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	Inhibition of chloroplast translation as a new target for herbicides. RSC Chemical Biology, 2022, 3, 37-43.	2.0	4
2	OUP accepted manuscript. Briefings in Bioinformatics, 2022, , .	3.2	8
3	Crystal structure of Arabidopsis thaliana HPPK/DHPS, a bifunctional enzyme and target of the herbicide asulam. Plant Communications, 2022, 3, 100322.	3.6	3
4	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
5	Improved herbicide discovery using physico-chemical rules refined by antimalarial library screening. RSC Advances, 2021, 11, 8459-8467.	1.7	13
6	Antibiotic resistance lessons for the herbicide resistance crisis. Pest Management Science, 2021, 77, 3807-3814.	1.7	9
7	Plant asparaginyl endopeptidases and their structural determinants of function. Biochemical Society Transactions, 2021, 49, 965-976.	1.6	9
8	Structural and biochemical analyses of concanavalin A circular permutation by jack bean asparaginyl endopeptidase. Plant Cell, 2021, 33, 2794-2811.	3.1	9
9	Systematic, smallâ€scale screening with Arabidopsis reveals herbicides synergies that extend to lettuce. Pest Management Science, 2021, 77, 4930-4941.	1.7	8
10	Herbicidal activity of fluoroquinolone derivatives. Plant Direct, 2021, 5, e348.	0.8	1
11	A chameleonic macrocyclic peptide with drug delivery applications. Chemical Science, 2021, 12, 6670-6683.	3.7	9
12	Structural Characterization of the PawL-Derived Peptide Family, an Ancient Subfamily of Orbitides. Journal of Natural Products, 2021, 84, 2914-2922.	1.5	0
13	De Novo Peptide Sequencing Reveals Many Cyclopeptides in the Human Gut and Other Environments. Cell Systems, 2020, 10, 99-108.e5.	2.9	28
14	Defining the Familial Fold of the Vicilin-Buried Peptide Family. Journal of Natural Products, 2020, 83, 3030-3040.	1.5	6
15	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
16	Cyclic Peptides in Seed of <i>Annona muricata</i> Are Ribosomally Synthesized. Journal of Natural Products, 2020, 83, 1167-1173.	1.5	9
17	An Orbitide from <i>Ratibida columnifera</i> Seed Containing 16 Amino Acid Residues. Journal of Natural Products, 2019, 82, 2152-2158.	1.5	14
18	Total Synthesis of the Antimalarial Ascidian Natural Product Albopunctatone. Organic Letters, 2019, 21, 5519-5523.	2.4	7

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19	Sequencing Orbitides by Acid-Mediated Ring Cleavage Followed by Tandem Mass Spectrometry. Journal of Proteome Research, 2019, 18, 4065-4071.	1.8	5
20	An interstitial peptide is readily processed from within seed proteins. Plant Science, 2019, 285, 175-183.	1.7	0
21	An Ancient Peptide Family Buried within Vicilin Precursors. ACS Chemical Biology, 2019, 14, 979-993.	1.6	17
22	The macrocyclizing protease butelase 1 remains autocatalytic and reveals the structural basis for ligase activity. Plant Journal, 2019, 98, 988-999.	2.8	57
23	A herbicide structureâ€"activity analysis of the antimalarial lead compound MMV007978 against Arabidopsis thaliana. Pest Management Science, 2018, 74, 1558-1563.	1.7	10
24	Buried treasure: biosynthesis, structures and applications of cyclic peptides hidden in seed storage albumins. Natural Product Reports, 2018, 35, 137-146.	5.2	31
25	Developing ciprofloxacin analogues against plant DNA gyrase: a novel herbicide mode of action. Chemical Communications, 2018, 54, 1869-1872.	2.2	20
26	A family of small, cyclic peptides buried in preproalbumin since the Eocene epoch. Plant Direct, 2018, 2, e00042.	0.8	32
27	Macrocyclization by asparaginyl endopeptidases. New Phytologist, 2018, 218, 923-928.	3.5	36
28	Targeting plant <scp>DIHYDROFOLATE REDUCTASE</scp> with antifolates and mechanisms for genetic resistance. Plant Journal, 2018, 95, 727-742.	2.8	13
29	Structural basis of ribosomal peptide macrocyclization in plants. ELife, 2018, 7, .	2.8	52
30	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
31	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
32	Herbicidal properties of antimalarial drugs. Scientific Reports, 2017, 7, 45871.	1.6	39
33	Stepwise Evolution of a Buried Inhibitor Peptide over 45 My. Molecular Biology and Evolution, 2017, 34, 1505-1516.	3.5	45
34	Evidence for Ancient Origins of Bowman-Birk Inhibitors from <i>Selaginella moellendorffii</i>. Plant Cell, 2017, 29, 461-473.	3.1	18
35	Exploiting the Evolutionary Relationship between Malarial Parasites and Plants To Develop New Herbicides. Angewandte Chemie, 2017, 129, 10013-10017.	1.6	1
36	Exploiting the Evolutionary Relationship between Malarial Parasites and Plants To Develop New Herbicides. Angewandte Chemie - International Edition, 2017, 56, 9881-9885.	7.2	16

