William A. Laing

List of Publications by Year
in descending order

98 papers	7,695 citations	81743 39 h-index	53109 85 g-index
99 all docs	99 docs citations	99 times ranked	7698 citing authors

#	Article	IF	Citations
1	Transient expression vectors for functional genomics, quantification of promoter activity and RNA silencing in plants. Plant Methods, 2005, 1, 13.	1.9	1,290
2	Regulation of Soybean Net Photosynthetic CO₂ Fixation by the Interaction of CO₂, O₂, and Ribulose 1,5-Diphosphate Carboxylase. Plant Physiology, 1974, 54, 678-685.	2.3	631
3	MYB transcription factors that colour our fruit. Trends in Plant Science, 2008, 13, 99-102.	4.3	594
4	Analyses of Expressed Sequence Tags from Apple. Plant Physiology, 2006, 141, 147-166.	2.3	246
5	Gene expression studies in kiwifruit and gene over-expression in Arabidopsis indicates that GDP-L-galactose guanyltransferase is a major control point of vitamin C biosynthesis. Journal of Experimental Botany, 2009, 60, 765-778.	2.4	245
6	The missing step of the L-galactose pathway of ascorbate biosynthesis in plants, an L-galactose guanyltransferase, increases leaf ascorbate content. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 9534-9539.	3.3	216
7	Midgut protease activities in 12 phytophagous lepidopteran larvae: Dietary and protease inhibitor interactions. Insect Biochemistry and Molecular Biology, 1992, 22, 735-746.	1.2	208
8	Enhancing ascorbate in fruits and tubers through overâ€expression of the <scp>l</scp>â€galactose pathway gene GDPâ€<scp>l</scp>â€galactose phosphorylase. Plant Biotechnology Journal, 2012, 10, 390-397.	4.1	199
9	An Upstream Open Reading Frame Is Essential for Feedback Regulation of Ascorbate Biosynthesis in Arabidopsis. Plant Cell, 2015, 27, 772-786.	3.1	192
10	Analysis of expressed sequence tags from Actinidia: applications of a cross species EST database for gene discovery in the areas of flavor, health, color and ripening. BMC Genomics, 2008, 9, 351.	1.2	178
11	A manually annotated Actinidia chinensis var. chinensis (kiwifruit) genome highlights the challenges associated with draft genomes and gene prediction in plants. BMC Genomics, 2018, 19, 257.	1.2	167
12	Dietary Flavonoids from Modified Apple Reduce Inflammation Markers and Modulate Gut Microbiota in Mice. Journal of Nutrition, 2014, 144, 146-154.	1.3	153
13	The regulation of ascorbate biosynthesis. Current Opinion in Plant Biology, 2016, 33, 15-22.	3.5	141
14	Carbon Dioxide Fixation by Lupin Root Nodules. Plant Physiology, 1977, 60, 47-50.	2.3	134
15	A highly specific L-galactose-1-phosphate phosphatase on the path to ascorbate biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16976-16981.	3.3	134
16	Physiological impacts of Mg deficiency in Pinus radiata: growth and photosynthesis. New Phytologist, 2000, 146, 47-57.	3.5	122
17	QTL and candidate gene mapping for polyphenolic composition in apple fruit. BMC Plant Biology, 2012, 12, 12.	1.6	117
18	Anti-Inflammatory Procyanidins and Triterpenes in 109 Apple Varieties. Journal of Agricultural and Food Chemistry, 2012, 60, 10546-10554.	2.4	115

