Lee T Hickey

List of Publications by Year
in descending order

83	4,835	117625	110387
papers	citations	34 h-index	64 g-index

93	93	93	4149
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Speed breeding is a powerful tool to accelerate crop research and breeding. Nature Plants, 2018, 4, 23-29.	9.3	770
2	Breeding crops to feed 10 billion. Nature Biotechnology, 2019, 37, 744-754.	17.5	577
3	Speed breeding in growth chambers and glasshouses for crop breeding and model plant research. Nature Protocols, 2018, 13, 2944-2963.	12.0	286
4	Fast-Forwarding Genetic Gain. Trends in Plant Science, 2018, 23, 184-186.	8.8	164
5	High-throughput phenotyping of seminal root traits in wheat. Plant Methods, 2015, 11, 13.	4.3	150
6	VERNALIZATION1 Modulates Root System Architecture in Wheat and Barley. Molecular Plant, 2018, 11, 226-229.	8.3	118
7	Speed breeding for multiple disease resistance in barley. Euphytica, 2017, 213, 1.	1.2	107
8	A chickpea genetic variation map based on the sequencing of 3,366 genomes. Nature, 2021, 599, 622-627.	27.8	106
9	Genome-Wide Association Study for Pre-harvest Sprouting Resistance in a Large Germplasm Collection of Chinese Wheat Landraces. Frontiers in Plant Science, 2017, 08, 401.	3.6	98
10	Speed breeding orphan crops. Theoretical and Applied Genetics, 2019, 132, 607-616.	3.6	98
11	Unlocking new alleles for leaf rust resistance in the Vavilov wheat collection. Theoretical and Applied Genetics, 2018, 131, 127-144.	3.6	97
12	Mapping Rph20: a gene conferring adult plant resistance to Puccinia hordei in barley. Theoretical and Applied Genetics, 2011, 123, 55-68.	3.6	89
13	Q&A: modern crop breeding for future food security. BMC Biology, 2019, 17, 18.	3.8	88
14	A rapid phenotyping method for adult plant resistance to leaf rust in wheat. Plant Methods, 2016, 12, 17.	4.3	86
15	Exploring and Harnessing Haplotype Diversity to Improve Yield Stability in Crops. Frontiers in Plant Science, 2017, 8, 1534.	3.6	86
16	A Major Root Architecture QTL Responding to Water Limitation in Durum Wheat. Frontiers in Plant Science, 2019, 10, 436.	3.6	84
17	Speed breeding for multiple quantitative traits in durum wheat. Plant Methods, 2018, 14, 36.	4.3	83
18	Fast-forward breeding for a food-secure world. Trends in Genetics, 2021, 37, 1124-1136.	6.7	82

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19	A roadmap for gene functional characterisation in crops with large genomes: Lessons from polyploid wheat. ELife, 2020, 9, .	6.0	78
20	Wheat root systems as a breeding target for climate resilience. Theoretical and Applied Genetics, 2021, 134, 1645-1662.	3.6	74
21	Root System Architecture and Its Association with Yield under Different Water Regimes in Durum Wheat. Crop Science, 2018, 58, 2331-2346.	1.8	70
22	Rapid phenotyping for adultâ€plant resistance to stripe rust in wheat. Plant Breeding, 2012, 131, 54-61.	1.9	63
23	Insights into deployment of DNA markers in plant variety protection and registration. Theoretical and Applied Genetics, 2019, 132, 1911-1929.	3.6	56
24	Novel sources of resistance to Septoria nodorum blotch in the Vavilov wheat collection identified by genome-wide association studies. Theoretical and Applied Genetics, 2018, 131, 1223-1238.	3.6	53
25	Multivariate Genomic Selection and Potential of Rapid Indirect Selection with Speed Breeding in Spring Wheat. Crop Science, 2019, 59, 1945-1959.	1.8	51
26	Crown rot of wheat in Australia: Fusarium pseudograminearum taxonomy, population biology and disease management. Australasian Plant Pathology, 2018, 47, 285-299.	1.0	50
27	Root architectural traits and yield: exploring the relationship in barley breeding trials. Euphytica, 2018, 214, 1.	1.2	46
28	Characterization of Rph24: A Gene Conferring Adult Plant Resistance to Puccinia hordei in Barley. Phytopathology, 2017, 107, 834-841.	2.2	45
29	Designer Roots for Future Crops. Trends in Plant Science, 2018, 23, 957-960.	8.8	45
30	Resistance to yellow spot in wheat grown under accelerated growth conditions. Euphytica, 2016, 209, 693-707.	1.2	43
31	Overcoming polyploidy pitfalls: a user guide for effective SNP conversion into KASP markers in wheat. Theoretical and Applied Genetics, 2020, 133, 2413-2430.	3.6	42
32	Into the vault of the Vavilov wheats: old diversity for new alleles. Genetic Resources and Crop Evolution, 2017, 64, 531-544.	1.6	41
33	Need for speed: manipulating plant growth to accelerate breeding cycles. Current Opinion in Plant Biology, 2021, 60, 101986.	7.1	41
34	Grain dormancy in fixed lines of white-grained wheat (Triticum aestivum L.) grown under controlled environmental conditions. Euphytica, 2009, 168, 303-310.	1.2	40
35	High-resolution mapping of rachis nodes per rachis, a critical determinant of grain yield components in wheat. Theoretical and Applied Genetics, 2019, 132, 2707-2719.	3.6	40
36	Hotter, drier, CRISPR: the latest edit on climate change. Theoretical and Applied Genetics, 2021, 134, 1691-1709.	3.6	40

