David Fleisher

List of Publications by Year
in descending order

75 papers	2,106 citations	257450 24 h-index	243625 44 g-index
75 all docs	75 docs citations	75 times ranked	2342 citing authors

#	Article	IF	Citations
1	Random Forests for Global and Regional Crop Yield Predictions. PLoS ONE, 2016, 11, e0156571.	2.5	377
2	Removal of Uranium from Water Using Terrestrial Plants. Environmental Science & Technology, 1997, 31, 3468-3474.	10.0	223
3	Whole Plant Photosynthesis, Development, and Carbon Partitioning in Potato as a Function of Temperature. Agronomy Journal, 2006, 98, 1195-1203.	1.8	117
4	Carbon dioxide diffusion across stomata and mesophyll and photo-biochemical processes as affected by growth CO2 and phosphorus nutrition in cotton. Journal of Plant Physiology, 2013, 170, 801-813.	3.5	97
5	A potato model intercomparison across varying climates and productivity levels. Global Change Biology, 2017, 23, 1258-1281.	9.5	90
6	Elevated carbon dioxide and water stress effects on potato canopy gas exchange, water use, and productivity. Agricultural and Forest Meteorology, 2008, 148, 1109-1122.	4.8	81
7	Temperature Influence on Potato Leaf and Branch Distribution and on Canopy Photosynthetic Rate. Agronomy Journal, 2006, 98, 1442-1452.	1.8	77
8	Modeling Temperature Responses of Leaf Growth, Development, and Biomass in Maize with MAIZSIM. Agronomy Journal, 2012, 104, 1523-1537.	1.8	62
9	Relationship between photosynthetic pigments and chlorophyll fluorescence in soybean under varying phosphorus nutrition at ambient and elevated CO$_2$. Photosynthetica, 2017, 55, 421-433.	1.7	49
10	Effect of elevated carbon dioxide and water stress on gas exchange and water use efficiency in corn. Agricultural and Forest Meteorology, 2011, 151, 378-384.	4.8	46
11	Plant Density and Leaf Area Index Effects on the Distribution of Light Transmittance to the Soil Surface in Maize. Agronomy Journal, 2014, 106, 1828-1837.	1.8	46
12	Effect of Phosphorus Nutrition on Growth and Physiology of Cotton Under Ambient and Elevated Carbon Dioxide. Journal of Agronomy and Crop Science, 2013, 199, 436-448.	3.5	45
13	Approaches to Modeling Potato Leaf Appearance Rate. Agronomy Journal, 2006, 98, 522-528.	1.8	40
14	Evapotranspiration Measurement in Controlled Environment Chambers: A Comparison between Time Domain Reflectometry and Accumulation of Condensate from Cooling Coils. Agronomy Journal, 2007, 99, 166-173.	1.8	36
15	Phosphorus Nutrition Affects Temperature Response of Soybean Growth and Canopy Photosynthesis. Frontiers in Plant Science, 2018, 9, 1116.	3.6	35
16	Modeling expansion of individual leaves in the potato canopy. Agricultural and Forest Meteorology, 2006, 139, 84-93.	4.8	33
17	Response of Potato Gas Exchange and Productivity to Phosphorus Deficiency and Carbon Dioxide Enrichment. Crop Science, 2012, 52, 1803-1815.	1.8	32
18	Simulation of potato gas exchange rates using SPUDSIM. Agricultural and Forest Meteorology, 2010, 150, 432-442.	4.8	30

