

# Arkusz Marczak

## List of Publications by Year in descending order

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98  
papers

2,416  
citations

186265

28  
h-index

254184

43  
g-index

102  
all docs

102  
docs citations

102  
times ranked

3925  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of Drought-Induced Proteomic and Metabolomic Changes in Barley ( <i>Hordeum vulgare</i> L.) Leaves and Roots Unravels Some Aspects of Biochemical Mechanisms Involved in Drought Tolerance. <i>Frontiers in Plant Science</i> , 2016, 7, 1108.	3.6	126
2	Structural Characterization of Flavonoid Glycoconjugates and Their Derivatives with Mass Spectrometric Techniques. <i>Molecules</i> , 2016, 21, 1494.	3.8	115
3	Sucrose-induced lupine defense against <i>Fusarium oxysporum</i> . <i>Plant Physiology and Biochemistry</i> , 2005, 43, 363-373.	5.8	114
4	Induction of apoptosis by plumbagin through reactive oxygen species-mediated inhibition of topoisomerase II. <i>Toxicology and Applied Pharmacology</i> , 2007, 223, 267-276.	2.8	83
5	A fragmentation study of an isoflavone glycoside, genistein-7-O-glucoside, using electrospray quadrupole time-of-flight mass spectrometry at high mass resolution. <i>International Journal of Mass Spectrometry</i> , 2004, 232, 171-183.	1.5	81
6	Ionizing radiation affects protein composition of exosomes secreted in vitro from head and neck squamous cell carcinoma. <i>Acta Biochimica Polonica</i> , 2015, 62, 265-272.	0.5	70
7	Structural analysis and profiling of phenolic secondary metabolites of Mexican lupine species using LC-MS techniques. <i>Phytochemistry</i> , 2013, 92, 71-86.	2.9	69
8	Limited prolonged effects of rifaximin treatment on irritable bowel syndrome-related differences in the fecal microbiome and metabolome. <i>Gut Microbes</i> , 2016, 7, 397-413.	9.8	68
9	Modification by Homocysteine Thiolactone Affects Redox Status of Cytochrome c. <i>Biochemistry</i> , 2007, 46, 6225-6231.	2.5	56
10	Mass spectrometry-based serum proteome pattern analysis in molecular diagnostics of early stage breast cancer. <i>Journal of Translational Medicine</i> , 2009, 7, 60.	4.4	55
11	Differences in leaf proteome response to cold acclimation between <i>Lolium perenne</i> plants with distinct levels of frost tolerance. <i>Journal of Plant Physiology</i> , 2011, 168, 1271-1279.	3.5	48
12	Detection of metabolites discriminating subtypes of thyroid cancer: Molecular profiling of FFPE samples using the GC/MS approach. <i>Molecular and Cellular Endocrinology</i> , 2015, 417, 149-157.	3.2	45
13	Profiling isoflavone conjugates in root extracts of lupine species with LC/ESI/MSn systems. <i>Journal of Mass Spectrometry</i> , 2005, 40, 1088-1103.	1.6	44
14	Secondary metabolites in vitro cultured plants of the genus <i>Drosera</i> . <i>Phytochemical Analysis</i> , 2005, 16, 143-149.	2.4	43
15	Cannabinoid synthases and osmoprotective metabolites accumulate in the exudates of <i>Cannabis sativa</i> L. glandular trichomes. <i>Plant Science</i> , 2019, 284, 108-116.	3.6	43
16	Ionizing radiation affects the composition of the proteome of extracellular vesicles released by head-and-neck cancer cells in vitro. <i>Journal of Radiation Research</i> , 2019, 60, 289-297.	1.6	43
17	Pea aphid infestation induces changes in flavonoids, antioxidative defence, soluble sugars and sugar transporter expression in leaves of pea seedlings. <i>Protoplasma</i> , 2016, 253, 1063-1079.	2.1	42
18	Fragmentation pathways of acylated flavonoid diglucuronides from leaves of <i>Medicago truncatula</i> . <i>Phytochemical Analysis</i> , 2010, 21, 224-233.	2.4	41

