## Martin Kussmann

List of Publications by Year in descending order

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131	5,016	36 h-index	63
papers	citations		g-index
138 all docs	138 docs citations	138 times ranked	8005 citing authors

#	Article	IF	CITATIONS
1	Matrix-assisted Laser Desorption/Ionization Mass Spectrometry Sample Preparation Techniques Designed for Various Peptide and Protein Analytes. Journal of Mass Spectrometry, 1997, 32, 593-601.	1.6	432
2	OMICS-driven biomarker discovery in nutrition and health. Journal of Biotechnology, 2006, 124, 758-787.	3.8	268
3	Nuclear Proteomics Uncovers Diurnal Regulatory Landscapes in Mouse Liver. Cell Metabolism, 2017, 25, 102-117.	16.2	164
4	Motif affinity and mass spectrometry proteomic approach for the discovery of cellular AMPK targets: Identification of mitochondrial fission factor as a new AMPK substrate. Cellular Signalling, 2015, 27, 978-988.	3.6	143
5	"Exosomicsâ€â€"A Review of Biophysics, Biology and Biochemistry of Exosomes With a Focus on Human Breast Milk. Frontiers in Genetics, 2018, 9, 92.	2.3	143
6	Chemical crossâ€inking with thiolâ€cleavable reagents combined with differential mass spectrometric peptide mappingâ€"A novel approach to assess intermolecular protein contacts. Protein Science, 2000, 9, 1503-1518.	7.6	140
7	Qualitative and quantitative profiling of the bovine milk fat globule membrane proteome. Journal of Proteomics, 2010, 73, 1079-1088.	2.4	129
8	Mass spectrometry for nutritional peptidomics: How to analyze food bioactives and their health effects. Journal of Proteomics, 2012, 75, 3546-3559.	2.4	126
9	Serum profiling of healthy aging identifies phospho- and sphingolipid species as markers of human longevity. Aging, 2014, 6, 9-25.	3.1	126
10	Experimental and computational approaches to quantitative proteomics: Status quo and outlook. Journal of Proteomics, 2008, 71, 19-33.	2.4	108
11	Industrial-scale proteomics: From liters of plasma to chemically synthesized proteins. Proteomics, 2004, 4, 2125-2150.	2.2	103
12	The Biology/Disease-driven Human Proteome Project (B/D-HPP): Enabling Protein Research for the Life Sciences Community. Journal of Proteome Research, 2013, 12, 23-27.	3.7	100
13	OMICS-rooted studies of milk proteins, oligosaccharides and lipids. Journal of Proteomics, 2009, 73, 196-208.	2.4	88
14	Matrix-assisted Laser Desorption/Ionization Mass Spectrometric Peptide Mapping of the Neural Cell Adhesion Protein Neurolin Purified by Sodium Dodecyl Sulfate Polyacrylamide Gel Electrophoresis or Acidic Precipitation., 1997, 32, 483-493.		83
15	Guidelines for reporting the use of mass spectrometry in proteomics. Nature Biotechnology, 2008, 26, 860-861.	17.5	82
16	Proteomic Biomarker Discovery in 1000 Human Plasma Samples with Mass Spectrometry. Journal of Proteome Research, 2016, 15, 389-399.	3.7	77
17	High-throughput and simultaneous quantitative analysis of homocysteine–methionine cycle metabolites and co-factors in blood plasma and cerebrospinal fluid by isotope dilution LC–MS/MS. Analytical and Bioanalytical Chemistry, 2017, 409, 295-305.	3.7	74
18	Profiling techniques in nutrition and health research. Current Opinion in Biotechnology, 2008, 19, 83-99.	6.6	73

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19	Non-covalent binding of proteins to polyphenols correlates with their amino acid sequence. Food Chemistry, 2012, 132, 1333-1339.	8.2	73
20	Circadian and Feeding Rhythms Orchestrate the Diurnal Liver Acetylome. Cell Reports, 2017, 20, 1729-1743.	6.4	72
