Specific Real-time PCR Method. Food Analytical Methods, 2008, 1, 136-143.	2.6	33
34	Metabolite Profiling of Barley Grain Subjected to Induced Drought Stress: Responses of Free Amino Acids in Differently Adapted Cultivars. Journal of Agricultural and Food Chemistry, 2015, 63, 4252-4261.	5.2	30
35	Impact of induced drought stress on the metabolite profiles of barley grain. Metabolomics, 2015, 11, 454-467.	3.0	29
36	GC-Based Analysis of Plant Stanyl Fatty Acid Esters in Enriched Foods. Journal of Agricultural and Food Chemistry, 2011, 59, 5204-5214.	5.2	28

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37	Analysis and Sensory Evaluation of Volatile Constituents of Fresh Blackcurrant (<i>Ribes nigrum</i>) Tj ETQq1 1 0.784314 rgBT /Overlo	5.2	28
38	Online LCâ€“GC Analysis of Free Sterols/Stanols and Intact Steryl/Stanyl Esters in Cereals. Journal of Agricultural and Food Chemistry, 2013, 61, 10932-10939.	5.2	27
39	Development of a modular system for detection of genetically modified organisms in food based on ligation-dependent probe amplification. European Food Research and Technology, 2008, 227, 805-812.	3.3	26
40	Enantioselective Analysis of Secondary Alcohols and Their Esters in Purple and Yellow Passion Fruits. Journal of Agricultural and Food Chemistry, 2007, 55, 10339-10344.	5.2	24
41	Fate of dietary phytosteryl/-stanyl esters: analysis of individual intact esters in human feces. European Journal of Nutrition, 2013, 52, 997-1013.	3.9	24
42	2,3-Di-O-methoxymethyl-6-O-tert-butyldimethylsilyl-Î³-cyclodextrin: a new class of cyclodextrin derivatives for gas chromatographic separation of enantiomers. Journal of Chromatography A, 2005, 1063, 181-192.	3.7	21
43	Detection of lupine (Lupinus spp.) DNA in processed foods using real-time PCR. Food Control, 2011, 22, 215-220.	5.5	19
44	Capillary gas chromatographic analysis of complex phytosteryl/-stanyl ester mixtures in enriched skimmed milk-drinking yoghurts. Food Control, 2012, 27, 275-283.	5.5	19
45	Stereoselectivity of the Generation of 3-Mercaptohexanal and 3-Mercaptohexanol by Lipase-Catalyzed Hydrolysis of 3-Acetylthioesters. Journal of Agricultural and Food Chemistry, 2003, 51, 4349-4355.	5.2	18
46	Enzyme-catalyzed hydrolysis of ? -oryzanol. European Food Research and Technology, 2004, 218, 349-354.	3.3	18
47	Quantification of lupine (Lupinus angustifolius) in wheat flour using real-time PCR and an internal standard material. European Food Research and Technology, 2012, 235, 61-66.	3.3	18
48	Heating Two Types of Enriched Margarine: Complementary Analysis of Phytosteryl/Phytostanyl Fatty Acid Esters and Phytosterol/Phytostanol Oxidation Products. Journal of Agricultural and Food Chemistry, 2016, 64, 2699-2708.	5.2	18
49	Enantioselective Analysis of Methyl-Branched Alcohols and Acids in Rhubarb (Rheum rhabarbarumL.) Stalks. Journal of Agricultural and Food Chemistry, 2003, 51, 7086-7091.	5.2	17
50	Analysis and Sensory Evaluation of Gooseberry (Ribes uva crispa L.) Volatiles. Journal of Agricultural and Food Chemistry, 2013, 61, 6240-6249.	5.2	17
51	On-line liquid chromatographyâ€“gas chromatography: A novel approach for the analysis of phytosterol oxidation products in enriched foods. Journal of Chromatography A, 2015, 1396, 98-108.	3.7	17
52	Genetic and Environmental Influence on Maize Kernel Proteome. Journal of Proteome Research, 2010, 9, 6160-6168.	3.7	16
53	Influence of the Stereochemistry on the Sensory Properties of 4-Mercapto-2-heptanol and Its Acetyl-Derivatives. Journal of Agricultural and Food Chemistry, 2013, 61, 2062-2069.	5.2	16
54	Comparison of odour thresholds and odour qualities of the enantiomers of 4â€mercaptoâ€2â€alkanones and 4â€acetylthioâ€2â€alkanones. Flavour and Fragrance Journal, 2015, 30, 171-178.	2.6	15

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55	Comparative assessment of DNA-based approaches for the quantification of food allergens. Food Chemistry, 2014, 160, 104-111.	8.2	14
