Michael O Pumphrey

List of Publications by Year
in descending order

80 papers	6,763 citations	61977 — 43 h-index	69246 — 77 g-index
84 all docs	84 docs citations	84 times ranked	4880 citing authors

#	Article	IF	Citations
1	Genome-wide comparative diversity uncovers multiple targets of selection for improvement in hexaploid wheat landraces and cultivars. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8057-8062.	7.1	1,065
2	Durum wheat genome highlights past domestication signatures and future improvement targets. Nature Genetics, 2019, 51, 885-895.	21.4	576
3	Low-altitude, high-resolution aerial imaging systems for row and field crop phenotyping: A review. European Journal of Agronomy, 2015, 70, 112-123.	4.1	380
4	A Genome-Wide Association Study of Resistance to Stripe Rust (<i>Puccinia striiformis</i>f.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 T G3: Genes, Genomes, Genetics, 2015, 5, 449-465.	1.8	356
5	Wheat Fhb1 encodes a chimeric lectin with agglutinin domains and a pore-forming toxin-like domain conferring resistance to Fusarium head blight. Nature Genetics, 2016, 48, 1576-1580.	21.4	299
6	Megabase Level Sequencing Reveals Contrasted Organization and Evolution Patterns of the Wheat Gene and Transposable Element Spaces. Plant Cell, 2010, 22, 1686-1701.	6.6	258
7	Phenotypic and Genotypic Characterization of Race TKTTF of <i>Puccinia graminis</i> f. sp. <i>tritici</i> that Caused a Wheat Stem Rust Epidemic in Southern Ethiopia in 2013â€“14. Phytopathology, 2015, 105, 917-928.	2.2	202
8	Complex microcolinearity among wheat, rice, and barley revealed by fine mapping of the genomic region harboring a major QTL for resistance to Fusarium head blight in wheat. Functional and Integrative Genomics, 2006, 6, 83-89.	3.5	183
9	Validating the Fhb1 QTL for Fusarium Head Blight Resistance in Nearâ€Isogenic Wheat Lines Developed from Breeding Populations. Crop Science, 2007, 47, 200-206.	1.8	179
10	Genetic Architecture of Resistance to Stripe Rust in a Global Winter Wheat Germplasm Collection. G3: Genes, Genomes, Genetics, 2016, 6, 2237-2253.	1.8	154
11	Nonadditive Expression of Homoeologous Genes Is Established Upon Polyploidization in Hexaploid Wheat. Genetics, 2009, 181, 1147-1157.	2.9	151
12	Molecular cytogenetic characterization of alien introgressions with gene Fhb3 for resistance to Fusarium head blight disease of wheat. Theoretical and Applied Genetics, 2008, 117, 1155-1166.	3.6	132
13	Toward positional cloning of<i>Fhb1</i>, a major QTL for Fusarium head blight resistance in wheat. Cereal Research Communications, 2008, 36, 195-201.	1.6	118
14	A novel Robertsonian translocation event leads to transfer of a stem rust resistance gene (Sr52) effective against race Ug99 from Dasypyrum villosum into bread wheat. Theoretical and Applied Genetics, 2011, 123, 159-167.	3.6	114
15	Discovery and molecular mapping of a new gene conferring resistance to stem rust, Sr53, derived from Aegilops geniculata and characterization of spontaneous translocation stocks with reduced alien chromatin. Chromosome Research, 2011, 19, 669-682.	2.2	111
16	Characterization of molecular diversity and genome-wide mapping of loci associated with resistance to stripe rust and stem rust in Ethiopian bread wheat accessions. BMC Plant Biology, 2017, 17, 134.	3.6	99
17	Association mapping of North American spring wheat breeding germplasm reveals loci conferring resistance to Ug99 and other African stem rust races. BMC Plant Biology, 2015, 15, 249.	3.6	98
18	The genetic architecture of genomeâ€wide recombination rate variation in allopolyploid wheat revealed by nested association mapping. Plant Journal, 2018, 95, 1039-1054.	5.7	97

