

Seth C Murray

List of Publications by Year in descending order

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Version: 2024-02-01

87
papers

3,619
citations

172207

29
h-index

149479

56
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96
all docs

96
docs citations

96
times ranked

3999
citing authors

#	ARTICLE	IF	CITATIONS
1	Registration of tropical populations of maize selected in parallel for early flowering time across the United States. <i>Journal of Plant Registrations</i> , 2022, 16, 100-108.	0.4	3
2	Accurate prediction of complex traits for individuals and offspring from parents using a simple, rapid, and efficient method for gene-based breeding in cotton and maize. <i>Plant Science</i> , 2022, 316, 111153.	1.7	5
3	Root system size and root hair length are key phenes for nitrate acquisition and biomass production across natural variation in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2022, 73, 3569-3583.	2.4	18
4	Phenomic data-facilitated rust and senescence prediction in maize using machine learning algorithms. <i>Scientific Reports</i> , 2022, 12, 7571.	1.6	2
5	Report from the conference, "identifying obstacles to applying big data in agriculture". <i>Precision Agriculture</i> , 2021, 22, 306-315.	3.1	15
6	Effect of grain coverage disruption on aflatoxins in maize and sorghum. , 2021, 4, e20143.		2
7	Validation of functional polymorphisms affecting maize plant height by unoccupied aerial systems discovers novel temporal phenotypes. <i>G3: Genes, Genomes, Genetics</i> , 2021, 11, .	0.8	18
8	Temporal Vegetation Indices and Plant Height from Remotely Sensed Imagery Can Predict Grain Yield and Flowering Time Breeding Value in Maize via Machine Learning Regression. <i>Remote Sensing</i> , 2021, 13, 2141.	1.8	30
9	Unoccupied aerial systems discovered overlooked loci capturing the variation of entire growing period in maize. <i>Plant Genome</i> , 2021, 14, e20102.	1.6	16
10	High throughput can produce better decisions than high accuracy when phenotyping plant populations. <i>Crop Science</i> , 2021, 61, 3301-3313.	0.8	22
11	The importance of dominance and genotype-by-environment interactions on grain yield variation in a large-scale public cooperative maize experiment. <i>G3: Genes, Genomes, Genetics</i> , 2021, 11, .	0.8	52
12	Accurate prediction of maize grain yield using its contributing genes for gene-based breeding. <i>Genomics</i> , 2020, 112, 225-236.	1.3	32
13	Estimation and classification of popping expansion capacity in popcorn breeding programs using NIR spectroscopy. <i>Journal of Cereal Science</i> , 2020, 91, 102861.	1.8	7
14	Relative utility of agronomic, phenological, and morphological traits for assessing genotype-by-environment interaction in maize inbreds. <i>Crop Science</i> , 2020, 60, 62-81.	0.8	21
15	Yield, Insect-Derived Ear Injury, and Aflatoxin Among Developmental and Commercial Maize Hybrids Adapted to the North American Subtropics. <i>Journal of Economic Entomology</i> , 2020, 113, 2950-2958.	0.8	2
16	R/UAStools::plotscreate: Create Multi-Polygon Shapefiles for Extraction of Research Plot Scale Agriculture Remote Sensing Data. <i>Frontiers in Plant Science</i> , 2020, 11, 511768.	1.7	17
17	Plant science decadal vision 2020-2030: Reimagining the potential of plants for a healthy and sustainable future. <i>Plant Direct</i> , 2020, 4, e00252.	0.8	26
18	Unoccupied aerial system enabled functional modeling of maize height reveals dynamic expression of loci. <i>Plant Direct</i> , 2020, 4, e00223.	0.8	28

