

# Aaron J Lorenz

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

4,551  
citations

186265

28  
h-index

123424

61  
g-index

70  
all docs

70  
docs citations

70  
times ranked

4316  
citing authors

#	ARTICLE	IF	CITATIONS
1	Iron deficiency in soybean. <i>Crop Science</i> , 2022, 62, 36-52.	1.8	16
2	Registration of M10â€207102 soybean germplasm: A highâ€yielding, earlyâ€maturity line with elevated protein. <i>Journal of Plant Registrations</i> , 2022, 16, 132-136.	0.5	2
3	Plant Breeding for Intercropping in Temperate Field Crop Systems: A Review. <i>Frontiers in Plant Science</i> , 2022, 13, 843065.	3.6	17
4	Development of a controlled-environment assay to induce iron deficiency chlorosis in soybean by adjusting calcium carbonates, pH, and nodulation. <i>Plant Methods</i> , 2022, 18, 36.	4.3	4
5	Candidate Genes Modulating Reproductive Timing in Elite US Soybean Lines Identified in Soybean Alleles of Arabidopsis Flowering Orthologs With Divergent Latitude Distribution. <i>Frontiers in Plant Science</i> , 2022, 13, 889066.	3.6	4
6	Optimization of temporal UASâ€based imagery analysis to estimate plant maturity date for soybean breeding. <i>The Plant Phenome Journal</i> , 2021, 4, e20018.	2.0	11
7	Variation in Soybean Aphid (Hemiptera: Aphididae) Biotypes Within Fields. <i>Journal of Economic Entomology</i> , 2021, 114, 1336-1344.	1.8	4
8	The utility of genomic prediction models in evolutionary genetics. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2021, 288, 20210693.	2.6	13
9	Optimization of training sets for genomic prediction of early-stage single crosses in maize. <i>Theoretical and Applied Genetics</i> , 2021, 134, 687-699.	3.6	13
10	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, .	1.8	52
11	Mining Fiskeby III and Mandarin (Ottawa) Expression Profiles to Understand Iron Stress Tolerant Responses in Soybean. <i>International Journal of Molecular Sciences</i> , 2021, 22, 11032.	4.1	3
12	Implementation of genomic selection in public-sector plant breeding programs: Current status and opportunities. <i>Crop Breeding and Applied Biotechnology</i> , 2021, 21, .	0.4	13
13	Belowground microbial communities respond to water deficit and are shaped by decades of maize hybrid breeding. <i>Environmental Microbiology</i> , 2020, 22, 889-904.	3.8	15
14	Relative utility of agronomic, phenological, and morphological traits for assessing genotypeâ€byâ€environment interaction in maize inbreds. <i>Crop Science</i> , 2020, 60, 62-81.	1.8	21
15	Genome-wide association study and genomic selection for tolerance of soybean biomass to soybean cyst nematode infestation. <i>PLoS ONE</i> , 2020, 15, e0235089.	2.5	28
16	Registration of â€NE10589â€™ (Husker Genetics Brand Ruth) hard red winter wheat. <i>Journal of Plant Registrations</i> , 2020, 14, 388-397.	0.5	4
17	Characterizing introgression-by-environment interactions using maize near isogenic lines. <i>Theoretical and Applied Genetics</i> , 2020, 133, 2761-2773.	3.6	2
18	Maize genomes to fields (G2F): 2014â€2017 field seasons: genotype, phenotype, climatic, soil, and inbred ear image datasets. <i>BMC Research Notes</i> , 2020, 13, 71.	1.4	38

