Diane E Mather

List of Publications by Year
in descending order

104 papers	6,146 citations	101543 36 h-index	74163 75 g-index
106 all docs	106 docs citations	106 times ranked	5379 citing authors

#	Article	IF	Citations
1	Characterization of polyploid wheat genomic diversity using a highâ€density 90Â000 single nucleotide polymorphism array. Plant Biotechnology Journal, 2014, 12, 787-796.	8.3	1,828
2	Raising yield potential of wheat. I. Overview of a consortium approach and breeding strategies. Journal of Experimental Botany, 2011, 62, 439-452.	4.8	262
3	Random amplified polymorphic DNA and pedigree relationships in spring barley. Theoretical and Applied Genetics, 1993, 85, 976-984.	3.6	223
4	The Genetics and Transcriptional Profiles of the Cellulose Synthase-Like HvCslF Gene Family in Barley. Plant Physiology, 2008, 146, 1821-1833.	4.8	204
5	Regions of the Genome that Affect Agronomic Performance in Twoâ€Row Barley. Crop Science, 1996, 36, 1053-1062.	1.8	191
6	Effect of population size on the estimation of QTL: a test using resistance to barley stripe rust. Theoretical and Applied Genetics, 2005, 111, 1260-1270.	3.6	185
7	Regions of the Genome That Affect Grain and Malt Quality in a North American Twoâ€Row Barley Cross. Crop Science, 1997, 37, 544-554.	1.8	160
8	Whole-Genome Mapping of Agronomic and Metabolic Traits to Identify Novel Quantitative Trait Loci in Bread Wheat Grown in a Water-Limited Environment. Plant Physiology, 2013, 162, 1266-1281.	4.8	115
9	Genome-wide association mapping of grain yield in a diverse collection of spring wheat (Triticum) Tj ETQq1 1 0.784314 rgBT /Overloc	2.5	108
10	Metabolic profiling and factor analysis to discriminate quantitative resistance in wheat cultivars against fusarium head blight. Physiological and Molecular Plant Pathology, 2005, 66, 119-133.	2.5	101
11	Genotypic variation in wheat grain fructan content revealed by a simplified HPLC method. Journal of Cereal Science, 2008, 48, 369-378.	3.7	95
12	Genetic control of grain yield and grain physical characteristics in a bread wheat population grown under a range of environmental conditions. Theoretical and Applied Genetics, 2014, 127, 1607-1624.	3.6	85
13	QTLs affecting kernel size and shape in a two-rowed by six-rowed barley cross. Theoretical and Applied Genetics, 2002, 105, 237-247.	3.6	79
14	Multi-environment analysis and improved mapping of a yield-related QTL on chromosome 3B of wheat. Theoretical and Applied Genetics, 2013, 126, 747-761.	3.6	77
15	A GDSL Esterase/Lipase Catalyzes the Esterification of Lutein in Bread Wheat. Plant Cell, 2019, 31, 3092-3112.	6.6	74
16	Detection of QTL for metabolic and agronomic traits in wheat with adjustments for variation at genetic loci that affect plant phenology. Plant Science, 2015, 233, 143-154.	3.6	72
17	Mapping of Disease Resistance Loci in Barley on the Basis of Visual Assessment of Naturally Occurring Symptoms. Crop Science, 1998, 38, 843-850.	1.8	67
18	Morphological, physiological and yield responses of durum wheat to pre-anthesis water-deficit stress are genotype-dependent. Crop and Pasture Science, 2015, 66, 1024.	1.5	63

