Mariusz Kowalczyk

List of Publications by Year
in descending order

75 papers	5,571 citations	172457 29 h-index	79698 73 g-index
77 all docs	77 docs citations	77 times ranked	6174 citing authors

#	Article	IF	Citations
1	An Auxin Gradient and Maximum in theArabidopsisRoot Apex Shown by High-Resolution Cell-Specific Analysis of IAA Distribution and Synthesis. Plant Cell, 2009, 21, 1659-1668.	6.6	439
2	Auxin Controls Arabidopsis Adventitious Root Initiation by Regulating Jasmonic Acid Homeostasis. Plant Cell, 2012, 24, 2515-2527.	6.6	427
3	Auxin and Light Control of Adventitious Rooting in Arabidopsis Require ARGONAUTE1. Plant Cell, 2005, 17, 1343-1359.	6.6	339
4	A Strategy for Identifying Differences in Large Series of Metabolomic Samples Analyzed by GC/MS. Analytical Chemistry, 2004, 76, 1738-1745.	6.5	313
5	The SUR2 gene of Arabidopsis thaliana encodes the cytochrome P450 CYP83B1, a modulator of auxin homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 14819-14824.	7.1	284
6	Tissueâ€specific profiling of the Arabidopsis thaliana auxin metabolome. Plant Journal, 2012, 72, 523-536.	5.7	277
7	Identification and Biochemical Characterization of anArabidopsis Indole-3-acetic Acid Glucosyltransferase. Journal of Biological Chemistry, 2001, 276, 4350-4356.	3.4	242
8	bus, a Bushy Arabidopsis CYP79F1 Knockout Mutant with Abolished Synthesis of Short-Chain Aliphatic Glucosinolates. Plant Cell, 2001, 13, 351-367.	6.6	235
9	A Family of Auxin-Conjugate Hydrolases That Contributes to Free Indole-3-Acetic Acid Levels during Arabidopsis Germination. Plant Physiology, 2004, 135, 978-988.	4.8	220
10	Metabolism of Indole-3-Acetic Acid in Arabidopsis1. Plant Physiology, 1998, 118, 285-296.	4.8	204
11	Biosynthesis, conjugation, catabolism and homeostasis of indole-3-acetic acid in Arabidopsis thaliana. Plant Molecular Biology, 2002, 50, 309-332.	3.9	191
12	Quantitative Analysis of Indole-3-Acetic Acid Metabolites in Arabidopsis. Plant Physiology, 2001, 127, 1845-1853.	4.8	184
13	STY1regulates auxin homeostasis and affects apical-basal patterning of the Arabidopsis gynoecium. Plant Journal, 2006, 47, 112-123.	5.7	172
14	AXR4 Is Required for Localization of the Auxin Influx Facilitator AUX1. Science, 2006, 312, 1218-1220.	12.6	165
15	Title is missing!. Plant Molecular Biology, 2002, 49, 249-272.	3.9	145
16	Quantitative Analysis of Indole-3-Acetic Acid Metabolites in Arabidopsis. Plant Physiology, 2001, 127, 1845-1853.	4.8	138
17	Regulation of Auxin Homeostasis and Gradients in Arabidopsis Roots through the Formation of the Indole-3-Acetic Acid Catabolite 2-Oxindole-3-Acetic Acid. Plant Cell, 2013, 25, 3858-3870.	6.6	131
18	Over-expression of anArabidopsisgene encoding a glucosyltransferase of indole-3-acetic acid: phenotypic characterisation of transgenic lines. Plant Journal, 2002, 32, 573-583.	5.7	130

