Joshua S Mylne

List of Publications by Year
in descending order

77 papers	4,860 citations	159525 30 h-index	98753 67 g-index
94 all docs	94 docs citations	94 times ranked	4606 citing authors

#	Article	IF	Citations
1	Vernalization requires epigenetic silencing of FLC by histone methylation. Nature, 2004, 427, 164-167.	13.7	866
2	Multiple Pathways in the Decision to Flower: Enabling, Promoting, and Resetting. Plant Cell, 2004, 16, S18-S31.	3.1	571
3	Multiple Roles of Arabidopsis VRN1 in Vernalization and Flowering Time Control. Science, 2002, 297, 243-246.	6.0	418
4	LHP1, the Arabidopsis homologue of HETEROCHROMATIN PROTEIN1, is required for epigenetic silencing of FLC. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 5012-5017.	3.3	270
5	The PHD Finger Protein VRN5 Functions in the Epigenetic Silencing of Arabidopsis FLC. Current Biology, 2007, 17, 73-78.	1.8	251
6	ARABIDOPSIS TRITHORAX1 Dynamically Regulates<i>FLOWERING LOCUS C</i>Activation via Histone 3 Lysine 4 Trimethylation. Plant Cell, 2008, 20, 580-588.	3.1	236
7	Albumins and their processing machinery are hijacked for cyclic peptides in sunflower. Nature Chemical Biology, 2011, 7, 257-259.	3.9	141
8	The alpine violet, Viola biflora, is a rich source of cyclotides with potent cytotoxicity. Phytochemistry, 2008, 69, 939-952.	1.4	131
9	Cyclic Peptides Arising by Evolutionary Parallelism via Asparaginyl-Endopeptidaseâ€“Mediated Biosynthesis. Plant Cell, 2012, 24, 2765-2778.	3.1	129
10	Cyclotides Associate with Leaf Vasculature and Are the Products of a Novel Precursor in Petunia (Solanaceae). Journal of Biological Chemistry, 2012, 287, 27033-27046.	1.6	126
11	Cyclotides as a basis for drug design. Expert Opinion on Drug Discovery, 2012, 7, 179-194.	2.5	102
12	Protocol: A simple phenol-based method for 96-well extraction of high quality RNA from Arabidopsis. Plant Methods, 2011, 7, 7.	1.9	94
13	Peptide Macrocyclization by a Bifunctional Endoprotease. Chemistry and Biology, 2015, 22, 571-582.	6.2	86
14	Cyclotides: macrocyclic peptides with applications in drug design and agriculture. Cellular and Molecular Life Sciences, 2010, 67, 9-16.	2.4	75
15	Physical clustering of <i>FLC</i> alleles during Polycomb-mediated epigenetic silencing in vernalization. Genes and Development, 2013, 27, 1845-1850.	2.7	74
16	Discovery of Cyclotide-Like Protein Sequences in Graminaceous Crop Plants: Ancestral Precursors of Circular Proteins?. Plant Cell, 2006, 18, 2134-2144.	3.1	70
17	DNA Gyrase Is the Target for the Quinolone Drug Ciprofloxacin in Arabidopsis thaliana. Journal of Biological Chemistry, 2016, 291, 3136-3144.	1.6	58
18	The macrocyclizing protease butelase 1 remains autocatalytic and reveals the structural basis for ligase activity. Plant Journal, 2019, 98, 988-999.	2.8	57