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19	A single polyploidization event at the origin of the tetraploid genome of <i>Coffea arabica</i> is responsible for the extremely low genetic variation in wild and cultivated germplasm. <i>Scientific Reports</i> , 2020, 10, 4642.	1.6	86
20	Analysis of the genes controlling three quantitative traits in three diverse plant species reveals the molecular basis of quantitative traits. <i>Scientific Reports</i> , 2020, 10, 10074.	1.6	37
21	Phenomic selection and prediction of maize grain yield from near-infrared reflectance spectroscopy of kernels. <i>The Plant Phenome Journal</i> , 2020, 3, e20002.	1.0	36
22	Development of novel perennial <i>Sorghum bicolor</i> – <i>S. propinquum</i> hybrids. <i>Crop Science</i> , 2020, 60, 863-872.	0.8	3
23	Maize genomes to fields (G2F): 2014–2017 field seasons: genotype, phenotype, climatic, soil, and inbred ear image datasets. <i>BMC Research Notes</i> , 2020, 13, 71.	0.6	38
24	A diallel analysis of a maize donor population response to in vivo maternal haploid induction: II. Haploid male fertility. <i>Crop Science</i> , 2020, 60, 873-882.	0.8	5
25	Utility of Climatic Information via Combining Ability Models to Improve Genomic Prediction for Yield Within the Genomes to Fields Maize Project. <i>Frontiers in Genetics</i> , 2020, 11, 592769.	1.1	44
26	Prediction of Maize Grain Yield before Maturity Using Improved Temporal Height Estimates of Unmanned Aerial Systems. <i>The Plant Phenome Journal</i> , 2019, 2, 1-15.	1.0	52
27	Assessing the impact of corn variety and Texas terroir on flavor and alcohol yield in new-make bourbon whiskey. <i>PLoS ONE</i> , 2019, 14, e0220787.	1.1	19
28	Association of Insect-Derived Ear Injury With Yield and Aflatoxin of Maize Hybrids Varying in Bt Transgenes. <i>Environmental Entomology</i> , 2019, 48, 1401-1411.	0.7	7
29	Big Data Driven Agriculture: Big Data Analytics in Plant Breeding, Genomics, and the Use of Remote Sensing Technologies to Advance Crop Productivity. <i>The Plant Phenome Journal</i> , 2019, 2, 1-8.	1.0	37
30	Tx741, Tx777, Tx779, Tx780, and Tx782 Inbred Maize Lines for Yield and Southern United States Stress Adaptation. <i>Journal of Plant Registrations</i> , 2019, 13, 258-269.	0.4	9
31	Evaluation of Elite Maize Inbred Lines for Reduced <i>Aspergillus flavus</i> Infection, Aflatoxin Accumulation, and Agronomic Traits. <i>Crop Science</i> , 2019, 59, 2562-2571.	0.8	5
32	The Genomic Basis for Short-Term Evolution of Environmental Adaptation in Maize. <i>Genetics</i> , 2019, 213, 1479-1494.	1.2	23
33	The Agronomic Science Foundation—Impacting Our Societies for More Than 50 Years. <i>CSA News</i> , 2019, 64, 21-22.	0.1	0
34	Multitemporal field-based plant height estimation using 3D point clouds generated from small unmanned aerial systems high-resolution imagery. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2018, 64, 31-42.	1.4	125
35	Rust and Thinning Management Effect on Cup Quality and Plant Performance for Two Cultivars of <i>Coffea arabica</i> L. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 5281-5292.	2.4	12
36	Temporal Estimates of Crop Growth in Sorghum and Maize Breeding Enabled by Unmanned Aerial Systems. <i>The Plant Phenome Journal</i> , 2018, 1, 1-10.	1.0	51