#	Article	IF	Citations
19	Tentative Characterization of Polyphenolic Compounds in the Male Flowers of Phoenix dactylifera by Liquid Chromatography Coupled with Mass Spectrometry and DFT. International Journal of Molecular Sciences, 2017, 18, 512.	4.1	116
20	The auxin-signaling pathway is required for the lateral root response of Arabidopsis to the rhizobacterium Phyllobacterium brassicacearum. Planta, 2010, 232, 1455-1470.	3.2	110
21	Auxin Metabolism and Function in the Multicellular Brown AlgaEctocarpus siliculosusÂ Â. Plant Physiology, 2010, 153, 128-144.	4.8	103
22	Homologues of the Arabidopsis thaliana SHI/STY/LRP1 genes control auxin biosynthesis and affect growth and development in the moss Physcomitrella patens. Development (Cambridge), 2010, 137, 1275-1284.	2.5	97
23	Down-regulation of a single auxin efflux transport protein in tomato induces precocious fruit development. Journal of Experimental Botany, 2012, 63, 4901-4917.	4.8	82
24	Quantitative analysis of indole-3-acetic acid metabolites in Arabidopsis. Plant Physiology, 2001, 127, 1845-53.	4.8	81
25	Biosynthesis, conjugation, catabolism and homeostasis of indole-3-acetic acid in Arabidopsis thaliana. Plant Molecular Biology, 2002, 49, 249-72.	3.9	70
26	The Effect of Nutritional Factors and Plant Growth Regulators on Micropropagation and Production of Phenolic Acids and Saponins from Plantlets and Adventitious Root Cultures of Eryngium maritimum L.. Journal of Plant Growth Regulation, 2014, 33, 809-819.	5.1	46
27	Novel Phenolic Constituents of Pulmonaria officinalis L. LC-MS/MS Comparison of Spring and Autumn Metabolite Profiles. Molecules, 2018, 23, 2277.	3.8	39
28	Identification of new adventitious rooting mutants amongst suppressors of the Arabidopsis thaliana superroot2 mutation. Journal of Experimental Botany, 2014, 65, 1605-1618.	4.8	38
29	New pharmacological properties of Medicago sativa and Saponaria officinalis saponin-rich fractions addressed to Candida albicans. Journal of Medical Microbiology, 2014, 63, 1076-1086.	1.8	37
30	Qualitative and Quantitative Analysis of Steroidal Saponins in Crude Extract and Bark Powder ofYucca schidigeraRoezl.. Journal of Agricultural and Food Chemistry, 2011, 59, 8058-8064.	5.2	23
31	New Bufadienolides Isolated from the Roots of Kalanchoe daigremontiana (Crassulaceae). Molecules, 2016, 21, 243.	3.8	23
32	Identification and VIGS-based characterization of Bx1 ortholog in rye (Secale cereale L.). PLoS ONE, 2017, 12, e0171506.	2.5	23
33	Three new triterpene saponins from roots of Eryngium planum. Natural Product Research, 2014, 28, 653-660.	1.8	22
34	Structural and quantitative changes of saponins in fresh alfalfa compared to alfalfa silage. Journal of the Science of Food and Agriculture, 2019, 99, 2243-2250.	3.5	22
35	LCâ€“ESI-MS/MS profile of phenolic and glucosinolate compounds in samh flour (Mesembryanthemum) Tj ETQq1 1 0.784314 rgBT /O plasma. Food Research International, 2016, 85, 282-290.	6.2	21
36	Effects of herbal nutraceuticals and/or zinc against Haemonchus contortus in lambs experimentally infected. BMC Veterinary Research, 2018, 14, 78.	1.9	21

