

Gerrit Hoogenboom

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3139974/gerrit-hoogenboom-publications-by-citations.pdf>

Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

340 papers	10,918 citations	54 h-index	88 g-index
378 ext. papers	13,272 ext. citations	4.3 avg, IF	6.45 L-index

#	Paper	IF	Citations
340	Rising temperatures reduce global wheat production. <i>Nature Climate Change</i> , 2015 , 5, 143-147	21.4	1048
339	Methodologies for simulating impacts of climate change on crop production. <i>Field Crops Research</i> , 2011 , 124, 357-368	5.5	401
338	Contribution of agrometeorology to the simulation of crop production and its applications. <i>Agricultural and Forest Meteorology</i> , 2000 , 103, 137-157	5.8	285
337	Similar estimates of temperature impacts on global wheat yield by three independent methods. <i>Nature Climate Change</i> , 2016 , 6, 1130-1136	21.4	233
336	Climate change impact and adaptation for wheat protein. <i>Global Change Biology</i> , 2019 , 25, 155-173	11.4	177
335	Application of the CSM-CERES-Maize model for planting date evaluation and yield forecasting for maize grown off-season in a subtropical environment. <i>European Journal of Agronomy</i> , 2007 , 27, 165-177	5	161
334	Nitrate leaching in a silage maize field under different irrigation and nitrogen fertilizer rates. <i>Agricultural Water Management</i> , 2009 , 96, 946-954	5.9	155
333	An evaluation of the statistical methods for testing the performance of crop models with observed data. <i>Agricultural Systems</i> , 2014 , 127, 81-89	6.1	153
332	Integration of MODIS LAI and vegetation index products with the CSM-CERES-Maize model for corn yield estimation. <i>International Journal of Remote Sensing</i> , 2011 , 32, 1039-1065	3.1	153
331	Corn-yield estimation through assimilation of remotely sensed data into the CSM-CERES-Maize model. <i>International Journal of Remote Sensing</i> , 2008 , 29, 3011-3032	3.1	148
330	From accessing to assessing forecasts: an end-to-end study of participatory climate forecast dissemination in Burkina Faso (West Africa). <i>Climatic Change</i> , 2009 , 92, 433-460	4.5	133
329	Agricultural production systems modelling and software: Current status and future prospects. <i>Environmental Modelling and Software</i> , 2015 , 72, 276-286	5.2	123
328	Adaptation to climate change and climate variability: The importance of understanding agriculture as performance. <i>Njas - Wageningen Journal of Life Sciences</i> , 2011 , 57, 179-185	7	119
327	Modifying DSSAT Crop Models for Low-Input Agricultural Systems Using a Soil Organic Matter Residue Module from CENTURY. <i>Agronomy Journal</i> , 2002 , 94, 462-474	2.2	119
326	Irrigation strategies to improve the water use efficiency of wheat-maize double cropping systems in North China Plain. <i>Agricultural Water Management</i> , 2010 , 97, 1165-1174	5.9	111
325	Interfacing Geographic Information Systems with Agronomic Modeling: A Review. <i>Agronomy Journal</i> , 1999 , 91, 761-772	2.2	109
324	Multi-model projections of future climate and climate change impacts uncertainty assessment for cotton production in Pakistan. <i>Agricultural and Forest Meteorology</i> , 2018 , 253-254, 94-113	5.8	101

323	Assessment of maize growth and yield using crop models under present and future climate in southwestern Ethiopia. <i>Agricultural and Forest Meteorology</i> , 2015 , 214-215, 252-265	5.8	97
322	Simulating Effects of Genes for Physiological Traits in a Process-Oriented Crop Model. <i>Agronomy Journal</i> , 1996 , 88, 416-422	2.2	97
321	The uncertainty of crop yield projections is reduced by improved temperature response functions. <i>Nature Plants</i> , 2017 , 3, 17102	11.5	95
320	Modelling crop yield, soil water content and soil temperature for a soybean/maize rotation under conventional and conservation tillage systems in Northeast China. <i>Agricultural Water Management</i> , 2013 , 123, 32-44	5.9	94
319	Roundup Ready Soybean: Glyphosate Effects on Fusarium solani Root Colonization and Sudden Death Syndrome. <i>Agronomy Journal</i> , 2003 , 95, 114	2.2	94
318	Using the DSSAT-CERES-Maize model to simulate crop yield and nitrogen cycling in fields under long-term continuous maize production. <i>Nutrient Cycling in Agroecosystems</i> , 2011 , 89, 313-328	3.3	93
317	From genome to crop: integration through simulation modeling. <i>Field Crops Research</i> , 2004 , 90, 145-163	5.5	93
316	Root Growth Rate of Soybean as Affected by Drought Stress1. <i>Agronomy Journal</i> , 1987 , 79, 607-614	2.2	92
315	Climate warming and management impact on the change of phenology of the rice-wheat cropping system in Punjab, Pakistan. <i>Field Crops Research</i> , 2019 , 230, 46-61	5.5	88
314	Analysis and classification of data sets for calibration and validation of agro-ecosystem models. <i>Environmental Modelling and Software</i> , 2015 , 72, 402-417	5.2	83
313	Forecast Skill and Farmers' Skills: Seasonal Climate Forecasts and Agricultural Risk Management in the Southeastern United States. <i>Weather, Climate, and Society</i> , 2010 , 2, 44-59	2.3	78
312	Artificial neural networks for automated year-round temperature prediction. <i>Computers and Electronics in Agriculture</i> , 2009 , 68, 52-61	6.5	76
311	Interaction of water and nitrogen on maize grown for silage. <i>Agricultural Water Management</i> , 2009 , 96, 809-821	5.9	75
310	Climate change impact on global potato production. <i>European Journal of Agronomy</i> , 2018 , 100, 87-98	5	75
309	Using pattern recognition for estimating cultivar coefficients of a crop simulation model. <i>Field Crops Research</i> , 2009 , 111, 290-302	5.5	73
308	Simulation-Based Analysis of Effects of Vrn and Ppd Loci on Flowering in Wheat. <i>Crop Science</i> , 2008 , 48, 678-687	2.4	72
307	Simulating water content, crop yield and nitrate-N loss under free and controlled tile drainage with subsurface irrigation using the DSSAT model. <i>Agricultural Water Management</i> , 2011 , 98, 1105-1111	5.9	71
306	Quantification the impacts of climate change and crop management on phenology of maize-based cropping system in Punjab, Pakistan. <i>Agricultural and Forest Meteorology</i> , 2017 , 247, 42-55	5.8	70