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19	Hyperhomocysteinemia and Bleomycin Hydrolase Modulate the Expression of Mouse Brain Proteins Involved in Neurodegeneration. <i>Journal of Alzheimer's Disease</i> , 2014, 40, 713-726.	2.6	38
20	The Influence of Lead on Generation of Signalling Molecules and Accumulation of Flavonoids in Pea Seedlings in Response to Pea Aphid Infestation. <i>Molecules</i> , 2017, 22, 1404.	3.8	38
21	Proteomic profile of melanoma cell-derived small extracellular vesicles in patients' plasma: a potential correlate of melanoma progression. <i>Journal of Extracellular Vesicles</i> , 2021, 10, e12063.	12.2	38
22	Harmonization of exosome isolation from culture supernatants for optimized proteomics analysis. <i>PLoS ONE</i> , 2018, 13, e0205496.	2.5	36
23	Identification of N-homocysteinylation sites in plasma proteins. <i>Amino Acids</i> , 2014, 46, 235-244.	2.7	34
24	<i>Saponaria officinalis</i> L. extract: Surface active properties and impact on environmental bacterial strains. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 150, 209-215.	5.0	33
25	Direct monitoring of albumin lysine-525 N-homocysteinylation in human serum by liquid chromatography/mass spectrometry. <i>Analytical Biochemistry</i> , 2010, 405, 132-134.	2.4	32
26	An Optimized Method of Metabolite Extraction from Formalin-Fixed Paraffin-Embedded Tissue for GC/MS Analysis. <i>PLoS ONE</i> , 2015, 10, e0136902.	2.5	32
27	Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry monitoring of anthocyanins in extracts from <i>Arabidopsis thaliana</i> leaves. <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 3949-3956.	1.5	31
28	Proteomes of exosomes from HPV(+) or HPV(-) head and neck cancer cells: differential enrichment in immunoregulatory proteins. <i>Oncolmmunology</i> , 2019, 8, e1593808.	4.6	30
29	Analysis of site-specific N-homocysteinylation of human serum albumin in vitro and in vivo using MALDI-ToF and LC-MS/MS mass spectrometry. <i>Journal of Proteomics</i> , 2011, 74, 967-974.	2.4	29
30	Effects of Endogenous Signals and <i>Fusarium oxysporum</i> on the Mechanism Regulating Genistein Synthesis and Accumulation in Yellow Lupine and Their Impact on Plant Cell Cytoskeleton. <i>Molecules</i> , 2014, 19, 13392-13421.	3.8	28
31	Identification of Altered Developmental Pathways in Human Juvenile HD iPSC With 71Q and 109Q Using Transcriptome Profiling. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 528.	3.7	28
32	Identification of drought responsive proteins and related proteomic QTLs in barley. <i>Journal of Experimental Botany</i> , 2019, 70, 2823-2837.	4.8	28
33	Serum Proteome Signature of Radiation Response: Upregulation of Inflammation-Related Factors and Downregulation of Apolipoproteins and Coagulation Factors in Cancer Patients Treated With Radiation Therapy – A Pilot Study. <i>International Journal of Radiation Oncology Biology Physics</i> , 2015, 92, 1108-1115.	0.8	25
34	Deeper insight into chronic kidney disease-related atherosclerosis: comparative proteomic studies of blood plasma using 2DE and mass spectrometry. <i>Journal of Translational Medicine</i> , 2015, 13, 20.	4.4	25
35	The Dynamics of the Defense Strategy of Pea Induced by Exogenous Nitric Oxide in Response to Aphid Infestation. <i>International Journal of Molecular Sciences</i> , 2017, 18, 329.	4.1	25
36	Panel of serum metabolites discriminates cancer patients and healthy participants of lung cancer screening - a pilot study. <i>Acta Biochimica Polonica</i> , 2017, 64, 513-518.	0.5	25