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37	Yunnaneic Acid B, a Component of Pulmonaria officinalis Extract, Prevents Peroxynitrite-Induced Oxidative Stress in Vitro. Journal of Agricultural and Food Chemistry, 2017, 65, 3827-3834.	5.2	20
38	Micropropagation of Eryngium campestre L. via Shoot Culture Provides Valuable Uniform Plant Material with Enhanced Content of Phenolic Acids and Antimicrobial Activity. Acta Biologica Cracoviensia Series Botanica, 2016, 58, 43-56.	0.5	18
39	Triterpenoid Components from Oak Heartwood (Quercus robur) and Their Potential Health Benefits. Journal of Agricultural and Food Chemistry, 2017, 65, 4611-4623.	5.2	17
40	ScBx gene based association analysis of hydroxamate content in rye (Secale cereale L.). Journal of Applied Genetics, 2017, 58, 1-9.	1.9	16
41	Biological activities of leaf extracts from selected Kalanchoe species and their relationship with bufadienolides content. Pharmaceutical Biology, 2020, 58, 732-740.	2.9	16
42	Saponin Inventory from Argania spinosa Kernel Cakes by Liquid Chromatography and Mass Spectrometry. Phytochemical Analysis, 2013, 24, 616-622.	2.4	15
43	Cytotoxic triterpenoids isolated from sweet chestnut heartwood (Castanea sativa) and their health benefits implication. Food and Chemical Toxicology, 2017, 109, 863-870.	3.6	14
44	Bufadienolides from Kalanchoe daigremontiana modulate the enzymatic activity of plasmin - In vitro and in silico analyses. International Journal of Biological Macromolecules, 2018, 120, 1591-1600.	7.5	14
45	Biosynthesis, conjugation, catabolism and homeostasis of indole-3-acetic acid in Arabidopsis thaliana. , 2002, , 249-272.		13
46	Isolation and Structural Determination of Triterpenoid Glycosides from the Aerial Parts of Alsike Clover (Trifolium hybridum L.). Journal of Agricultural and Food Chemistry, 2013, 61, 2631-2637.	5.2	13
47	QTL mapping for benzoxazinoid content, preharvest sprouting, Î±-amylase activity, and leaf rust resistance in rye (Secale cereale L.). PLoS ONE, 2017, 12, e0189912.	2.5	13
48	The effect of total and individual alfalfa saponins on rumen methane production. Journal of the Science of Food and Agriculture, 2020, 100, 1922-1930.	3.5	13
49	The Effect of Selected Herbal Extracts on Lactic Acid Bacteria Activity. Applied Sciences (Switzerland), 2021, 11, 3898.	2.5	13
50	Changes in benzoxazinoid contents and the expression of the associated genes in rye (Secale cereale) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.5	12
51	Phytochemical Screening, Phenolic Compounds and Antioxidant Activity of Biomass from Lychnis flos-cuculi L. In Vitro Cultures and Intact Plants. Plants, 2021, 10, 206.	3.5	12
52	Biotinylated Indoles as Probes for Indole-Binding Proteins. Bioconjugate Chemistry, 2001, 12, 152-162.	3.6	11
53	Triterpenoid saponins from the aerial parts of Trifolium argutum Sol. and their phytotoxic evaluation. Phytochemistry Letters, 2015, 13, 165-170.	1.2	11
54	Triterpene Saponins from the Aerial Parts of Trifolium medium L. var. sarosiense. Journal of Agricultural and Food Chemistry, 2013, 61, 9789-9796.	5.2	10