305	Global wheat production with 1.5 and 2.0°C above pre-industrial warming. <i>Global Change Biology</i> , 2018 , 25, 1428	11.4	69
304	Multimodel ensembles improve predictions of crop-environment-management interactions. <i>Global Change Biology</i> , 2018 , 24, 5072-5083	11.4	68
303	Impact of Climate Change on the Rice-Wheat Cropping System of Pakistan. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2015 , 219-258		65
302	A potato model intercomparison across varying climates and productivity levels. <i>Global Change Biology</i> , 2017 , 23, 1258-1281	11.4	64
301	The influence of aerosols on crop production: A study using the CERES crop model. <i>Agricultural Systems</i> , 2006 , 89, 390-413	6.1	64
300	Calibration and validation of APSIM-Wheat and CERES-Wheat for spring wheat under rainfed conditions: Models evaluation and application. <i>Computers and Electronics in Agriculture</i> , 2016 , 123, 384-401	6.5	63
299	Evaluation of Satellite-Based, Modeled-Derived Daily Solar Radiation Data for the Continental United States. <i>Agronomy Journal</i> , 2011 , 103, 1242-1251	2.2	61
298	Effects of Estimating Soil Hydraulic Properties and Root Growth Factor on Soil Water Balance and Crop Production. <i>Agronomy Journal</i> , 2009 , 101, 572-583	2.2	61
297	Evaluation of NASA satellite- and assimilation model-derived long-term daily temperature data over the continental US. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 1574-1584	5.8	61
296	The DSSAT crop modeling ecosystem. <i>Burleigh Dodds Series in Agricultural Science</i> , 2019 , 173-216	2	61
295	Gene-Based Approaches to Crop Simulation. <i>Agronomy Journal</i> , 2003 , 95, 52	2.2	60
294	Integrated description of agricultural field experiments and production: The ICASA Version 2.0 data standards. <i>Computers and Electronics in Agriculture</i> , 2013 , 96, 1-12	6.5	59
293	Application of the CSM-CERES-Rice model for evaluation of plant density and nitrogen management of fine transplanted rice for an irrigated semiarid environment. <i>Precision Agriculture</i> , 2012 , 13, 200-218	5.6	58
292	Using the WISE database to parameterize soil inputs for crop simulation models. <i>Computers and Electronics in Agriculture</i> , 2007 , 56, 85-100	6.5	58
291	Support vector regression with reduced training sets for air temperature prediction: a comparison with artificial neural networks. <i>Neural Computing and Applications</i> , 2011 , 20, 151-159	4.8	57
290	Comparison of Priestley-Taylor and FAO-56 Penman-Monteith for Daily Reference Evapotranspiration Estimation in Georgia. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2007 , 133, 175-182	1.1	57
289	Weather analogue: A tool for real-time prediction of daily weather data realizations based on a modified k-nearest neighbor approach. <i>Environmental Modelling and Software</i> , 2008 , 23, 703-713	5.2	54
288	BEANGRO: A Process-Oriented Dry Bean Model with a Versatile User Interface. <i>Agronomy Journal</i> , 1994 , 86, 182-190	2.2	54

287	Modifying DSSAT Crop Models for Low-Input Agricultural Systems Using a Soil Organic Matter Residue Module from CENTURY 2002 , 94, 462		54
286	Estimation of meteorological drought indices based on AgMERRA precipitation data and station-observed precipitation data. <i>Journal of Arid Land</i> , 2017 , 9, 797-809	2.2	53
285	Evaluation of the DSSAT-CSM for simulating yield and soil organic C and N of a long-term maize and wheat rotation experiment in the Loess Plateau of Northwestern China. <i>Agricultural Systems</i> , 2015 , 135, 90-104	6.1	52
284	The Role of Crop Systems Simulation in Agriculture and Environment. <i>International Journal of Agricultural and Environmental Information Systems</i> , 2010 , 1, 41-54	1.2	52
283	Simulated CSM-CROPGRO-cotton yield under projected future climate by SimCLIM for southern Punjab, Pakistan. <i>Agricultural Systems</i> , 2018 , 167, 213-222	6.1	50
282	Maize ethanol feedstock production and net energy value as affected by climate variability and crop management practices. <i>Agricultural Systems</i> , 2009 , 100, 11-21	6.1	48
281	Estimating the impacts of climate change on crop yields and N ₂ O emissions for conventional and no-tillage in Southwestern Ontario, Canada. <i>Agricultural Systems</i> , 2018 , 159, 187-198	6.1	46
280	Evaluation of a Crop Simulation Model that Incorporates Gene Action. <i>Agronomy Journal</i> , 1997 , 89, 613-620		46
279	A Computer Program to Analyze Single-Season Crop Model Outputs. <i>Agronomy Journal</i> , 1994 , 86, 860-868		46
278	Impacts of 1.5 versus 2.0 °C on cereal yields in the West African Sudan Savanna. <i>Environmental Research Letters</i> , 2018 , 13, 034014	6.2	45
277	Modeling Dormant Bud Cold Hardiness and Budbreak in Twenty-Three Vitis Genotypes Reveals Variation by Region of Origin. <i>American Journal of Enology and Viticulture</i> , 2014 , 65, 59-71	2.2	44
276	Improving Physiological Assumptions Of Simulation Models By Using Gene-Based Approaches. <i>Agronomy Journal</i> , 2003 , 95, 82	2.2	44
275	The impact of climate warming and crop management on phenology of sunflower-based cropping systems in Punjab, Pakistan. <i>Agricultural and Forest Meteorology</i> , 2018 , 256-257, 270-282	5.8	43
274	Simulation of potato yield, nitrate leaching, and profit margins as influenced by irrigation and nitrogen management in different soils and production regions. <i>Agricultural Water Management</i> , 2016 , 171, 120-130	5.9	43
273	Can Egypt become self-sufficient in wheat?. <i>Environmental Research Letters</i> , 2018 , 13, 094012	6.2	43
272	Climate change impact on Mexico wheat production. <i>Agricultural and Forest Meteorology</i> , 2018 , 263, 373-387	5.8	43
271	Interactive effects of elevated [CO ₂] and temperature on growth and development of a short- and long-season peanut cultivar. <i>Climatic Change</i> , 2009 , 93, 389-406	4.5	42
270	Evaluation of FAO-56 crop coefficient procedures for deficit irrigation management of cotton in a humid climate. <i>Agricultural Water Management</i> , 2007 , 91, 33-42	5.9	42

269	Towards shifting planting date as an adaptation practice for rainfed wheat response to climate change. <i>Agricultural Water Management</i> , 2017 , 186, 108-119	5.9	41
268	Reanalysis of a global soil database for crop and environmental modeling. <i>Environmental Modelling and Software</i> , 2012 , 35, 163-170	5.2	41
267	Assessing crop management options with crop simulation models based on generated weather data. <i>Field Crops Research</i> , 2007 , 103, 198-207	5.5	41
266	A Computer Program to Analyze Multiple-Season Crop Model Outputs. <i>Agronomy Journal</i> , 1995 , 87, 131-136	4.36	41
265	Variation in cold hardiness of sweet cherry flower buds through different phenological stages. <i>Scientia Horticulturae</i> , 2014 , 172, 161-167	4.1	40
264	AEGIS/WIN: A Computer Program for the Application of Crop Simulation Models Across Geographic Areas. <i>Agronomy Journal</i> , 1997 , 89, 919-928	2.2	40
263	Soybean (<i>Glycine max</i> (L.) Merr.) growth and development response to CO ₂ enrichment under different temperature regimes. <i>European Journal of Agronomy</i> , 2006 , 24, 52-61	5	40
262	Optimizing irrigation management for a spatially variable soybean field. <i>Agricultural Systems</i> , 2003 , 76, 359-377	6.1	40
261	Application of the CSM-CERES-Rice model for evaluation of plant density and irrigation management of transplanted rice for an irrigated semiarid environment. <i>Irrigation Science</i> , 2013 , 31, 491-506	3.1	39
260	Rooting traits of peanut genotypes with different yield responses to pre-flowering drought stress. <i>Field Crops Research</i> , 2011 , 120, 262-270	5.5	39
259	Modeling responses of dryland spring triticale, proso millet and foxtail millet to initial soil water in the High Plains. <i>Field Crops Research</i> , 2009 , 113, 48-63	5.5	39
258	Impact of generated solar radiation on simulated crop growth and yield. <i>Ecological Modelling</i> , 2008 , 210, 312-326	3	39
257	Evaluation of two evapotranspiration approaches simulated with the CSM-CERES-Maize model under different irrigation strategies and the impact on maize growth, development and soil moisture content for semi-arid conditions. <i>Agricultural and Forest Meteorology</i> , 2013 , 176, 64-76	5.8	38
256	A genetic algorithm to refine input data selection for air temperature prediction using artificial neural networks. <i>Applied Soft Computing Journal</i> , 2013 , 13, 2253-2260	7.5	38
255	Predicting growth and yield of winter rapeseed in a Mediterranean environment: Model adaptation at a field scale. <i>Field Crops Research</i> , 2013 , 144, 100-112	5.5	37
254	Beyond the fit—Introducing climate forecasts among organic farmers in Georgia (United States). <i>Climatic Change</i> , 2011 , 109, 791-799	4.5	36
253	Effect of the interaction of water and nitrogen on sunflower under drip irrigation in an arid region. <i>Agricultural Water Management</i> , 2016 , 171, 162-172	5.9	36
252	Remote Sensing and Geospatial Technological Applications for Site-specific Management of Fruit and Nut Crops: A Review. <i>Remote Sensing</i> , 2010 , 2, 1973-1997	5	35

