Thomas Joseph Higgins

List of Publications by Year
in descending order

109 papers	6,890 citations	43973 48 h-index	60497 81 g-index
110 all docs	110 docs citations	110 times ranked	3704 citing authors

#	Article	IF	Citations
1	Enhanced methionine levels and increased nutritive value of seeds of transgenic lupins (Lupinus) Tj ETQq1 1 0.784314 rgBT /Overlock Sciences of the United States of America, 1997, 94, 8393-8398.	3.3	283
2	Bean [alpha]-Amylase Inhibitor Confers Resistance to the Pea Weevil (Bruchus pisorum) in Transgenic Peas (Pisum sativum L.). Plant Physiology, 1995, 107, 1233-1239.	2.3	263
3	Bean alpha -amylase inhibitor 1 in transgenic peas (Pisum sativum) provides complete protection from pea weevil (Bruchus pisorum) under field conditions. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 3820-3825.	3.3	248
4	Vicilin with carboxy-terminal KDEL is retained in the endoplasmic reticulum and accumulates to high levels in the leaves of transgenic plants.. Plant Journal, 1992, 2, 181-192.	2.8	225
5	Gibberellic acid enhances the level of translatable mRNA for Î±-amylase in barley aleurone layers. Nature, 1976, 260, 166-169.	13.7	210
6	Transformation and Regeneration of Two Cultivars of Pea (Pisum sativum L.). Plant Physiology, 1993, 101, 751-757.	2.3	193
7	Assembly of storage protein oligomers in the endoplasmic reticulum and processing of the polypeptides in the protein bodies of developing pea cotyledons. Journal of Cell Biology, 1982, 93, 306-313.	2.3	192
8	Vicilin with carboxy-terminal KDEL is retained in the endoplasmic reticulum and accumulates to high levels in the leaves of transgenic plants. Plant Journal, 1992, 2, 181-192.	2.8	162
9	Transgenic Expression of Bean Î±-Amylase Inhibitor in Peas Results in Altered Structure and Immunogenicity. Journal of Agricultural and Food Chemistry, 2005, 53, 9023-9030.	2.4	161
10	Achievements and Challenges in Legume Breeding for Pest and Disease Resistance. Critical Reviews in Plant Sciences, 2015, 34, 195-236.	2.7	153
11	The effects of gibberellic acid and abscisic acid on ?-amylase mRNA levels in barley aleurone layers studies using an ?-amylase cDNA clone. Plant Molecular Biology, 1984, 3, 407-418.	2.0	151
12	A biotechnological approach to improving the nutritive value of alfalfa.. Journal of Animal Science, 1995, 73, 2752.	0.2	148
13	Role of the endoplasmic reticulum in the synthesis of reserve proteins and the kinetics of their transport to protein bodies in developing pea cotyledons.. Journal of Cell Biology, 1982, 93, 5-14.	2.3	142
14	Characterization of the Î±-Amylases Synthesized by Aleurone Layers of Himalaya Barley in Response to Gibberellic Acid. Plant Physiology, 1982, 70, 1647-1653.	2.3	135
15	Characterisation of the wheat Mr 15000 ?grain-softness protein? and analysis of the relationship between its accumulation in the whole seed and grain softness. Theoretical and Applied Genetics, 1993, 86, 589-597.	1.8	135
16	Genetic transformation of cowpea (Vigna unguiculata L.) and stable transmission of the transgenes to progeny. Plant Cell Reports, 2006, 25, 304-312.	2.8	133
17	Regulation of Legumin Levels in Developing Pea Seeds under Conditions of Sulfur Deficiency. Plant Physiology, 1983, 71, 47-54.	2.3	131
18	Engineering plant protein composition for improved nutrition. Trends in Plant Science, 1998, 3, 282-286.	4.3	130