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55	Enhanced accumulation of triterpenoid saponins in in vitro plantlets and dedifferentiated cultures of Eryngium planum L.: a medicinal plant. Horticulture Environment and Biotechnology, 2019, 60, 147-154.	2.1	10
56	Cocultivating rye with berseem clover affects benzoxazinoid production and expression of related genes. Crop Science, 2020, 60, 3228-3246.	1.8	10
57	Benzoxazinoids Biosynthesis in Rye (Secale cereale L.) Is Affected by Low Temperature. Agronomy, 2020, 10, 1260.	3.0	10
58	New triterpenoid saponins from the roots of Saponaria officinalis. Natural Product Communications, 2013, 8, 1687-90.	0.5	10
59	An In Vitro Anticancer, Antioxidant, and Phytochemical Study on Water Extract of Kalanchoe daigremontiana Raym.-Hamet and H. Perrier. Molecules, 2022, 27, 2280.	3.8	9
60	Highly Polar Triterpenoid Saponins from the Roots ofSaponaria officinalisL.. Helvetica Chimica Acta, 2016, 99, 347-354.	1.6	8
61	Ultrahigh-Performance Liquid Chromatographyâ€“High-Resolution Quadrupole Time-of-Flight Mass Spectrometry Based Metabolomics Reveals Key Differences between Brachiaria decumbens and B. brizantha, Two Similar Pastures with Different Toxicities. Journal of Agricultural and Food Chemistry, 2016, 64, 4686-4694.	5.2	6
62	Genes ScBx1 and Sclglâ€”Competitors or Cooperators?. Genes, 2020, 11, 223.	2.4	6
63	Effect of Saponaria Officinalis L. Or Panax Ginseng C.A Meyer Triterpenoid Saponins on Ruminal Fermentation in Vitro / WpÅ‚yw Saponin Triterpenowych Saponaria Officinalis L. Lub Panax Ginseng C.A. Meyer Na Przemiany ZachodzÄ…ce W Å»waczu W Warunkach In Vitro. Annals of Animal Science, 2013, 13, 815-827.	1.6	6
64	Fast characterization of C- glycoside acetophenones in Medemia argun male racemes (an Ancient) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Molecular Structure, 2017, 1145, 230-239.	3.6	5
65	Determination of benzoxazinoids in Spring and Winter varieties of wheat using ultra-performance liquid chromatography coupled with mass spectrometry. Acta Chromatographica, 2019, 31, 179-182.	1.3	5
66	The Pros and Cons of Cystic Fibrosis (CF) Patient Use of Herbal Supplements Containing Pulmonaria officinalis L. Extract: the Evidence from an In Vitro Study on Staphylococcus aureus CF Clinical Isolates. Molecules, 2019, 24, 1151.	3.8	5
67	Multifunctional compounds in the extract from mature seeds of Vicia faba var. minor: Phytochemical profiling, antioxidant activity and cellular safety in human selected blood cells in in vitro trials. Biomedicine and Pharmacotherapy, 2021, 139, 111718.	5.6	5
68	Pulmonaria obscura and Pulmonaria officinalis Extracts as Mitigators of Peroxynitrite-Induced Oxidative Stress and Cyclooxygenase-2 Inhibitorsâ€“In Vitro and In Silico Studies. Molecules, 2021, 26, 631.	3.8	5
69	Development, validation, and application of capillary zone electrophoresis method for determination of pyrimidine glucosides in seeds of Vicia faba L. var. minor. Phytochemical Analysis, 2021, 32, 375-381.	2.4	2
70	Determination of Saponins in Leaves of Four Swiss Chard (<i>Beta vulgaris</i> L.) Cultivars by UHPLC-CAD/QTOF-MS/MS. Polish Journal of Food and Nutrition Sciences, 2021, , 147-159.	1.7	2
71	Fingerprinting of two an acylated polyoxypregnane glycosides from Caralluma quadrangula (Forssk.) N.E.Br. using UPLC-ESI-Q-TOF and computational study. Natural Product Research, 2021, , 1-5.	1.8	2
72	Electrospray ionization mass spectrometry characterization of ubiquitous minor lipids and oligosaccharides in milk of the camel (Camelus dromedarius) and their inhibition of oxidative stress in human plasma. Journal of Dairy Science, 2020, 103, 72-86.	3.4	1

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73	The Roots of Rye (Secale cereale L.) Are Capable of Synthesizing Benzoxazinoids. International Journal of Molecular Sciences, 2021, 22, 4656.	4.1	1
74	Fingerprinting profile of flavonol glycosides from Bassia eriophora using negative electrospray ionization, computational studies and their antioxidant activities. Journal of Molecular Structure, 2021, 1241, 130689.	3.6	1
75	Comprehensive polyoxypregnane glycosides report in Caralluma quadrangula using UPLCâ€“ESIâ€“Qâ€“TOF and their antioxidant effects in human plasma. Biomedicine and Pharmacotherapy, 2022, 150, 112954.	5.6	1