Dietrich Ober

List of Publications by Year
in descending order

43	1,731	22	40
papers	citations	h-index	g-index
		304743	289244

44	44	44	1541
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Insights into polyamine metabolism: homospermidine is double-oxidized in two discrete steps by a single copper-containing amine oxidase in pyrrolizidine alkaloid biosynthesis. Plant Cell, 2022, 34, 2364-2382.	6.6	11
2	Development of an activity assay for characterizing deoxyhypusine synthase and its diverse reaction products. FEBS Open Bio, 2021, 11, 10-25.	2.3	5
3	CRISPR/Cas9-Mediated Genome Editing in Comfrey (Symphytum officinale) Hairy Roots Results in the Complete Eradication of Pyrrolizidine Alkaloids. Molecules, 2021, 26, 1498.	3.8	19
4	Specific Distribution of Pyrrolizidine Alkaloids in Floral Parts of Comfrey (Symphytum officinale) and its Implications for Flower Ecology. Journal of Chemical Ecology, 2019, 45, 128-135.	1.8	23
5	Reduction of Pyrrolizidine Alkaloid Levels in Comfrey (Symphytum officinale) Hairy Roots by RNAi Silencing of Homospermidine Synthase. Planta Medica, 2019, 85, 1177-1186.	1.3	12
6	Crystal structure of pyrrolizidine alkaloid<i>N</i>-oxygenase from the grasshopper<i>Zonocerus variegatus</i>. Acta Crystallographica Section D: Structural Biology, 2018, 74, 422-432.	2.3	12
7	Radioactive Tracer Feeding Experiments and Product Analysis to Determine the Biosynthetic Capability of Comfrey (Symphytum officinale) Leaves for Pyrrolizidine Alkaloids. Bio-protocol, 2018, 8, e2719.	0.4	2
8	Identification of a Second Site of Pyrrolizidine Alkaloid Biosynthesis in Comfrey to Boost Plant Defense in Floral Stage[,]. Plant Physiology, 2017, 174, 47-55.	4.8	21
9	Variability of Pyrrolizidine Alkaloid Occurrence in Species of the Grass Subfamily Pooideae (Poaceae). Frontiers in Plant Science, 2017, 8, 2046.	3.6	9
10	Comprehensive Structural Characterization of the Bacterial Homospermidine Synthaseâ€“an Essential Enzyme of the Polyamine Metabolism. Scientific Reports, 2016, 6, 19501.	3.3	19
11	Familial classification of the Boraginales. Taxon, 2016, 65, 502-522.	0.7	93
12	Paralogue Interference Affects the Dynamics after Gene Duplication. Trends in Plant Science, 2015, 20, 814-821.	8.8	31
13	Single cell subtractive transcriptomics for identification of cell-specifically expressed candidate genes of pyrrolizidine alkaloid biosynthesis. Phytochemistry, 2015, 117, 17-24.	2.9	7
14	New aspect of plantâ€“rhizobia interaction: Alkaloid biosynthesis in <i>Crotalaria</i> depends on nodulation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4164-4169.	7.1	52
15	Evolution of Homospermidine Synthase in the Convolvulaceae: A Story of Gene Duplication, Gene Loss, and Periods of Various Selection Pressures Â Â. Plant Cell, 2013, 25, 1213-1227.	6.6	38
16	Distinct Cell-Specific Expression of Homospermidine Synthase Involved in Pyrrolizidine Alkaloid Biosynthesis in Three Species of the Boraginales Â Â Â. Plant Physiology, 2012, 159, 920-929.	4.8	18
17	Independent Recruitment of a Flavin-Dependent Monooxygenase for Safe Accumulation of Sequestered Pyrrolizidine Alkaloids in Grasshoppers and Moths. PLoS ONE, 2012, 7, e31796.	2.5	23
18	Evolutionary recruitment of a flavin-dependent monooxygenase for stabilization of sequestered pyrrolizidine alkaloids in arctiids. Phytochemistry, 2011, 72, 1576-1584.	2.9	22

