David Jordan

List of Publications by Year
in descending order

121 papers	7,263 citations	50244 46 h-index	69214 77 g-index
128 all docs	128 docs citations	128 times ranked	6034 citing authors

#	Article	IF	Citations
1	Whole-genome sequencing reveals untapped genetic potential in Africaâ€™s indigenous cereal crop sorghum. Nature Communications, 2013, 4, 2320.	5.8	405
2	Sorghum stay-green QTL individually reduce post-flowering drought-induced leaf senescence. Journal of Experimental Botany, 2006, 58, 327-338.	2.4	286
3	Drought adaptation of stay-green sorghum is associated with canopy development, leaf anatomy, root growth, and water uptake. Journal of Experimental Botany, 2014, 65, 6251-6263.	2.4	264
4	QTL for nodal root angle in sorghum (Sorghum bicolor L. Moench) co-locate with QTL for traits associated with drought adaptation. Theoretical and Applied Genetics, 2012, 124, 97-109.	1.8	226
5	A consensus genetic map of sorghum that integrates multiple component maps and high-throughput Diversity Array Technology (DArT) markers. BMC Plant Biology, 2009, 9, 13.	1.6	172
6	Exploring and Exploiting Pan-genomics for Crop Improvement. Molecular Plant, 2019, 12, 156-169.	3.9	172
7	Identification of genomic regions associated with stay green in sorghum by testing RILs in multiple environments. Theoretical and Applied Genetics, 2000, 100, 1225-1232.	1.8	166
8	Stayâ€green alleles individually enhance grain yield in sorghum under drought by modifying canopy development and water uptake patterns. New Phytologist, 2014, 203, 817-830.	3.5	163
9	QTL for root angle and number in a population developed from bread wheats (Triticum aestivum) with contrasting adaptation to water-limited environments. Theoretical and Applied Genetics, 2013, 126, 1563-1574.	1.8	160
10	Crop design for specific adaptation in variable dryland production environments. Crop and Pasture Science, 2014, 65, 614.	0.7	152
11	Morphological and architectural development of root systems in sorghum and maize. Plant and Soil, 2010, 333, 287-299.	1.8	148
12	The Relationship Between the Stayâ€Green Trait and Grain Yield in Elite Sorghum Hybrids Grown in a Range of Environments. Crop Science, 2012, 52, 1153-1161.	0.8	148
13	Identification of QTL for sugar-related traits in a sweetÂÃ—Âgrain sorghum (Sorghum bicolor L. Moench) recombinant inbred population. Molecular Breeding, 2008, 22, 367-384.	1.0	138
14	DArT markers: diversity analyses and mapping in Sorghum bicolor. BMC Genomics, 2008, 9, 26.	1.2	131
15	Integrating sorghum whole genome sequence information with a compendium of sorghum QTL studies reveals uneven distribution of QTL and of gene-rich regions with significant implications for crop improvement. Theoretical and Applied Genetics, 2011, 123, 169-191.	1.8	131
16	Multi-Spectral Imaging from an Unmanned Aerial Vehicle Enables the Assessment of Seasonal Leaf Area Dynamics of Sorghum Breeding Lines. Frontiers in Plant Science, 2017, 8, 1532.	1.7	129
17	Estimation of plant height using a high throughput phenotyping platform based on unmanned aerial vehicle and self-calibration: Example for sorghum breeding. European Journal of Agronomy, 2018, 95, 24-32.	1.9	122
18	VERNALIZATION1 Modulates Root System Architecture in Wheat and Barley. Molecular Plant, 2018, 11, 226-229.	3.9	118