251	Quantification of the impacts of climate warming and crop management on canola phenology in Punjab, Pakistan. <i>Journal of Agronomy and Crop Science</i> , 2017 , 203, 442-452	3.9	34
250	Coordinating AgMIP data and models across global and regional scales for 1.5°C and 2.0°C assessments. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018 , 376,	3	34
249	Optimizing Parameters of CSM-CERES-Maize Model to Improve Simulation Performance of Maize Growth and Nitrogen Uptake in Northeast China. <i>Journal of Integrative Agriculture</i> , 2012 , 11, 1898-1913	3.2	34
248	Soil carbon dynamics and crop residue yields of cropping systems in the Northern Guinea Savanna of Burkina Faso. <i>Soil and Tillage Research</i> , 2007 , 93, 138-151	6.5	34
247	Evaluation of the OILCROP-SUN model for sunflower hybrids under different agro-meteorological conditions of Punjab Pakistan. <i>Field Crops Research</i> , 2016 , 188, 17-30	5.5	33
246	A review of coupled hydrologic and crop growth models. <i>Agricultural Water Management</i> , 2019 , 224, 105746	5.9	33
245	A comparison of the performance of the CSM-CERES-Maize and EPIC models using maize variety trial data. <i>Agricultural Systems</i> , 2017 , 150, 109-119	6.1	33
244	Soil organic carbon dynamics and crop yield for different crop rotations in a degraded ferruginous tropical soil in a semi-arid region: a simulation approach. <i>Journal of Agricultural Science</i> , 2011 , 149, 579-593	5.3	33
243	A SIMPLE crop model. <i>European Journal of Agronomy</i> , 2019 , 104, 97-106	5	32
242	Modeling the effect of a heat wave on maize production in the USA and its implications on food security in the developing world. <i>Weather and Climate Extremes</i> , 2014 , 5-6, 67-77	6	32
241	Growth and development of cotton (<i>Gossypium hirsutum</i> L.) in response to CO ₂ enrichment under two different temperature regimes. <i>Environmental and Experimental Botany</i> , 2009 , 67, 178-187	5.9	32
240	Biophysical and economic implications for agriculture of +1.5° and +2.0°C global warming using AgMIP Coordinated Global and Regional Assessments. <i>Climate Research</i> , 2018 , 76, 17-39	1.6	32
239	Integrating growth stage deficit irrigation into a process based crop model. <i>Agricultural and Forest Meteorology</i> , 2017 , 243, 84-92	5.8	31
238	An integrated crop and hydrologic modeling system to estimate hydrologic impacts of crop irrigation demands. <i>Environmental Modelling and Software</i> , 2015 , 72, 341-355	5.2	31
237	Photothermal impact on maize performance: a simulation approach. <i>Ecological Modelling</i> , 2004 , 180, 277-290	3	31
236	Simulating the impact of water saving irrigation and conservation agriculture practices for rice-wheat systems in the irrigated semi-arid drylands of Central Asia. <i>Agricultural and Forest Meteorology</i> , 2015 , 214-215, 266-280	5.8	30
235	Uncertainty Analysis and Parameter Estimation for the CSM-CROPGRO-Cotton Model. <i>Agronomy Journal</i> , 2012 , 104, 1363-1373	2.2	30
234	Climate impacts on global agriculture emerge earlier in new generation of climate and crop models. <i>Nature Food</i> ,	14.4	30

233	Modelling Climate Change Impacts and Adaptation Strategies for Sunflower in Pakistan. <i>Outlook on Agriculture</i> , 2016 , 45, 39-45	2.9	30
232	Towards modeling soil texture-specific sensitivity of wheat yield and water balance to climatic changes. <i>Agricultural Water Management</i> , 2016 , 177, 248-263	5.9	30
231	Predicting Key Phenological Stages for 17 Grapevine Cultivars (<i>Vitis vinifera</i> L.). <i>American Journal of Enology and Viticulture</i> , 2017 , 68, 60-72	2.2	29
230	Water-Yield Relations and Water Use Efficiency of Maize Under Nitrogen Fertigation for Semiarid Environments: Experiment and Synthesis. <i>Advances in Agronomy</i> , 2015 , 175-229	7.7	29
229	The impact of potential errors in rainfall observation on the simulation of crop growth, development and yield. <i>Ecological Modelling</i> , 2002 , 157, 1-21	3	29
228	Shoot Growth Rate of Soybean as Affected by Drought Stress ¹ . <i>Agronomy Journal</i> , 1987 , 79, 598-607	2.2	29
227	Models Calibration and Evaluation 2020 , 151-178		29
226	Determining optimum sowing date of wheat using CSM-CERES-Wheat model. <i>Journal of the Saudi Society of Agricultural Sciences</i> , 2015 , 14, 189-199	3.3	28
225	Water use and water use efficiency of sweet corn under different weather conditions and soil moisture regimes. <i>Agricultural Water Management</i> , 2009 , 96, 1369-1376	5.9	28
224	Simulated Canola Yield Responses to Climate Change and Adaptation in Canada. <i>Agronomy Journal</i> , 2018 , 110, 133-146	2.2	28
223	Estimating irrigation water use for maize in the Southeastern USA: A modeling approach. <i>Agricultural Water Management</i> , 2012 , 107, 104-111	5.9	27
222	Evaluation of the Weather Research and Forecasting model for two frost events. <i>Computers and Electronics in Agriculture</i> , 2008 , 64, 234-247	6.5	27
221	Freezing tolerance of apple flower buds. <i>Scientia Horticulturae</i> , 2016 , 198, 344-351	4.1	26
220	Coupling and testing a new soil water module in DSSAT CERES-Maize model for maize production under semi-arid condition. <i>Agricultural Water Management</i> , 2016 , 163, 90-99	5.9	26
219	Response of soybean genotypes to different irrigation regimes in a humid region of the southeastern USA. <i>Agricultural Water Management</i> , 2010 , 97, 981-987	5.9	26
218	Estimating the demand for irrigation water in a humid climate: A case study from the southeastern United States. <i>Agricultural Water Management</i> , 2009 , 96, 1421-1428	5.9	26
217	Modeling the water and nitrogen productivity of sunflower using OILCROP-SUN model in Pakistan. <i>Field Crops Research</i> , 2017 , 205, 67-77	5.5	25
216	A multi-scale and multi-model gridded framework for forecasting crop production, risk analysis, and climate change impact studies. <i>Environmental Modelling and Software</i> , 2019 , 115, 144-154	5.2	25