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19	Genome-wide association mapping reveals a rich genetic architecture of stripe rust resistance loci in emmer wheat (Triticum turgidum ssp. dicoccum). Theoretical and Applied Genetics, 2017, 130, 2249-2270.	3.6	80
20	Development and characterization of wheat-Ae. searsii Robertsonian translocations and a recombinant chromosome conferring resistance to stem rust. Theoretical and Applied Genetics, 2011, 122, 1537-1545.	3.6	77
21	Stem Rust Resistance in <i>Aegilops tauschii</i> Germplasm. Crop Science, 2011, 51, 2074-2078.	1.8	72
22	Genome-wide association mapping for seedling and field resistance to Puccinia striiformis f. sp. tritici in elite durum wheat. Theoretical and Applied Genetics, 2017, 130, 649-667.	3.6	71
23	Markers Linked to Wheat Stem Rust Resistance Gene <i>Sr11</i> Effective to <i>Puccinia graminis</i> f. sp. <i>tritici</i> Race TKTTF. Phytopathology, 2016, 106, 1352-1358.	2.2	69
24	Loci associated with resistance to stripe rust (Puccinia striiformis f. sp. tritici) in a core collection of spring wheat (Triticum aestivum). PLoS ONE, 2017, 12, e0179087.	2.5	69
25	NIR Absorbance Characteristics of Deoxynivalenol and of Sound and <i>Fusarium</i>-Damaged Wheat Kernels. Journal of Near Infrared Spectroscopy, 2009, 17, 213-221.	1.5	67
26	Novel Sources of Stripe Rust Resistance Identified by Genome-Wide Association Mapping in Ethiopian Durum Wheat (Triticum turgidum ssp. durum). Frontiers in Plant Science, 2017, 8, 774.	3.6	66
27	A Genome-Wide Association Study of Field and Seedling Response to Individual Stem Rust Pathogen Races Reveals Combinations of Race-Specific Genes in North American Spring Wheat. Frontiers in Plant Science, 2018, 9, 52.	3.6	66
28	Nearâ€Infrared Spectroscopic Method for Identification of <i>Fusarium</i> Head Blight Damage and Prediction of Deoxynivalenol in Single Wheat Kernels. Cereal Chemistry, 2010, 87, 511-517.	2.2	65
29	Introgression of stem rust resistance genes SrTA10187 and SrTA10171 from Aegilops tauschii to wheat. Theoretical and Applied Genetics, 2013, 126, 2477-2484.	3.6	65
30	Deep Learning for Predicting Complex Traits in Spring Wheat Breeding Program. Frontiers in Plant Science, 2020, 11, 613325.	3.6	64
31	Genetic Characterization of Stem Rust Resistance in a Global Spring Wheat Germplasm Collection. Crop Science, 2017, 57, 2575-2589.	1.8	63
32	Simultaneous transfer, introgression, and genomic localization of genes for resistance to stem rust race TTKSK (Ug99) from Aegilops tauschii to wheat. Theoretical and Applied Genetics, 2013, 126, 1179-1188.	3.6	61
33	Molecular Mapping of Stemâ€Rustâ€Resistance Gene <i>Sr40</i> in Wheat. Crop Science, 2009, 49, 1681-1686.	1.8	58
34	Development of Wheat Lines Having a Small Introgressed Segment Carrying Stem Rust Resistance Gene <i>Sr22</i>. Crop Science, 2010, 50, 1823-1830.	1.8	58
35	Multitrait machineâ€•and deepâ€learning models for genomic selection using spectral information in a wheat breeding program. Plant Genome, 2021, 14, e20119.	2.8	56
36	Development and characterization of a compensating wheat-Thinopyrum intermedium Robertsonian translocation with Sr44 resistance to stem rust (Ug99). Theoretical and Applied Genetics, 2013, 126, 1167-1177.	3.6	54