21	Alzheimer disease pathology and the cerebrospinal fluid proteome. Alzheimer's Research and Therapy, 2018, 10, 66.	6.2	67
22	Proteomics in Nutrition: Status Quo and Outlook for Biomarkers and Bioactives. Journal of Proteome Research, 2010, 9, 4876-4887.	3.7	65
23	The Extended Nutrigenomics – Understanding the Interplay between the Genomes of Food, Gut Microbes, and Human Host. Frontiers in Genetics, 2011, 2, 21.	2.3	61
24	Mass spectrometry in nutrition: Understanding dietary health effects at the molecular level. Mass Spectrometry Reviews, 2007, 26, 727-750.	<b>5.</b> 4	59
25	Nutrigenomics and personalized nutrition: science and concept. Personalized Medicine, 2008, 5, 447-455.	1.5	57
26	The GNB3 C825T polymorphism as a pharmacogenetic marker in the treatment of hypertension, obesity, and depression. Pharmacogenetics and Genomics, 2011, 21, 594-606.	1.5	57
27	Sample Preparation Techniques for Peptides and Proteins Analyzed by MALDI-MS., 2000, 146, 405-424.		53
28	Impact of breast-feeding and high- and low-protein formula on the metabolism and growth of infants from overweight and obese mothers. Pediatric Research, 2014, 75, 535-543.	2.3	52
29	Transcriptome and translational signaling following endurance exercise in trained skeletal muscle: impact of dietary protein. Physiological Genomics, 2011, 43, 1004-1020.	2.3	50
30	Comprehensive and Scalable Highly Automated MS-Based Proteomic Workflow for Clinical Biomarker Discovery in Human Plasma. Journal of Proteome Research, 2014, 13, 3837-3845.	3.7	49
31	Comprehensive Analysis of Vitamin E Constituents in Human Plasma by Liquid Chromatographyâ^'Mass Spectrometry. Analytical Chemistry, 2007, 79, 7087-7096.	6.5	47
32	One-carbon metabolism, cognitive impairment and CSF measures of Alzheimer pathology: homocysteine and beyond. Alzheimer's Research and Therapy, 2017, 9, 43.	6.2	46
33	Obesity shows preserved plasma proteome in large independent clinical cohorts. Scientific Reports, 2018, 8, 16981.	3.3	45
34	Nutrigenomics: where are we with genetic and epigenetic markers for disposition and susceptibility?. Nutrition Reviews, 2010, 68, S38-S47.	5.8	42
35	ANIBAL, Stable Isotope-based Quantitative Proteomics by Aniline and Benzoic Acid Labeling of Amino and Carboxylic Groups. Molecular and Cellular Proteomics, 2008, 7, 800-812.	3.8	40
36	Proteomics of human plasma: A critical comparison of analytical workflows in terms of effort, throughput and outcome. EuPA Open Proteomics, 2013, 1, 8-16.	2.5	40

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37	Proteomes of Paired Human Cerebrospinal Fluid and Plasma: Relation to Blood–Brain Barrier Permeability in Older Adults. Journal of Proteome Research, 2019, 18, 1162-1174.	3.7	40
38	Proteomics in Nutrition and Health. Combinatorial Chemistry and High Throughput Screening, 2005, 8, 679-696.	1.1	39
39	Influence of gut microbiota on mouse B2 B cell ontogeny and function. Molecular Immunology, 2011, 48, 1091-1101.	2.2	39
40	The differential plasma proteome of obese and overweight individuals undergoing a nutritional weight loss and maintenance intervention. Proteomics - Clinical Applications, 2018, 12, 1600150.	1.6	39
41	Proteomic methods in nutrition. Current Opinion in Clinical Nutrition and Metabolic Care, 2006, 9, 575-583.	2.5	38
42	Urinary metabolic insights into host-gut microbial interactions in healthy and IBD children. World Journal of Gastroenterology, 2017, 23, 3643.	3.3	38
43	Metabotyping of <i>Caenorhabditis elegans </i> and their Culture Media Revealed Unique Metabolic Phenotypes Associated to Amino Acid Deficiency and Insulin-Like Signaling. Journal of Proteome Research, 2011, 10, 990-1003.	3.7	37