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19	Control of CO2 fixation. Changes in the activity of ribulosephosphate kinase and fructose- and sedoheptulose-bisphosphatase in chloroplasts. Biochimica Et Biophysica Acta - Bioenergetics, 1981, 637, 348-359.	0.5	108
20	Isotope Discrimination by Ribulose 1,5-Diphosphate Carboxylase. Plant Physiology, 1976, 57, 580-582.	2.3	97
21	Variation in Ascorbic Acid and Oxalate Levels in the Fruit ofActinidia chinensisTissues and Genotypes. Journal of Agricultural and Food Chemistry, 2005, 53, 2322-2326.	2.4	90
22	Physiological and biochemical leaf and tree responses to crop load in apple. Tree Physiology, 2005, 25, 1253-1263.	1.4	89
23	Allelic Variation in Paralogs of GDP-l-Galactose Phosphorylase Is a Major Determinant of Vitamin C Concentrations in Apple Fruit Â Â Â. Plant Physiology, 2012, 160, 1613-1629.	2.3	81
24	Purification, characterization and cloning of an aspartic proteinase inhibitor from squash phloem exudate. FEBS Journal, 1998, 254, 160-167.	0.2	78
25	Changes in photosynthetic efficiency and carotenoid composition in leaves of white clover at different developmental stages. Plant Physiology and Biochemistry, 2003, 41, 887-893.	2.8	72
26	Increasing ascorbate levels in crops to enhance human nutrition and plant abiotic stress tolerance. Current Opinion in Biotechnology, 2017, 44, 153-160.	3.3	72
27	Characterization and partial purification of the digestive proteases of the black field cricket, Teleogryllus commodus (Walker): Elastase is a major component. Insect Biochemistry, 1990, 20, 157-164.	1.8	71
28	Multifunctional oxidosqualene cyclases and cytochrome P450 involved in the biosynthesis of apple fruit triterpenic acids. New Phytologist, 2016, 211, 1279-1294.	3.5	66
29	Kiwifruit-based polyphenols and related antioxidants for functional foods: kiwifruit extract-enhanced gluten-free bread. International Journal of Food Sciences and Nutrition, 2009, 60, 251-264.	1.3	53
30	Effects of protease inhibitor concentration and combinations on the survival, growth and gut enzyme activities of the black field cricket, Teleogryllus commodus. Journal of Insect Physiology, 1994, 40, 803-811.	0.9	52
31	Effects of protease inhibitors and dietary protein level on the black field cricket Teleogryllus commodus. Entomologia Experimentalis Et Applicata, 1991, 61, 123-130.	0.7	51
32	Changes in quinic acid metabolism during fruit development in three kiwifruit species. Functional Plant Biology, 2009, 36, 463.	1.1	48
33	Effects of carbon dioxide concentration on coral photosynthesis. Marine Biology, 1983, 75, 113-116.	0.7	47
34	A cysteine proteinase inhibitor purified from apple fruit. Phytochemistry, 1998, 49, 957-963.	1.4	46
35	Photoinhibition of photosynthesis in intact kiwifruit (Actinidia deliciosa) leaves: Effect of temperature. Planta, 1988, 174, 152-158.	1.6	45
36	A steady-state kinetic study on the catalytic mechanism of ribulose bisphosphate carboxylase from soybean. Archives of Biochemistry and Biophysics, 1980, 202, 592-600.	1.4	43

#	Article	IF	Citations
37	Title is missing!. Transgenic Research, 1999, 8, 383-395.	1.3	43
38	Photoinhibition of photosynthesis in intact kiwifruit (Actinidia deliciosa) leaves: Recovery and its dependence on temperature. Planta, 1988, 174, 159-165.	1.6	41
39	Plant Serine Proteinase Inhibitors. Protein and Peptide Letters, 2005, 12, 439-447.	0.4	39
40	A combined omics approach to evaluate the effects of dietary curcumin on colon inflammation in the Mdr1aâˆ'/âˆ' mouse model of inflammatory bowel disease. Journal of Nutritional Biochemistry, 2016, 27, 181-192.	1.9	39
41	A general method for two-dimensional protein electrophoresis of fruit samples. Postharvest Biology and Technology, 2004, 32, 175-181.	2.9	38
42	Unusual Immuno-Modulatory Triterpene-Caffeates in the Skins of Russeted Varieties of Apples and Pears. Journal of Agricultural and Food Chemistry, 2013, 61, 2773-2779.	2.4	38
43	Multiple Copies of a Simple MYB-Binding Site Confers Trans-regulation by Specific Flavonoid-Related R2R3 MYBs in Diverse Species. Frontiers in Plant Science, 2017, 8, 1864.	1.7	38
44	Carbon Dioxide Fixation by Lupin Root Nodules. Plant Physiology, 1979, 63, 450-454.	2.3	37
45	The expression of a mammalian proteinase inhibitor, bovine spleen trypsin inhibitor in tobacco and its effects on Helicoverpa armigera larvae. Transgenic Research, 2002, 11, 161-173.	1.3	37
46	Purification and characterization of phytocystatins from kiwifruit cortex and seeds. Phytochemistry, 2004, 65, 19-30.	1.4	36
47	Defining the Potassium Binding Region in an Apple Terpene Synthase. Journal of Biological Chemistry, 2009, 284, 8661-8669.	1.6	36
48	Light-dependent, but phytochrome-independent, translational control of the accumulation of the P700 chlorophyll-a protein of photosystem I in barley (Hordeum vulgare L.). Planta, 1988, 176, 269-276.	1.6	35
49	Temperature and light response curves for photosynthesis in kiwifruit (Actinidia chinensis) cv. Hayward. New Zealand Journal of Agricultural Research, 1985, 28, 117-124.	0.9	34
50	Toxicity of Trypsin Endopeptidase Inhibitors to Honey Bees (Hymenoptera: Apidae). Journal of Economic Entomology, 1995, 88, 46-50.	0.8	34
51	Modulation of colonic inflammation in Mdr1aâˆ'/âˆ' mice by green tea polyphenols and their effects on the colon transcriptome and proteome. Journal of Nutritional Biochemistry, 2013, 24, 1678-1690.	1.9	34
52	Determination of the Relative Expression Levels of Rubisco Small Subunit Genes in Arabidopsis by Rapid Amplification of cDNA Ends. Analytical Biochemistry, 2001, 291, 237-244.	1.1	33
53	Kiwifruit L-galactose dehydrogenase: molecular, biochemical and physiological aspects of the enzyme. Functional Plant Biology, 2004, 31, 1015.	1.1	33
54	Activity expressed from cloned Anacystis nidulans large and small subunit ribulose bisphosphate carboxylase genes. Plant Molecular Biology, 1985, 5, 257-263.	2.0	32