#	Article	IF	Citations
19	A QTL on the short arm of wheat (Triticum aestivum L.) chromosome 3B affects the stability of grain weight in plants exposed to a brief heat shock early in grain filling. BMC Plant Biology, 2016, 16, 100.	3.6	62
20	Laser ablation tomography for visualization of root colonization by edaphic organisms. Journal of Experimental Botany, 2019, 70, 5327-5342.	4.8	62
21	QTL detection with bidirectional and unidirectional selective genotyping: marker-based and trait-based analyses. Theoretical and Applied Genetics, 2009, 118, 347-358.	3.6	60
22	Mapping of novel salt tolerance QTL in an Excaliburâ€‰Ã—â€‰Kukri doubled haploid wheat population. Theoretical and Applied Genetics, 2018, 131, 2179-2196.	3.6	60
23	Effect of silk age on resistance of maize toFusarium graminearum. Canadian Journal of Plant Pathology, 1992, 14, 293-298.	1.4	58
24	Genetic improvement of spring barley cultivars grown in eastern Canada from 1910 to 1988. Euphytica, 1993, 71, 35-48.	1.2	56
25	QTL analysis of malting quality traits in two barley populations. Australian Journal of Agricultural Research, 2007, 58, 858.	1.5	54
26	Quantitative trait loci for grain fructan concentration in wheat (Triticum aestivum L.). Theoretical and Applied Genetics, 2008, 117, 701-709.	3.6	54
27	Analytical Approaches and Population Types for Finding and Utilizing QTL in Complex Plant Populations. Crop Science, 2009, 49, 363-380.	1.8	53
28	Genotypic differences in the resistance of maize silk toFusarium graminearum. Canadian Journal of Plant Pathology, 1992, 14, 211-214.	1.4	52
29	KIN: Software for Computing Kinship Coefficients. Journal of Heredity, 1993, 84, 238-238.	2.4	52
30	Genetic diversity for quantitatively inherited agronomic and malting quality traits. Developments in Plant Genetics and Breeding, 2003, 7, 201-226.	0.6	51
31	Temperature Switch PCR (TSP): Robust assay design for reliable amplification and genotyping of SNPs. BMC Genomics, 2009, 10, 580.	2.8	47
32	The Global Durum Wheat Panel (GDP): An International Platform to Identify and Exchange Beneficial Alleles. Frontiers in Plant Science, 2020, 11, 569905.	3.6	44
33	Genome-Wide Identification of MicroRNAs in Leaves and the Developing Head of Four Durum Genotypes during Water Deficit Stress. PLoS ONE, 2015, 10, e0142799.	2.5	43
34	Nitrogen Fertilizer and Seeding Date Induced Changes in Protein, Oil and Î²-Glucan Contents of Four Oat Cultivars. Journal of Cereal Science, 1994, 20, 283-290.	3.7	42
35	The dynamics of cereal cyst nematode infection differ between susceptible and resistant barley cultivars and lead to changes in (1,3;1,4)â€Î²â€glucan levels and <scp>HvCslF</scp> gene transcript abundance. New Phytologist, 2015, 207, 135-147.	7.3	40
36	Leafy Reducedâ€Stature Maize Hybrids for Shortâ€Season Environments. Crop Science, 1999, 39, 1106-1110.	1.8	39

#	Article	IF	Citations
37	Plant Population Density Effects on Maize Inbred Lines Grown in Shortâ€Season Environments. Crop Science, 1998, 38, 104-108.	1.8	38
38	Addition of rye chromosome 4R to wheat increases anther length and pollen grain number. Theoretical and Applied Genetics, 2015, 128, 953-964.	3.6	38
39	Mapping Quantitative Trait Loci for Starch Granule Traits in Barley. Journal of Cereal Science, 1999, 29, 153-160.	3.7	37
40	Quantitative trait loci affecting germination traits and malt friability in a two-rowed by six-rowed barley cross. Journal of Cereal Science, 2004, 39, 283-290.	3.7	36
41	Genetic mapping and marker development for resistance of wheat against the root lesion nematode Pratylenchus neglectus. BMC Plant Biology, 2013, 13, 230.	3.6	35
42	Distribution of Deoxynivalenol in Fusarium graminearum-Infected Maize Ears. Phytopathology, 1996, 86, 110.	2.2	35
43	Novel allelic variants encoded at the Glu-D3 locus in bread wheat. Journal of Cereal Science, 2009, 49, 254-261.	3.7	34
44	Effect of Macroconidial Suspension Volume and Concentration on Expression of Resistance toFusarium graminearumin Maize.. Plant Disease, 1995, 79, 461.	1.4	34
45	Genetic mapping and QTL analysis of disease resistance traits in the barley population BaudinÃ—AC Metcalfe. Crop and Pasture Science, 2011, 62, 152.	1.5	33
46	Comparison of Techniques for Inoculating Maize Silk, Kernel, and Cob Tissues withFusarium graminearum. Plant Disease, 1996, 80, 81.	1.4	33
47	A second â€˜overexpressionâ€™ allele at the Glu-B1 high-molecular-weight glutenin locus of wheat: sequence characterisation and functional effects. Theoretical and Applied Genetics, 2012, 124, 333-343.	3.6	32
48	A QTL on the Ca7 chromosome of chickpea affects resistance to the root-lesion nematode Pratylenchus thornei. Molecular Breeding, 2021, 41, 1.	2.1	32
49	Evidence for a Gene for Silk Resistance toFusarium graminearumSchw. Ear Rot of Maize. Journal of Heredity, 1994, 85, 118-121.	2.4	31
50	Genetic control of lutein esterification in wheat (Triticum aestivum L.) grain. Journal of Cereal Science, 2015, 64, 109-115.	3.7	31
51	Inheritance of Kernel Resistance to Fusarium graminearum in Maize. Journal of Heredity, 1996, 87, 382-385.	2.4	30
52	Clusters of genes encoding fructan biosynthesizing enzymes in wheat and barley. Plant Molecular Biology, 2012, 80, 299-314.	3.9	29
53	Effectiveness of selective genotyping for detection of quantitative trait loci: an analysis of grain and malt quality traits in three barley populations. Genome, 2002, 45, 1116-1124.	2.0	28
54	Development and assessment of simple PCR markers for SNP genotyping in barley. Theoretical and Applied Genetics, 2009, 119, 939-951.	3.6	28