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19	Common evolutionary origin of legume and non-legume plant haemoglobins. Nature, 1986, 324, 166-168.	13.7	124
20	Amino acid and cDNA sequences of a methionine-rich 2S protein from sunflower seed (Helianthus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.2	124
21	Gene technology for grain legumes: can it contribute to the food challenge in developing countries?. Plant Science, 2004, 167, 195-206.	1.7	122
22	Transgenic chickpea seeds expressing high levels of a bean Â-amylase inhibitor. Molecular Breeding, 2004, 14, 73-82.	1.0	120
23	The redistribution of protein sulfur in transgenic rice expressing a gene for a foreign, sulfur-rich protein. Plant Journal, 2003, 34, 1-11.	2.8	119
24	Seed-specific overexpression of a potato sucrose transporter increases sucrose uptake and growth rates of developing pea cotyledons. Plant Journal, 2002, 30, 165-175.	2.8	116
25	Pulse-labeling Studies on Protein Synthesis in Developing Pea Seeds and Evidence of a Precursor Form of Legumin Small Subunit. Plant Physiology, 1980, 66, 510-515.	2.3	113
26	The sequence of a pea vicilin gene and its expression in transgenic tobacco plants. Plant Molecular Biology, 1988, 11, 683-695.	2.0	106
27	Gibberellic acid and abscisic acid modulate protein synthesis and mRNA levels in barley aleurone layers. Plant Molecular Biology, 1982, 1, 191-215.	2.0	102
28	Transcriptional and post-transcriptional regulation of storage protein gene expression in sulfur-deficient pea seeds. Nucleic Acids Research, 1985, 13, 999-1013.	6.5	88
29	The effect of auxin on cytokinin levels and metabolism in transgenic tobacco tissue expressing an ipt gene. Planta, 1995, 196, 84.	1.6	88
30	Influence of Sulfur Nutrition on Developmental Patterns of Some Major Pea Seed Proteins and Their mRNAs. Plant Physiology, 1984, 75, 651-657.	2.3	87
31	Transgenic chickpeas (Cicer arietinum L.) expressing a sequence-modified cry2Aa gene. Plant Science, 2010, 178, 333-339.	1.7	83
32	Occurrence of short particles in beans infected with the cowpea strain of TMV. Virology, 1976, 71, 486-497.	1.1	80
33	Plasticity of seed protein composition in response to nitrogen and sulfur availability. Current Opinion in Plant Biology, 2002, 5, 212-217.	3.5	80
34	Sulphur and nitrogen nutrition influence the response of chickpea seeds to an added, transgenic sink for organic sulphur. Journal of Experimental Botany, 2004, 55, 1889-1901.	2.4	78
35	Efficient Agrobacterium transformation of elite wheat germplasm without selection. Plant Cell, Tissue and Organ Culture, 2014, 119, 647-659.	1.2	77
36	Monitoring the fate of dietary proteins in rumen fluid using gel electrophoresis. British Journal of Nutrition, 1988, 60, 241-247.	1.2	71