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37	Association mapping of resistance to Puccinia hordei in Australian barley breeding germplasm. Theoretical and Applied Genetics, 2014, 127, 1199-1212.	3.6	37
38	Discovery of QTL for stay-green and heat-stress in barley (Hordeum vulgare) grown under simulated abiotic stress conditions. Euphytica, 2016, 207, 305-317.	1.2	36
39	â€œSpeedGSâ€•to Accelerate Genetic Gain in Spring Wheat. , 2019, , 303-327.		35
40	Can a speed breeding approach accelerate genetic gain in pigeonpea?. Euphytica, 2019, 215, 1.	1.2	35
41	Genomic Regions Influencing Seminal Root Traits in Barley. Plant Genome, 2016, 9, plantgenome2015.03.0012.	2.8	33
42	Mining Vavilovâ€™s Treasure Chest of Wheat Diversity for Adult Plant Resistance to Puccinia triticina. Plant Disease, 2017, 101, 317-323.	1.4	28
43	Structural Changes of Starch Molecules in Barley Grains During Germination. Cereal Chemistry, 2014, 91, 431-437.	2.2	27
44	Integrating Rapid Phenotyping and Speed Breeding to Improve Stay-Green and Root Adaptation of Wheat in Changing, Water-Limited, Australian Environments.. Procedia Environmental Sciences, 2015, 29, 175-176.	1.4	27
45	Technological perspectives for plant breeding. Theoretical and Applied Genetics, 2019, 132, 555-557.	3.6	27
46	Allelic effects and variations for key bread-making quality genes in bread wheat using high-throughput molecular markers. Journal of Cereal Science, 2019, 85, 305-309.	3.7	26
47	Speed vernalization to accelerate generation advance in winter cereal crops. Molecular Plant, 2022, 15, 1300-1309.	8.3	25
48	Spot form of net blotch resistance in barley is under complex genetic control. Theoretical and Applied Genetics, 2015, 128, 489-499.	3.6	24
49	Selection in Early Generations to Shift Allele Frequency for Seminal Root Angle in Wheat. Plant Genome, 2018, 11, 170071.	2.8	23
50	Adaptive Traits to Improve Durum Wheat Yield in Drought and Crown Rot Environments. International Journal of Molecular Sciences, 2020, 21, 5260.	4.1	23
51	Screening for grain dormancy in segregating generations of dormantÂÃ—Ânon-dormant crosses in white-grained wheat (Triticum aestivum L.). Euphytica, 2010, 172, 183-195.	1.2	22
52	Mapping Quantitative Trait Loci for Partial Resistance to Powdery Mildew in an Australian Barley Population. Crop Science, 2012, 52, 1021-1032.	1.8	21
53	Discovering new alleles for yellow spot resistance in the Vavilov wheat collection. Theoretical and Applied Genetics, 2019, 132, 149-162.	3.6	21
54	Grain dormancy QTL identified in a doubled haploid barley population derived from two non-dormant parents. Euphytica, 2012, 188, 113-122.	1.2	20