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19	The Sorghum QTL Atlas: a powerful tool for trait dissection, comparative genomics and crop improvement. Theoretical and Applied Genetics, 2019, 132, 751-766.	1.8	114
20	A Weakly Supervised Deep Learning Framework for Sorghum Head Detection and Counting. Plant Phenomics, 2019, 2019, 1525874.	2.5	114
21	Prediction of hybrid performance in grain sorghum using RFLP markers. Theoretical and Applied Genetics, 2003, 106, 559-567.	1.8	109
22	Location of major effect genes in sorghum (Sorghum bicolor (L.) Moench). Theoretical and Applied Genetics, 2010, 121, 1339-1356.	1.8	109
23	Exploring and Exploiting Genetic Variation from Unadapted Sorghum Germplasm in a Breeding Program. Crop Science, 2011, 51, 1444-1457.	0.8	96
24	Extensive variation within the pan-genome of cultivated and wild sorghum. Nature Plants, 2021, 7, 766-773.	4.7	94
25	Modelling spatial trends in sorghum breeding field trials using a two-dimensional P-spline mixed model. Theoretical and Applied Genetics, 2017, 130, 1375-1392.	1.8	92
26	The Effect of Tropical Sorghum Conversion and Inbred Development on Genome Diversity as Revealed by Highâ€Resolution Genotyping. Crop Science, 2008, 48, S-12.	0.8	90
27	A domestication history of dynamic adaptation and genomic deterioration in Sorghum. Nature Plants, 2019, 5, 369-379.	4.7	84
28	An assessment of the genetic relationship between sweet and grain sorghums, within Sorghum bicolor ssp. bicolor (L.) Moench, using AFLP markers. Euphytica, 2007, 157, 161-176.	0.6	83
29	Sorghum genotypes differ in high temperature responses for seed set. Field Crops Research, 2015, 171, 32-40.	2.3	83
30	Molecular mapping and candidate gene identification of the Rf2 gene for pollen fertility restoration in sorghum [Sorghum bicolor (L.) Moench]. Theoretical and Applied Genetics, 2010, 120, 1279-1287.	1.8	80
31	Designing crops for adaptation to the drought and highâ€temperature risks anticipated in future climates. Crop Science, 2020, 60, 605-621.	0.8	80
32	Recent emergence of the wheat Lr34 multi-pathogen resistance: insights from haplotype analysis in wheat, rice, sorghum and Aegilops tauschii. Theoretical and Applied Genetics, 2013, 126, 663-672.	1.8	79
33	Supermodels: sorghum and maize provide mutual insight into the genetics of flowering time. Theoretical and Applied Genetics, 2013, 126, 1377-1395.	1.8	77
34	Integrating modelling and phenotyping approaches to identify and screen complex traits: transpiration efficiency in cereals. Journal of Experimental Botany, 2018, 69, 3181-3194.	2.4	76
35	Aerial Imagery Analysis â€" Quantifying Appearance and Number of Sorghum Heads for Applications in Breeding and Agronomy. Frontiers in Plant Science, 2018, 9, 1544.	1.7	74
36	Genetic Variability and Control of Nodal Root Angle in Sorghum. Crop Science, 2011, 51, 2011-2020.	0.8	73

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37	Largeâ€scale GWAS in sorghum reveals common genetic control of grain size among cereals. Plant Biotechnology Journal, 2020, 18, 1093-1105.	4.1	72
38	Characterization of Linkage Disequilibrium and Population Structure in a Mungbean Diversity Panel. Frontiers in Plant Science, 2017, 8, 2102.	1.7	71
39	Identifications of two different mechanisms for sorghum midge resistance through QTL mapping. Theoretical and Applied Genetics, 2003, 107, 116-122.	1.8	67
40	Resistance gene analogues in sugarcane and sorghum and their association with quantitative trait loci for rust resistance. Genome, 2005, 48, 391-400.	0.9	66
41	Pre-anthesis ovary development determines genotypic differences in potential kernel weight in sorghum. Journal of Experimental Botany, 2009, 60, 1399-1408.	2.4	65
42	Genetic control of nodal root angle in sorghum and its implications on water extraction. European Journal of Agronomy, 2012, 42, 3-10.	1.9	64
43	Whole-Genome Analysis of Candidate genes Associated with Seed Size and Weight in Sorghum bicolor Reveals Signatures of Artificial Selection and Insights into Parallel Domestication in Cereal Crops. Frontiers in Plant Science, 2017, 8, 1237.	1.7	59
44	Mapping and characterization of Rf 5 : a new gene conditioning pollen fertility restoration in A1 and A2 cytoplasm in sorghum (Sorghum bicolor (L.) Moench). Theoretical and Applied Genetics, 2011, 123, 383-396.	1.8	56
45	Development of a phenotyping platform for high throughput screening of nodal root angle in sorghum. Plant Methods, 2017, 13, 56.	1.9	56
46	Genetic variability in high temperature effects on seed-set in sorghum. Functional Plant Biology, 2013, 40, 439.	1.1	54
47	A physiological framework to explain genetic and environmental regulation of tillering in sorghum. New Phytologist, 2014, 203, 155-167.	3.5	53
48	The plasticity of NBS resistance genes in sorghum is driven by multiple evolutionary processes. BMC Plant Biology, 2014, 14, 253.	1.6	49
49	Genomic Prediction of Grain Yield and Drought-Adaptation Capacity in Sorghum Is Enhanced by Multi-Trait Analysis. Frontiers in Plant Science, 2019, 10, 997.	1.7	48
50	QTL analysis of ergot resistance in sorghum. Theoretical and Applied Genetics, 2008, 117, 369-382.	1.8	46
51	Molecular characterization of the waxy locus in sorghum. Genome, 2008, 51, 524-533.	0.9	46
52	SorGSD: a sorghum genome SNP database. Biotechnology for Biofuels, 2016, 9, 6.	6.2	44
53	Title is missing!. Euphytica, 1998, 102, 1-7.	0.6	43
54	QTL analysis in multiple sorghum populations facilitates the dissection of the genetic and physiological control of tillering. Theoretical and Applied Genetics, 2014, 127, 2253-2266.	1.8	43