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19	Interactive Effects of Carbon Dioxide and Water Stress on Potato Canopy Growth and Development. Agronomy Journal, 2008, 100, 711-719.	1.8	28
20	Simulating leaf area of corn plants at contrasting water status. Agricultural and Forest Meteorology, 2009, 149, 1161-1167.	4.8	27
21	Combining explanatory crop models with geospatial data for regional analyses of crop yield using field-scale modeling units. Computers and Electronics in Agriculture, 2012, 89, 51-61.	7.7	27
22	EFFECTS OF CARBON DIOXIDE AND PHOSPHORUS SUPPLY ON POTATO DRY MATTER ALLOCATION AND CANOPY MORPHOLOGY. Journal of Plant Nutrition, 2013, 36, 566-586.	1.9	26
23	Cover crop residue decomposition in no-till cropping systems: Insights from multi-state on-farm litter bag studies. Agriculture, Ecosystems and Environment, 2022, 326, 107823.	5.3	26
24	Yield response of potato to spatially patterned nitrogen application. Agriculture, Ecosystems and Environment, 2009, 129, 107-116.	5.3	25
25	Growth, nutrient dynamics, and efficiency responses to carbon dioxide and phosphorus nutrition in soybean. Journal of Plant Interactions, 2014, 9, 838-849.	2.1	25
26	Ratooning as an adaptive management tool for climatic change in rice systems along a north-south transect in the southern Mississippi valley. Agricultural and Forest Meteorology, 2018, 263, 409-416.	4.8	25
27	Quantitative Effects of Phosphorus on Maize Canopy Photosynthesis and Biomass. Crop Science, 2017, 57, 3156-3169.	1.8	22
28	Modeling potato root growth and water uptake under water stress conditions. Agricultural and Forest Meteorology, 2014, 194, 37-49.	4.8	21
29	Combined effects of CO_2 enrichment, diurnal light levels and water stress on foliar metabolites of potato plants grown in naturally sunlit controlled environment chambers. Physiologia Plantarum, 2015, 153, 243-252.	5.2	21
30	Improving potato drought simulations: Assessing water stress factors using a coupled model. Agricultural and Forest Meteorology, 2015, 200, 144-155.	4.8	21
31	Low Tunnels as a Strawberry Breeding Tool and Season-Extending Production System. International Journal of Fruit Science, 2017, 17, 233-258.	2.4	18
32	Climate, Water Management, and Land Use: Estimating Potential Potato and Corn Production in the U.S. Northeastern Seaboard Region. Transactions of the ASABE, 2016, 59, 1539-1553.	1.1	17
33	Mapping sub-field maize yields in Nebraska, USA by combining remote sensing imagery, crop simulation models, and machine learning. Precision Agriculture, 2020, 21, 678-694.	6.0	15
34	Nitrogen Concentration and Dry-Matter Accumulation in Maize Crop: Assessing Maize Nitrogen Status with an Allometric Function and a Chlorophyll Meter. Communications in Soil Science and Plant Analysis, 2012, 43, 1563-1575.	1.4	13
35	Effects of CO2 enrichment and drought pretreatment on metabolite responses to water stress and subsequent rehydration using potato tubers from plants grown in sunlit chambers. Journal of Plant Physiology, 2015, 189, 126-136.	3.5	13
36	A diffusive model of maize root growth in MAIZSIM and its applications in Ridge-Furrow Rainfall Harvesting. Agricultural Water Management, 2021, 254, 106966.	5.6	13

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37	Simulations of Water and Thermal Dynamics for Soil Surfaces With Residue Mulch and Surface Runoff. Water Resources Research, 2021, 57, .	4.2	13
38	Coupled model of surface runoff and surface-subsurface water movement. Advances in Water Resources, 2020, 137, 103499.	3.8	11
39	Interactive effects of temperature and phosphorus nutrition on soybean: leaf photosynthesis, chlorophyll fluorescence, and nutrient efficiency. Photosynthetica, 2019, 57, 248-257.	1.7	11
40	Top Level Modeling of Biomass Production Component of ALSS. , 0, , .		10
41	Biophysical Constraints to Potential Production Capacity of Potato across the U.S. Eastern Seaboard Region. Agronomy Journal, 2014, 106, 43-56.	1.8	10
42	Evaluation of the agricultural policy environmental extender (APEX) for the Chesapeake Bay watershed. Agricultural Water Management, 2019, 221, 477-485.	5.6	10
43	Combined effects of drought and CO_2 enrichment on foliar metabolites of potato (Solanum tuberosum *L.) cultivars*. Journal of Plant Interactions, 2019, 14, 110-118.	2.1	10
44	Effects of elevated CO2 and temperature on soybean growth and gas exchange rates: A modified GLYCIM model. Agricultural and Forest Meteorology, 2022, 312, 108700.	4.8	9
45	Concurrent Science and Engineering for Phytomation Systems. J Agricultural Meteorology, 2003, 59, 93-101.	1.5	8
46	Quantifying the measurement errors in a portable open gas-exchange system and their effects on the parameterization of Farquhar et al. model for C_3 leaves. Photosynthetica, 2012, 50, 223-238.	1.7	8
47	Parameter Estimation of the Farquhar—von Caemmerer—Berry Biochemical Model from Photosynthetic Carbon Dioxide Response Curves. Sustainability, 2017, 9, 1288.	3.2	8
48	Relationship of Strawberry Yield with Microclimate Factors in Open and Covered Raised-Bed Production. Transactions of the ASABE, 2017, 60, 1511-1525.	1.1	8
49	Regional food production and land redistribution as adaptation to climate change in the U.S. Northeast Seaboard. Computers and Electronics in Agriculture, 2018, 154, 54-70.	7.7	8
50	Development of a mobile computing framework to aid decision-making on organic fertilizer management using a crop growth model. Computers and Electronics in Agriculture, 2021, 181, 105936.	7.7	8
51	Development of an automated gridded crop growth simulation support system for distributed computing with virtual machines. Computers and Electronics in Agriculture, 2020, 169, 105196.	7.7	7
52	Potato Stem Density Effects on Canopy Development and Production. Potato Research, 2011, 54, 137-155.	2.7	6
53	Potato Gas Exchange Response to Drought Cycles under Elevated Carbon Dioxide. Agronomy Journal, 2014, 106, 2024-2034.	1.8	6
54	Evaluation of Different Crop Models for Simulating Rice Development and Yield in the U.S. Mississippi Delta. Agronomy, 2020, 10, 1905.	3.0	6

