

# Claudia S Maier

## List of Publications by Year in descending order

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96  
papers

3,669  
citations

147566

31  
h-index

143772

57  
g-index

100  
all docs

100  
docs citations

100  
times ranked

5006  
citing authors

#	ARTICLE	IF	CITATIONS
1	Acrolein: Sources, metabolism, and biomolecular interactions relevant to human health and disease. <i>Molecular Nutrition and Food Research</i> , 2008, 52, 7-25.	1.5	586
2	The effect of the source pressure on the abundance of ions of noncovalent protein assemblies in an electrospray ionization orthogonal time-of-flight instrument. <i>Rapid Communications in Mass Spectrometry</i> , 2001, 15, 596-601.	0.7	194
3	Isolation and identification of antioxidant peptides from enzymatically hydrolyzed rice bran protein. <i>Food Chemistry</i> , 2016, 192, 156-162.	4.2	192
4	The chemistry of gut microbial metabolism of polyphenols. <i>Phytochemistry Reviews</i> , 2016, 15, 425-444.	3.1	161
5	Centella asiatica: phytochemistry and mechanisms of neuroprotection and cognitive enhancement. <i>Phytochemistry Reviews</i> , 2018, 17, 161-194.	3.1	144
6	Supercomplexes of the mitochondrial electron transport chain decline in the aging rat heart. <i>Archives of Biochemistry and Biophysics</i> , 2009, 490, 30-35.	1.4	111
7	Caffeoylquinic acids: chemistry, biosynthesis, occurrence, analytical challenges, and bioactivity. <i>Plant Journal</i> , 2021, 107, 1299-1319.	2.8	87
8	Site-Specific Amide Hydrogen/Deuterium Exchange in <i>E. coli</i> Thioredoxins Measured by Electrospray Ionization Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2001, 123, 9860-9866.	6.6	80
9	The Wewakpeptins, Cyclic Depsipeptides from a Papua New Guinea Collection of the Marine Cyanobacterium <i>Lyngbya semiplena</i> . <i>Journal of Organic Chemistry</i> , 2005, 70, 3133-3139.	1.7	78
10	Caffeoylquinic Acids in <i>Centella asiatica</i> Protect against Amyloid- $\beta^2$ Toxicity. <i>Journal of Alzheimer's Disease</i> , 2014, 40, 359-373.	1.2	78
11	New Role for an Old Probe: $\alpha$ Affinity Labeling of Oxylipid Protein Conjugates by $\epsilon$ -Amino oxymethylcarbonylhydrazinod-biotin. <i>Analytical Chemistry</i> , 2006, 78, 6847-6854.	3.2	76
12	Epigallocatechin gallate (EGCG) potentiates the cytotoxicity of rotenone in neuroblastoma SH-SY5Y cells. <i>Brain Research</i> , 2007, 1176, 133-142.	1.1	76
13	Protein composition of the outermost exosporium-like layer of <i>Clostridium difficile</i> 630 spores. <i>Journal of Proteomics</i> , 2015, 123, 1-13.	1.2	73
14	Protein Conformations, Interactions, and H/D Exchange. <i>Methods in Enzymology</i> , 2005, 402, 312-360.	0.4	72
15	Site-Specific Protein Adducts of 4-Hydroxy-2-( <i>E</i> )-Nonenal in Human THP-1 Monocytic Cells: Protein Carbonylation Is Diminished by Ascorbic Acid. <i>Chemical Research in Toxicology</i> , 2010, 23, 37-47.	1.7	66
16	Design, Synthesis, and Application of a Hydrazide-Functionalized Isotope-Coded Affinity Tag for the Quantification of Oxylipid $\alpha$ -Protein Conjugates. <i>Analytical Chemistry</i> , 2007, 79, 3342-3354.	3.2	63
17	Exosomes from Osteosarcoma and normal osteoblast differ in proteomic cargo and immunomodulatory effects on T cells. <i>Experimental Cell Research</i> , 2017, 358, 369-376.	1.2	58
18	Site-specific proteomic analysis of lipoxidation adducts in cardiac mitochondria reveals chemical diversity of 2-alkenal adduction. <i>Journal of Proteomics</i> , 2011, 74, 2417-2429.	1.2	57