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37	Cowpea bruchid midgut transcriptome response to a soybean cystatin â€" costs and benefits of counterâ€defence. Insect Molecular Biology, 2009, 18, 97-110.	1.0	61
38	Accumulation of a sulphur-rich seed albumin from sunflower in the leaves of transgenic subterranean clover (Trifolium subterraneum L.). Transgenic Research, 1996, 5, 179-185.	1.3	58
39	The role of glycosylation in storage-protein synthesis in developing pea seeds. Planta, 1981, 153, 201-209.	1.6	56
40	Title is missing!. Molecular Breeding, 1999, 5, 357-365.	1.0	56
41	Protein extraction from mature rice leaves for two-dimensional gel electrophoresis and its application in proteome analysis. Proteomics, 2004, 4, 1903-1908.	1.3	54
42	Genetic engineering with Î±-amylase inhibitors makes seeds resistant to bruchids. Seed Science Research, 1998, 8, 257-264.	0.8	53
43	Poly(A) Sequences in Plant Polysomal RNA. Nature: New Biology, 1973, 246, 68-70.	4.5	52
44	Occurrence of short particles in beans infected with the cowpea strain of TMV. Virology, 1976, 71, 471-485.	1.1	51
45	Developmental and environmental regulation of pea legumin genes in transgenic tobacco. Molecular Genetics and Genomics, 1991, 225, 148-157.	2.4	51
46	A Plant-Based Allergy Vaccine Suppresses Experimental Asthma Via an IFN-Î³ and CD4+CD45RBlow T Cell-Dependent Mechanism. Journal of Immunology, 2003, 171, 2116-2126.	0.4	50
47	Sequence interrelationships of the subunits of vicilin from pea seeds. Plant Molecular Biology, 1983, 2, 259-267.	2.0	49
48	cDNA and protein sequence of a major pea seed albumin (PA 2 : Mr?26 000). Plant Molecular Biology, 1987, 8, 37-45.	2.0	49
49	Agrobacterium-Mediated Transformation of Subterranean Clover (Trifolium subterraneum L.). Plant Physiology, 1994, 105, 81-88.	2.3	48
50	Transgenic cowpeas (Vigna unguiculata L. Walp) expressing Bacillus thuringiensis Vip3Ba protein are protected against the Maruca pod borer (Maruca vitrata). Plant Cell, Tissue and Organ Culture, 2017, 131, 335-345.	1.2	48
51	Pea convicilin: structure and primary sequence of the protein and expression of a gene in the seeds of transgenic tobacco. Planta, 1990, 180, 461-470.	1.6	47
52	Genetic engineering of grain and pasture legumes for improved nutritive value. Genetica, 1993, 90, 181-200.	0.5	45
53	In-vitro rates of rumen proteolysis of ribulose-1,5-bisphosphate carboxylase (rubisco) from lucerne leaves, and of ovalbumin, vicilin and sunflower albumin 8 storage proteins. Journal of the Science of Food and Agriculture, 1994, 64, 53-61.	1.7	45
54	Nutritional evaluation of transgenic high-methionine lupins (Lupinus angustifolius L) with broiler chickens. Journal of the Science of Food and Agriculture, 2002, 82, 280-285.	1.7	42

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55	Cell-free Synthesis of Pea Seed Proteins. Plant Physiology, 1977, 60, 655-661.	2.3	41
56	Expression of a Chicken Ovalbumin Gene in Three Lucerne Cultivars. Functional Plant Biology, 1991, 18, 495.	1.1	38
57	Pest and disease protection conferred by expression of barley Î² - hordothionin and Nicotiana alata proteinase inhibitor genes in transgenic tobacco. Functional Plant Biology, 2005, 32, 35.	1.1	37
58	The Regulation of Pea Seed Storage Protein Genes by Sulfur Stress. Functional Plant Biology, 1990, 17, 355.	1.1	36
59	Effectiveness of <i>Bacillus thuringiensis</i> -Transgenic Chickpeas and the Entomopathogenic Fungus <i>Metarhizium anisopliae</i> in Controlling <i>Helicoverpa armigera</i> (Lepidoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.4	36
60	Response to water deficit and high temperature of transgenic peas (Pisum sativum L.) containing a seed-specific Â-amylase inhibitor and the subsequent effects on pea weevil (Bruchus pisorum L.) survival. Journal of Experimental Botany, 2004, 55, 497-505.	2.4	35
61	Robust Genetic Transformation System to Obtain Non-chimeric Transgenic Chickpea. Frontiers in Plant Science, 2019, 10, 524.	1.7	34
62	Abscisic-acid and gibberellin action in developing kernels of triticale (cv. 6A190). Planta, 1979, 146, 249-255.	1.6	33
63	The expression of a chimeric cauliflower mosaic virus (CaMV-35S) â€" pea vicilin gene in tobacco. Plant Science, 1991, 74, 89-98.	1.7	33
64	Title is missing!. Molecular Breeding, 2000, 6, 421-431.	1.0	31
65	Genetically Modified Î±-Amylase Inhibitor Peas Are Not Specifically Allergenic in Mice. PLoS ONE, 2013, 8, e52972.	1.1	30
66	Differential recognition of chloroplast and cytoplasmic messenger RNA by 70S and 80S ribosomal systems. FEBS Letters, 1976, 63, 120-124.	1.3	29
67	Identification of <i>cis</i>â€localization elements of the maize 10â€kDa Î´â€zein and their use in targeting RNAs to specific cortical endoplasmic reticulum subdomains. Plant Journal, 2009, 60, 146-155.	2.8	28
68	Unintended changes in protein expression revealed by proteomic analysis of seeds from transgenic pea expressing a bean Î±â€amylase inhibitor gene. Proteomics, 2009, 9, 4406-4415.	1.3	26
69	Comparison of the Î±-Amylase Inhibitor-1 from Common Bean (<i>Phaseolus vulgaris</i>) Varieties and Transgenic Expression in Other Legumesâ€"Post-Translational Modifications and Immunogenicity. Journal of Agricultural and Food Chemistry, 2011, 59, 6047-6054.	2.4	25
70	The tolerance of three transgenic subterranean clover (Trifolium subterraneum L.) lines with the bxn gene to herbicides containing bromoxynil. Australian Journal of Agricultural Research, 2003, 54, 203.	1.5	24
71	Efficacy of a cry1Ab Gene for Control of Maruca vitrata (Lepidoptera: Crambidae) in Cowpea (Fabales:) Tj ETQq1 1 0.784314 rgBT /Overl	0.8	24
72	Size distribution and In vitro translation of the RNAs isolated from turnip yellow mosaic virus nucleoproteins. Virology, 1978, 84, 153-161.	1.1	23