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19	Structural basis of ribosomal peptide macrocyclization in plants. ELife, 2018, 7, .	2.8	52
20	Evolutionary Origins of a Bioactive Peptide Buried within Preproalbumin Â. Plant Cell, 2014, 26, 981-995.	3.1	51
21	Cyclotides are a component of the innate defense of <i>Oldenlandia affinis</i>. Biopolymers, 2010, 94, 635-646.	1.2	45
22	An interactive database to explore herbicide physicochemical properties. Organic and Biomolecular Chemistry, 2015, 13, 5586-5590.	1.5	45
23	Stepwise Evolution of a Buried Inhibitor Peptide over 45 My. Molecular Biology and Evolution, 2017, 34, 1505-1516.	3.5	45
24	Binary Vectors for Sense and Antisense Expression of Arabidopsis ESTs. Plant Molecular Biology Reporter, 1998, 16, 257-262.	1.0	41
25	Circular proteins from Melicytus (Violaceae) refine the conserved protein and gene architecture of cyclotides. Organic and Biomolecular Chemistry, 2009, 7, 2378.	1.5	40
26	Herbicidal properties of antimalarial drugs. Scientific Reports, 2017, 7, 45871.	1.6	39
27	Cycloquest: Identification of Cyclopeptides via Database Search of Their Mass Spectra against Genome Databases. Journal of Proteome Research, 2011, 10, 4505-4512.	1.8	38
28	Seed storage albumins: biosynthesis, trafficking and structures. Functional Plant Biology, 2014, 41, 671.	1.1	37
29	Macrocyclization by asparaginyl endopeptidases. New Phytologist, 2018, 218, 923-928.	3.5	36
30	The Arabidopsis B3 Domain Protein VERNALIZATION1 (VRN1) Is Involved in Processes Essential for Development, with Structural and Mutational Studies Revealing Its DNA-binding Surface. Journal of Biological Chemistry, 2013, 288, 3198-3207.	1.6	32
31	A family of small, cyclic peptides buried in preproalbumin since the Eocene epoch. Plant Direct, 2018, 2, e00042.	0.8	32
32	Buried treasure: biosynthesis, structures and applications of cyclic peptides hidden in seed storage albumins. Natural Product Reports, 2018, 35, 137-146.	5.2	31
33	Identification of candidates for cyclotide biosynthesis and cyclisation by expressed sequence tag analysis of Oldenlandia affinis. BMC Genomics, 2010, 11, 111.	1.2	30
34	De Novo Peptide Sequencing Reveals Many Cyclopeptides in the Human Gut and Other Environments. Cell Systems, 2020, 10, 99-108.e5.	2.9	28
35	Cosuppression of Eukaryotic Release Factor 1-1 in Arabidopsis Affects Cell Elongation and Radial Cell Division. Plant Physiology, 2005, 139, 115-126.	2.3	26
36	A comparative study of extraction methods reveals preferred solvents for cystine knot peptide isolation from Momordica cochinchinensis seeds. FÃ¬toterapÃ¬Ã¢, 2014, 95, 22-33.	1.1	26

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37	The Evolution of<i>Momordica</i>Cyclic Peptides. Molecular Biology and Evolution, 2015, 32, 392-405.	3.5	26
38	Next generation sequencing and de novo transcriptomics to study gene evolution. Plant Methods, 2014, 10, 34.	1.9	23
39	Developing ciprofloxacin analogues against plant DNA gyrase: a novel herbicide mode of action. Chemical Communications, 2018, 54, 1869-1872.	2.2	20
40	Cyclotide Isolation and Characterization. Methods in Enzymology, 2012, 516, 37-62.	0.4	19
41	Orientation and Location of the Cyclotide Kalata B1 in Lipid Bilayers Revealed by Solid-State NMR. Biophysical Journal, 2017, 112, 630-642.	0.2	19
42	Epigenetic Regulation in the Control of Flowering. Cold Spring Harbor Symposia on Quantitative Biology, 2004, 69, 457-464.	2.0	18
43	Evidence for Ancient Origins of Bowman-Birk Inhibitors from <i>Selaginella moellendorffii</i>. Plant Cell, 2017, 29, 461-473.	3.1	18
44	An Ancient Peptide Family Buried within Vicilin Precursors. ACS Chemical Biology, 2019, 14, 979-993.	1.6	17
45	¹⁵N cyclotides by whole plant labeling. Biopolymers, 2008, 90, 575-580.	1.2	16
46	Exploiting the Evolutionary Relationship between Malarial Parasites and Plants To Develop New Herbicides. Angewandte Chemie - International Edition, 2017, 56, 9881-9885.	7.2	16
47	A tripartite approach identifies the major sunflower seed albumins. Theoretical and Applied Genetics, 2016, 129, 613-629.	1.8	14
48	Natural structural diversity within a conserved cyclic peptide scaffold. Amino Acids, 2017, 49, 103-116.	1.2	14
49	An Orbitide from <i>Ratibida columnifera</i> Seed Containing 16 Amino Acid Residues. Journal of Natural Products, 2019, 82, 2152-2158.	1.5	14
50	Mature forms of the major seed storage albumins in sunflower: A mass spectrometric approach. Journal of Proteomics, 2016, 147, 177-186.	1.2	13
51	Diverse cyclic seed peptides in the Mexican zinnia (Zinnia haageana). Biopolymers, 2016, 106, 806-817.	1.2	13
52	Targeting plant <scp>DIHYDROFOLATE REDUCTASE</scp> with antifolates and mechanisms for genetic resistance. Plant Journal, 2018, 95, 727-742.	2.8	13
53	Improved herbicide discovery using physico-chemical rules refined by antimalarial library screening. RSC Advances, 2021, 11, 8459-8467.	1.7	13
54	Two proteins for the price of one: Structural studies of the dual-destiny protein preproalbumin with sunflower trypsin inhibitor-1. Journal of Biological Chemistry, 2017, 292, 12398-12411.	1.6	12