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55	Construction of a genetic map in a sorghum recombinant inbred line using probes from different sources and its comparison with other sorghum maps. Australian Journal of Agricultural Research, 1998, 49, 729.	1.5	43
56	Allelic variation at a single gene increases food value in a drought-tolerant staple cereal. Nature Communications, 2013, 4, 1483.	5.8	41
57	Fine mapping of qGW1, a major QTL for grain weight in sorghum. Theoretical and Applied Genetics, 2015, 128, 1813-1825.	1.8	40
58	Identification of genomic regions for rust resistance in sorghum. Euphytica, 1998, 103, 287-292.	0.6	39
59	Allelic variation of the Î²-, Î³- and Î´-kafirin genes in diverse Sorghum genotypes. Theoretical and Applied Genetics, 2010, 121, 1227-1237.	1.8	39
60	Whole Genome Sequencing Reveals Potential New Targets for Improving Nitrogen Uptake and Utilization in Sorghum bicolor. Frontiers in Plant Science, 2016, 7, 1544.	1.7	39
61	Decrease in sorghum grain yield due to the dw3 dwarfing gene is caused by reduction in shoot biomass. Field Crops Research, 2011, 124, 231-239.	2.3	38
62	Domestication and the storage starch biosynthesis pathway: signatures of selection from a whole sorghum genome sequencing strategy. Plant Biotechnology Journal, 2016, 14, 2240-2253.	4.1	38
63	Yield trends under varying environmental conditions for sorghum and wheat across Australia. Agricultural and Forest Meteorology, 2016, 228-229, 276-285.	1.9	38
64	Molecular Breeding for Complex Adaptive Traits: How Integrating Crop Ecophysiology and Modelling Can Enhance Efficiency. , 2016, , 147-162.		38
65	Markers associated with stalk number and suckering in sugarcane colocate with tillering and rhizomatousness QTLs in sorghum. Genome, 2004, 47, 988-993.	0.9	37
66	Association mapping of resistance to Puccinia hordei in Australian barley breeding germplasm. Theoretical and Applied Genetics, 2014, 127, 1199-1212.	1.8	37
67	Suppression of populations of Australian sheep blowfly, <i>Lucilia cuprina</i> (Wiedemann) (Diptera:) Tj ETQq1 1 0.784314 rgBT /Ov	1.1	33
68	Development of Genomic Prediction in Sorghum. Crop Science, 2018, 58, 690-700.	0.8	31
69	Combining pedigree and genomic information to improve prediction quality: an example in sorghum. Theoretical and Applied Genetics, 2019, 132, 2055-2067.	1.8	30
70	Sorghum dwarfing genes can affect radiation capture and radiation use efficiency. Field Crops Research, 2013, 149, 283-290.	2.3	28
71	Heterosis in locally adapted sorghum genotypes and potential of hybrids for increased productivity in contrasting environments in Ethiopia. Crop Journal, 2016, 4, 479-489.	2.3	26
72	Novel Grain Weight Loci Revealed in a Cross between Cultivated and Wild Sorghum. Plant Genome, 2018, 11, 170089.	1.6	26