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19	Mitochondria-Centric Review of Polyphenol Bioactivity in Cancer Models. <i>Antioxidants and Redox Signaling</i> , 2018, 29, 1589-1611.	2.5	57
20	Thermal Denaturation of <i>Escherichia coli</i> Thioredoxin Studied by Hydrogen/Deuterium Exchange and Electrospray Ionization Mass Spectrometry: Monitoring a Two-State Protein Unfolding Transition. <i>Biochemistry</i> , 1999, 38, 1136-1143.	1.2	53
21	Non-estrogenic Xanthohumol Derivatives Mitigate Insulin Resistance and Cognitive Impairment in High-Fat Diet-induced Obese Mice. <i>Scientific Reports</i> , 2018, 8, 613.	1.6	53
22	Isolation and Identification of Tyrosinase-Inhibitory and Copper-Chelating Peptides from Hydrolyzed Rice-Bran-Derived Albumin. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 8346-8354.	2.4	52
23	Probing metal ion binding and conformational properties of the colicin E9 endonuclease by electrospray ionization time-of-flight mass spectrometry. <i>Protein Science</i> , 2009, 11, 1738-1752.	3.1	51
24	Reductive Metabolism of Xanthohumol and 8-Prenylnaringenin by the Intestinal Bacterium <i>Eubacterium ramulus</i> . <i>Molecular Nutrition and Food Research</i> , 2019, 63, e1800923.	1.5	42
25	Detection of carbonyl-modified proteins in interfibrillar rat mitochondria using aminooxymethylcarbonylhydrazine-D-biotin as an aldehyde/keto-reactive probe in combination with Western blot analysis and tandem mass spectrometry. <i>Electrophoresis</i> , 2008, 29, 1317-1324.	1.3	41
26	A Preliminary Proteomic Investigation of Circulating Exosomes and Discovery of Biomarkers Associated with the Progression of Osteosarcoma in a Clinical Model of Spontaneous Disease. <i>Translational Oncology</i> , 2018, 11, 1137-1146.	1.7	41
27	Antiproliferative and Cytotoxic Activity of Xanthohumol and Its Non-Estrogenic Derivatives in Colon and Hepatocellular Carcinoma Cell Lines. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1203.	1.8	41
28	Hydrogen/Deuterium Exchange Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2009, 492, 255-271.	0.4	39
29	Bioactive peptides from brown rice protein hydrolyzed by bromelain: Relationship between biofunctional activities and flavor characteristics. <i>Journal of Food Science</i> , 2020, 85, 707-717.	1.5	39
30	Structural and functional analysis of the finished genome of the recently isolated toxic <i>Anabaena</i> sp. WA102. <i>BMC Genomics</i> , 2016, 17, 457.	1.2	38
31	Protein modifications by electrophilic lipoxidation products: Adduct formation, chemical strategies and tandem mass spectrometry for their detection and identification. <i>Mass Spectrometry Reviews</i> , 2014, 33, 157-182.	2.8	36
32	Hop proanthocyanidins induce apoptosis, protein carbonylation, and cytoskeleton disorganization in human colorectal adenocarcinoma cells via reactive oxygen species. <i>Food and Chemical Toxicology</i> , 2009, 47, 827-836.	1.8	35
33	Caffeoylquinic Acids in <i>Centella asiatica</i> Reverse Cognitive Deficits in Male 5XFAD Alzheimer's Disease Model Mice. <i>Nutrients</i> , 2020, 12, 3488.	1.7	34
34	Improvements in Metabolic Syndrome by Xanthohumol Derivatives Are Linked to Altered Gut Microbiota and Bile Acid Metabolism. <i>Molecular Nutrition and Food Research</i> , 2020, 64, e1900789.	1.5	32
35	Conformational changes in chemically modified <i>Escherichia coli</i> thioredoxin monitored by H/D exchange and electrospray ionization mass spectrometry. <i>Protein Science</i> , 2002, 11, 1320-1329.	3.1	29
36	Integration of mass spectral fingerprinting analysis with precursor ion (MS1) quantification for the characterisation of botanical extracts: application to extracts of <i>Centella asiatica</i> (L.) Urban. <i>Phytochemical Analysis</i> , 2020, 31, 722-738.	1.2	28