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19	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.	2.3	44
20	Dominance Effects and Functional Enrichments Improve Prediction of Agronomic Traits in Hybrid Maize. <i>Genetics</i> , 2020, 215, 215-230.	2.9	35
21	Soybean iron deficiency chlorosis high-throughput phenotyping using an unmanned aircraft system. <i>Plant Methods</i> , 2019, 15, 97.	4.3	21
22	Genome-Wide Association and Gene Co-expression Network Analyses Reveal Complex Genetics of Resistance to Gossâ€™s Wilt of Maize. <i>G3: Genes, Genomes, Genetics</i> , 2019, 9, 3139-3152.	1.8	6
23	Evaluation of Nonparametric Models for Genomic Prediction of Earlyâ€™stage Single Crosses in Maize. <i>Crop Science</i> , 2019, 59, 1411-1423.	1.8	9
24	Response Surface Analysis of Genomic Prediction Accuracy Values Using Quality Control Covariates in Soybean. <i>Evolutionary Bioinformatics</i> , 2019, 15, 117693431983130.	1.2	12
25	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.	0.5	9
26	Multi-trait Improvement by Predicting Genetic Correlations in Breeding Crosses. <i>G3: Genes, Genomes, Genetics</i> , 2019, 9, 3153-3165.	1.8	34
27	Environmental Stability Study of Soybeans with Modified Carbohydrate Profiles in Maturity Groups 0 to V. <i>Crop Science</i> , 2019, 59, 1531-1543.	1.8	8
28	Identification and Fineâ€™Mapping of a Soybean Quantitative Trait Locus on Chromosome 5 Conferring Tolerance to Iron Deficiency Chlorosis. <i>Plant Genome</i> , 2019, 12, 190007.	2.8	14
29	Genomic Dissection of Nonhost Resistance to Wheat Stem Rust in <i>Brachypodium distachyon</i> . <i>Molecular Plant-Microbe Interactions</i> , 2019, 32, 392-400.	2.6	4
30	Genome-Wide Analysis of Grain Yield Stability and Environmental Interactions in a Multiparental Soybean Population. <i>G3: Genes, Genomes, Genetics</i> , 2018, 8, 519-529.	1.8	75
31	Genomeâ€™Wide Association Mapping of Hostâ€™Plant Resistance to Soybean Aphid. <i>Plant Genome</i> , 2018, 11, 180011.	2.8	29
32	Genomic Selection in Preliminary Yield Trials in a Winter Wheat Breeding Program. <i>G3: Genes, Genomes, Genetics</i> , 2018, 8, 2735-2747.	1.8	74
33	Changes in Dynamic Leaf Traits in Maize Associated with Year of Hybrid Release. <i>Crop Science</i> , 2018, 58, 551-563.	1.8	3
34	Evaluating Methods of Updating Training Data in Long-Term Genomewide Selection. <i>G3: Genes, Genomes, Genetics</i> , 2017, 7, 1499-1510.	1.8	44
35	Training Population Design and Resource Allocation for Genomic Selection in Plant Breeding. , 2017, , 7-22.		17
36	Dissecting the Genetic Basis of Local Adaptation in Soybean. <i>Scientific Reports</i> , 2017, 7, 17195.	3.3	37