215	A web-based fuzzy expert system for frost warnings in horticultural crops. <i>Environmental Modelling and Software</i> , 2012 , 35, 84-91	5.2	25
214	Cotton yields as influenced by ENSO at different planting dates and spatial aggregation levels. <i>Agricultural Systems</i> , 2012 , 111, 45-52	6.1	25
213	A multi-objective approach to water and nutrient efficiency for sustainable agricultural intensification. <i>Agricultural Systems</i> , 2019 , 173, 289-302	6.1	24
212	Classification of root distribution patterns and their contributions to yield in peanut genotypes under mid-season drought stress. <i>Field Crops Research</i> , 2012 , 127, 181-190	5.5	24
211	Designing a Peanut Ideotype for a Target Environment Using the CSM-CROPGRO-Peanut Model. <i>Crop Science</i> , 2011 , 51, 1887-1902	2.4	24
210	Simulating the effect of long-term fertilization on maize yield and soil C/N dynamics in northeastern China using DSSAT and CENTURY-based soil model. <i>Nutrient Cycling in Agroecosystems</i> , 2013 , 95, 287-303	3.3	23
209	Response of sunflower hybrids to nitrogen application grown under different agro-environments. <i>Journal of Plant Nutrition</i> , 2017 , 40, 82-92	2.3	23
208	Net energy value of maize ethanol as a response to different climate and soil conditions in the southeastern USA. <i>Biomass and Bioenergy</i> , 2009 , 33, 1055-1064	5.3	23
207	Comparison of three calibration methods for modeling rice phenology. <i>Agricultural and Forest Meteorology</i> , 2020 , 280, 107785	5.8	23
206	Yield, quality and drought sensitivity of tomato to water deficit during different growth stages. <i>Scientia Agricola</i> , 2020 , 77,	2.5	23
205	Climate change impacts on crop yield, soil water balance and nitrate leaching in the semiarid and humid regions of Canada. <i>PLoS ONE</i> , 2018 , 13, e0207370	3.7	23
204	Adaptation strategies for maize production under climate change for semi-arid environments. <i>European Journal of Agronomy</i> , 2020 , 115, 126040	5	22
203	An Overview of CERES _{Borghum} as Implemented in the Cropping System Model Version 4.5. <i>Agronomy Journal</i> , 2015 , 107, 1987-2002	2.2	22
202	Application of the Cropping System Model (CSM)-CROPGRO-Soybean for Determining Optimum Management Strategies for Soybean in Tropical Environments. <i>Journal of Agronomy and Crop Science</i> , 2009 , 196, 231-242	3.9	22
201	Distribution of Dry Matter Between Shoots and Roots of Irrigated and Nonirrigated Determinate Soybeans ¹ . <i>Agronomy Journal</i> , 1986 , 78, 807-813	2.2	22
200	Potential adaptation strategies for rainfed soybean production in the south-eastern USA under climate change based on the CSM-CROPGRO-Soybean model. <i>Journal of Agricultural Science</i> , 2015 , 153, 798-824	1	21
199	Land-use classification of multispectral aerial images using artificial neural networks. <i>International Journal of Remote Sensing</i> , 2009 , 30, 1989-2004	3.1	21
198	Assessing climate change impacts on pearl millet under arid and semi-arid environments using CSM-CERES-Millet model. <i>Environmental Science and Pollution Research</i> , 2019 , 26, 6745-6757	5.1	21

197	Estimation of the base temperature and growth phase duration in terms of thermal time for four grapevine cultivars. <i>International Journal of Biometeorology</i> , 2015 , 59, 1771-81	3.7	20
196	Comparison of individual and combined ANN models for prediction of air and dew point temperature. <i>Applied Intelligence</i> , 2013 , 39, 354-366	4.9	20
195	Drought tolerance mechanisms for yield responses to pre-flowering drought stress of peanut genotypes with different drought tolerant levels. <i>Field Crops Research</i> , 2013 , 144, 34-42	5.5	20
194	Experiments and Data for Model Evaluation and Application 2012 , 9-18		20
193	ENSO-based climate variability affects water use efficiency of rainfed cotton grown in the southeastern USA. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 629-635	5.7	20
192	Agricultural water use estimation using geospatial modeling and a geographic information system. <i>Agricultural Water Management</i> , 2004 , 67, 185-199	5.9	20
191	Simulation of Crop Growth: CROPGRO Model 2018 , 651-692		20
190	Evaluation of the CSM-CROPGRO-Canola Model for Simulating Canola Growth and Yield at West Nipissing in Eastern Canada. <i>Agronomy Journal</i> , 2016 , 108, 575-584	2.2	20
189	Using daily data from seasonal forecasts in dynamic crop models for yield prediction: A case study for rice in Nepal's Terai. <i>Agricultural and Forest Meteorology</i> , 2019 , 265, 349-358	5.8	20
188	Adapting irrigated and rainfed wheat to climate change in semi-arid environments: Management, breeding options and land use change. <i>European Journal of Agronomy</i> , 2019 , 109, 125915	5	19
187	Water and Nitrogen Productivity of Maize under Semiarid Environments. <i>Crop Science</i> , 2015 , 55, 877-888	2.4	19
186	Determining optimum planting dates for rainfed wheat using the precipitation uncertainty model and adjusted crop evapotranspiration. <i>Agricultural Water Management</i> , 2013 , 126, 56-63	5.9	19
185	Distinguishing blueberry bushes from mixed vegetation land use using high resolution satellite imagery and geospatial techniques. <i>Computers and Electronics in Agriculture</i> , 2009 , 67, 51-58	6.5	19
184	Gene-based modelling for rice: an opportunity to enhance the simulation of rice growth and development?. <i>Journal of Theoretical Biology</i> , 2007 , 249, 593-605	2.3	19
183	Simulating Soybean Water Stress Effects with RZWQM and CROPGRO Models. <i>Agronomy Journal</i> , 2002 , 94, 1234-1243	2.2	19
182	Methodology to estimate rice genetic coefficients for the CSM-CERES-Rice model using GENCALC and GLUE genetic coefficient estimators. <i>Journal of Agricultural Science</i> , 2018 , 156, 482-492	1	18
181	Growth rates and yields of cassava at different planting dates in a tropical savanna climate. <i>Scientia Agricola</i> , 2019 , 76, 376-388	2.5	18
180	Growing food, growing a movement: climate adaptation and civic agriculture in the southeastern United States. <i>Agriculture and Human Values</i> , 2014 , 31, 69-82	2.7	18

