

# Claire I Halpin

## List of Publications by Year in descending order

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Version: 2024-02-01

55  
papers

5,108  
citations

126907

33  
h-index

182427

51  
g-index

56  
all docs

56  
docs citations

56  
times ranked

5668  
citing authors

#	ARTICLE	IF	CITATIONS
1	Caffeoyl Shikimate Esterase (CSE) Is an Enzyme in the Lignin Biosynthetic Pathway in <i>Arabidopsis</i> . <i>Science</i> , 2013, 341, 1103-1106.	12.6	432
2	Gene stacking in transgenic plants - the challenge for 21st century plant biotechnology. <i>Plant Biotechnology Journal</i> , 2005, 3, 141-155.	8.3	367
3	Field and pulping performances of transgenic trees with altered lignification. <i>Nature Biotechnology</i> , 2002, 20, 607-612.	17.5	350
4	E unum pluribus: multiple proteins from a self-processing polyprotein. <i>Trends in Biotechnology</i> , 2006, 24, 68-75.	9.3	332
5	Manipulation of lignin quality by downregulation of cinnamyl alcohol dehydrogenase. <i>Plant Journal</i> , 1994, 6, 339-350.	5.7	321
6	A Systems Biology View of Responses to Lignin Biosynthesis Perturbations in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2012, 24, 3506-3529.	6.6	321
7	Lignin: Genetic Engineering and Impact on Pulping. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2003, 38, 305-350.	5.2	276
8	Brown-midrib maize (bm1) - a mutation affecting the cinnamyl alcohol dehydrogenase gene. <i>Plant Journal</i> , 1998, 14, 545-553.	5.7	271
9	Strong decrease in lignin content without significant alteration of plant development is induced by simultaneous down-regulation of cinnamoyl CoA reductase (CCR) and cinnamyl alcohol dehydrogenase (CAD) in tobacco plants. <i>Plant Journal</i> , 2001, 28, 257-270.	5.7	252
10	Spatiotemporal Asymmetry of the Meiotic Program Underlies the Predominantly Distal Distribution of Meiotic Crossovers in Barley. <i>Plant Cell</i> , 2012, 24, 4096-4109.	6.6	185
11	Molecular phenotyping of lignin-modified tobacco reveals associated changes in cell wall metabolism, primary metabolism, stress metabolism and photorespiration. <i>Plant Journal</i> , 2007, 52, 263-285.	5.7	161
12	Self-processing 2A-polyproteins - a system for co-ordinate expression of multiple proteins in transgenic plants. <i>Plant Journal</i> , 1999, 17, 453-459.	5.7	131
13	Variation in the interaction between alleles of <i>HvAPETALA2</i> and microRNA172 determines the density of grains on the barley inflorescence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 16675-16680.	7.1	121
14	The Synaptonemal Complex Protein ZYP1 Is Required for Imposition of Meiotic Crossovers in Barley. <i>Plant Cell</i> , 2014, 26, 729-740.	6.6	88
15	Improved paper pulp from plants with suppressed cinnamoyl-CoA reductase or cinnamyl alcohol dehydrogenase. <i>Transgenic Research</i> , 2002, 11, 495-503.	2.4	81
16	Genomic Selection in Multi-environment Crop Trials. <i>G3: Genes, Genomes, Genetics</i> , 2016, 6, 1313-1326.	1.8	79
17	Automated saccharification assay for determination of digestibility in plant materials. <i>Biotechnology for Biofuels</i> , 2010, 3, 23.	6.2	77
18	Simultaneous Suppression of Multiple Genes by Single Transgenes. Down-Regulation of Three Unrelated Lignin Biosynthetic Genes in Tobacco. <i>Plant Physiology</i> , 2002, 128, 844-853.	4.8	68