44	Comparison of in Vivo and in Vitro Phosphorylation of the Exocytosis-Sensitive Protein PP63/Parafusin by Differential MALDI Mass Spectrometric Peptide Mappingâ€. Biochemistry, 1999, 38, 7780-7790.	2.5	35
45	Quantification of Anthocyanins and Flavonols in Milk-Based Food Products by Ultra Performance Liquid Chromatographya 'Tandem Mass Spectrometry. Analytical Chemistry, 2009, 81, 6347-6356.	6.5	34
46	Proteomics of Cerebrospinal Fluid: Throughput and Robustness Using a Scalable Automated Analysis Pipeline for Biomarker Discovery. Analytical Chemistry, 2015, 87, 10755-10761.	6.5	34
47	Perspective: a systems approach to diabetes research. Frontiers in Genetics, 2013, 4, 205.	2.3	33
48	Musculoskeletal system in the old age and the demand for healthy ageing biomarkers. Mechanisms of Ageing and Development, 2013, 134, 541-547.	4.6	32
49	Systems Biology Approaches for Inflammatory Bowel Disease. Inflammatory Bowel Diseases, 2014, 20, 2104-2114.	1.9	32
50	Combination of Gas-Phase Fractionation and MS <sup>3</sup> Acquisition Modes for Relative Protein Quantification with Isobaric Tagging. Journal of Proteome Research, 2012, 11, 5081-5089.	3.7	31
51	Goals in Nutrition Science 2015–2020. Frontiers in Nutrition, 2015, 2, 26.	3.7	31
52	Proteomics of the rat gut: Analysis of the myenteric plexus-longitudinal muscle preparation. Proteomics, 2005, 5, 2561-2569.	2.2	28
53	Proteomics and circadian rhythms: It's all about signaling!. Proteomics, 2015, 15, 310-317.	2.2	28
54	A Nutrigenomics View of Protein Intake. Progress in Molecular Biology and Translational Science, 2012, 108, 51-74.	1.7	27

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55	Clinical and Vitamin Response to a Shortâ€Term Multiâ€Micronutrient Intervention in Brazilian Children and Teens: From Population Data to Interindividual Responses. Molecular Nutrition and Food Research, 2018, 62, e1700613.	3.3	27
56	OMICS-Derived Targets for Inflammatory Gut Disorders: Opportunities for the Development of Nutrition Related Biomarkers. Endocrine, Metabolic and Immune Disorders - Drug Targets, 2007, 7, 271-287.	1.2	26
57	Comparative gene expression profiling between human cultured myotubes and skeletal muscle tissue. BMC Genomics, 2010, 11, 125.	2.8	26
58	Time-resolved Quantitative Proteome Analysis of In Vivo Intestinal Development. Molecular and Cellular Proteomics, 2011, 10, M110.005231.	3.8	25
59	Differentially isotope-coded N-terminal protein sulphonation: Combining protein identification and quantification. Proteomics, 2006, 6, 2338-2349.	2.2	24
60	Plasma pharmacokinetics of catechin metabolite $4\hat{a}\in^2$ -O-Me-EGC in healthy humans. European Journal of Nutrition, 2011, 50, 575-580.	3.9	24
61	Urinary Metabolic Phenotyping Reveals Differences in the Metabolic Status of Healthy and Inflammatory Bowel Disease (IBD) Children in Relation to Growth and Disease Activity. International Journal of Molecular Sciences, 2016, 17, 1310.	4.1	24
62	Rapid enrichment of bioactive milk proteins and iterative, consolidated protein identification by multidimensional protein identification technology. Proteomics, 2005, 5, 3836-3846.	2.2	23
63	Label-free quantitative proteomics of two Bifidobacterium longum strains. Journal of Proteomics, 2009, 72, 771-784.	2.4	23
64	High-throughput method for the quantitation of metabolites and co-factors from homocysteine–methionine cycle for nutritional status assessment. Bioanalysis, 2016, 8, 1937-1949.	1.5	23