179	Predicting realizations of daily weather data for climate forecasts using the non-parametric nearest-neighbour re-sampling technique. <i>International Journal of Climatology</i> , 2008 , 28, 1357-1368	3.5	18
178	Using crop modeling to evaluate the impacts of climate change on wheat in southeastern turkey. <i>Environmental Science and Pollution Research</i> , 2019 , 26, 29397-29408	5.1	17
177	Determination of efficient test sites for evaluation of peanut breeding lines using the CSM-CROPGRO-peanut model. <i>Field Crops Research</i> , 2009 , 110, 272-281	5.5	17
176	Different uncertainty distribution between high and low latitudes in modelling warming impacts on wheat. <i>Nature Food</i> , 2020 , 1, 63-69	14.4	17
175	Adapting the CROPGRO Model to Simulate Alfalfa Growth and Yield. <i>Agronomy Journal</i> , 2018 , 110, 1777-1790	17	17
174	Modelling climate change impacts on maize yields under low nitrogen input conditions in sub-Saharan Africa. <i>Global Change Biology</i> , 2020 , 26, 5942-5964	11.4	16
173	Decision Support System to Study Climate Change Impacts on Crop Production. <i>ASA Special Publication</i> , 2015 , 51-75	1.1	16
172	Role of land surface parameterizations on modeling cold-pooling events and low-level jets. <i>Atmospheric Research</i> , 2011 , 99, 147-161	5.4	16
171	A Real-Time Gridded Crop Model for Assessing Spatial Drought Stress on Crops in the Southeastern United States. <i>Journal of Applied Meteorology and Climatology</i> , 2011 , 50, 1459-1475	2.7	16
170	A comparison of ASCE and FAO-56 reference evapotranspiration for a 15-min time step in humid climate conditions. <i>Journal of Hydrology</i> , 2009 , 375, 326-333	6	16
169	Alternative Crop Insurance Indexes. <i>Journal of Agricultural & Applied Economics</i> , 2008 , 40, 223-237	1.1	16
168	Soybean production in 2025 and 2050 in the southeastern USA based on the SimCLIM and the CSM-CROPGRO-Soybean models. <i>Climate Research</i> , 2015 , 63, 73-89	1.6	16
167	Predicting water and nitrogen requirements for maize under semi-arid conditions using the CSM-CERES-Maize model. <i>European Journal of Agronomy</i> , 2018 , 100, 56-66	5	15
166	Photoperiod sensitivity of local millet and sorghum varieties in West Africa. <i>Njas - Wageningen Journal of Life Sciences</i> , 2014 , 68, 29-39	7	14
165	Social justice in climate services: Engaging African American farmers in the American South. <i>Climate Risk Management</i> , 2014 , 2, 11-25	4.6	14
164	Scheduling irrigation with a dynamic crop growth model and determining the relation between simulated drought stress and yield for peanut. <i>Irrigation Science</i> , 2013 , 31, 889-901	3.1	14
163	Estimation of solar radiation based on air temperature and application with the DSSAT v4.5 peanut and rice simulation models in Thailand. <i>Agricultural and Forest Meteorology</i> , 2013 , 180, 182-193	5.8	14
162	Multi-environment evaluation of peanut lines by model simulation with the cultivar coefficients derived from a reduced set of observed field data. <i>Field Crops Research</i> , 2009 , 110, 111-122	5.5	14

161	Simulating the production potential and net energy yield of maize-ethanol in the southeastern USA. <i>European Journal of Agronomy</i> , 2010 , 32, 272-279	5	14
160	Regression-Based Evaluation of Ecophysiological Models. <i>Agronomy Journal</i> , 2007 , 99, 419-427	2.2	14
159	Modeling growth, development and yield of Sugarbeet using DSSAT. <i>Agricultural Systems</i> , 2019 , 169, 58-70	6.1	14
158	Simulated Effects of Winter Wheat Cover Crop on Cotton Production Systems of the Texas Rolling Plains. <i>Transactions of the ASABE</i> , 2017 , 60, 2083-2096	0.9	13
157	El Niño Southern Oscillation Effects on Winter Wheat in the Southeastern United States. <i>Agronomy Journal</i> , 2015 , 107, 2193-2204	2.2	13
156	From management to negotiation: technical and institutional innovations for integrated water resource management in the Upper Comol River Basin, Burkina Faso. <i>Environmental Management</i> , 2009 , 44, 695-711	3.1	13
155	Short Communication: Climate change and biofuel wheat: A case study of southern Saskatchewan. <i>Canadian Journal of Plant Science</i> , 2012 , 92, 421-425	1	13
154	A WEB-BASED DATA EXCHANGE SYSTEM FOR CROP MODEL APPLICATIONS. <i>Agronomy Journal</i> , 2004 , 96, 1	2.2	13
153	Application of the CSM CERES-Wheat Model for Yield Prediction and Planting Date Evaluation at Guanzhong Plain in Northwest China. <i>Agronomy Journal</i> , 2017 , 109, 204-217	2.2	12
152	The ENSO effect on peanut yield as influenced by planting date and soil type. <i>Agricultural Systems</i> , 2013 , 121, 1-8	6.1	12
151	Maize kernel growth at different floret positions of the ear. <i>Field Crops Research</i> , 2013 , 149, 177-186	5.5	12
150	Designing cotton ideotypes for the future: Reducing risk of crop failure for low input rainfed conditions in Northern Cameroon. <i>European Journal of Agronomy</i> , 2017 , 90, 162-173	5	12
149	Effect of atmospheric water vapor on photosynthesis, transpiration and canopy conductance: A case study in corn . <i>Plant, Soil and Environment</i> , 2013 , 59, 549-555	2.2	12
148	Dry bean competitiveness with redroot pigweed as affected by growth habit and nitrogen rate. <i>Field Crops Research</i> , 2012 , 135, 38-45	5.5	12
147	Dynamic patterns of components of genotypeEnvironment interaction for pod yield of peanut over multiple years: A simulation approach. <i>Field Crops Research</i> , 2008 , 106, 9-21	5.5	12
146	Modeling the impact of climate warming on potato phenology. <i>European Journal of Agronomy</i> , 2022 , 132, 126404	5	12
145	Stochastic Programming for Improved Multiuse Reservoir Operation in Burkina Faso, West Africa. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2015 , 141, 04014056	2.8	11
144	Spatial suitability assessment for vineyard site selection based on fuzzy logic. <i>Precision Agriculture</i> , 2018 , 19, 1027-1048	5.6	11

143	Simulating weather effects on potato yield, nitrate leaching, and profit margin in the US Pacific Northwest. <i>Agricultural Water Management</i> , 2018 , 201, 177-187	5.9	11
142	Understanding high resolution space-time variability of rainfall in southwest Georgia, United States. <i>International Journal of Climatology</i> , 2014 , 34, 3188-3203	3.5	11
141	The impact of El Niño Southern Oscillation phases on off-season maize yield for a subtropical region of Brazil. <i>International Journal of Climatology</i> , 2010 , 30, 1056-1066	3.5	11
140	Experience with Water Balance, Evapotranspiration, and Predictions of Water Stress Effects in the CROPGRO Model. <i>Advances in Agricultural Systems Modeling</i> , 59-103	0.3	11
139	How well do crop modeling groups predict wheat phenology, given calibration data from the target population?. <i>European Journal of Agronomy</i> , 2021 , 124, 126195	5	11
138	A dynamic model with QTL covariables for predicting flowering time of common bean (<i>Phaseolus vulgaris</i>) genotypes. <i>European Journal of Agronomy</i> , 2018 , 101, 200-209	5	11
137	Remotely sensed vegetation index and LAI for parameter determination of the CSM-CROPGRO-Soybean model when in situ data are not available. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2019 , 79, 110-115	7.3	10
136	The Impact of Seasonal Environments in a Tropical Savanna Climate on Forking, Leaf Area Index, and Biomass of Cassava Genotypes. <i>Agronomy</i> , 2019 , 9, 19	3.6	10
135	Modelling varietal differences in response to phosphorus in West African sorghum. <i>European Journal of Agronomy</i> , 2018 , 100, 35-43	5	10
134	Chlorophyll fluorescence and biomass of four cassava genotypes grown under rain-fed upper paddy field conditions in the tropics. <i>Journal of Agronomy and Crop Science</i> , 2018 , 204, 554-565	3.9	10
133	Weather-based Pest Forecasting for Efficient Crop Protection 2014 , 59-78		10
132	Determining FAO-56 crop coefficients for peanut under different water stress levels. <i>Irrigation Science</i> , 2013 , 31, 169-178	3.1	10
131	Reduction in greenhouse gas emissions due to the use of bio-ethanol from wheat grain and straw produced in the south-eastern USA. <i>Journal of Agricultural Science</i> , 2010 , 148, 511-527	1	10
130	Agricultural Risk Decision Support System for Resource-Poor Farmers in Burkina Faso, West Africa. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2009 , 135, 323-333	2.8	10
129	Effects of variety, cropping system and soil inoculation with <i>Aspergillus flavus</i> on aflatoxin levels during storage of maize. <i>Tropical Plant Pathology</i> , 2012 , 37, 25-36	2.5	10
128	Simulating alfalfa regrowth and biomass in eastern Canada using the CSM-CROPGRO-perennial forage model. <i>European Journal of Agronomy</i> , 2020 , 113, 125971	5	10
127	Predicting favorable conditions for early leaf spot of peanut using output from the Weather Research and Forecasting (WRF) model. <i>International Journal of Biometeorology</i> , 2012 , 56, 259-68	3.7	9
126	Effects of planting date and variety on flooded rice production in the deepwater area of Thailand. <i>Field Crops Research</i> , 2011 , 124, 270-277	5.5	9