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37	Isolation and characterisation of antioxidative peptides from bromelain-hydrolysed brown rice protein by proteomic technique. <i>Process Biochemistry</i> , 2018, 70, 179-187.	1.8	27
38	A comparative “bottom up” proteomics strategy for the site-specific identification and quantification of protein modifications by electrophilic lipids. <i>Journal of Proteomics</i> , 2012, 75, 5724-5733.	1.2	26
39	Untargeted Metabolomic Screen Reveals Changes in Human Plasma Metabolite Profiles Following Consumption of Fresh Broccoli Sprouts. <i>Molecular Nutrition and Food Research</i> , 2018, 62, e1700665.	1.5	26
40	A targeted mass spectrometry-based approach for the identification and characterization of proteins containing $\beta$ -aminoacidic and $\beta$ -glutamic semialdehyde residues. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 2905-2914.	1.9	22
41	Conformational dynamics of human FXR-LBD ligand interactions studied by hydrogen/deuterium exchange mass spectrometry: Insights into the antagonism of the hypolipidemic agent Z-guggulsterone. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014, 1844, 1684-1693.	1.1	22
42	Mass Tagging Approach for Mitochondrial Thiol Proteins. <i>Journal of Proteome Research</i> , 2005, 4, 1403-1412.	1.8	21
43	Label-Free Proteomics Assisted by Affinity Enrichment for Elucidating the Chemical Reactivity of the Liver Mitochondrial Proteome toward Adduction by the Lipid Electrophile 4-hydroxy-2-nonenal (HNE). <i>Frontiers in Chemistry</i> , 2016, 4, 2.	1.8	21
44	Electrospray Quadrupole Travelling Wave Ion Mobility Time-of-Flight Mass Spectrometry for the Detection of Plasma Metabolome Changes Caused by Xanthohumol in Obese Zucker (fa/fa) Rats. <i>Metabolites</i> , 2013, 3, 701-717.	1.3	20
45	Xanthohumol ameliorates Diet-Induced Liver Dysfunction via Farnesoid X Receptor-Dependent and Independent Signaling. <i>Frontiers in Pharmacology</i> , 2021, 12, 643857.	1.6	20
46	Intramolecular Interactions in Chemically Modified <i>Escherichia coli</i> Thioredoxin Monitored by Hydrogen/Deuterium Exchange and Electrospray Ionization Mass Spectrometry. <i>Biochemistry</i> , 2001, 40, 14413-14421.	1.2	19
47	Protein Adducts of Aldehydic Lipid Peroxidation Products. <i>Methods in Enzymology</i> , 2010, 473, 305-330.	0.4	19
48	Vitamin C Activates the Folate-Mediated One-Carbon Cycle in C2C12 Myoblasts. <i>Antioxidants</i> , 2020, 9, 217.	2.2	19
49	Conformational Properties of the A-State of Cytochrome c Studied by Hydrogen/Deuterium Exchange and Electrospray Mass Spectrometry. <i>Analytical Biochemistry</i> , 1997, 252, 127-135.	1.1	18
50	Mass spectrometry-based quantification of myocardial protein adducts with acrolein in an in vivo model of oxidative stress. <i>Molecular Nutrition and Food Research</i> , 2011, 55, 1401-1410.	1.5	18
51	Conformational modulation of the farnesoid X receptor by prenylflavonoids: Insights from hydrogen deuterium exchange mass spectrometry (HDX-MS), fluorescence titration and molecular docking studies. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2016, 1864, 1667-1677.	1.1	18
52	Anodic stripping voltammetry on a carbon-based ion-selective electrode. <i>Electrochimica Acta</i> , 2021, 390, 138855.	2.6	18
53	The omics approach to bee nutritional landscape. <i>Metabolomics</i> , 2019, 15, 127.	1.4	17
54	Targeting the Liver-Brain Axis with Hop-Derived Flavonoids Improves Lipid Metabolism and Cognitive Performance in Mice. <i>Molecular Nutrition and Food Research</i> , 2020, 64, e2000341.	1.5	17