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73	Fructan formation in transgenic white clover expressing a fructosyltransferase from Streptococcus salivarius. Functional Plant Biology, 2002, 29, 1287.	1.1	23
74	Expression of the isopentenyl transferase gene is regulated by auxin in transgenic tobacco tissues. Transgenic Research, 1996, 5, 57-65.	1.3	22
75	Cowpea. Handbook of Plant Breeding, 2015, , 219-250.	0.1	22
76	Decreased accumulation of glutelin types in rice grains constitutively expressing a sunflower seed albumin gene. Phytochemistry, 2005, 66, 2534-2539.	1.4	21
77	Resistance of Î±AI-1 transgenic chickpea (<i>Cicer arietinum</i>) and cowpea (<i>Vigna unguiculata</i>) dry grains to bruchid beetles (Coleoptera: Chrysomelidae). Bulletin of Entomological Research, 2013, 103, 373-381.	0.5	21
78	Starch but not protein digestibility is altered in pigs fed transgenic peas containing Î±-amylase inhibitor. Journal of the Science of Food and Agriculture, 2006, 86, 1894-1899.	1.7	20
79	An assessment of the risk of Bt-cowpea to non-target organisms in West Africa. Journal of Pest Science, 2018, 91, 1165-1179.	1.9	20
80	Transgenic peas expressing an Î±â€•amylase inhibitor gene from beans show altered expression and modification of endogenous proteins. Electrophoresis, 2009, 30, 1863-1868.	1.3	19
81	An Improved Transformation System for Cowpea (Vigna unguiculata L. Walp) via Sonication and a Kanamycin-Geneticin Selection Regime. Frontiers in Plant Science, 2019, 10, 219.	1.7	18
82	Biological response of broiler chickens fed peas (Pisum sativum L.) expressing the bean (Phaseolus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1900-1907.	1.7	17
83	Bean Î±-Amylase Inhibitors in Transgenic Peas Inhibit Development of Pea Weevil Larvae. Journal of Economic Entomology, 2007, 100, 1416-1422.	0.8	17
84	Natural Inhibitors in Normal and Dwarf Peas. Journal of Experimental Botany, 1974, 25, 705-714.	2.4	16
85	Evidence for the presence of mRNA in the post-ribosomal cytoplasm of sheep lymphocytes. Nucleic Acids and Protein Synthesis, 1976, 432, 312-322.	1.7	16
86	Nucleotide sequence of an A-type legumin gene from pea. Nucleic Acids Research, 1990, 18, 655-655.	6.5	15
87	Messenger RNA for the insect storage protein calliphorin: In vitro translation and chromosomal hybridization analyses of a 20 S poly(A)-RNA fraction. Biochemical Genetics, 1978, 16, 355-371.	0.8	13
88	A Wild Cajanus scarabaeoides (L.), Thouars, IBS 3471, for Improved Insect-Resistance in Cultivated Pigeonpea. Agronomy, 2020, 10, 517.	1.3	13
89	Production of <i>Bean yellow mosaic virus</i> resistant subterranean clover (<i>Trifolium) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Biology, 1999, 135, 469-480.	1.3	12
90	Heterologous expression of an Î±-amylase inhibitor from common bean (Phaseolus vulgaris) in Kluyveromyces lactis and Saccharomyces cerevisiae. Microbial Cell Factories, 2017, 16, 110.	1.9	12