#	Article	IF	Citations
55	Genotyping by Sequencing in Almond: SNP Discovery, Linkage Mapping, and Marker Design. G3: Genes, Genomes, Genetics, 2018, 8, 161-172.	1.8	28
56	Verifications of a Quantitative Trait Locus Affecting Agronomic Traits in Twoâ€Row Barley. Crop Science, 1999, 39, 248-252.	1.8	27
57	Genetic Control of Quantitative Grain and Malt Quality Traits in Barley. The Journal of Crop Improvement: Innovations in Practiceory and Research, 2002, 5, 131-164.	0.4	25
58	Resistance of Maize Hybrids and Inbreds Following Silk Inoculation with Three Isolates ofFusarium graminearum. Plant Disease, 1993, 77, 1248.	1.4	25
59	Pedigree selection for Gibberella ear rot resistance in maize. Euphytica, 2005, 143, 1-8.	1.2	24
60	A Genome-Wide Association Study for Culm Cellulose Content in Barley Reveals Candidate Genes Co-Expressed with Members of the CELLULOSE SYNTHASE A Gene Family. PLoS ONE, 2015, 10, e0130890.	2.5	24
61	Application of Geostatistical and Neighbor Analyses to Data from Plant Breeding Trials. Crop Science, 1998, 38, 1545-1553.	1.8	22
62	Genetic control of processing quality in a bread wheat mapping population grown in water-limited environments. Journal of Cereal Science, 2013, 57, 304-311.	3.7	21
63	Title is missing!. Euphytica, 1999, 107, 185-192.	1.2	20
64	Genetic control of grain protein, dough rheology traits and loaf traits in a bread wheat population grown in three environments. Journal of Cereal Science, 2015, 64, 147-152.	3.7	20
65	Heritability of ?-glucan, groat percentage, and crown rust resistance in two oat crosses. Euphytica, 1996, 91, 359-364.	1.2	19
66	Leafy reduced-stature maize for short-season environments: morphological aspects of inbred lines. Euphytica, 1997, 96, 301-309.	1.2	17
67	Variation in tolerance to radiant frost at reproductive stages in field pea germplasm. Euphytica, 2012, 186, 831-845.	1.2	17
68	Differential expression of the HvCslF6 gene late in grain development may explain quantitative differences in (1,3;1,4)-Î²-glucan concentration in barley. Molecular Breeding, 2015, 35, 20.	2.1	17
69	Post-anthesis heat and a Gpc-B1 introgression have similar but non-additive effects in bread wheat. Functional Plant Biology, 2014, 41, 1002.	2.1	17
70	Leaf and Stem Characteristics of Timothy Plants Divergently Selected for the Ratio of Lignin to Cellulose. Crop Science, 2005, 45, 2425-2429.	1.8	15
71	Exact word matches in rice pseudomolecules. Genome, 2006, 49, 1047-1051.	2.0	15
72	An informative set of SNP markers for molecular characterisation of Australian barley germplasm. Crop and Pasture Science, 2010, 61, 70.	1.5	15