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73	From bits to bites: Advancement of the Germinate platform to support prebreeding informatics for crop wild relatives. Crop Science, 2021, 61, 1538-1566.	0.8	26
74	Genetic Variation in Potential Kernel Size Affects Kernel Growth and Yield of Sorghum. Crop Science, 2010, 50, 685-695.	0.8	25
75	Spot form of net blotch resistance in barley is under complex genetic control. Theoretical and Applied Genetics, 2015, 128, 489-499.	1.8	24
76	Two distinct classes of QTL determine rust resistance in sorghum. BMC Plant Biology, 2014, 14, 366.	1.6	23
77	Genetic diversity of Ethiopian sorghum reveals signatures of climatic adaptation. Theoretical and Applied Genetics, 2021, 134, 731-742.	1.8	23
78	Genetic erosion and changes in distribution of sorghum (<i>Sorghum bicolor</i> L. (Moench)) landraces in north-eastern Ethiopia. Plant Genetic Resources: Characterisation and Utilisation, 2008, 6, 1-10.	0.4	22
79	Comparison of identity by descent and identity by state for detecting genetic regions under selection in a sorghum pedigree breeding program. Molecular Breeding, 2005, 14, 441-454.	1.0	21
80	Post-anthesis nitrate uptake is critical to yield and grain protein content in Sorghum bicolor. Journal of Plant Physiology, 2017, 216, 118-124.	1.6	20
81	High-Throughput Phenotyping of Dynamic Canopy Traits Associated with Stay-Green in Grain Sorghum. Plant Phenomics, 2020, 2020, 4635153.	2.5	19
82	Applications of pedigree-based genome mapping in wheat and barley breeding programs. Euphytica, 2007, 154, 307-316.	0.6	18
83	Characterisation of grain quality in diverse sorghum germplasm using a Rapid Visco-Analyzer and near infrared reflectance spectroscopy. Journal of the Science of Food and Agriculture, 2012, 92, 1402-1410.	1.7	16
84	How accurate are the marker orders in crop linkage maps generated from large marker datasets?. Crop and Pasture Science, 2009, 60, 362.	0.7	16
85	Genetic Components of Variance and the Role of Pollen Traits in Sorghum Ergot Resistance. Crop Science, 2006, 46, 2387-2395.	0.8	15
86	Coordination of stomata and vein patterns with leaf width underpins waterâ€use efficiency in a C₄ crop. Plant, Cell and Environment, 2022, 45, 1612-1630.	2.8	15
87	Genetic differentiation analysis for the identification of complementary parental pools for sorghum hybrid breeding in Ethiopia. Theoretical and Applied Genetics, 2015, 128, 1765-1775.	1.8	14
88	Predicting Tillering of Diverse Sorghum Germplasm across Environments. Crop Science, 2017, 57, 78-87.	0.8	14
89	Large-scale genome-wide association study reveals that drought-induced lodging in grain sorghum is associated with plant height and traits linked to carbon remobilisation. Theoretical and Applied Genetics, 2020, 133, 3201-3215.	1.8	14
90	Multi-environment analysis of sorghum breeding trials using additive and dominance genomic relationships. Theoretical and Applied Genetics, 2020, 133, 1009-1018.	1.8	13

