Karl-Heinz Engel

List of Publications by Citations

91 papers	2,370 citations	30 h-index	45 g-index
94 ext. papers	2,706 ext. citations	5 avg, IF	5.02 L-index

#	Paper	IF	Citations
91	Comparison of two GM maize varieties with a near-isogenic non-GM variety using transcriptomics, proteomics and metabolomics. *Plant Biotechnology Journal*, **2010**, 8, 436-51	11.6	189
90	Content of gamma-oryzanol and composition of steryl ferulates in brown rice (Oryza sativa L.) of European origin. *Journal of Agricultural and Food Chemistry*, **2006**, 54, 8127-33	5.7	116
89	Metabolite profiling of germinating rice seeds. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 11612-20	5.7	83
88	Safety aspects of the production of foods and food ingredients from insects. *Molecular Nutrition and Food Research*, **2017**, 61, 1600520	5.9	82
87	Identification and characterization of wheat grain albumin/globulin allergens. *Electrophoresis*, **1997**, 18, 826-33	3.6	78
86	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	6	74
85	Metabolite profiling of maize kernels--genetic modification versus environmental influence. *Journal of Agricultural and Food Chemistry*, **2012**, 60, 3005-12	5.7	70
84	Gut metabolites and bacterial community networks during a pilot intervention study with flaxseeds in healthy adult men. *Molecular Nutrition and Food Research*, **2015**, 59, 1614-28	5.9	65
83	Distortion of genetically modified organism quantification in processed foods: influence of particle size compositions and heat-induced DNA degradation. *Journal of Agricultural and Food Chemistry*, **2005**, 53, 9971-9	5.7	60
82	Metabolite profiling of barley: Influence of the malting process. *Food Chemistry*, **2011**, 124, 948-957	8.5	58
81	Metabolite profiling of two low phytic acid (lpa) rice mutants. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 11011-9	5.7	58
80	Disruption of OsSULTR3;3 reduces phytate and phosphorus concentrations and alters the metabolite profile in rice grains. *New Phytologist*, **2016**, 211, 926-39	9.8	56
79	Metabolite profiling of maize grain: differentiation due to genetics and environment. *Metabolomics* , **2009**, 5, 459-477	4.7	54
78	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, 3022-30	5.7	53
77	Development of a real-time PCR for the detection of lupine DNA (lupinus species) in foods. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 4328-32	5.7	50
76	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, 409-18	3.2	49
75	Metabolite profiling of colored rice (Oryza sativa L.) grains. *Journal of Cereal Science*, **2012**, 55, 112-119	3.8	47

74	Phytosterol oxidation products in enriched foods: Occurrence, exposure, and biological effects. *Molecular Nutrition and Food Research*, **2015**, 59, 1339-52	5.9	43
73	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, 5330-9	5.7	43
72	Stereochemical course of the generation of 3-mercaptohexanal and 3-mercaptohexanol by beta-lyase-catalyzed cleavage of cysteine conjugates. *Journal of Agricultural and Food Chemistry*, **2004**, 52, 110-6	5.7	41
71	A metabolite profiling approach to follow the sprouting process of mung beans (Vigna radiata). *Metabolomics*, **2011**, 7, 102-117	4.7	39
70	Quantification of DNA from genetically modified organisms in composite and processed foods. *Trends in Food Science and Technology*, **2006**, 17, 490-497	15.3	38
69	Coupled liquid chromatography-gas chromatography for the rapid analysis of gamma-oryzanol in rice lipids. *Journal of Chromatography A*, **2003**, 985, 403-10	4.5	36
68	Analysis of steryl esters in cocoa butter by on-line liquid chromatography-gas chromatography. *Journal of Chromatography A*, **2001**, 918, 341-9	4.5	36
67	A methodology for automated comparative analysis of metabolite profiling data. *European Food Research and Technology*, **2003**, 216, 335-342	3.4	35
66	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	5.8	33
65	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	3.4	32
64	Online LC-GC-based analysis of minor lipids in various tree nuts and peanuts. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 11636-44	5.7	30
63	Metabolite profiling of two novel low phytic acid (lpa) soybean mutants. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 6408-16	5.7	30
62	Volatile constituents of uncooked rhubarb (Rheum rhabarbarum L.) stalks. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 6530-6	5.7	30
61	Detection of Cashew Nut in Foods by a Specific Real-time PCR Method. *Food Analytical Methods*, **2008**, 1, 136-143	3.4	28
60	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	4.1	27
59	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, 4252-61	5.7	25
58	Online LC-GC analysis of free sterols/stanols and intact steryl/stanyl esters in cereals. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 10932-9	5.7	25
57	Impact of induced drought stress on the metabolite profiles of barley grain. *Metabolomics*, **2015**, 11, 454-467	4.7	25