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37	Development of a SNP marker assay for the Lr67 gene of wheat using a genotyping by sequencing approach. Molecular Breeding, 2014, 34, 2109-2118.	2.1	52
38	Multiâ€Locus Mixed Model Analysis Of Stem Rust Resistance In Winter Wheat. Plant Genome, 2017, 10, plantgenome2017.01.0001.	2.8	52
39	Genetic Maps of Stem Rust Resistance Gene <i>Sr35</i> in Diploid and Hexaploid Wheat. Crop Science, 2010, 50, 2464-2474.	1.8	51
40	Genome-Wide Association Mapping of Loci for Resistance to Stripe Rust in North American Elite Spring Wheat Germplasm. Phytopathology, 2018, 108, 234-245.	2.2	50
41	Evaluation of the Potential for Genomic Selection to Improve Spring Wheat Resistance to Fusarium Head Blight in the Pacific Northwest. Frontiers in Plant Science, 2018, 9, 911.	3.6	50
42	Combining Genomic and Phenomic Information for Predicting Grain Protein Content and Grain Yield in Spring Wheat. Frontiers in Plant Science, 2021, 12, 613300.	3.6	50
43	A robust molecular marker for the detection of shortened introgressed segment carrying the stem rust resistance gene Sr22 in common wheat. Theoretical and Applied Genetics, 2011, 122, 1-7.	3.6	48
44	Evaluation of Nearâ€Isogenic Lines for Three Heightâ€Reducing Genes in Hard Red Spring Wheat. Crop Science, 2012, 52, 1145-1152.	1.8	48
45	Identification of promising host-induced silencing targets among genes preferentially transcribed in haustoria of Puccinia. BMC Genomics, 2015, 16, 579.	2.8	47
46	A Time for More Booms and Fewer Busts? Unraveling Cerealâ€“Rust Interactions. Molecular Plant-Microbe Interactions, 2014, 27, 207-214.	2.6	46
47	Unlocking Diversity in Germplasm Collections via Genomic Selection: A Case Study Based on Quantitative Adult Plant Resistance to Stripe Rust in Spring Wheat. Plant Genome, 2017, 10, plantgenome2016.12.0124.	2.8	42
48	Association mapping of leaf rust resistance loci in a spring wheat core collection. Theoretical and Applied Genetics, 2017, 130, 345-361.	3.6	41
49	Identification and Validation of SNP Markers Linked to the Stripe Rust Resistance Gene <i>Yr5</i> in Wheat. Crop Science, 2016, 56, 3055-3065.	1.8	32
50	Genomic variants affecting homoeologous gene expression dosage contribute to agronomic trait variation in allopolyploid wheat. Nature Communications, 2022, 13, 826.	12.8	31
51	Virulence Characterization of Wheat Stripe Rust Fungus <i>Puccinia striiformis</i> f. sp. <i>tritici</i> in Ethiopia and Evaluation of Ethiopian Wheat Germplasm for Resistance to Races of the Pathogen from Ethiopia and the United States. Plant Disease, 2017, 101, 73-80.	1.4	29
52	Genomeâ€wide Association Study of Agronomic Traits in a Springâ€Planted North American Elite Hard Red Spring Wheat Panel. Crop Science, 2018, 58, 1838-1852.	1.8	29
53	Genomic Selection and Genome-Wide Association Studies for Grain Protein Content Stability in a Nested Association Mapping Population of Wheat. Agronomy, 2021, 11, 2528.	3.0	26
54	Impact of a Quantitative Trait Locus for Tiller Number on Plasticity of Agronomic Traits in Spring Wheat. Crop Science, 2016, 56, 595-602.	1.8	24