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37	The effect of artificial selection on phenotypic plasticity in maize. <i>Nature Communications</i> , 2017, 8, 1348.	12.8	105
38	Allelic variants of OsHKT1;1 underlie the divergence between indica and japonica subspecies of rice ( <i>Oryza sativa</i> ) for root sodium content. <i>PLoS Genetics</i> , 2017, 13, e1006823.	3.5	118
39	Genome-wide Association Mapping of Qualitatively Inherited Traits in a Germplasm Collection. <i>Plant Genome</i> , 2017, 10, plantgenome2016.06.0054.	2.8	37
40	Leveraging genomic prediction to scan germplasm collection for crop improvement. <i>PLoS ONE</i> , 2017, 12, e0179191.	2.5	35
41	Mapping Quantitative Trait Loci for Resistance to Goss's Bacterial Wilt and Leaf Blight in North American Maize by Joint Linkage Analysis. <i>Crop Science</i> , 2016, 56, 2306-2313.	1.8	12
42	Genome-Enabled Prediction Models for Yield Related Traits in Chickpea. <i>Frontiers in Plant Science</i> , 2016, 7, 1666.	3.6	127
43	Prospects of Genomic Prediction in the USDA Soybean Germplasm Collection: Historical Data Creates Robust Models for Enhancing Selection of Accessions. <i>G3: Genes, Genomes, Genetics</i> , 2016, 6, 2329-2341.	1.8	90
44	Genomic Prediction of Single Crosses in the Early Stages of a Maize Hybrid Breeding Pipeline. <i>G3: Genes, Genomes, Genetics</i> , 2016, 6, 3443-3453.	1.8	107
45	Greenhouse screening of maize genotypes for deep root mass and related root traits and their association with grain yield under water-deficit conditions in the field. <i>Euphytica</i> , 2016, 207, 79-94.	1.2	30
46	Environmental Reviews and Case Studies: Bringing Unmanned Aerial Systems Closer to the Environment. <i>Environmental Practice</i> , 2015, 17, 188-200.	0.3	15
47	Selection for Silage Yield and Composition Did Not Affect Genomic Diversity Within the Wisconsin Quality Synthetic Maize Population. <i>G3: Genes, Genomes, Genetics</i> , 2015, 5, 541-549.	1.8	8
48	A Population Structure and Genome-wide Association Analysis on the USDA Soybean Germplasm Collection. <i>Plant Genome</i> , 2015, 8, eplantgenome2015.04.0024.	2.8	174
49	Adding Genetically Distant Individuals to Training Populations Reduces Genomic Prediction Accuracy in Barley. <i>Crop Science</i> , 2015, 55, 2657-2667.	1.8	150
50	Genetic variation in seminal and nodal root angle and their association with grain yield of maize under water-stressed field conditions. <i>Plant and Soil</i> , 2015, 397, 213-225.	3.7	50
51	Genotyping by sequencing for genomic prediction in a soybean breeding population. <i>BMC Genomics</i> , 2014, 15, 740.	2.8	191
52	On crop height estimation with UAVs. , 2014, , .		89
53	The phylogenetic relationships of US maize germplasm. <i>Nature Genetics</i> , 2013, 45, 844-845.	21.4	19
54	Resource Allocation for Maximizing Prediction Accuracy and Genetic Gain of Genomic Selection in Plant Breeding: A Simulation Experiment. <i>G3: Genes, Genomes, Genetics</i> , 2013, 3, 481-491.	1.8	114

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55	Genomic Selection in Plant Breeding. <i>Advances in Agronomy</i> , 2011, 110, 77-123.	5.2	395
56	Association mapping and gene-gene interaction for stem rust resistance in CIMMYT spring wheat germplasm. <i>Theoretical and Applied Genetics</i> , 2011, 123, 1257-1268.	3.6	158
57	Plant Breeding with Genomic Selection: Gain per Unit Time and Cost. <i>Crop Science</i> , 2010, 50, 1681-1690.	1.8	547
58	Cell Wall Composition and Ruminant Digestibility of Various Maize Tissues Across Development. <i>Bioenergy Research</i> , 2010, 3, 28-37.	3.9	24
59	Genomic selection in plant breeding: from theory to practice. <i>Briefings in Functional Genomics</i> , 2010, 9, 166-177.	2.7	996
60	Performance of Single Nucleotide Polymorphisms versus Haplotypes for Genome-Wide Association Analysis in Barley. <i>PLoS ONE</i> , 2010, 5, e14079.	2.5	118
61	Correlating detergent fiber analysis and dietary fiber analysis data for corn stover collected by NIRS. <i>Cellulose</i> , 2009, 16, 577-585.	4.9	44
62	Genetic Variation and Breeding Potential of Phytate and Inorganic Phosphorus in a Maize Population. <i>Crop Science</i> , 2008, 48, 79-84.	1.8	22
63	Quantitative Determination of Phytate and Inorganic Phosphorus for Maize Breeding. <i>Crop Science</i> , 2007, 47, 600-604.	1.8	39