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37	Cross-talk interactions of exogenous nitric oxide and sucrose modulates phenylpropanoid metabolism in yellow lupine embryo axes infected with <i>Fusarium oxysporum</i> . <i>Plant Science</i> , 2013, 211, 102-121.	3.6	24
38	Water Deficit Affects Primary Metabolism Differently in Two <i>Lolium multiflorum</i> / <i>Festuca arundinacea</i> Introgression Forms with a Distinct Capacity for Photosynthesis and Membrane Regeneration. <i>Frontiers in Plant Science</i> , 2016, 7, 1063.	3.6	24
39	Label-Free Quantitative Proteomics Reveals Differences in Molecular Mechanism of Atherosclerosis Related and Non-Related to Chronic Kidney Disease. <i>International Journal of Molecular Sciences</i> , 2016, 17, 631.	4.1	22
40	Isolation of Exosomes for the Purpose of Protein Cargo Analysis with the Use of Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2017, 1654, 291-307.	0.9	22
41	Effect of drought stress on metabolite contents in barley recombinant inbred line population revealed by untargeted GC-MS profiling. <i>Acta Physiologiae Plantarum</i> , 2017, 39, 1.	2.1	22
42	Metabolic Profiles of Whole Serum and Serum-Derived Exosomes Are Different in Head and Neck Cancer Patients Treated by Radiotherapy. <i>Journal of Personalized Medicine</i> , 2020, 10, 229.	2.5	22
43	iTRAQ-based proteomic analysis of plasma reveals abnormalities in lipid metabolism proteins in chronic kidney disease-related atherosclerosis. <i>Scientific Reports</i> , 2016, 6, 32511.	3.3	21
44	Phenotyping the genus <i>Hypericum</i> by secondary metabolite profiling: emodin vs. skyrin, two possible key intermediates in hypericin biosynthesis. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 7689-7699.	3.7	21
45	Role of sucrose in the development of <i>Fusarium</i> wilt in lupine embryo axes. <i>Physiological and Molecular Plant Pathology</i> , 2007, 70, 25-37.	2.5	20
46	Mass spectrometry-based analysis of therapy-related changes in serum proteome patterns of patients with early-stage breast cancer. <i>Journal of Translational Medicine</i> , 2010, 8, 66.	4.4	20
47	Proteome profiles of different types of thyroid cancers. <i>Molecular and Cellular Endocrinology</i> , 2018, 472, 68-79.	3.2	20
48	Application of LC/MS systems to structural characterization of flavonoid glycoconjugates. <i>Phytochemistry Letters</i> , 2015, 11, 358-367.	1.2	18
49	Optimization of Plasma Sample Pretreatment for Quantitative Analysis Using iTRAQ Labeling and LC-MALDI-TOF/TOF. <i>PLoS ONE</i> , 2014, 9, e101694.	2.5	17
50	Radiation-related Changes in Serum Proteome Profiles Detected by Mass Spectrometry in Blood of Patients Treated with Radiotherapy Due to Larynx Cancer. <i>Journal of Radiation Research</i> , 2011, 52, 575-581.	1.6	16
51	The mobilization of defence mechanisms in the early stages of pea seed germination against <i>Ascochyta pisi</i> . <i>Protoplasma</i> , 2013, 250, 63-75.	2.1	16
52	Inactivation of the Paraoxonase 1 Gene Affects the Expression of Mouse Brain Proteins Involved in Neurodegeneration. <i>Journal of Alzheimer's Disease</i> , 2014, 42, 247-260.	2.6	16
53	Bioremoval of estrogens by laccase immobilized onto polyacrylonitrile/polyethersulfone material: Effect of inhibitors and mediators, process characterization and catalytic pathways determination. <i>Journal of Hazardous Materials</i> , 2022, 432, 128688.	12.4	16
54	Changes in carbohydrate and isoflavonoid metabolism in yellow lupine in response to infection by <i>Fusarium oxysporum</i> during the stages of seed germination and early seedling growth. <i>Physiological and Molecular Plant Pathology</i> , 2010, 75, 46-55.	2.5	15