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55	Agronomic Performance of Spring Wheat as Related to Planting Date and Photoperiod Response. Crop Science, 2012, 52, 1633-1639.	1.8	18
56	Genome-wide associations for multiple pest resistances in a Northwestern United States elite spring wheat panel. PLoS ONE, 2018, 13, e0191305.	2.5	18
57	A TILLING Resource for Hard Red Winter Wheat Variety Jagger. Crop Science, 2019, 59, 1666-1671.	1.8	17
58	Spring Wheat Tolerance and Resistance to <i>Heterodera avenae</i> in the Pacific Northwest. Plant Disease, 2013, 97, 590-600.	1.4	16
59	Agronomic Impact of a Stem Solidness Gene in Nearâ€Isogenic Lines of Wheat. Crop Science, 2015, 55, 514-520.	1.8	16
60	Registration of the Triticeaeâ€CAP Spring Wheat Nested Association Mapping Population. Journal of Plant Registrations, 2019, 13, 294-297.	0.5	16
61	Development of a Raspberry Pi-Based Sensor System for Automated In-Field Monitoring to Support Crop Breeding Programs. Inventions, 2021, 6, 42.	2.5	15
62	Spectral Reflectance for Indirect Selection and Genomeâ€Wide Association Analyses of Grain Yield and Drought Tolerance in North American Spring Wheat. Crop Science, 2018, 58, 2289-2301.	1.8	14
63	Investigating conditions that induce late maturity alpha-amylase (LMA) using Northwestern US spring wheat (<i>Triticum aestivum</i> L.). Seed Science Research, 2021, 31, 169-177.	1.7	13
64	Development of an Automated High- Throughput Phenotyping System for Wheat Evaluation in a Controlled Environment. Transactions of the ASABE, 2019, 62, 61-74.	1.1	12
65	<i>Fusarium</i> Head Blight Symptoms and Mycotoxin Levels in Single Kernels of Infected Wheat Spikes. Cereal Chemistry, 2011, 88, 291-295.	2.2	11
66	3D Robotic System Development for High-throughput Crop Phenotyping. IFAC-PapersOnLine, 2016, 49, 242-247.	0.9	11
67	The genetics of late maturity alpha-amylase (LMA) in North American spring wheat (<i>Triticum) Tj ETQq1 1 0.784314 rgBT /Overlock 1(	1.7	10
68	Segregation analysis indicates that Puroindoline b-2 variants 2 and 3 are allelic inÂTriticum aestivum and that a revision to Puroindoline b-2 gene symbolization isÂindicated. Journal of Cereal Science, 2013, 57, 61-66.	3.7	8
69	The Borlaug Global Rust Initiative: Reducing the Genetic Vulnerability of Wheat to Rust. , 2014, , 317-331.		7
70	Introgression of a Novel Ug99-Effective Stem Rust Resistance Gene into Wheat and Development of <i>Dasypyrum villosum</i> Chromosome-Specific Markers via Genotyping-by-Sequencing (GBS). Plant Disease, 2019, 103, 1068-1074.	1.4	7
71	Development of the Wheat Practical Haplotype Graph database as a resource for genotyping data storage and genotype imputation. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	7
72	Agronomic Traits in Durum Wheat Germplasm Possessing Puroindoline Genes. Agronomy Journal, 2019, 111, 1254-1265.	1.8	6

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73	Development of Automated High-Throughput Phenotyping System for Controlled Environment Studies. , 2017, , .		4
74	Identifying Loci Conferring Resistance to Leaf and Stripe Rusts in a Spring Wheat Population (<i>Triticum aestivum</i>) via Genome-Wide Association Mapping. Phytopathology, 2019, 109, 1932-1940.	2.2	4
75	Genomeâ€wide mapping of resistance to stripe rust caused by Puccinia striiformis f. sp. tritici in hexaploid winter wheat. Crop Science, 2020, 60, 115-131.	1.8	4
76	Reliable DNA Markers for a Previously Unidentified, Yet Broadly Deployed Hessian Fly Resistance Gene on Chromosome 6B in Pacific Northwest Spring Wheat Varieties. Frontiers in Plant Science, 0, 13, .	3.6	4
77	Registration of â€˜Daynâ€™ Hard White Spring Wheat. Journal of Plant Registrations, 2018, 12, 222-227.	0.5	2
78	Registration of Hessian flyâ€resistant germplasm KS18WGRC65 carrying <i>H26</i> in hard red winter wheat â€˜Overleyâ€™ background. Journal of Plant Registrations, 2020, 14, 206-209.	0.5	2
79	Registration of â€˜Gleeâ€™ Hard Red Spring Wheat. Journal of Plant Registrations, 2018, 12, 60-65.	0.5	1
80	Analysis of the primary sources of quantitative adult plant resistance to stripe rust in U.S. soft red winter wheat germplasm. Plant Genome, 2021, 14, e20082.	2.8	1