65	Mitochondrial lysine deacetylation promotes energy metabolism and calcium signaling in insulinâ€secreting cells. FASEB Journal, 2019, 33, 4660-4674.	0.5	23
66	Insulin Resistance during normal child growth and development is associated with a distinct blood metabolic phenotype (Earlybird 72). Pediatric Diabetes, 2019, 20, 832-841.	2.9	22
67	Rapid identification of differentiation markers from whole epithelial cells by matrixâ€assisted laser desorption/ionisation timeâ€ofâ€flight mass spectrometry and statistical analysis. Rapid Communications in Mass Spectrometry, 2008, 22, 1099-1108.	1.5	21
68	Proteomics at the center of nutrigenomics: Comprehensive molecular understanding of dietary health effects. Nutrition, 2009, 25, 1085-1093.	2.4	21
69	The genomics of micronutrient requirements. Genes and Nutrition, 2015, 10, 466.	2.5	21
70	A Highly Automated Shotgun Proteomic Workflow: Clinical Scale and Robustness for Biomarker Discovery in Blood. Methods in Molecular Biology, 2017, 1619, 433-449.	0.9	21
71	A reverse metabolic approach to weaning: in silico identification of immune-beneficial infant gut bacteria, mining their metabolism for prebiotic feeds and sourcing these feeds in the natural product space. Microbiome, 2018, 6, 171.	11.1	21
72	Rapid identification of stress-related fingerprint from whole bacterial cells of Bifidobacterium lactis using matrix assisted laser desorption/ionization mass spectrometry. Journal of the American Society for Mass Spectrometry, 2004, 15, 1222-1227.	2.8	20

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73	Maternal deprivation affects the neuromuscular protein profile of the rat colon in response to an acute stressor later in life. Journal of Proteomics, 2008, 71, 80-88.	2.4	20
74	Nutriproteomics: technologies and applications for identification and quantification of biomarkers and ingredients. Proceedings of the Nutrition Society, 2011, 70, 351-364.	1.0	20
75	Double-balloon jejunal perfusion to compare absorption of vitamin E and vitamin E acetate in healthy volunteers under maldigestion conditions. European Journal of Clinical Nutrition, 2013, 67, 202-206.	2.9	20
76	Identification of Protein-Protein Interfaces Implicated in CD80-CD28 Costimulatory Signaling. Journal of Immunology, 2004, 172, 6803-6809.	0.8	19
77	Proteomics-based diagnosis of chronic obstructive pulmonary disease: the hunt for new markers. Expert Review of Proteomics, 2008, 5, 693-704.	3.0	19
78	Maternal Circulating Vitamin Status and Colostrum Vitamin Composition in Healthy Lactating Women—A Systematic Approach. Nutrients, 2018, 10, 687.	4.1	19
79	Quantification of flavan-3-ols and phenolic acids in milk-based food products by reversed-phase liquid chromatography–tandem mass spectrometry. Journal of Chromatography A, 2009, 1216, 8362-8370.	3.7	18
80	The Human Diabetes Proteome Project (HDPP): From network biology to targets for therapies and prevention. Translational Proteomics, 2013, 1, 3-11.	1.2	18
81	Enabling nutrient security and sustainability through systems research. Genes and Nutrition, 2015, 10, 462.	2.5	17
82	Blood plasma lipidomic signature of epicardial fat in healthy obese women. Obesity, 2015, 23, 130-137.	3.0	17
83	Coordinated activation of mitochondrial respiration and exocytosis mediated by PKC signaling in pancreatic $\hat{l}^2$ cells. FASEB Journal, 2017, 31, 1028-1045.	0.5	17
84	Metabonomics of ageing $\hat{a} \in \text{``Towards}$ understanding metabolism of a long and healthy life. Mechanisms of Ageing and Development, 2017, 165, 171-179.	4.6	17