#	Article	IF	Citations
73	Genetic mapping of the Cre8 locus for resistance against cereal cyst nematode (Heterodera avenae) Tj ETQq1 1 0.784314 rgBT /Overlock	2.1	15
74	Large expert-curated database for benchmarking document similarity detection in biomedical literature search. Database: the Journal of Biological Databases and Curation, 2019, 2019, .	3.0	15
75	Loci on chromosomes 1A and 2A affect resistance to tan (yellow) spot in wheat populations not segregating for tsn1. Theoretical and Applied Genetics, 2017, 130, 2637-2654.	3.6	14
76	Evaluation of yield stability of cowpea under sole and intercrop management in Nigeria. Euphytica, 1991, 61, 193-201.	1.2	13
77	GREGOR: Software for Genetic Simulation. Journal of Heredity, 1993, 84, 237-237.	2.4	13
78	Nitrogen Fertilizer Application and Seeding Date Effects on Oat Grain Milling Quality. Agronomy Journal, 1994, 86, 838-843.	1.8	13
79	Screening for Partial Resistance to an Isolate of Crown Rust (Puccinia coronataf.) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 5 1994, 16, 49-55.	1.4	12
80	A locus on barley chromosome 5H affects adult plant resistance to powdery mildew. Molecular Breeding, 2018, 38, 103.	2.1	11
81	Protein and carbohydrate accumulation in normal and high-lysine barley in spike culture. Physiologia Plantarum, 1984, 60, 75-80.	5.2	10
82	A method for detecting DNA polymorphism in large populations. Genome, 1994, 37, 506-508.	2.0	10
83	Black point formation in barley: environmental influences and quantitative trait loci. Australian Journal of Agricultural Research, 2008, 59, 1021.	1.5	10
84	A cysteine in the repetitive domain of a high-molecular-weight glutenin subunit interferes with the mixing properties of wheat dough. Amino Acids, 2013, 44, 1061-1071.	2.7	10
85	Accumulation of mutations in genes associated with sexual reproduction contributed to the domestication of a vegetatively propagated staple crop, enset. Horticulture Research, 2020, 7, 185.	6.3	10
86	Pooled DNA for linkage analysis: practical and statistical considerations. Genome, 1994, 37, 999-1004.	2.0	9
87	Assessment of ear rot symptom development in maize hybrids inoculated withFusarium graminearum. Canadian Journal of Plant Pathology, 1997, 19, 390-396.	1.4	9
88	Use of specific differential isolates of Rhynchosporium commune to detect minor gene resistance to leaf scald in barley seedlings. Australasian Plant Pathology, 2014, 43, 197-203.	1.0	9
89	Estimation of phenotypic selection differentials for predicting genetic responses to ratio-based selection. Genome, 1988, 30, 838-843.	2.0	8
90	Maize landraces of the St. Lawrence-Great Lakes region of North America. Euphytica, 1997, 98, 141-148.	1.2	8

#	Article	IF	Citations
91	Variation among S-locus haplotypes and among stylar RNases in almond. Scientific Reports, 2020, 10, 583.	3.3	8
92	Three-dimensional imaging reveals that positions of cyst nematode feeding sites relative to xylem vessels differ between susceptible and resistant wheat. Plant Cell Reports, 2021, 40, 393-403.	5.6	8
93	Lipoxygenase in Wheat: Genetic Control and Impact on Stability of Lutein and Lutein Esters. Foods, 2021, 10, 1149.	4.3	8
94	Responses to Divergent Phenotypic Selection for Fiber Traits in Timothy. Crop Science, 2005, 45, 1017-1022.	1.8	7
95	Infection by cyst nematodes induces rapid remodelling of developing xylem vessels in wheat roots. Scientific Reports, 2020, 10, 9025.	3.3	7
96	EC_oligos: automated and whole-genome primer design for exons within one or between two genomes. Bioinformatics, 2004, 20, 3668-3669.	4.1	5
97	Anatomical features at the disarticulation zone in florets of fatuoid and nonfatuoid oat (<i>Avena) Tj ETQq1 1 0.784314 rgBT /Overlo	1.1	5
98	Hill plots for yield evaluation in a doubled haploid recurrent selection program in barley (Hordeum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.9	4
99	From Genes to Markers: Exploiting Gene Sequence Information to Develop Tools for Plant Breeding. Methods in Molecular Biology, 2014, 1145, 21-36.	0.9	4
100	Dormancy and dormancy release in white-grained wheat (Triticum aestivum L.). Planta, 2021, 253, 5.	3.2	4
101	Fine mapping of Rha2 in barley reveals candidate genes for resistance against cereal cyst nematode. Theoretical and Applied Genetics, 2019, 132, 1309-1320.	3.6	2
102	Analysis of Genetic Diversity in the Traditional Chinese Medicine Plant â€˜Kushenâ€™ (Sophora flavescens) Tj ETQq0 0 0 rgBT /Overlock	3.6	2
103	Identification of Sclerotinia stem rot resistance quantitative trait loci in a chickpea (Cicer arietinum) recombinant inbred line population. Functional Plant Biology, 2022, , .	2.1	1
104	Perspectives in Development for Maize Production in the Caribbean: A Case Study of Trinidad and Tobago. Canadian Journal of Development Studies, 1997, 18, 613-627.	2.8	0