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91	Predicting Additive and Non-additive Genetic Effects from Trials Where Traits Are Affected by Interplot Competition. Journal of Agricultural, Biological, and Environmental Statistics, 2013, 18, 53-63.	0.7	12
92	Differences in temperature response of phenological development among diverse Ethiopian sorghum genotypes are linked to racial grouping and agroecological adaptation. Crop Science, 2020, 60, 977-990.	0.8	12
93	Enhancement of sorghum grain yield and nutrition: A role for arbuscular mycorrhizal fungi regardless of soil phosphorus availability. Plants People Planet, 2022, 4, 143-156.	1.6	12
94	A global resource for exploring and exploiting genetic variation in sorghum crop wild relatives. Crop Science, 2021, 61, 150-162.	0.8	11
95	Determining Crop Growth Dynamics in Sorghum Breeding Trials Through Remote and Proximal Sensing Technologies. , 2018, , .		10
96	A Graph-Based Pan-Genome Guides Biological Discovery. Molecular Plant, 2020, 13, 1247-1249.	3.9	10
97	The Impacts of Flowering Time and Tillering on Grain Yield of Sorghum Hybrids across Diverse Environments. Agronomy, 2020, 10, 135.	1.3	10
98	Status of Sorghum and Pearl Millet Diseases in Australia. , 0, , 441-448.		10
99	Detecting Sorghum Plant and Head Features from Multispectral UAV Imagery. Plant Phenomics, 2021, 2021, 9874650.	2.5	10
100	Genetic control of leaf angle in sorghum and its effect on light interception. Journal of Experimental Botany, 2022, 73, 801-816.	2.4	10
101	Crop Genomics Goes Beyond a Single Reference Genome. Trends in Plant Science, 2019, 24, 1072-1074.	4.3	9
102	Manipulating assimilate availability provides insight into the genes controlling grain size in sorghum. Plant Journal, 2021, 108, 231-243.	2.8	9
103	Quantitative Trait Loci of Plant Attributes Related to Sorghum Grain Number Determination. Crop Science, 2016, 56, 3046-3054.	0.8	7
104	Investigating successive Australian barley breeding populations for stable resistance to leaf rust. Theoretical and Applied Genetics, 2017, 130, 2463-2477.	1.8	7
105	Perspectives on Applications of Hierarchical Gene-To-Phenotype (G2P) Maps to Capture Non-stationary Effects of Alleles in Genomic Prediction. Frontiers in Plant Science, 2021, 12, 663565.	1.7	7
106	Estimating Photosynthetic Attributes from High-Throughput Canopy Hyperspectral Sensing in Sorghum. Plant Phenomics, 2022, 2022, 9768502.	2.5	7
107	Genetic Diversity of C4 Photosynthesis Pathway Genes in Sorghum bicolor (L.). Genes, 2020, 11, 806.	1.0	6
108	Non-cellulosic cell wall polysaccharides are subject to genotypeÂÃ—Âenvironment effects in sorghum (Sorghum bicolor) grain. Journal of Cereal Science, 2015, 63, 64-71.	1.8	5

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109	Fine Mapping of qDor7, a Major QTL Affecting Seed Dormancy in Sorghum (Sorghum bicolor (L.)) Tj ETQq1 1 0.784314 rgBT /Overloc	1.0	4
110	Evaluation of variation in Ethiopian sorghum injera quality with new imaging techniques. Cereal Chemistry, 2020, 97, 362-372.	1.1	4
111	Grain Sorghum. , 2009, , 183-197.		4
112	Genetic Manipulation of Root System Architecture to Improve Drought Adaptation in Sorghum. Compendium of Plant Genomes, 2016, , 207-226.	0.3	3
113	The vegetative nitrogen response of sorghum lines containing different alleles for nitrate reductase and glutamate synthase. Molecular Breeding, 2017, 37, 1.	1.0	3
114	Genomic prediction for broad and specific adaptation in sorghum accommodating differential variances of SNP effects. Crop Science, 2020, 60, 2328-2342.	0.8	3
115	Use of optical density as a measure ofClaviceps africanaconidial suspension concentration. Australasian Plant Pathology, 2006, 35, 77.	0.5	2
116	Spatial and temporal patterns of lodging in grain sorghum (Sorghum bicolor) in Australia. Crop and Pasture Science, 2020, 71, 379.	0.7	2
117	An integrated systems approach to crop improvement. , 2009, , 189-207.		2
118	Decoding the sorghum methylome: understanding epigenetic contributions to agronomic traits. Biochemical Society Transactions, 2022, 50, 583-596.	1.6	2
119	Modelling Heat and Drought Adaptation in Crops. Proceedings (mdpi), 2019, 36, 190.	0.2	1
120	How Do Crops Balance Water Supply and Demand when Water Is Limiting?. Proceedings (mdpi), 2020, 36, .	0.2	0
121	Tall 3-dwarfs: oxymoron or opportunity to increase grain yield in sorghum?. Planta, 2021, 253, 110.	1.6	0