85	Characterisation of the covalent structure of proteins from biological material by MALDI mass spectrometry ‣ possibilities and limitations. Spectroscopy, 1998, 14, 1-27.	0.8	16
86	Automated Target Preparation for Microarray-Based Gene Expression Analysis. Analytical Chemistry, 2006, 78, 6299-6305.	6.5	16
87	Combining protein identification and quantification: C-terminal isotope-coded tagging using sulfanilic acid. Rapid Communications in Mass Spectrometry, 2006, 20, 1585-1594.	1.5	16
88	Gene expression changes by high-polyphenols cocoa powder intake: a randomized crossover clinical study. European Journal of Nutrition, 2019, 58, 1887-1898.	3.9	16
89	Vitamin B2 and Folate Concentrations are Associated with ARA, EPA and DHA Fatty Acids in Red Blood Cells of Brazilian Children and Adolescents. Nutrients, 2019, 11, 2918.	4.1	16
90	Robotic automation of a UHPLC/MS-MS method profiling one-carbon metabolites, amino acids, and precursors in plasma. Analytical Biochemistry, 2020, 592, 113558.	2.4	15

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91	Mechanisms of weight maintenance under high―and lowâ€protein, lowâ€glycaemic index diets. Molecular Nutrition and Food Research, 2011, 55, 1603-1612.	3.3	14
92	Improvement of cardiometabolic markers after fish oil intervention in young Mexican adults and the role of PPARα L162V and PPARγ2 P12A. Journal of Nutritional Biochemistry, 2017, 43, 98-106.	4.2	14
93	Perspective: Advancing Understanding of Population Nutrient–Health Relations via Metabolomics and Precision Phenotypes. Advances in Nutrition, 2019, 10, 944-952.	6.4	14
94	Artificial Intelligence in Functional Food Ingredient Discovery and Characterisation: A Focus on Bioactive Plant and Food Peptides. Frontiers in Genetics, 2021, 12, 768979.	2.3	13
95	[41] Tertiary structure-selective characterization ofprotein dithiol groups by phenylarsine oxide modification and mass spectrometric peptide mapping. Methods in Enzymology, 1995, 251, 430-435.	1.0	12
96	Gas chromatography/tandem mass spectrometry analysis of alkylresorcinols in red blood cells. Rapid Communications in Mass Spectrometry, 2008, 22, 4098-4104.	1.5	12
97	An Adaptive Pipeline To Maximize Isobaric Tagging Data in Large-Scale MS-Based Proteomics. Journal of Proteome Research, 2018, 17, 2165-2173.	3.7	11
98	The Impact of Nutritional Interventions in Pregnant Women on DNA Methylation Patterns of the Offspring: A Systematic Review. Molecular Nutrition and Food Research, 2018, 62, e1800034.	3.3	11
99	How to comprehensively analyse proteins and how this influences nutritional research. Clinical Chemistry and Laboratory Medicine, 2007, 45, 288-300.	2.3	9
100	Toward Protein Biomarkers for Allergy: CD4+ T Cell Proteomics in Allergic and Nonallergic Subjects Sampled in and out of Pollen Season. Journal of Proteome Research, 2011, 10, 1558-1570.	3.7	9
101	Consequences of Exchanging Carbohydrates for Proteins in the Cholesterol Metabolism of Mice Fed a High-fat Diet. PLoS ONE, 2012, 7, e49058.	2.5	9
102	Reprint of: Musculoskeletal system in the old age and the demand for healthy ageing biomarkers. Mechanisms of Ageing and Development, 2014, 136-137, 94-100.	4.6	9
103	Translational genomics. Applied & Translational Genomics, 2014, 3, 43-47.	2.1	9
104	Vitamin E and Vitamin E Acetate Absorption from Self-assembly Systems under Pancreas Insufficiency Conditions. Chimia, 2014, 68, 129.	0.6	9
105	Human nutrition, environment, and health. Genes and Nutrition, 2015, 10, 489.	2.5	9
106	The Human Diabetes Proteome Project (HDPP): The 2014 update. Translational Proteomics, 2015, 8-9, 1-7.	1.2	7