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55	The genetic origin of evolidine, the first cyclopeptide discovered in plants, and related orbitides. Journal of Biological Chemistry, 2020, 295, 14510-14521.	1.6	11
56	A herbicide structureâ€“activity analysis of the antimalarial lead compound MMV007978 against Arabidopsis thaliana. Pest Management Science, 2018, 74, 1558-1563.	1.7	10
57	Cyclic Peptides in Seed of <i>Annona muricata</i> Are Ribosomally Synthesized. Journal of Natural Products, 2020, 83, 1167-1173.	1.5	9
58	Antibiotic resistance lessons for the herbicide resistance crisis. Pest Management Science, 2021, 77, 3807-3814.	1.7	9
59	Plant asparaginyl endopeptidases and their structural determinants of function. Biochemical Society Transactions, 2021, 49, 965-976.	1.6	9
60	Structural and biochemical analyses of concanavalin A circular permutation by jack bean asparaginyl endopeptidase. Plant Cell, 2021, 33, 2794-2811.	3.1	9
61	A chameleonic macrocyclic peptide with drug delivery applications. Chemical Science, 2021, 12, 6670-6683.	3.7	9
62	Systematic, smallâ€scale screening with Arabidopsis reveals herbicides synergies that extend to lettuce. Pest Management Science, 2021, 77, 4930-4941.	1.7	8
63	OUP accepted manuscript. Briefings in Bioinformatics, 2022, , .	3.2	8
64	NMR assignment and secondary structure of the C-terminal DNA binding domain of Arabidopsis thaliana VERNALIZATION1. Biomolecular NMR Assignments, 2012, 6, 5-8.	0.4	7
65	Total Synthesis of the Antimalarial Ascidian Natural Product Albopunctatone. Organic Letters, 2019, 21, 5519-5523.	2.4	7
66	Defining the Familial Fold of the Vicilin-Buried Peptide Family. Journal of Natural Products, 2020, 83, 3030-3040.	1.5	6
67	Sequencing Orbitides by Acid-Mediated Ring Cleavage Followed by Tandem Mass Spectrometry. Journal of Proteome Research, 2019, 18, 4065-4071.	1.8	5
68	Inhibition of chloroplast translation as a new target for herbicides. RSC Chemical Biology, 2022, 3, 37-43.	2.0	4
69	Florigen takes two to tango. Nature Chemical Biology, 2011, 7, 665-666.	3.9	3
70	Crystal structure of Arabidopsis thaliana HPPK/DHPS, a bifunctional enzyme and target of the herbicide asulam. Plant Communications, 2022, 3, 100322.	3.6	3
71	Expression, purification and preliminary X-ray diffraction studies of VERNALIZATION1208â€“341fromArabidopsis thaliana. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 291-294.	0.7	2
72	Rapid isolation of high-quality RNA from symbiotic dinoflagellates. Phycologia, 1998, 37, 307-309.	0.6	1

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73	Exploiting the Evolutionary Relationship between Malarial Parasites and Plants To Develop New Herbicides. Angewandte Chemie, 2017, 129, 10013-10017.	1.6	1
74	Solution NMR and racemic crystallography provide insights into a novel structural class of cyclic plant peptides. RSC Chemical Biology, 2021, 2, 1682-1691.	2.0	1
75	Herbicidal activity of fluoroquinolone derivatives. Plant Direct, 2021, 5, e348.	0.8	1
76	An interstitial peptide is readily processed from within seed proteins. Plant Science, 2019, 285, 175-183.	1.7	0
77	Structural Characterization of the PawL-Derived Peptide Family, an Ancient Subfamily of Orbitides. Journal of Natural Products, 2021, 84, 2914-2922.	1.5	0