#	Article	IF	Citations
19	The evolution of pyrrolizidine alkaloid biosynthesis and diversity in the Senecioneae. Phytochemistry Reviews, 2011, 10, 3-74.	6.5	64
20	Flavin-Dependent Monooxygenases as a Detoxification Mechanism in Insects: New Insights from the Arctiids (Lepidoptera). PLoS ONE, 2010, 5, e10435.	2.5	60
21	Evolution of pyrrolizidine alkaloids in Phalaenopsis orchids and other monocotyledons: Identification of deoxyhypusine synthase, homospermidine synthase and related pseudogenes. Phytochemistry, 2009, 70, 508-516.	2.9	24
22	Homospermidine in transgenic tobacco results in considerably reduced spermidine levels but is not converted to pyrrolizidine alkaloid precursors. Plant Molecular Biology, 2009, 71, 145-155.	3.9	13
23	Pyrrolizidine alkaloid biosynthesis, evolution of a pathway in plant secondary metabolism. Phytochemistry, 2009, 70, 1687-1695.	2.9	68
24	Pyrrolizidine Alkaloid Biosynthesis in <i>Phalaenopsis</i> Orchids: Developmental Expression of Alkaloid-Specific Homospermidine Synthase in Root Tips and Young Flower Buds. Plant Physiology, 2008, 148, 751-760.	4.8	23
25	Defense by Pyrrolizidine Alkaloids: Developed by Plants and Recruited by Insects. , 2008, , 213-231.		22
26	Tissue distribution, core biosynthesis and diversification of pyrrolizidine alkaloids of the lycopsamine type in three Boraginaceae species. Phytochemistry, 2007, 68, 1026-1037.	2.9	48
27	Tissue distribution and biosynthesis of 1,2-saturated pyrrolizidine alkaloids in Phalaenopsis hybrids (Orchidaceae). Phytochemistry, 2006, 67, 1493-1502.	2.9	42
28	Recruitment of alkaloid-specific homospermidine synthase (HSS) from ubiquitous deoxyhypusine synthase: Does Crotalaria possess a functional HSS that still has DHS activity?. Phytochemistry, 2005, 66, 1346-1357.	2.9	17
29	Seeing double: gene duplication and diversification in plant secondary metabolism. Trends in Plant Science, 2005, 10, 444-449.	8.8	153
30	Polyphyletic Origin of Pyrrolizidine Alkaloids within the Asteraceae. Evidence from Differential Tissue Expression of Homospermidine Synthase. Plant Physiology, 2004, 136, 4037-4047.	4.8	51
31	Repeated Evolution of the Pyrrolizidine Alkaloidâ€"Mediated Defense System in Separate Angiosperm Lineages wâƒž. Plant Cell, 2004, 16, 2772-2784.	6.6	94
32	Evidence for general occurrence of homospermidine in plants and its supposed origin as by-product of deoxyhypusine synthase. Phytochemistry, 2003, 62, 339-344.	2.9	34
33	Chapter nine Chemical ecology of alkaloids exemplified with the pyrrolizidines. Recent Advances in Phytochemistry, 2003, 37, 203-230.	0.5	10
34	Molecular Evolution by Change of Function. Journal of Biological Chemistry, 2003, 278, 12805-12812.	3.4	58
35	Evolutionary recruitment of a flavin-dependent monooxygenase for the detoxification of host plant-acquired pyrrolizidine alkaloids in the alkaloid-defended arctiid moth Tyria jacobaeae. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6085-6090.	7.1	113
36	Cell-Specific Expression of Homospermidine Synthase, the Entry Enzyme of the Pyrrolizidine Alkaloid Pathway in Senecio vernalis, in Comparison with Its Ancestor, Deoxyhypusine Synthase. Plant Physiology, 2002, 130, 47-57.	4.8	68

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37	Phylogenetic origin of a secondary pathway: the case of pyrrolizidine alkaloids. Plant Molecular Biology, 2000, 44, 445-450.	3.9	42
38	Biosynthesis and Metabolism of Pyrrolizidine Alkaloids in Plants and Specialized Insect Herbivores. Topics in Current Chemistry, 2000, , 207-243.	4.0	99
39	Deoxyhypusine Synthase from Tobacco. Journal of Biological Chemistry, 1999, 274, 32040-32047.	3.4	78
40	Homospermidine synthase of Rhodopseudomonas viridis: Substrate specificity and effects of the heterologously expressed enzyme on polyamine metabolism of Escherichia coli.. Journal of General and Applied Microbiology, 1996, 42, 411-419.	0.7	17
41	Purification, Molecular Cloning and Expression in Escherichia coli of Homospermidine Synthase from Rhodopseudomonas viridis. FEBS Journal, 1996, 240, 373-379.	0.2	38
42	Biosynthesis of pyrrolizidine alkaloids: putrescine and spermidine are essential substrates of enzymatic homospermidine formation. Canadian Journal of Chemistry, 1994, 72, 80-85.	1.1	60
43	A complete digitization of German herbaria is possible, sensible and should be started now. Research Ideas and Outcomes, 0, 6, .	1.0	18