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55	Germ-Free Swiss Webster Mice on a High-Fat Diet Develop Obesity, Hyperglycemia, and Dyslipidemia. <i>Microorganisms</i> , 2020, 8, 520.	1.6	17
56	Nonmuscle myosins II-B and Va are components of detergent-resistant membrane skeletons derived from mouse forebrain. <i>Brain Research</i> , 2007, 1143, 46-59.	1.1	16
57	Analysis of autophagic flux in response to sulforaphane in metastatic prostate cancer cells. <i>Molecular Nutrition and Food Research</i> , 2015, 59, 1954-1961.	1.5	16
58	Delineation of hypoxia-induced proteome shifts in osteosarcoma cells with different metastatic propensities. <i>Scientific Reports</i> , 2020, 10, 727.	1.6	16
59	Electrospray ionization Fourier transform ion cyclotron resonance mass spectrometric analysis of the recombinant human macrophage colony stimulating factor $\hat{I}^2$ and derivatives. <i>Journal of the American Society for Mass Spectrometry</i> , 2000, 11, 237-243.	1.2	15
60	Plant growth and metabolic changes in “Super Hot” chili fruit ( <i>Capsicum annuum</i> ) exposed to supplemental LED lights. <i>Plant Science</i> , 2021, 305, 110826.	1.7	14
61	Structural comparison of recombinant human macrophage colony stimulating factor $\hat{I}^2$ and a partially reduced derivative using hydrogen deuterium exchange and electrospray ionization mass spectrometry. <i>Protein Science</i> , 2008, 10, 2336-2345.	3.1	13
62	A multiplex biomarker approach for the diagnosis of transitional cell carcinoma from canine urine. <i>Analytical Biochemistry</i> , 2014, 455, 41-47.	1.1	13
63	Xanthohumol Requires the Intestinal Microbiota to Improve Glucose Metabolism in Diet-Induced Obese Mice. <i>Molecular Nutrition and Food Research</i> , 2021, 65, e2100389.	1.5	13
64	Centella asiatica Alters Metabolic Pathways Associated With Alzheimer’s Disease in the 5xFAD Mouse Model of A $\beta$ -Amyloid Accumulation. <i>Frontiers in Pharmacology</i> , 2021, 12, 788312.	1.6	12
65	The Impact of the hAPP695SW Transgene and Associated Amyloid- $\hat{I}^2$ Accumulation on Murine Hippocampal Biochemical Pathways. <i>Journal of Alzheimer’s Disease</i> , 2022, 85, 1601-1619.	1.2	12
66	Pharmacokinetics and Pharmacodynamics of Key Components of a Standardized Centella asiatica Product in Cognitively Impaired Older Adults: A Phase 1, Double-Blind, Randomized Clinical Trial. <i>Antioxidants</i> , 2022, 11, 215.	2.2	10
67	Tetrahydroxanthohumol, a xanthohumol derivative, attenuates high-fat diet-induced hepatic steatosis by antagonizing PPAR $\hat{I}^3$ . <i>ELife</i> , 2021, 10, .	2.8	9
68	Mechanism of Lipid Binding of Human Apolipoprotein E3 by Hydrogen/Deuterium Exchange/Mass Spectrometry and Fluorescence Polarization. <i>Protein and Peptide Letters</i> , 2016, 23, 404-413.	0.4	9
69	Phytochemical characterization of Tabernanthe iboga root bark and its effects on dysfunctional metabolism and cognitive performance in high-fat-fed C57BL/6J mice. <i>Journal of Food Bioactives: an Official Scientific Publication of the International Society of Nutraceuticals and Functional Foods (ISNFF)</i> . 2018. 3. 111-123.	2.4	9
70	Conformational studies of the robust 2-Cys peroxiredoxin <i>Salmonella typhimurium</i> AhpC by solution phase hydrogen/deuterium (H/D) exchange monitored by electrospray ionization mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2011, 302, 93-100.	0.7	8
71	Tandem Mass Spectrometric Characterization of Thiol Peptides Modified by the Chemoselective Cationic Sulfhydryl Reagent (4-Iodobutyl)Triphenylphosphonium $\hat{I}^2$ . <i>Journal of the American Society for Mass Spectrometry</i> , 2011, 22, 1771-1783.	1.2	8
72	HDAC6 activity is not required for basal autophagic flux in metastatic prostate cancer cells. <i>Experimental Biology and Medicine</i> , 2016, 241, 1177-1185.	1.1	8