56	Simultaneous detection of allergenic fish, cephalopods and shellfish in food by multiplex ligation-dependent probe amplification. European Food Research and Technology, 2014, 239, 559-566.	3.3	14
57	Analysis and Sensory Evaluation of the Stereoisomers of a Homologous Series (C5â€"C10) of 4-Mercapto-2-alkanols. Journal of Agricultural and Food Chemistry, 2017, 65, 8913-8922.	5.2	14
58	2,3-Di-O-methoxymethyl-6-O-tert-butyldimethylsilyl-Î²-cyclodextrin, a useful stationary phase for gas chromatographic separation of enantiomers. Journal of Chromatography A, 2005, 1076, 148-154.	3.7	13
59	Analysis and stereodifferentiation of linalool in Theobroma cacao and cocoa products using enantioselective multidimensional gas chromatography. European Food Research and Technology, 2012, 235, 827-834.	3.3	13
60	Modelling framework for assessment of dietary exposure to added flavouring substances within the FACET (Flavours, Additives, and Food Contact Material Exposure Task) project. Food and Chemical Toxicology, 2013, 58, 236-241.	3.6	13
61	Determination of the absolute configurations of 4-mercapto-2-alkanones using the 1H NMR anisotropy method and enzyme-catalyzed kinetic resolution of the corresponding 4-acetylthio-2-alkanones. European Food Research and Technology, 2011, 232, 753-760.	3.3	12
62	Assessment of dietary exposure to flavouring substances via consumption of flavoured teas. Part 1: occurrence and contents of monoterpenes in Earl Grey teas marketed in the European Union. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2013, 30, 1701-1714.	2.3	12
63	Contribution to the ongoing discussion on fluoride toxicity. Archives of Toxicology, 2021, 95, 2571-2587.	4.2	12
64	Apricot DNA as an Indicator for Persipan: Detection and Quantitation in Marzipan Using Ligation-Dependent Probe Amplification. Journal of Agricultural and Food Chemistry, 2012, 60, 5853-5858.	5.2	11
65	Analysis of Phytostanyl Fatty Acid Esters in Enriched Foods via UHPLC-APCI-MS. Journal of Agricultural and Food Chemistry, 2014, 62, 4268-4275.	5.2	11
66	Simultaneous quantification of the food allergens soy bean, celery, white mustard and brown mustard via combination of tetraplex real-time PCR and standard addition. Food Control, 2015, 47, 246-253.	5.5	11
67	Reinvestigation of the Absolute Configurations of Chiral Î²-Mercaptoalkanones Using Vibrational Circular Dichroism and ¹H NMR Analysis. Journal of Agricultural and Food Chemistry, 2016, 64, 8563-8571.	5.2	11
68	An approach based on ultrahigh performance liquid chromatography-atmospheric pressure chemical ionization-mass spectrometry allowing the quantification of both individual phytosteryl and phytostanyl fatty acid esters in complex mixtures. Journal of Chromatography A, 2016, 1429, 218-229.	3.7	11
69	Sensory active piperine analogues from Macropiper excelsum and their effects on intestinal nutrient uptake in Caco-2Âcells. Phytochemistry, 2017, 135, 181-190.	2.9	11
70	Stability of the Metabolite Signature Resulting from the <i>OsSULTR3;3</i> Mutation in <i>Low Phytic Acid</i> Rice (<i>Oryza sativa</i> L.) Seeds upon Cross-breeding. Journal of Agricultural and Food Chemistry, 2018, 66, 9366-9376.	5.2	11
71	Impact of Crossing Parent and Environment on the Metabolite Profiles of Progenies Generated from a <i>Low Phytic Acid</i> Rice (<i>Oryza sativa</i> L.) Mutant. Journal of Agricultural and Food Chemistry, 2019, 67, 2396-2407.	5.2	11
72	Analysis and Sensory Evaluation of Jostaberry (<i>Ribes x nidigrolaria</i> Bauer) Volatiles. Journal of Agricultural and Food Chemistry, 2013, 61, 9067-9075.	5.2	9

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73	Analysis of phytosteryl and phytostanyl fatty acid esters in enriched dairy foods: a combination of acid digestion, lipid extraction, and on-line LC-GC. European Food Research and Technology, 2013, 236, 999-1007.	3.3	7