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37	Four Parent Maize (FPM) Population: Effects of Mating Designs on Linkage Disequilibrium and Mapping Quantitative Traits. <i>Plant Genome</i> , 2018, 11, 170102.	1.6	21
38	Genome-Wide Association and Metabolic Pathway Analysis of Corn Earworm Resistance in Maize. <i>Plant Genome</i> , 2018, 11, 170069.	1.6	20
39	Four-Parent Maize (FPM) Population: Development and Phenotypic Characterization. <i>Crop Science</i> , 2018, 58, 1106-1117.	0.8	11
40	Characterizing canopy height with UAS structure-from-motion photogrammetry—results analysis of a maize field trial with respect to multiple factors. <i>Remote Sensing Letters</i> , 2018, 9, 753-762.	0.6	24
41	Maize Genomes to Fields: 2014 and 2015 field season genotype, phenotype, environment, and inbred ear image datasets. <i>BMC Research Notes</i> , 2018, 11, 452.	0.6	25
42	UAS imaging for automated crop lodging detection: a case study over an experimental maize field. <i>Proceedings of SPIE</i> , 2017, , .	0.8	9
43	The effect of artificial selection on phenotypic plasticity in maize. <i>Nature Communications</i> , 2017, 8, 1348.	5.8	105
44	MULTI-platform uas imaging for crop height estimation: Performance analysis over an experimental maize field. , 2017, , .		1
45	Identification of Resistance to Aflatoxin Accumulation and Yield Potential in Maize Hybrids in the Southeast Regional Aflatoxin Trials (SERAT). <i>Crop Science</i> , 2017, 57, 202-215.	0.8	17
46	Assessing Lodging Severity over an Experimental Maize (<i>Zea mays</i> L.) Field Using UAS Images. <i>Remote Sensing</i> , 2017, 9, 923.	1.8	72
47	Registration of Perennial <i>Sorghum bicolor</i> – <i>S. propinquum</i> Line PSH12TX09. <i>Journal of Plant Registrations</i> , 2017, 11, 76-79.	0.4	7
48	Corn and sorghum phenotyping using a fixed-wing UAV-based remote sensing system. <i>Proceedings of SPIE</i> , 2016, , .	0.8	6
49	High clearance phenotyping systems for season-long measurement of corn, sorghum and other row crops to complement unmanned aerial vehicle systems. <i>Proceedings of SPIE</i> , 2016, , .	0.8	4
50	Comprehensive UAV agricultural remote-sensing research at Texas A M University. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
51	Unmanned Aerial Vehicles for High-Throughput Phenotyping and Agronomic Research. <i>PLoS ONE</i> , 2016, 11, e0159781.	1.1	262
52	Molecular characterization and phylogenetic analysis of ZmMCUs in maize. <i>Biologia (Poland)</i> , 2015, 70, 599-605.	0.8	7
53	Rapid Estimation of Phenolic Content in Colored Maize by Near-Infrared Reflectance Spectroscopy and Its Use in Breeding. <i>Crop Science</i> , 2015, 55, 2234-2243.	0.8	16
54	Genome Wide Association Study for Drought, Aflatoxin Resistance, and Important Agronomic Traits of Maize Hybrids in the Sub-Tropics. <i>PLoS ONE</i> , 2015, 10, e0117737.	1.1	89

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55	Genome-Wide Association Mapping of <i>Aspergillus flavus</i> and Aflatoxin Accumulation Resistance in Maize. <i>Crop Science</i> , 2015, 55, 1857-1867.	0.8	43
56	Influence of Genetic Background on Anthocyanin and Copigment Composition and Behavior during Thermoalkaline Processing of Maize. <i>Journal of Agricultural and Food Chemistry</i> , 2015, 63, 5528-5538.	2.4	44
57	Hallauer's Tusn: a decade of selection for tropical-to-temperate phenological adaptation in maize. <i>Heredity</i> , 2015, 114, 229-240.	1.2	30
58	An empirical evaluation of three vibrational spectroscopic methods for detection of aflatoxins in maize. <i>Food Chemistry</i> , 2015, 173, 629-639.	4.2	43
59	Diallel Analysis of Diverse Maize Germplasm Lines for Agronomic Characteristics. <i>Crop Science</i> , 2014, 54, 2547-2556.	0.8	9
60	Feasibility of Surface-Enhanced Raman Spectroscopy for Rapid Detection of Aflatoxins in Maize. <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 4466-4474.	2.4	94
61	Quality Protein Maize Germplasm Characterized for Amino Acid Profiles and Endosperm Opacity. <i>Crop Science</i> , 2014, 54, 863-872.	0.8	4
62	Estimation of Rhizome Composition and Overwintering Ability in Perennial Sorghum spp. Using Near-Infrared Spectroscopy (NIRS). <i>Bioenergy Research</i> , 2013, 6, 822-829.	2.2	12
63	A multi-environment trial analysis shows slight grain yield improvement in Texas commercial maize. <i>Field Crops Research</i> , 2013, 149, 167-176.	2.3	46
64	A proposal to use gamete cycling in vitro to improve crops and livestock. <i>Nature Biotechnology</i> , 2013, 31, 877-880.	9.4	5
65	Targeted mapping of quantitative trait locus regions for rhizomatousness in chromosome SBI-01 and analysis of overwintering in a <i>Sorghum bicolor</i> – <i>S. propinquum</i> population. <i>Molecular Breeding</i> , 2013, 31, 153-162.	1.0	29
66	Differentiation of Seed, Sugar, and Biomass-Producing Genotypes in <i>Saccharinae</i> Species. , 2013, , 479-502.		7
67	Combining Ability for Total Phenols and Secondary Traits in a Diverse Set of Colored (Red, Blue, and) Tj ETQq1 1 0.784314 rgBT /Over	0.8	17
68	Phenotypic and Genetic Characterization of a Maize Association Mapping Panel Developed for the Identification of New Sources of Resistance to <i>Aspergillus flavus</i> and Aflatoxin Accumulation. <i>Crop Science</i> , 2013, 53, 2374-2383.	0.8	50
69	Diallel Analysis of Diverse Maize Germplasm Lines for Resistance to Aflatoxin Accumulation. <i>Crop Science</i> , 2013, 53, 394-402.	0.8	15
70	Characterization of Genetic Diversity and Linkage Disequilibrium of ZmLOX4 and ZmLOX5 Loci in Maize. <i>PLoS ONE</i> , 2013, 8, e53973.	1.1	18
71	QTLs for Energy-related Traits in a Sweet – Grain Sorghum [<i>Sorghum bicolor</i> (L.) Moench] Mapping Population. <i>Crop Science</i> , 2012, 52, 2040-2049.	0.8	50
72	A response to Honnay <i>et al</i> .. <i>Frontiers in Ecology and the Environment</i> , 2012, 10, 121-122.	1.9	0