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55	Pathogenic variation of Pyrenophora teres f. teres in Australia. Australasian Plant Pathology, 2017, 46, 115-128.	1.0	20
56	Origin of leaf rust adult plant resistance gene Rph20 in barley. Genome, 2012, 55, 396-399.	2.0	18
57	Genetic insights into underground responses to Fusarium graminearum infection in wheat. Scientific Reports, 2018, 8, 13153.	3.3	18
58	Rapid delivery systems for future food security. Nature Biotechnology, 2021, 39, 1179-1181.	17.5	17
59	QTL identified for stay-green in a multi-reference nested association mapping population of wheat exhibit context dependent expression and parent-specific alleles. Field Crops Research, 2021, 270, 108181.	5.1	16
60	Vavilov wheat accessions provide useful sources of resistance to tan spot (syn. yellow spot) of wheat. Plant Pathology, 2018, 67, 1076-1087.	2.4	15
61	Beyond the gene: epigenetic and cis-regulatory targets offer new breeding potential for the future. Current Opinion in Biotechnology, 2022, 73, 88-94.	6.6	13
62	Rapid Phenotyping Adult Plant Resistance to Stem Rust in Wheat Grown under Controlled Conditions. Methods in Molecular Biology, 2017, 1659, 183-196.	0.9	12
63	Is plant variety registration keeping pace with speed breeding techniques?. Euphytica, 2020, 216, 1.	1.2	12
64	Response of Barley Genotypes to Weed Interference in Australia. Agronomy, 2020, 10, 99.	3.0	11
65	Dissecting the Genetics of Early Vigour to Design Drought-Adapted Wheat. Frontiers in Plant Science, 2021, 12, 754439.	3.6	9
66	Toward More Effective Discovery and Deployment of Novel Plant Genetic Variation: Reflection and Future Directions. , 2016, , 139-150.		8
67	Genetic characterization of adult-plant resistance to tan spot (syn, yellow spot) in wheat. Theoretical and Applied Genetics, 2021, 134, 2823-2839.	3.6	8
68	A toolkit to rapidly modify root systems through single plant selection. Plant Methods, 2022, 18, 2.	4.3	8
69	High-throughput Phenotyping of Wheat Seminal Root Traits in a Breeding Context. Procedia Environmental Sciences, 2015, 29, 102-103.	1.4	7
70	Investigating successive Australian barley breeding populations for stable resistance to leaf rust. Theoretical and Applied Genetics, 2017, 130, 2463-2477.	3.6	7
71	Genetic Characterization of Resistance to Pyrenophora teres f. teres in the International Barley Differential Canadian Lake Shore. Frontiers in Plant Science, 2019, 10, 326.	3.6	7
72	A linkage disequilibrium-based approach to position unmapped SNPs in crop species. BMC Genomics, 2021, 22, 773.	2.8	7

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73	Mining the Vavilov wheat diversity panel for new sources of adult plant resistance to stripe rust. Theoretical and Applied Genetics, 2022, 135, 1355-1373.	3.6	6
74	Physiological Changes in Barley mlo-11 Powdery Mildew Resistance Conditioned by Tandem Repeat Copy Number. International Journal of Molecular Sciences, 2020, 21, 8769.	4.1	5
75	Accelerating Breeding Cycles. , 2022, , 557-571.		5
76	Tunable crops are just a spray away. Nature Plants, 2021, 7, 102-103.	9.3	4
77	Designing chickpea for a hotter drier world. Euphytica, 2022, 218, .	1.2	3
78	Harnessing genetic variation at regulatory regions to fine-tune traits for climate-resilient crops. Molecular Plant, 2022, 15, 222-224.	8.3	2
79	Haplotype variants of Sr46 in Aegilops tauschii, the diploid D genome progenitor of wheat. Theoretical and Applied Genetics, 2022, 135, 2627-2639.	3.6	2
80	How Do Crops Balance Water Supply and Demand when Water Is Limiting?. Proceedings (mdpi), 2020, 36, .	0.2	0
81	Combining Trait Physiology, Crop Modelling and Molecular Genetics to Improve Wheat Adaptation to Terminal Water-Stress Targeting Stay-Green and Root Traits. Proceedings (mdpi), 2020, 36, .	0.2	0
82	Integrating Crop Modelling, Physiology, Genetics and Breeding to Aid Crop Improvement for Changing Environments in the Australian Wheatbelt. Proceedings (mdpi), 2019, 36, 4.	0.2	0
83	Trends in exploring wheat and barley germplasm for novel disease resistance traits. Burleigh Dodds Series in Agricultural Science, 2018, , 261-270.	0.2	0