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55	Altered Levels of Proteins and Phosphoproteins, in the Absence of Early Causative Transcriptional Changes, Shape the Molecular Pathogenesis in the Brain of Young Presymptomatic Ki91 SCA3/MJD Mouse. <i>Molecular Neurobiology</i> , 2019, 56, 8168-8202.	4.0	15
56	Role of the proteome in providing phenotypic stability in control and ectomycorrhizal poplar plants exposed to chronic mild Pb stress. <i>Environmental Pollution</i> , 2020, 264, 114585.	7.5	15
57	The Use of Mass Spectrometric Techniques to Differentiate Isobaric and Isomeric Flavonoid Conjugates from <i>Axyris amaranthoides</i> . <i>Molecules</i> , 2016, 21, 1229.	3.8	14
58	Physical activity reduces anxiety and regulates brain fatty acid synthesis. <i>Molecular Brain</i> , 2020, 13, 62.	2.6	14
59	Molecular Composition of Serum Exosomes Could Discriminate Rectal Cancer Patients with Different Responses to Neoadjuvant Radiotherapy. <i>Cancers</i> , 2022, 14, 993.	3.7	14
60	Bleomycin hydrolase and hyperhomocysteinemia modulate the expression of mouse proteins involved in liver homeostasis. <i>Amino Acids</i> , 2014, 46, 1471-1480.	2.7	13
61	Upregulation of hepatic autophagy under nutritional ketosis. <i>Journal of Nutritional Biochemistry</i> , 2021, 93, 108620.	4.2	13
62	Comparison of peptide cancer signatures identified by mass spectrometry in serum of patients with head and neck, lung and colorectal cancers: Association with tumor progression. <i>International Journal of Oncology</i> , 2012, 40, 148-56.	3.3	12
63	Ionizing radiation induces changes in profile of metabolites in serum of cancer patients. <i>Acta Biochimica Polonica</i> , 2017, 64, 189-193.	0.5	12
64	Regulation of the leaf proteome by inoculation of <i>Populus Æ— canescens</i> with two <i>Paxillus involutus</i> isolates differing in root colonization rates. <i>Mycorrhiza</i> , 2019, 29, 503-517.	2.8	12
65	A Comparison of Selected Biochemical and Physical Characteristics and Yielding of Fruits in Apple Cultivars ( <i>Malus domestica</i> Borkh.). <i>Agronomy</i> , 2020, 10, 458.	3.0	12
66	Significance of intratissue estrogen concentration coupled with estrogen receptors levels in colorectal cancer prognosis. <i>Oncotarget</i> , 2017, 8, 115546-115560.	1.8	12
67	Serum Proteome Alterations in Human Cystathionine Î²-Synthase Deficiency and Ischemic Stroke Subtypes. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3096.	4.1	10
68	Genetic Attenuation of Paraoxonase 1 Activity Induces Proatherogenic Changes in Plasma Proteomes of Mice and Humans. <i>Antioxidants</i> , 2020, 9, 1198.	5.1	10
69	Association between plasma proteome profiles analysed by mass spectrometry, a lymphocyte-based DNA-break repair assay and radiotherapy-induced acute mucosal reaction in head and neck cancer patients. <i>International Journal of Radiation Biology</i> , 2011, 87, 711-719.	1.8	9
70	Mass Spectrometry-Based Lipidomics Reveals Differential Changes in the Accumulated Lipid Classes in Chronic Kidney Disease. <i>Metabolites</i> , 2021, 11, 275.	2.9	9
71	Gaussian mixture decomposition in the analysis of MALDI-TOF spectra. <i>Expert Systems</i> , 2012, 29, 216-231.	4.5	8
72	Cystathionine Î²-synthase deficiency: different changes in proteomes of thrombosis-resistant <i>Cbs</i> <sup>Δ</sup> mice and thrombosis-prone <i>CBS</i> <sup>Δ</sup> humans. <i>Scientific Reports</i> , 2020, 10, 10726.	3.3	8