56	GC-based analysis of plant stanyl fatty acid esters in enriched foods. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 5204-14	5.7	24
55	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	3.4	24
54	Fate of dietary phytosteryl/-stanyl esters: analysis of individual intact esters in human feces. *European Journal of Nutrition*, **2013**, 52, 997-1013	5.2	23
53	Enantioselective analysis of secondary alcohols and their esters in purple and yellow passion fruits. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 10339-44	5.7	20
52	Capillary gas chromatographic analysis of complex phytosteryl/-stanyl ester mixtures in enriched skimmed milk-drinking yoghurts. *Food Control*, **2012**, 27, 275-283	6.2	19
51	2,3-di-O-methoxymethyl-6-O-tert-butyldimethylsilyl-gamma-cyclodextrin: a new class of cyclodextrin derivatives for gas chromatographic separation of enantiomers. *Journal of Chromatography A*, **2005**, 1063, 181-92	4.5	18
50	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	3.4	17
49	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, 4349-55	5.7	17
48	Analysis and sensory evaluation of gooseberry (Ribes uva crispa L.) volatiles. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 6240-9	5.7	15
47	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, 2062-9	5.7	15
46	Enzyme-catalyzed hydrolysis of □bryzanol. *European Food Research and Technology*, **2004**, 218, 349-354	3.4	15
45	Enantioselective analysis of methyl-branched alcohols and acids in rhubarb (Rheum rhabarbarum L.) stalks. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 7086-91	5.7	15
44	Comparison of odour thresholds and odour qualities of the enantiomers of 4-mercapto-2-alkanones and 4-acetylthio-2-alkanones. *Flavour and Fragrance Journal*, **2015**, 30, 171-178	2.5	14
43	Chirality: An Important Phenomenon Regarding Biosynthesis, Perception, and Authenticity of Flavor Compounds. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 10265-10274	5.7	14
42	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	3.4	14
41	Analysis and Sensory Evaluation of Volatile Constituents of Fresh Blackcurrant (Ribes nigrum L.) Fruits. *Journal of Agricultural and Food Chemistry*, **2017**, 65, 9475-9487	5.7	13
40	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	3.4	13
39	Detection of lupine (Lupinus spp.) DNA in processed foods using real-time PCR. *Food Control*, **2011**, 22, 215-220	6.2	13