125	Determining the impact of climate and soil variability on switchgrass (<i>Panicum virgatum</i> L.) production in the south-eastern USA; a simulation study. <i>Biofuels, Bioproducts and Biorefining</i> , 2011 , 5, 505-518	5.3	9
124	Parameterizing soil and weather inputs for crop simulation models using the VEMAP database. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 135, 111-118	5.7	9
123	El Niño-Southern Oscillation (ENSO): Impact on tomato spotted wilt intensity in peanut and the implication on yield. <i>Crop Protection</i> , 2010 , 29, 448-453	2.7	9
122	Climate Resilient Cotton Production System: A Case Study in Pakistan 2020 , 447-484		9
121	Modeling the effect of temperature on bud dormancy of grapevines. <i>Agricultural and Forest Meteorology</i> , 2020 , 280, 107782	5.8	9
120	Evaluation of Timing and Rates for Nitrogen Application for Optimizing Maize Growth and Development and Maximizing Yield. <i>Agronomy Journal</i> , 2018 , 110, 565-571	2.2	9
119	Effects of different irrigation regimes on soil moisture availability evaluated by CSM-CERES-Maize model under semi-arid condition. <i>Ecohydrology and Hydrobiology</i> , 2017 , 17, 207-216	2.8	8
118	Winter wheat production on the Guanzhong Plain of Northwest China under projected future climate with SimCLIM. <i>Agricultural Water Management</i> , 2020 , 239, 106233	5.9	8
117	Coupling individual kernel-filling processes with source-sink interactions into GREENLAB-Maize. <i>Annals of Botany</i> , 2018 , 121, 961-973	4.1	8
116	Predicting Crop Yields with the Agricultural Reference Index for Drought. <i>Journal of Agronomy and Crop Science</i> , 2014 , 200, 163-171	3.9	8
115	OILCROP-SUN Model Relevance for Evaluation of Nitrogen Management of Sunflower Hybrids in Sargodha, Punjab. <i>American Journal of Plant Sciences</i> , 2013 , 04, 1731-1735	0.5	8
114	Impact of Early Spring Weather Factors on the Risk of Tomato Spotted Wilt in Peanut. <i>Plant Disease</i> , 2009 , 93, 783-788	1.5	8
113	Modification and Testing of a Model Simulating Root and Shoot Growth as Related to Soil Water Dynamics. <i>Advances in Irrigation</i> , 1987 , 4, 331-387		8
112	Common bean canopy characteristics and N assimilation as affected by weed pressure and nitrogen rate. <i>Journal of Agricultural Science</i> , 2016 , 154, 598-611	1	8
111	Limited Irrigation for Improving Water Use Efficiency of Winter Wheat in the Guanzhong Plain of Northwest China. <i>Transactions of the ASABE</i> , 2016 , 59, 1841-1852	0.9	7
110	A surrogate weighted mean ensemble method to reduce the uncertainty at a regional scale for the calculation of potential evapotranspiration. <i>Scientific Reports</i> , 2020 , 10, 870	4.9	7
109	Fuzzy Union to Assess Climate Suitability of Annual Ryegrass (<i>Lolium multiflorum</i>), Alfalfa (<i>Medicago sativa</i>) and Sorghum (<i>Sorghum bicolor</i>). <i>Scientific Reports</i> , 2018 , 8, 10220	4.9	7
108	Methodology to evaluate the performance of simulation models for alternative compiler and operating system configurations. <i>Computers and Electronics in Agriculture</i> , 2012 , 81, 62-71	6.5	7

107	ESTIMATION OF TEMPORAL VARIATION RESILIENCE IN COTTON VARIETIES USING STATISTICAL MODELS. <i>Pakistan Journal of Agricultural Sciences</i> , 2016 , 53, 787-807	1.5	7
106	Analysis of several bioclimatic indices for viticultural zoning in the Pacific Northwest. <i>Climate Research</i> , 2018 , 76, 203-223	1.6	7
105	Prediction of climate variables by comparing the knearest neighbor method and MIROC5 outputs in an arid environment. <i>Climate Research</i> , 2019 , 77, 99-114	1.6	7
104	Crop Response to Climate: Ecophysiological Models. <i>Advances in Global Change Research</i> , 2010 , 59-83	1.2	7
103	How well do crop modeling groups predict wheat phenology, given calibration data from the target population?		
102	Predicting Kernel Growth of Maize under Controlled Water and Nitrogen Applications. <i>International Journal of Plant Production</i> , 2020 , 14, 609-620	2.4	7
101	Sentinel Site Data for Crop Model ImprovementDefinition and Characterization. <i>Advances in Agricultural Systems Modeling</i> , 2016 , 125-158	0.3	7
100	Comparison between grapevine tissue temperature and air temperature. <i>Scientia Horticulturae</i> , 2019 , 247, 407-420	4.1	7
99	Cassava Growth Analysis of Production during the Off-Season of Paddy Rice. <i>Crop Science</i> , 2019 , 59, 760-771	2.1	7
98	Evaluation of subsurface, mulched and non-mulched surface drip irrigation for maize production and economic benefits in northeast China. <i>Irrigation Science</i> , 2021 , 39, 159-171	3.1	7
97	Minimum Temperature, Rainfall, and Agronomic Management Impacts on Corn Grain Aflatoxin Contamination. <i>Agronomy Journal</i> , 2018 , 110, 1697-1708	2.2	7
96	DEVELOPMENT OF BLOOM PHENOLOGY MODELS FOR TREE FRUITS. <i>Acta Horticulturae</i> , 2015 , 107-112	0.3	6
95	Soybean Root Senescence under Drought Stress. <i>ASA Special Publication</i> , 2015 , 109-121	1.1	6
94	The Weather Research and Forecasting (WRF) model: application in prediction of TSWV-vectors populations. <i>Journal of Applied Entomology</i> , 2011 , 135, 81-90	1.7	6
93	Gene-Based Approaches to Crop Simulation. <i>Agronomy Journal</i> , 2003 , 95, 52-64	2.2	6
92	Potential benefits of genotype-based adaptation strategies for grain sorghum production in the Texas High Plains under climate change. <i>European Journal of Agronomy</i> , 2020 , 117, 126037	5	6
91	Report from the conference, Identifying obstacles to applying big data in agriculture□ <i>Precision Agriculture</i> , 2021 , 22, 306-315	5.6	6
90	Time-to-event analysis to evaluate dormancy status of single-bud cuttings: an example for grapevines. <i>Plant Methods</i> , 2018 , 14, 94	5.8	6