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73	Total synthesis of [ <sup>13</sup> C] <sub>2</sub> , [ <sup>13</sup> C] <sub>3</sub> , and [ <sup>13</sup> C] <sub>5</sub> isotopomers of xanthohumol, the principal prenylflavonoid from hops. Journal of Labelled Compounds and Radiopharmaceuticals, 2017, 60, 639-648.	0.5	8
74	Proteome-Driven Elucidation of Adaptive Responses to Combined Vitamin E and C Deficiency in Zebrafish. Journal of Proteome Research, 2014, 13, 1647-1656.	1.8	7
75	The Ahr2-Dependent <i>wfikk1</i> Gene Influences Zebrafish Transcriptome, Proteome, and Behavior. Toxicological Sciences, 2022, 187, 325-344.	1.4	7
76	Metabolic changes and improved growth in micropropagated red raspberry "Indian summer" are tied to improved mineral nutrition. In Vitro Cellular and Developmental Biology - Plant, 2017, 53, 579-590.	0.9	6
77	Ordered opening of LDL receptor binding domain of human apolipoprotein E3 revealed by hydrogen/deuterium exchange mass spectrometry and fluorescence spectroscopy. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 1165-1173.	1.1	6
78	Effects of low and high dose intraarticular tiludronate on synovial fluid and clinical variables in healthy horses—a preliminary investigation. PeerJ, 2014, 2, e534.	0.9	6
79	Ion mobility-enhanced MSE-based label-free analysis reveals effects of low-dose radiation post contextual fear conditioning training on the mouse hippocampal proteome. Journal of Proteomics, 2016, 140, 24-36.	1.2	5
80	Plasma Lipidomic Patterns in Patients with Symptomatic Coronary Microvascular Dysfunction. Metabolites, 2021, 11, 648.	1.3	5
81	Withania somnifera and Centella asiatica Extracts Ameliorate Behavioral Deficits in an In Vivo Drosophila melanogaster Model of Oxidative Stress. Antioxidants, 2022, 11, 121.	2.2	5
82	A mass spectrometric study of the heterogeneity of the monomer subunit of Lumbricus terrestris hemoglobin. Journal of the American Society for Mass Spectrometry, 1997, 8, 352-364.	1.2	4
83	<i>Centella asiatica</i> Water Extract Shows Low Potential for Cytochrome P450-Mediated Drug Interactions. Drug Metabolism and Disposition, 2020, 48, 1053-1063.	1.7	4
84	Xanthohumol Pyrazole Derivative Improves Diet-Induced Obesity and Induces Energy Expenditure in High-Fat Diet-Fed Mice. ACS Pharmacology and Translational Science, 2021, 4, 1782-1793.	2.5	4
85	Assessment of global proteome in LNCaP cells by 2D-RP/RP LC-MS/MS following sulforaphane exposure. EuPA Open Proteomics, 2015, 9, 34-40.	2.5	2
86	Visualisation tools for dependent peptide searches to support the exploration of in vitro protein modifications. PLoS ONE, 2020, 15, e0235263.	1.1	2
87	Electrospray Ionization Traveling Wave Ion Mobility Spectrometry Mass Spectrometry for the Analysis of Plant Phenolics: An Approach for Separation of Regioisomers. , 2013, , 21-41.		2
88	Developing a Rational, Optimized Product of Centella asiatica for Examination in Clinical Trials: Real World Challenges. Frontiers in Nutrition, 2021, 8, 799137.	1.6	2
89	Biomolecular mass spectrometry related to drug research. Pharmacochimistry Library, 2002, , 81-94.	0.1	1
90	Comparative liquid chromatography/tandem mass spectrometry lipidomics analysis of macaque heart tissue flash-frozen or embedded in optimal cutting temperature polymer (OCT): Practical considerations. Rapid Communications in Mass Spectrometry, 2021, 35, e9155.	0.7	0

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91	Integrated Identification and Quantification of Cyanobacterial Toxins from Pacific Northwest Freshwaters by Liquid Chromatography and High-resolution Mass Spectrometry. Journal of the Mexican Chemical Society, 2018, 62, .	0.2	0
92	Gas Chromatography Coupled to Atmospheric Pressure Chemical Ionization High-Resolution Mass Spectrometry for Metabolite Fingerprinting of Grape (Vitis vinifera L) Berry. Methods in Molecular Biology, 2022, 2396, 85-99.	0.4	0
93	Title is missing!., 2020, 15, e0235263.		0
94	Title is missing!., 2020, 15, e0235263.		0
95	Title is missing!., 2020, 15, e0235263.		0
96	Title is missing!., 2020, 15, e0235263.		0