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55	A piecewise analysis model for electrical conductivity calculation from time domain reflectometry waveforms. Computers and Electronics in Agriculture, 2021, 182, 106012.	7.7	6
56	Yield Response of an Ensemble of Potato Crop Models to Elevated CO2 in Continental Europe. European Journal of Agronomy, 2021, 126, 126265.	4.1	6
57	Modeling vapor transfer in soil water and heat simulations: A modularized, partially-coupled approach. Journal of Hydrology, 2022, 608, 127541.	5.4	6
58	Cultivar coefficient stability and effects on yield projections in the SPUDSIM model. Agronomy Journal, 2020, 112, 828-843.	1.8	5
59	Baselines, Trajectories, and Scenarios: Exploring Agricultural Production in the Northeast U.S.. Journal of Agriculture, Food Systems, and Community Development, 0, , 1-15.	2.4	5
60	Low-Tunnel Strawberry Production: Comparison of Cultivars and Films. International Journal of Fruit Science, 2020, 20, S705-S732.	2.4	4
61	MODELING AND CONTROL FOR CLOSED ENVIRONMENT PLANT PRODUCTION SYSTEMS. Acta Horticulturae, 2002, 593, 85-92.	0.2	3
62	Development of an orchestration aid system for gridded crop growth simulations using Kubernetes. Computers and Electronics in Agriculture, 2021, 186, 106187.	7.7	3
63	Proposed Standards for Peer-Reviewed Publication of Computer Code. Agronomy Journal, 2016, 108, 1782-1786.	1.8	2
64	Object-Oriented Analysis and Modeling of Closed Plant Production Systems. , 2000, , 53-58.		2
65	Evaluating County-level Potential Production Capacity of Potatoes for Maine using the Crop Model SPUDSIM. , 2011, , .		1
66	Testing Approaches and Components in Physiologically Based Crop Models for Sensitivity to Climatic Factors. Advances in Agricultural Systems Modeling, 0, , 1-31.	0.3	1
67	Climate Change and Potato: Responses to Carbon Dioxide, Temperature, and Drought. Advances in Agricultural Systems Modeling, 2016, , 69-90.	0.3	1
68	A generic composite measure of similarity between geospatial variables. Ecological Informatics, 2020, 60, 101169.	5.2	1
69	Analogy-Based Crop Yield Forecasts Based on Temporal Similarity of Leaf Area Index. Remote Sensing, 2021, 13, 3069.	4.0	1
70	GLUEOS: A high performance computing system based on the orchestration of containers for the GLUE parameter calibration of a crop growth model. Computers and Electronics in Agriculture, 2022, 197, 106906.	7.7	1
71	Response of a U.S. rice hybrid variety to high heat at Two CO2 concentrations during anthesis and grainfill. Agricultural and Forest Meteorology, 2022, 323, 109058.	4.8	1
72	A multiscale finite element method for coupled heat and water transfer in heterogeneous soils. Journal of Hydrology, 2022, 612, 128028.	5.4	1

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73	Maize water use and yield in the solar corridor system: a simulation study. , 2019, , 57-78.		0
74	Simulation of Nitrogen Demand and Uptake in Potato Using a Carbon-Assimilation Approach. , 2008, , 219-243.		0
75	Monitoring the Vulnerability and Adaptation Planning for Food Security. , 0, , 36-46.		0