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19	Coordinate Expression and Independent Subcellular Targeting of Multiple Proteins from a Single Transgene. <i>Plant Physiology</i> , 2004, 135, 16-24.	4.8	68
20	Editorâ€™s Choice: Crop Genome Plasticity and Its Relevance to Food and Feed Safety of Genetically Engineered Breeding Stacks. <i>Plant Physiology</i> , 2012, 160, 1842-1853.	4.8	68
21	Enabling technologies for manipulating multiple genes on complex pathways. <i>Plant Molecular Biology</i> , 2001, 47, 295-310.	3.9	66
22	A Comparison of Mainstream Genotyping Platforms for the Evaluation and Use of Barley Genetic Resources. <i>Frontiers in Plant Science</i> , 2019, 10, 544.	3.6	66
23	A genome wide association scan for (1,3;1,4)- $\beta$ -glucan content in the grain of contemporary 2-row Spring and Winter barleys. <i>BMC Genomics</i> , 2014, 15, 907.	2.8	57
24	Lignin engineering to improve saccharification and digestibility in grasses. <i>Current Opinion in Biotechnology</i> , 2019, 56, 223-229.	6.6	56
25	Evolutionary Dynamics of the Cellulose Synthase Gene Superfamily in Grasses. <i>Plant Physiology</i> , 2015, 168, 968-983.	4.8	55
26	Effect of down-regulation of cinnamyl alcohol dehydrogenase on cell wall composition and on degradability of tobacco stems. , 1998, 76, 505-514.		54
27	BaRTv1.0: an improved barley reference transcript dataset to determine accurate changes in the barley transcriptome using RNA-seq. <i>BMC Genomics</i> , 2019, 20, 968.	2.8	50
28	Ecological impacts of trees with modified lignin. <i>Tree Genetics and Genomes</i> , 2007, 3, 101-110.	1.6	46
29	Stacking transgenes in forest trees. <i>Trends in Plant Science</i> , 2003, 8, 363-365.	8.8	45
30	A spontaneous mutation in MutLâ€™ Homolog 3 (Hv<sc>MLH</sc>3) affects synapsis and crossover resolution in the barley desynaptic mutant <i>des10</i>. <i>New Phytologist</i> , 2016, 212, 693-707.	7.3	44
31	Cloning and sequence analysis of laccase-encoding cDNA clones from tobacco. <i>Gene</i> , 1996, 178, 205-207.	2.2	41
32	Below-ground herbivory and root toughness: a potential model system using lignin-modified tobacco. <i>Physiological Entomology</i> , 2010, 35, 186-191.	1.5	41
33	Editorâ€™s Choice: Evaluating the Potential for Adverse Interactions within Genetically Engineered Breeding Stacks. <i>Plant Physiology</i> , 2013, 161, 1587-1594.	4.8	40
34	Plant lignin content altered by soil microbial community. <i>New Phytologist</i> , 2015, 206, 166-174.	7.3	40
35	The Barley Genome Sequence Assembly Reveals Three Additional Members of the CslF (1,3;1,4)- $\beta$ -Glucan Synthase Gene Family. <i>PLoS ONE</i> , 2014, 9, e90888.	2.5	39
36	<sc>RNA</sc>â€™ suppression of barley caffeic acid <i>O</i>-methyltransferase modifies lignin despite redundancy in the gene family. <i>Plant Biotechnology Journal</i> , 2019, 17, 594-607.	8.3	37

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37	Syringyl Lignin Is Unaltered by Severe Sinapyl Alcohol Dehydrogenase Suppression in Tobacco. <i>Plant Cell</i> , 2011, 23, 4492-4506.	6.6	34
38	Investigating and Manipulating Lignin Biosynthesis in the Postgenomic Era. <i>Advances in Botanical Research</i> , 2004, 41, 63-106.	1.1	28
39	desynaptic5 carries a spontaneous semi-dominant mutation affecting Disrupted Meiotic cDNA 1 in barley. <i>Journal of Experimental Botany</i> , 2019, 70, 2683-2698.	4.8	24
40	Microbial community structure in soils with decomposing residues from plants with genetic modifications to lignin biosynthesis. <i>FEMS Microbiology Letters</i> , 2006, 263, 68-75.	1.8	23
41	Enabling technologies for manipulating multiple genes on complex pathways. , 2001, , 295-310.		22
42	Barley sodium content is regulated by natural variants of the Na <sup>+</sup> transporter HvHKT1;5. <i>Communications Biology</i> , 2020, 3, 258.	4.4	21
43	Purification and characterization of the D2 cell adhesion protein: Analysis of the postnatally regulated polymorphic forms and their cellular distribution. <i>Neurochemical Research</i> , 1986, 11, 1333-1346.	3.3	17
44	Re-designing Lignin for Industry and Agriculture. <i>Biotechnology and Genetic Engineering Reviews</i> , 2004, 21, 229-248.	6.2	17
45	Genetically modified lignin below ground. <i>Nature Biotechnology</i> , 2007, 25, 168-169.	17.5	15
46	Identification of crop cultivars with consistently high lignocellulosic sugar release requires the use of appropriate statistical design and modelling. <i>Biotechnology for Biofuels</i> , 2013, 6, 185.	6.2	15
47	A novel cleavage site within the potato leafroll virus P1 polyprotein. <i>Journal of General Virology</i> , 2007, 88, 1620-1623.	2.9	13
48	Stimulation of homologous recombination in plants expressing heterologous recombinases. <i>BMC Plant Biology</i> , 2020, 20, 336.	3.6	11
49	Lignin: Genetic Engineering and Impact on Pulping. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2003, 38, 305-350.	5.2	9
50	Different routes for integral protein insertion into <i>Ricinus communis</i> protein-body and glyoxysome membranes. <i>Planta</i> , 1989, 179, 331-339.	3.2	7
51	Cell Biology: Up Against the Wall. <i>Current Biology</i> , 2013, 23, R1048-R1050.	3.9	7
52	Association mapping identifies quantitative trait loci (QTL) for digestibility in rice straw. <i>Biotechnology for Biofuels</i> , 2020, 13, 165.	6.2	7
53	Transgenic plants with improved energy characteristics. , 0, , 279-293.		5
54	Downregulation of Barley Regulator of Telomere Elongation Helicase 1 Alters the Distribution of Meiotic Crossovers. <i>Frontiers in Plant Science</i> , 2021, 12, 745070.	3.6	2

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55	Lignin manipulation for fibre improvement. , 2007, , 129-153.		2