89	Importance of genetic parameters and uncertainty of MANIHOT, a new mechanistic cassava simulation model. <i>European Journal of Agronomy</i> , 2020 , 115, 126031	5	5
88	Evaluating a generic drought index as a predictive tool for aflatoxin contamination of corn: From plot to regional level. <i>Crop Protection</i> , 2018 , 113, 64-74	2.7	5
87	Response of the Durum Wheat Cultivar Um Qais (<i>Triticum turgidum</i> subsp. durum) to Salinity. <i>Agriculture (Switzerland)</i> , 2019 , 9, 135	3	5
86	Estimating Growing Season Length Using Vegetation Indices Based on Remote Sensing: A Case Study for Vineyards in Washington State. <i>Transactions of the ASABE</i> , 2015 , 551-564	0.9	5
85	Application of DSSAT Crop Models to Generate Alternative Production Activities Under Combined Use of Organic-Inorganic Nutrients in Rwanda. <i>Journal of Crop Improvement</i> , 2012 , 26, 346-363	1.4	5
84	Impact of Planting Date and Hybrid on Early Growth of Sweet Corn. <i>Agronomy Journal</i> , 2009 , 101, 193-200	2	5
83	Predicting root growth and water uptake under different soil water regimes. <i>Agricultural Systems</i> , 1988 , 26, 263-290	6.1	5
82	A potential of the growth stage estimation for paddy rice by using chlorophyll absorption bands in the 400-1100 nm region. <i>J Agricultural Meteorology</i> , 2015 , 71, 24-31	1.1	5
81	Effects of climate change on killing frost in the Canadian prairies. <i>Climate Research</i> , 2012 , 54, 221-231	1.6	5
80	Multi-model evaluation of phenology prediction for wheat in Australia. <i>Agricultural and Forest Meteorology</i> , 2021 , 298-299, 108289	5.8	5
79	Radius of influence of air temperature from automated weather stations installed in complex terrain. <i>Theoretical and Applied Climatology</i> , 2019 , 137, 1957-1973	3	5
78	Bringing farmers' perceptions into science and policy: Understanding salinity tolerance of rice in southwestern Bangladesh under climate change. <i>Land Use Policy</i> , 2021 , 101, 105159	5.6	5
77	Modeling pollen tube growth of Gala and Fuji Apples. <i>Scientia Horticulturae</i> , 2018 , 240, 125-132	4.1	4
76	The Impact of Spatial Soil Variability on Simulation of Regional Maize Yield. <i>Transactions of the ASABE</i> , 2017 , 60, 2137-2148	0.9	4
75	Durum Wheat Cover Analysis in the Scope of Policy and Market Price Changes: A Case Study in Southern Italy. <i>Agriculture (Switzerland)</i> , 2017 , 7, 12	3	4
74	The art of the science: climate forecasts for wildfire management in the southeastern United States. <i>Climatic Change</i> , 2012 , 113, 1113-1121	4.5	4
73	A dynamic simulation of loblolly pine (<i>Pinustaeda</i> L.) seedling establishment based upon carbon and water balances. <i>Canadian Journal of Forest Research</i> , 1988 , 18, 833-850	1.9	4
72	Crop Models: Important Tools in Decision Support System to Manage Wheat Production under Vulnerable Environments. <i>Agriculture (Switzerland)</i> , 2021 , 11, 1166	3	4

71	Evaluation of crop model prediction and uncertainty using Bayesian parameter estimation and Bayesian model averaging. <i>Agricultural and Forest Meteorology</i> , 2021 , 311, 108686	5.8	4
70	Estimating seasonal fragrant rice production in Thailand using a spatial crop modelling and weather forecasting approach. <i>Journal of Agricultural Science</i> , 2019 , 157, 566-577	1	4
69	Evaluating the applicability of using daily forecasts from seasonal prediction systems (SPSs) for agriculture: a case study of Nepal Terai with the NCEP CFSv2. <i>Theoretical and Applied Climatology</i> , 2019 , 135, 1143-1156	3	4
68	Cultivar Coefficient Estimator for the Cropping System Model Based on Time-Series Data: A Case Study for Soybean. <i>Transactions of the ASABE</i> , 2021 , 64, 1391-1402	0.9	4
67	START: A data preparation tool for crop simulation models using web-based soil databases. <i>Computers and Electronics in Agriculture</i> , 2018 , 154, 256-264	6.5	4
66	Predicting the response of a potato-grain production system to climate change for a humid continental climate using DSSAT. <i>Agricultural and Forest Meteorology</i> , 2021 , 307, 108452	5.8	4
65	Observed dimming effect during a forest fire in the southeastern United States and the role of aerosols. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	3
64	Evaluation of solar irradiance at the surfaceInferences from in situ and satellite observations and a mesoscale model. <i>Theoretical and Applied Climatology</i> , 2010 , 102, 455-469	3	3
63	Evaluating the accuracy of VEMAP daily weather data for application in crop simulations on a regional scale. <i>European Journal of Agronomy</i> , 2010 , 32, 187-194	5	3
62	Stochastic Linear Programming for Improved Reservoir Operations for Multiple Objectives in Burkina Faso, West Africa 2008 ,		3
61	Archival precipitation data set for the Mississippi River Basin: Evaluation. <i>Geophysical Research Letters</i> , 2005 , 32, n/a-n/a	4.9	3
60	Investigation of satellite-related precipitation products for modeling of rainfed wheat production systems. <i>Agricultural Water Management</i> , 2021 , 258, 107222	5.9	3
59	Climate change impacts and adaptations for fine, coarse, and hybrid rice using CERES-Rice. <i>Environmental Science and Pollution Research</i> , 2020 , 27, 9454-9464	5.1	3
58	Climate change impacts and adaptations for wheat employing multiple climate and crop modelsin Pakistan. <i>Climatic Change</i> , 2020 , 163, 253-266	4.5	3
57	Performance of the CSM-CROPGRO-soybean in simulating soybean growth and development and the soil water balance for a tropical environment. <i>Agricultural Water Management</i> , 2021 , 252, 106929	5.9	3
56	Modeling growth, development and yield of cassava: A review. <i>Field Crops Research</i> , 2021 , 267, 108140	5.5	3
55	Toward large-scale crop production forecasts for global food security. <i>IBM Journal of Research and Development</i> , 2016 , 60, 5:1-5:11	2.5	3
54	Irrigation and shifting planting date as climate change adaptation strategies for sorghum. <i>Agricultural Water Management</i> , 2021 , 255, 106988	5.9	3