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73	Registration of Maize Germplasm Lines Tx736, Tx739, and Tx740 for Reducing Preharvest Aflatoxin Accumulation. <i>Journal of Plant Registrations</i> , 2012, 6, 88-94.	0.4	26
74	Genetic Variation for Maize Epicuticular Wax Response to Drought Stress at Flowering. <i>Journal of Agronomy and Crop Science</i> , 2012, 198, 161-172.	1.7	30
75	Plant breeding for harmony between agriculture and the environment. <i>Frontiers in Ecology and the Environment</i> , 2011, 9, 561-568.	1.9	117
76	Position Statement on Crop Adaptation to Climate Change. <i>Crop Science</i> , 2011, 51, 2337-2343.	0.8	33
77	Confirmation of QTL Reducing Aflatoxin in Maize Testcrosses. <i>Crop Science</i> , 2011, 51, 2489-2498.	0.8	24
78	Increased Food and Ecosystem Security via Perennial Grains. <i>Science</i> , 2010, 328, 1638-1639.	6.0	397
79	Perennial Questions of Hydrology and Climate Response. <i>Science</i> , 2010, 330, 33-34.	6.0	1
80	Sweet Sorghum Genetic Diversity and Association Mapping for Brix and Height. <i>Plant Genome</i> , 2009, 2, .	1.6	168
81	Genetic diversity and population structure analysis of accessions in the US historic sweet sorghum collection. <i>Theoretical and Applied Genetics</i> , 2009, 120, 13-23.	1.8	127
82	Genetic Improvement of Sorghum as a Biofuel Feedstock: II. QTL for Stem and Leaf Structural Carbohydrates. <i>Crop Science</i> , 2008, 48, 2180-2193.	0.8	162
83	Genetic Improvement of Sorghum as a Biofuel Feedstock: I. QTL for Stem Sugar and Grain Nonstructural Carbohydrates. <i>Crop Science</i> , 2008, 48, 2165-2179.	0.8	243
84	Selection Mapping of Loci for Quantitative Disease Resistance in a Diverse Maize Population. <i>Genetics</i> , 2008, 180, 583-599.	1.2	35
85	An Open-Source First-Generation Molecular Genetic Map from a Sugarbeet × Table Beet Cross and Its Extension to Physical Mapping. <i>Crop Science</i> , 2007, 47, S-27.	0.8	47
86	Challenges of Detecting Directional Selection After a Bottleneck: Lessons From <i>Sorghum bicolor</i> . <i>Genetics</i> , 2006, 173, 953-964.	1.2	86
87	Control of Aflatoxin using Atoxigenic Strains and Irrigation Management is Complicated by Maize Hybrid Diversity. <i>Crop Science</i> , 0, , .	0.8	0