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55	Overproduction of Digestive Enzymes Compensates for Inhibitory Effects of Protease and Î±-Amylase Inhibitors Fed to Three Species of Leafrollers (Lepidoptera: Tortricidae). Journal of Economic Entomology, 1998, 91, 1265-1276.	0.8	32
56	Visualization of pH gradients in the larval midgut of Spodoptera litura using 31P-NMR microscopy. Journal of Insect Physiology, 1996, 42, 777-790.	0.9	31
57	Photoinhibition of photosynthesis in intact kiwifruit (Actinidia deliciosa) leaves: Changes in susceptibility to photoinhibition and recovery during the growth season. Planta, 1992, 186, 418-25.	1.6	30
58	Photosynthetic Responses of Thirteen Pasture Species to Elevated CO2 and Temperature. Functional Plant Biology, 1995, 22, 713.	1.1	30
59	Photoinhibition of photosynthesis in intact kiwifruit (Actinidia deliciosa) leaves: Effect of light during growth on photoinhibition and recovery. Planta, 1988, 175, 355-363.	1.6	29
60	Kiwifruit extracts inhibit cytokine production by lipopolysaccharide-activated macrophages, and intestinal epithelial cells isolated from IL10 gene deficient mice. Cellular Immunology, 2011, 270, 70-79.	1.4	29
61	Avocado Fruit Skin Fluorescence following Hot Water Treatments and Pretreatments. Journal of the American Society for Horticultural Science, 1996, 121, 147-151.	0.5	29
62	Proteomic Analysis of Colon Tissue from Interleukin-10 Gene-Deficient Mice Fed Polyunsaturated Fatty Acids with Comparison to Transcriptomic Analysis. Journal of Proteome Research, 2012, 11, 1065-1077.	1.8	28
63	Effects of kiwifruit extracts on colonic gene and protein expression levels in IL-10 gene-deficient mice. British Journal of Nutrition, 2012, 108, 113-129.	1.2	24
64	Photoinhibition of Photosynthesis Causes a Reduction in Vegetative Growth Rates of Dwarf Bean (Phaseolus vulgaris) Plants. Functional Plant Biology, 1995, 22, 511.	1.1	23
65	Activation of spinach chloroplast acetyl-coenzyme A carboxylase by coenzyme A. FEBS Letters, 1982, 144, 341-344.	1.3	21
66	Posttranslational Modification of an Isoinhibitor from the Potato Proteinase Inhibitor II Gene Family in Transgenic Tobacco Yields a Peptide with Homology to Potato Chymotrypsin Inhibitor I. Plant Physiology, 1994, 106, 771-777.	2.3	21
67	Comparative photorespiration in Amaranthus, soybean and corn. Planta, 1971, 98, 221-231.	1.6	20
68	Photoinhibition of photosynthesis in intact kiwifruit (Actinidia deliciosa) leaves: effect of growth temperature on photoinhibition and recovery. Planta, 1989, 180, 32-39.	1.6	20
69	Post-weaning selenium and folate supplementation affects gene and protein expression and global DNA methylation in mice fed high-fat diets. BMC Medical Genomics, 2013, 6, 7.	0.7	19
70	Expression of the soybean (Kunitz) trypsin inhibitor in leaves of white clover (Trifolium repens L.). Plant Science, 2005, 168, 1211-1220.	1.7	18
71	Ethylene-regulated (methylsulfanyl)alkanoate ester biosynthesis is likely to be modulated by precursor availability in Actinidia chinensis genotypes. Journal of Plant Physiology, 2011, 168, 629-638.	1.6	18
72	Î±-Amylase Activities in Larval Midgut Extracts from Four Species of Lepidoptera (Tortricidae and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 Journal of Economic Entomology, 1996, 89, 39-45.	0.8	17