53	The chaos in calibrating crop models: Lessons learned from a multi-model calibration exercise. <i>Environmental Modelling and Software</i> , 2021 , 145, 105206	5.2	3
52	Development and improvement of the CROPGRO-Strawberry model. <i>Scientia Horticulturae</i> , 2022 , 291, 110538	4.1	3
51	Incorporating realistic trait physiology into crop growth models to support genetic improvement. <i>In Silico Plants</i> , 2021 , 3,	3.2	3
50	Modeling apple bloom phenology. <i>Acta Horticulturae</i> , 2017 , 201-206	0.3	2
49	Simulation of productivity and soil moisture under Marandu palisade grass using the CSM-CROPGRO-Perennial Forage model. <i>Crop and Pasture Science</i> , 2019 , 70, 159	2.2	2
48	Quantification of agricultural drought occurrence as an estimate for insurance programs. <i>Theoretical and Applied Climatology</i> , 2015 , 122, 799-808	3	2
47	Climate Smart Interventions of Small-Holder Farming Systems 2019 ,		2
46	Evaluation of CSM-CROPGRO-Cotton for Simulating Effects of Management and Climate Change on Cotton Growth and Evapotranspiration in an Arid Environment. <i>Transactions of the ASABE</i> , 2014 , 1627-1642	0.9	2
45	Building Capacity for Modeling in Africa 2012 , 1-7		2
44	Use of Crop Models for Climate-Agricultural Decisions. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2010 , 131-157		2
43	Integrated viewing and analysis of phenotypic, genotypic and environmental data with GenPhEn arrays <i>European Journal of Agronomy</i> , 2005 , 23, 170-182	5	2
42	Expected effects of climate change on the production and water use of crop rotation management reproduced by crop model ensemble for Czech Republic sites. <i>European Journal of Agronomy</i> , 2022 , 134, 126446	5	2
41	A Study on the Spectral Change in a Chlorophyll Absorption Band Monitored During the Growth of Japanese Tea Leaves. <i>J Agricultural Meteorology</i> , 2013 , 69, 255-263	1.1	2
40	Climate change impact uncertainty assessment and adaptations for sustainable maize production using multi-crop and climate models. <i>Environmental Science and Pollution Research</i> , 2021 , 1	5.1	2
39	Estimating the potential impact of climate change on sunflower yield in the Konya province of Turkey. <i>Journal of Agricultural Science</i> , 2020 , 158, 806-818	1	2
38	A new approach to clustering soil profile data using the modified distance matrix. <i>Computers and Electronics in Agriculture</i> , 2020 , 176, 105631	6.5	2
37	Assessing the Potential Impact of Climate Change on Rice Yield in the Artibonite Valley of Haiti Using the CSM-CERES-Rice Model. <i>Transactions of the ASABE</i> , 2020 , 63, 1385-1400	0.9	2
36	Improving maize production and decreasing nitrogen residue in soil using mulched drip fertigation. <i>Agricultural Water Management</i> , 2021 , 251, 106871	5.9	2

35	Performance of the CSM-CRANFLO cassava model for simulating planting date response of cassava genotypes. <i>Field Crops Research</i> , 2021 , 264, 108073	5.5	2
34	A comprehensive uncertainty quantification of large-scale process-based crop modeling frameworks. <i>Environmental Research Letters</i> , 2021 , 16, 084010	6.2	2
33	A New Function for Prediction of Biological Processes Response to Temperature. <i>International Journal of Plant Production</i> , 2020 , 14, 9-22	2.4	2
32	Modeling the response of dry bean yield to irrigation water availability controlled by watershed hydrology. <i>Agricultural Water Management</i> , 2021 , 243, 106429	5.9	2
31	Crop2ML: An open-source multi-language modeling framework for the exchange and reuse of crop model components. <i>Environmental Modelling and Software</i> , 2021 , 142, 105055	5.2	2
30	Modeling fruit growth of apple. <i>Acta Horticulturae</i> , 2017 , 335-340	0.3	1
29	Comparison of air temperature measured in a vineyard canopy and at a standard weather station. <i>PLoS ONE</i> , 2020 , 15, e0234436	3.7	1
28	Soybean yield in relation to distance from the Itaipu reservoir. <i>International Journal of Biometeorology</i> , 2016 , 60, 1015-28	3.7	1
27	jDSSAT: A JavaScript Module for DSSAT-CSM integration. <i>SoftwareX</i> , 2019 , 10, 100271	2.7	1
26	Mapping and cumulative distribution function (CDF) as alternative methods to address variability in soil test results. <i>Communications in Soil Science and Plant Analysis</i> , 1994 , 25, 1057-1070	1.5	1
25	Automated Microanalysis for Reducing Sugars, Sucrose, and Starch in Single Soybean Leaflets. <i>Journal of the Association of Official Analytical Chemists</i> , 1988 , 71, 844-848		1
24	Implications of new technologies for future food supply systems. <i>Journal of Agricultural Science</i> , 2021 , 159, 315-319	1	1
23	Alternative Crop Insurance Indexes. <i>Journal of Agricultural & Applied Economics</i> , 2008 , 40, 223-237	1.1	1
22	Multi-model evaluation of phenology prediction for wheat in Australia		1
21	Reuse of process-based models: automatic transformation into many programming languages and simulation platforms. <i>In Silico Plants</i> , 2020 , 2,	3.2	1
20	iCROP 2020: Crop Modeling for the Future. <i>Journal of Agricultural Science</i> , 2020 , 158, 791-793	1	1
19	The chaos in calibrating crop models		1
18	Determining optimum nitrogen management as a function of planting date for spring wheat (<i>Triticum aestivum</i> L.) under semi-arid conditions using a modeling approach. <i>Journal of Arid Environments</i> , 2020 , 182, 104256	2.5	1

17	Deriving genetic coefficients from variety trials to determine sorghum hybrid performance using the CSMCERES-Sorghum model. <i>Agronomy Journal</i> , 2021 , 113, 2591-2606	2.2	1
16	Yield Response of an Ensemble of Potato Crop Models to Elevated CO ₂ in Continental Europe. <i>European Journal of Agronomy</i> , 2021 , 126, 126265	5	1
15	Performance of a model in simulating growth and stability for cassava grown after rice. <i>Agronomy Journal</i> , 2021 , 113, 2335-2348	2.2	1
14	A Comparison of Temperature Data from Automated and Manual Observing Networks in Georgia and Impacts of Siting Characteristics. <i>Journal of Atmospheric and Oceanic Technology</i> , 2016 , 33, 1473-1494	2.3	1
13	Simultaneous water, salinity and nitrogen stresses on tomato (<i>Solanum lycopersicum</i>) root water uptake using mathematical models. <i>Journal of Plant Nutrition</i> , 2021 , 44, 282-295	2.3	1
12	Improving the CROPGRO Perennial Forage Model for simulating growth and biomass partitioning of guineagrass. <i>Agronomy Journal</i> , 2021 , 113, 3299-3314	2.2	1
11	Potential genotype-based climate change adaptation strategies for sustaining cotton production in the Texas High Plains: A simulation study. <i>Field Crops Research</i> , 2021 , 271, 108261	5.5	1
10	Are soybean models ready for climate change food impact assessments?. <i>European Journal of Agronomy</i> , 2022 , 135, 126482	5	1
9	Integration of Genomics with Crop Modeling for Predicting Rice Days to Flowering: A Multi-Model Analysis. <i>Field Crops Research</i> , 2022 , 276, 108394	5.5	0
8	Identifying Suitable Genotypes for Different Cassava Production Environments: A Modeling Approach. <i>Agronomy</i> , 2021 , 11, 1372	3.6	0
7	Adaptation of the SIMPLE Model to Oilseed Flax (<i>Linum usitatissimum</i> L.) for Arid and Semi-Arid Environments. <i>Agronomy</i> , 2022 , 12, 1267	3.6	0
6	Modelling Pod Growth Rate of Bambara Groundnut (<i>Vigna subterranea</i> Verdc.) in Response to Photoperiod and Temperature. <i>Crop Science</i> , 2017 , 57, 3145-3155	2.4	
5	Assimilation of Remote Sensing Data and Crop Simulation Models for Agricultural Study: Recent Advances and Future Directions 2013 , 405-439		
4	Biophysical Agricultural Assessment and Management Models for Developing Countries 2000 , 403-422		
3	A Comparative Study on the Branching Pattern of Monocyclic and Bicyclic Shoots of Apple cv. "Fuji". <i>Frontiers in Plant Science</i> , 2020 , 11, 571918	6.2	
2	Applications of Crop Modeling in Rice Production 2022 , 565-584		
1	The performance of sweet pepper cultivars under different nitrogen levels in a semi-arid environment. <i>Journal of Plant Nutrition</i> , 1-12	2.3	