74	Impact of Cross-Breeding of <i>Low Phytic Acid MIPS1</i> and <i>IPK1</i> Soybean (<i>Glycine max</i> L.) Tj ETQq0 0 0 rgBT /Overlock Chemistry, 2019, 67, 247-257.	5.2	7
75	Identification of Acyl Chain Oxidation Products upon Thermal Treatment of a Mixture of Phytosteryl/-stanyl Linoleates. Journal of Agricultural and Food Chemistry, 2016, 64, 9214-9223.	5.2	6
76	Phytic Acid Contents and Metabolite Profiles of Progenies from Crossing <i>Low Phytic Acid OsMIK</i> and <i>OsMRP5</i> Rice (<i>Oryza sativa</i> L.) Mutants. Journal of Agricultural and Food Chemistry, 2019, 67, 11805-11814.	5.2	6
77	Impact of cross-breeding of low phytic acid rice (Oryza sativa L.) mutants with commercial cultivars on the phytic acid contents. European Food Research and Technology, 2019, 245, 707-716.	3.3	6
78	The Importance of Sulfur-Containing Compounds to Fruit Flavors. , 1999, , 265-273.		6
79	Assessment of dietary exposure to flavouring substances via consumption of flavoured teas. Part II: transfer rates of linalool and linalyl esters into Earl Grey tea infusions. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2014, 31, 207-217.	2.3	5
80	Distributions of the Stereoisomers of Î²-Mercaptoheptanones and Î²-Mercaptoheptanols in Cooked Bell Pepper (Capsicum annuum). Journal of Agricultural and Food Chemistry, 2017, 65, 10250-10257.	5.2	5
81	Determination of the Absolute Configurations and Sensory Properties of the Enantiomers of a Homologous Series (C6â€“C10) of 2-Mercapto-4-alkanones. Journal of Agricultural and Food Chemistry, 2019, 67, 1187-1196.	5.2	5
82	Salivary nitrate/nitrite and acetaldehyde in humans: potential combination effects in the upper gastrointestinal tract and possible consequences for the in vivo formation of N-nitroso compoundsâ€”a hypothesis. Archives of Toxicology, 2022, 96, 1905-1914.	4.2	5
83	Quantitation of Acyl Chain Oxidation Products Formed upon Thermo-oxidation of Phytosteryl/-stanyl Oleates and Linoleates. Journal of Agricultural and Food Chemistry, 2017, 65, 2435-2442.	5.2	4
84	Analytical and Sensory Characterization of the Stereoisomers of 3-Mercaptocycloalkanones and 3-Mercaptocycloalkanols. Journal of Agricultural and Food Chemistry, 2020, 68, 7184-7193.	5.2	4
85	Absolute Configurations and Sensory Properties of the Stereoisomers of a Homologous Series (C6â€“C10) of 2-Mercapto-4-alkanols. Journal of Agricultural and Food Chemistry, 2020, 68, 2738-2746.	5.2	4
86	Strategies for UHPLC-MS/MS-Based Analysis of Different Classes of Acyl Chain Oxidation Products Resulting from Thermo-Oxidation of Sitostanyl Oleate. Journal of Agricultural and Food Chemistry, 2019, 67, 12072-12083.	5.2	3
87	Occurrence of 4â€methoxyâ€2â€methylâ€2â€butanethiol in blackcurrant (<i>Ribes nigrum</i> L.) berries. Flavour and Fragrance Journal, 2016, 31, 438-441.	2.6	2
88	Impact of thermooxidation of phytosteryl and phytostanyl fatty acid esters on cholesterol micellarization in vitro. Steroids, 2017, 125, 81-92.	1.8	1
89	Methods for Detection of Genetically Modified Organisms in Composite and Processed Foods. , 2006, , 219-247.		0
90	Authentication of Foods Enriched with Plant Sterols/Stanols and Their Esters. ACS Symposium Series, 2011, , 177-187.	0.5	0

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91	Metabolite Profiling of Cereals â€“ A Promising Tool for the Assessment of Grain Quality and Safety. ACS Symposium Series, 2011, , 55-75.	0.5	0
92	GC and On-line LC-GC: Useful Tools for the Qualitative and Quantitative Analysis of Phytosterols and Their Esters. ACS Symposium Series, 2014, , 257-270.	0.5	0
93	Stability of the Metabolite Signature Resulting from the <i>MIPS1</i> Mutation in <i>Low Phytic Acid</i> Soybean (<i>Glycine max</i> L. Merr.) Mutants upon Cross-Breeding. Journal of Agricultural and Food Chemistry, 2019, 67, 5043-5052.	5.2	0
94	Configurations and Sensory Properties of the Stereoisomers of 2,6-Dimethyl-4-propyl-1,3-oxathiane and 2,4-Dimethyl-6-propyl-1,3-oxathiane. Journal of Agricultural and Food Chemistry, 2022, , .	5.2	0