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73	Metabolome adjustments in ectomycorrhizal <i>Populus ã— canescens</i> associated with strong promotion of plant growth by <i>Paxillus involutus</i> despite a very low root colonization rate. <i>Tree Physiology</i> , 2020, 40, 1726-1743.	3.1	8
74	Different Research Approaches in Unraveling the Venom Proteome of <i>Naja ashei</i> . <i>Biomolecules</i> , 2020, 10, 1282.	4.0	8
75	Broad Influence of Mutant Ataxin-3 on the Proteome of the Adult Brain, Young Neurons, and Axons Reveals Central Molecular Processes and Biomarkers in SCA3/MJD Using Knock-In Mouse Model. <i>Frontiers in Molecular Neuroscience</i> , 2021, 14, 658339.	2.9	8
76	Proteomic and Structural Manifestations of Cardiomyopathy in Rat Models of Obesity and Weight Loss. <i>Frontiers in Endocrinology</i> , 2021, 12, 568197.	3.5	7
77	Pb Stress and Ectomycorrhizas: Strong Protective Proteomic Responses in Poplar Roots Inoculated with <i>Paxillus involutus</i> Isolate and Characterized by Low Root Colonization Intensity. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4300.	4.1	7
78	Biological activity of <i>Aesculus hippocastanum</i> flower extracts on vascular endothelial cells cultured in vitro. <i>Phytochemistry Letters</i> , 2019, 30, 367-375.	1.2	6
79	Proteomic Profiling of Leukocytes Reveals Dysregulation of Adhesion and Integrin Proteins in Chronic Kidney Disease-Related Atherosclerosis. <i>Journal of Proteome Research</i> , 2021, 20, 3053-3067.	3.7	5
80	The m6A RNA Modification Quantity and mRNA Expression Level of RNA Methylation-Related Genes in Head and Neck Squamous Cell Carcinoma Cell Lines and Patients. <i>Biomolecules</i> , 2021, 11, 908.	4.0	5
81	Photochemical activity of glenvastatin, a HMG-CoA reductase inhibitor. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011, 224, 1-7.	3.9	4
82	Characterization of equine CSN1S2 variants considering genetics, transcriptomics, and proteomics. <i>Journal of Dairy Science</i> , 2016, 99, 1277-1285.	3.4	4
83	Sex affects N-homocysteinylation at lysine residue 212 of albumin in mice. <i>Scientific Reports</i> , 2019, 9, 2669.	3.3	4
84	Integrated proteomic and metabolomic analyses revealed molecular adjustments in <i>Populus ã— canescens</i> colonized with the ectomycorrhizal fungus <i>Paxillus involutus</i> , which limited plant host growth. <i>Environmental Microbiology</i> , 2020, 22, 3754-3771.	3.8	4
85	Obesity-associated deterioration of the hippocampus is partially restored after weight loss. <i>Brain, Behavior, and Immunity</i> , 2021, 96, 212-226.	4.1	4
86	The complexity of oxidative cross-linking of phenylpropanoids – evidence from an in vitro model system. <i>Functional Plant Biology</i> , 2002, 29, 853.	2.1	4
87	Low BACH2 Expression Predicts Adverse Outcome in Chronic Lymphocytic Leukaemia. <i>Cancers</i> , 2022, 14, 23.	3.7	4
88	Biodegradation of ritalinic acid by <i>Nocardioides</i> sp. – Novel imidazole-based alkaloid metabolite as a potential marker in sewage epidemiology. <i>Journal of Hazardous Materials</i> , 2020, 385, 121554.	12.4	3
89	Cerebrocortical proteome profile of female rats subjected to the western diet and chronic social stress. <i>Nutritional Neuroscience</i> , 2020, , 1-14.	3.1	3
90	Influence of plant secondary metabolites on in vitro oxidation of methyl ferulate with cell wall peroxidases from lupine apoplast. <i>Journal of Plant Physiology</i> , 2008, 165, 239-250.	3.5	2

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91	Optimizing of MALDI-ToF-based low-molecular-weight serum proteome pattern analysis in detection of breast cancer patients; the effect of albumin removal on classification performance.. Neoplasma, 2010, 57, 537-544.	1.6	2
92	A highly effective approach to cofactor regeneration and subsequent membrane separation of bioconversion products: Kinetic parameters and effect of process conditions. Bioresource Technology Reports, 2020, 9, 100365.	2.7	2
93	Rhizosphere symbionts improve water stress tolerance in Moldavian balm through modulation of osmolytes. Rhizosphere, 2021, 19, 100367.	3.0	2
94	Partial-Body Irradiation in Patients with Prostate Cancer Treated with IMRT Has Little Effect on the Composition of Serum Proteome. Proteomes, 2015, 3, 117-131.	3.5	1
95	Decreased hippocampal efficiency in obese rats is expressed by impaired cognition, neurogenesis and proteomic changes. Proceedings of the Nutrition Society, 2020, 79, .	1.0	1
96	Effects of Simultaneous Exposure to a Western Diet and Wheel-Running Training on Brain Energy Metabolism in Female Rats. Nutrients, 2021, 13, 4242.	4.1	1
97	Global Proteome Profiling of the Temporal Cortex of Female Rats Exposed to Chronic Stress and the Western Diet. Nutrients, 2022, 14, 1934.	4.1	1
98	Alterations in Blood Plasma Metabolome of Patients with Lesniowski-Crohn's Disease Shortly after Surgical Treatment—Pilot Study. Metabolites, 2022, 12, 529.	2.9	0