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73	Dietary oleic acid as a control fatty acid for polyunsaturated fatty acid intervention studies: A transcriptomics and proteomics investigation using interleukinâ€10 geneâ€deficient mice. Biotechnology Journal, 2010, 5, 1226-1240.	1.8	17
74	Chronic inflammation, mutation and human disease. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2010, 690, 1-2.	0.4	17
75	Behavioural and physiological responses of grass grub larvae (Costelytra zealandica) feeding on protease inhibitors. New Zealand Journal of Zoology, 1992, 19, 123-131.	0.6	16
76	Quantification of folate in fruits and vegetables: A fluorescence-based homogeneous assay. Analytical Biochemistry, 2010, 402, 137-145.	1.1	16
77	Knockâ€down of transcript abundance of a family of Kunitz proteinase inhibitor genes in white clover () Tj ETQq1 1 0.784314 rgBT /O 1188-1201.	3.5	16
78	Identification and Characterisation of Proteinase Inhibitors and Their Genes from Seeds of Apple (Malus domestica). Journal of Biochemistry, 2003, 134, 31-42.	0.9	15
79	Molecular Characterization of the Onset and Progression of Colitis in Inoculated Interleukin-10 Gene-Deficient Mice: A Role for PPAR<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math>. PPAR Research, 2010, 2010, 1-18.	1.1	15
80	Regulation of wound ethylene biosynthesis by NAC transcription factors in kiwifruit. BMC Plant Biology, 2021, 21, 411.	1.6	14
81	Chloroplast phosphoproteins: Distribution of phosphoproteins within spinach chloroplasts. Plant Science Letters, 1984, 36, 99-104.	1.9	13
82	The Effect of Chloramphenicol on Photoinhibition of Photosynthesis and Its Recovery in Intact Kiwifruit (Actinidia deliciosa) Leaves. Functional Plant Biology, 1993, 20, 33.	1.1	13
83	Analysis of the interaction between the aspartic peptidase inhibitor SQAPI and aspartic peptidases using surface plasmon resonance. Journal of Molecular Recognition, 2002, 15, 135-144.	1.1	12
84	Solution Structure of the Squash Aspartic Acid Proteinase Inhibitor (SQAPI) and Mutational Analysis of Pepsin Inhibition. Journal of Biological Chemistry, 2010, 285, 27019-27025.	1.6	12
85	The interaction of the elastase inhibitor, eglin c, with insect digestive endopeptidases: Effect of pH on the dissociation constants. Insect Biochemistry and Molecular Biology, 1994, 24, 103-109.	1.2	11
86	Phosphorus Imaging as a Tool for Studying the pH Metabolism in Living Insects. Journal of Magnetic Resonance Series B, 1995, 108, 262-268.	1.6	11
87	Strong responses of growth and photosynthesis of five C3 pasture species to elevated CO2 at low temperatures. Functional Plant Biology, 2002, 29, 1089.	1.1	11
88	Wounding induces a series of closely related trypsin/chymotrypsin inhibitory peptides in leaves of tobacco. Phytochemistry, 1994, 37, 921-926.	1.4	10
89	The major extracellular proteinases of the silverleaf fungus, Chondrostereum purpureum , are metalloproteinases. Plant Pathology, 1996, 45, 552-563.	1.2	10
90	Serpins in fruit and vegetative tissues of apple (Malus domestica): expression of four serpins with distinct reactive centres and characterisation of a major inhibitory seed form, MdZ1b. Functional Plant Biology, 2005, 32, 517.	1.1	10

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91	The Squash Aspartic Proteinase Inhibitor SQAPI Is Widely Present in the Cucurbitales, Comprises a Small Multigene Family, and Is a Member of the Phytocystatin Family. Journal of Molecular Evolution, 2006, 63, 747-757.	0.8	10
92	The effect of perturbations in temperature and photon flux density on the growth and photosynthetic responses of five pasture species to elevated CO2. Functional Plant Biology, 2000, 27, 301.	1.1	10
93	A method to distinguish between chemical shift and susceptibility effects in NMR microscopy and its application to insect larvae. Magnetic Resonance Imaging, 1995, 13, 471-479.	1.0	9
94	Quantification and kinetics of the decline in grass grub endopeptidase activity during initiation of amber disease. Journal of Invertebrate Pathology, 2004, 86, 72-76.	1.5	8
95	A non-synonymous nucleotide substitution can account for one evolutionary route to sesquiterpene synthase activity in the TPS-b subgroup. FEBS Letters, 2011, 585, 1841-1846.	1.3	8
96	The interaction of the 11S globulin-like protein of kiwifruit seeds with pepsin. Plant Science, 2006, 171, 663-669.	1.7	7
97	Two dual trypsin/chymotrypsin iso-inhibitors purified from Festuca arundinacea seed. Phytochemistry, 1996, 43, 983-988.	1.4	5
98	2-O-Î²-<scp>d</scp>-Glucopyranosyl <scp>l</scp>-Ascorbic Acid, a Stable Form of Vitamin C, Is Widespread in Crop Plants. Journal of Agricultural and Food Chemistry, 2021, 69, 966-973.	2.4	4