107	A systems approach to personalised nutrition: Report on the Keystone Symposium "Human Nutrition, Environment and Health― Applied & Translational Genomics, 2016, 10, 16-18.	2.1	6
108	Nutriproteomics – Linking Proteomics Variation with Personalized Nutrition. Current Pharmacogenomics and Personalized Medicine, 2010, 8, 245-256.	0.2	5

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109	Front Cover: The differential plasma proteome of obese and overweight individuals undergoing a nutritional weight loss and maintenance intervention. Proteomics - Clinical Applications, 2018, 12, 1870001.	1.6	5
110	Plasma B Vitamers: Population Epidemiology and Parent-Child Concordance in Children and Adults. Nutrients, 2021, 13, 821.	4.1	5
111	Mass spectrometry as a rapid and powerful alternative to antibodies for detecting LPXTG wall-associated proteins of Staphylococcus aureus. International Journal of Mass Spectrometry, 2007, 268, 234-243.	1.5	4
112	Model Organisms Proteomics-From Holobionts to Human Nutrition. Proteomics, 2013, 13, 2537-2541.	2.2	4
113	Omics in Nutrition and Health Research. , 0, , 11-29.		4
114	Role of proteomics in nutrigenomics and nutrigenetics. Expert Review of Proteomics, 2009, 6, 453-456.	3.0	3
115	Proteomics at the interface of psychology, gut physiology and dysfunction: an underexploited approach that deserves expansion. Expert Review of Proteomics, 2011, 8, 605-614.	3.0	3
116	Circulating Structurally Related (-)-Epicatechin Metabolite Species and Levels after Sustained Intake of a Cocoa Powder High in Polyphenols Are Comparable to Those Achieved after a Single Dose. Nutrients, 2021, 13, 3829.	4.1	3
117	-Omics for Prevention: Gene, Protein and Metabolite Profiling to Better Understand Individual Disposition to Disease., 2006, 57, 247-255.		1
118	Differential Human Plasma Proteomics Based on AniBal Quantification and Peptide-level Off-Gel Isoelectric Focussing. Proteomics Insights, 2010, 3, PRI.S4851.	2.0	1
119	Special Issue "Genome Regulation― Journal of Proteomics, 2012, 75, 3381-3385.	2.4	1
120	Chapter 9. Nutrition and Immunity. RSC Food Analysis Monographs, 0, , 268-309.	0.2	1
121	Healthy ageing phenotypes and trajectories. , 2017, , 1243-1250.		1
122	Synthesis, Structural and Biochemical Characterization of Cytostatic Methotrexate-l <sup>3</sup> -Glutamyl-Glutathione Conjugates. Advances in Experimental Medicine and Biology, 1993, 338, 453-456.	1.6	1
123	"Nourish to Flourish― complementary feeding for a healthy infant gut microbiome—a non-randomised pilot feasibility study. Pilot and Feasibility Studies, 2022, 8, 103.	1.2	1
124	Automated Target Preparation for Gene Expression: Oligonucleotide Microarrays. Chimia, 2007, 61, 387.	0.6	0
125	Chapter 11. Conclusion. RSC Food Analysis Monographs, 0, , 329-331.	0.2	0
126	Genetics Meets Proteomics: Correlating the Portuguese Water Dog Blood Serum Proteome with Genetic Markers. Proteomics Insights, 2011, 4, PRI.S6470.	2.0	0

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127	Omics: Technologies and Translations. , 2014, , 121-152.		0
128	Front cover: The Impact of Nutritional Interventions in Pregnant Women on DNA Methylation Patterns of the Offspring: A Systematic Review. Molecular Nutrition and Food Research, 2018, 62, 1870099.	3.3	0
129	Proteomics in the Systems-Level Study of the Metabolic Syndrome. , 2014, , 185-212.		0
130	Personalized nutrition., 2024,, 540-561.		0
131	Chapter 1. Mass Spectrometry Technologies. RSC Food Analysis Monographs, 0, , 3-47.	0.2	0