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91	Seed-specific expression of the isopentenyl transferase gene (ipt) in transgenic tobacco. Functional Plant Biology, 1998, 25, 53.	1.1	10
92	Bean Î±-Amylase Inhibitors in Transgenic Peas Inhibit Development of Pea Weevil Larvae. Journal of Economic Entomology, 2007, 100, 1416-1422.	0.8	10
93	Changes in methylation during progressive transcriptional silencing in transgenic subterranean clover. Plant Biotechnology Journal, 2003, 1, 479-490.	4.1	9
94	Enhanced expression of Arabidopsis rubisco small subunit gene promoter regulated Cry1Ac gene in chickpea conferred complete resistance to Helicoverpa armigera. Journal of Plant Biochemistry and Biotechnology, 2021, 30, 243-253.	0.9	9
95	The Expression of an Ovalbumin and a Seed Protein Gene in the Leaves of Transgenic Plants. , 1991, , 471-478.		9
96	Macrozin, a Novel Storage Globulin From Seeds of Macrozamia communis L. Johnson. Functional Plant Biology, 1984, 11, 69.	1.1	9
97	In vitro regeneration of commercial cultivars of subterranean clover. Plant Cell, Tissue and Organ Culture, 1993, 35, 43-48.	1.2	8
98	Growth, fecundity and competitive ability of transgenic Trifolium subterraneum subsp. subterraneum cv. Leura expressing a sunflower seed albumin gene. Hereditas, 2004, 140, 229-244.	0.5	8
99	Potential of the bean Î±â€amylase inhibitor Î±<scp>Al</scp>â€1 to inhibit Î±â€amylase activity in true bugs (Hemiptera). Journal of Applied Entomology, 2015, 139, 192-200.	0.8	7
100	MOLECULAR ASPECTS OF SEED PROTEIN BIOSYNTHESIS. , 1981, , 175-189.		6
101	Development of transgenics in chickpea.. , 0, , 458-473.		5
102	Comparative TMT Proteomic Analysis Unveils Unique Insights into Helicoverpa armigera (HÃ¼bner) Resistance in Cajanus scarabaeoides (L.) Thouars. International Journal of Molecular Sciences, 2021, 22, 5941.	1.8	4
103	Insects, nematodes, and other pests. , 2012, , 353-370.		2
104	A Niche for Cowpea in Sub-Tropical Australia?. Agronomy, 2021, 11, 1654.	1.3	2
105	Manipulating the Sulfur Composition of Seeds. , 2012, , 35-45.		2
106	Storage Proteins and their Metabolism. , 0, , .		1
107	Increased efficiency of wool growth and live weight gain in Merino sheep fed transgenic lupin seed containing sunflower albumin. Journal of the Science of Food and Agriculture, 2001, 81, 147-154.	1.7	1
108	Molecular Approaches to the Management of Pasture Diseases. Assa, Cssa and Sssa, 0, , 533-561.	0.6	0

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109	Genetic Engineering of Grain Legumes: Their Potential for Sustainable Agriculture and Food and Nutritional Security. , 2021, , 91-121.		0