38	Genetic and environmental influence on maize kernel proteome. *Journal of Proteome Research*, **2010**, 9, 6160-8	5.6	13
37	On-line liquid chromatography-gas chromatography: A novel approach for the analysis of phytosterol oxidation products in enriched foods. *Journal of Chromatography A*, **2015**, 1396, 98-108	4.5	12
36	Comparative assessment of DNA-based approaches for the quantification of food allergens. *Food Chemistry*, **2014**, 160, 104-11	8.5	12
35	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, 1701-14	3.2	12
34	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, 2699-708	5.7	12
33	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	3.4	11
32	2,3-di-O-methoxymethyl-6-O-tert-butyldimethylsilyl-beta-cyclodextrin, a useful stationary phase for gas chromatographic separation of enantiomers. *Journal of Chromatography A*, **2005**, 1076, 148-54	4.5	11
31	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	6.3	10
30	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, 5853-8	5.7	10
29	Analysis and Sensory Evaluation of the Stereoisomers of a Homologous Series (C5-C10) of 4-Mercapto-2-alkanols. *Journal of Agricultural and Food Chemistry*, **2017**, 65, 8913-8922	5.7	9
28	Reinvestigation of the Absolute Configurations of Chiral Mercaptoalkanones Using Vibrational Circular Dichroism and H NMR Analysis. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 8563-8571	5.7	9
27	Stability of the Metabolite Signature Resulting from the OsSULTR3;3 Mutation in Low Phytic Acid Rice (Oryza sativa L.) Seeds upon Cross-breeding. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 9366-9376	5.7	9
26	Analysis of phytostanyl fatty acid esters in enriched foods via UHPLC-APCI-MS. *Journal of Agricultural and Food Chemistry*, **2014**, 62, 4268-75	5.7	9
25	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, 236-41	4.7	9
24	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, 218-29	4.5	8
23	Impact of Crossing Parent and Environment on the Metabolite Profiles of Progenies Generated from a Low Phytic Acid Rice (Oryza sativa L.) Mutant. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 2396-2407	5.7	7
22	Sensory active piperine analogues from Macropiper excelsum and their effects on intestinal nutrient uptake in Caco-2 cells. *Phytochemistry*, **2017**, 135, 181-190	4	6
21	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	3.4	6

20	Analysis and sensory evaluation of jostaberry (Ribes x nidigrolaria Bauer) volatiles. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 9067-75	5.7	6
19	Impact of Cross-Breeding of Low Phytic Acid MIPS1 and IPK1 Soybean (Glycine max L. Merr.) Mutants on Their Contents of Inositol Phosphate Isomers. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 247-257	5.7	6
18	The Importance of Sulfur-Containing Compounds to Fruit Flavors **1999**, 265-273		6
17	Phytic Acid Contents and Metabolite Profiles of Progenies from Crossing and Rice (L.) Mutants. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 11805-11814	5.7	5
16	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	5.7	5
15	Determination of the Absolute Configurations and Sensory Properties of the Enantiomers of a Homologous Series (C6-C10) of 2-Mercapto-4-alkanones. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 1187-1196	5.7	4
14	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	3.4	4
13	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	5.7	3
12	Distributions of the Stereoisomers of Mercaptoheptanones and Mercaptoheptanols in Cooked Bell Pepper (Capsicum annuum). *Journal of Agricultural and Food Chemistry*, **2017**, 65, 10250-10257	5.7	3
11	Absolute Configurations and Sensory Properties of the Stereoisomers of a Homologous Series (C6-C10) of 2-Mercapto-4-alkanols. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 2738-2746	5.7	2
10	Occurrence of 4-methoxy-2-methyl-2-butanethiol in blackcurrant (Ribes nigrum L.) berries. *Flavour and Fragrance Journal*, **2016**, 31, 438-441	2.5	2
9	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	5.7	2
8	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, 207-17	3.2	2
7	Impact of thermooxidation of phytosteryl and phytostanyl fatty acid esters on cholesterol micellarization in vitro. *Steroids*, **2017**, 125, 81-92	2.8	1
6	Analytical and Sensory Characterization of the Stereoisomers of 3-Mercaptocycloalkanones and 3-Mercaptocycloalkanols. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 7184-7193	5.7	0
5	Stability of the Metabolite Signature Resulting from the MIPS1 Mutation in Low Phytic Acid Soybean (Glycine max L. Merr.) Mutants upon Cross-Breeding. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 5043-5052	5.7	
4	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	0.4	
3	Authentication of Foods Enriched with Plant Sterols/Stanols and Their Esters. *ACS Symposium Series* , **2011**, 177-187	0.4	

2	Metabolite Profiling of Cereals A Promising Tool for the Assessment of Grain Quality and Safety. *ACS Symposium Series*, **2011**, 55-75	0.4
1	Methods for Detection of Genetically Modified Organisms in Composite and Processed Foods **2006**, 219-247	