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37	Natural structural diversity within a conserved cyclic peptide scaffold. Amino Acids, 2017, 49, 103-116.	1.2	14
38	Mature forms of the major seed storage albumins in sunflower: A mass spectrometric approach. Journal of Proteomics, 2016, 147, 177-186.	1.2	13
39	Diverse cyclic seed peptides in the Mexican zinnia (Zinnia haageana). Biopolymers, 2016, 106, 806-817.	1.2	13
40	DNA Gyrase Is the Target for the Quinolone Drug Ciprofloxacin in Arabidopsis thaliana. Journal of Biological Chemistry, 2016, 291, 3136-3144.	1.6	58
41	A tripartite approach identifies the major sunflower seed albumins. Theoretical and Applied Genetics, 2016, 129, 613-629.	1.8	14
42	Peptide Macrocyclization by a Bifunctional Endoprotease. Chemistry and Biology, 2015, 22, 571-582.	6.2	86
43	An interactive database to explore herbicide physicochemical properties. Organic and Biomolecular Chemistry, 2015, 13, 5586-5590.	1.5	45
44	The Evolution of<i>Momordica</i>Cyclic Peptides. Molecular Biology and Evolution, 2015, 32, 392-405.	3.5	26
45	Evolutionary Origins of a Bioactive Peptide Buried within Preproalbumin Â. Plant Cell, 2014, 26, 981-995.	3.1	51
46	Next generation sequencing and de novo transcriptomics to study gene evolution. Plant Methods, 2014, 10, 34.	1.9	23
47	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
48	Seed storage albumins: biosynthesis, trafficking and structures. Functional Plant Biology, 2014, 41, 671.	1.1	37
49	Physical clustering of <i>FLC</i> alleles during Polycomb-mediated epigenetic silencing in vernalization. Genes and Development, 2013, 27, 1845-1850.	2.7	74
50	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
51	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
52	Cyclic Peptides Arising by Evolutionary Parallelism via Asparaginyl-Endopeptidaseâ€"Mediated Biosynthesis. Plant Cell, 2012, 24, 2765-2778.	3.1	129
53	Cyclotides as a basis for drug design. Expert Opinion on Drug Discovery, 2012, 7, 179-194.	2.5	102
54	Cyclotide Isolation and Characterization. Methods in Enzymology, 2012, 516, 37-62.	0.4	19

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55	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
56	Florigen takes two to tango. Nature Chemical Biology, 2011, 7, 665-666.	3.9	3
57	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
58	Albumins and their processing machinery are hijacked for cyclic peptides in sunflower. Nature Chemical Biology, 2011, 7, 257-259.	3.9	141
59	Protocol: A simple phenol-based method for 96-well extraction of high quality RNA from Arabidopsis. Plant Methods, 2011, 7, 7.	1.9	94
60	Cyclotides: macrocyclic peptides with applications in drug design and agriculture. Cellular and Molecular Life Sciences, 2010, 67, 9-16.	2.4	75
61	Identification of candidates for cyclotide biosynthesis and cyclisation by expressed sequence tag analysis of Oldenlandia affinis. BMC Genomics, 2010, 11, 111.	1.2	30
62	Cyclotides are a component of the innate defense of <i>Oldenlandia affinis</i>. Biopolymers, 2010, 94, 635-646.	1.2	45
63	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
64	Circular proteins from Melicytus (Violaceae) refine the conserved protein and gene architecture of cyclotides. Organic and Biomolecular Chemistry, 2009, 7, 2378.	1.5	40
65	¹⁵N cyclotides by whole plant labeling. Biopolymers, 2008, 90, 575-580.	1.2	16
66	The alpine violet, Viola biflora, is a rich source of cyclotides with potent cytotoxicity. Phytochemistry, 2008, 69, 939-952.	1.4	131
67	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
68	The PHD Finger Protein VRN5 Functions in the Epigenetic Silencing of Arabidopsis FLC. Current Biology, 2007, 17, 73-78.	1.8	251
69	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
70	Discovery of Cyclotide-Like Protein Sequences in Graminaceous Crop Plants: Ancestral Precursors of Circular Proteins?. Plant Cell, 2006, 18, 2134-2144.	3.1	70
71	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
72	Multiple Pathways in the Decision to Flower: Enabling, Promoting, and Resetting. Plant Cell, 2004, 16, S18-S31.	3.1	571

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73	Vernalization requires epigenetic silencing of FLC by histone methylation. Nature, 2004, 427, 164-167.	13.7	866
74	Epigenetic Regulation in the Control of Flowering. Cold Spring Harbor Symposia on Quantitative Biology, 2004, 69, 457-464.	2.0	18
75	Multiple Roles of Arabidopsis VRN1 in Vernalization and Flowering Time Control. Science, 2002, 297, 243-246.	6.0	418
76	Binary Vectors for Sense and Antisense Expression of Arabidopsis ESTs. Plant Molecular Biology Reporter, 1998, 16, 257-262.	1.0	41
77	Rapid isolation of high-quality RNA from symbiotic dinoflagellates. Phycologia, 1998, 37, 307-309.	0.6	1