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List of Publications by Citations

190 papers	13,727 citations	56 h-index	114 g-index
199 ext. papers	16,657 ext. citations	6.5 avg, IF	6.26 L-index

#	Paper	IF	Citations
190	An overview of APSIM, a model designed for farming systems simulation. *European Journal of Agronomy*, **2003**, 18, 267-288	5	1689
189	Rising temperatures reduce global wheat production. *Nature Climate Change*, **2015**, 5, 143-147	21.4	1048
188	Temperature increase reduces global yields of major crops in four independent estimates. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 9326-9331	11.5	886
187	Uncertainty in simulating wheat yields under climate change. *Nature Climate Change*, **2013**, 3, 827-832	21.4	827
186	The impact of temperature variability on wheat yields. *Global Change Biology*, **2011**, 17, 997-1012	11.4	575
185	The Agricultural Model Intercomparison and Improvement Project (AgMIP): Protocols and pilot studies. *Agricultural and Forest Meteorology*, **2013**, 170, 166-182	5.8	573
184	Multimodel ensembles of wheat growth: many models are better than one. *Global Change Biology*, **2015**, 21, 911-25	11.4	292
183	Similar estimates of temperature impacts on global wheat yield by three independent methods. *Nature Climate Change*, **2016**, 6, 1130-1136	21.4	233
182	Performance of the APSIM-wheat model in Western Australia. *Field Crops Research*, **1998**, 57, 163-179	5.5	231
181	Simulated wheat growth affected by rising temperature, increased water deficit and elevated atmospheric CO2. *Field Crops Research*, **2004**, 85, 85-102	5.5	215
180	Climate change impact and adaptation for wheat protein. *Global Change Biology*, **2019**, 25, 155-173	11.4	177
179	Eco-efficient Agriculture: Concepts, Challenges, and Opportunities. *Crop Science*, **2010**, 50, S-109-S-119	2.4	172
178	Crop modelling for integrated assessment of risk to food production from climate change. *Environmental Modelling and Software*, **2015**, 72, 287-303	5.2	171
177	Integrating satellite and climate data to predict wheat yield in Australia using machine learning approaches. *Agricultural and Forest Meteorology*, **2019**, 274, 144-159	5.8	161
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175	Response of wheat growth, grain yield and water use to elevated CO under a Free-Air CO Enrichment (FACE) experiment and modelling in a semi-arid environment. *Global Change Biology*, **2015**, 21, 2670-2686	11.4	135
174	Comparing estimates of climate change impacts from process-based and statistical crop models. *Environmental Research Letters*, **2017**, 12, 015001	6.2	133

173	Analysis of water- and nitrogen-use efficiency of wheat in a Mediterranean climate. *Plant and Soil*, **2001**, 233, 127-143	4.2	133
172	Putting mechanisms into crop production models. *Plant, Cell and Environment*, **2013**, 36, 1658-72	8.4	123
171	Analysis of the benefits to wheat yield from assimilates stored prior to grain filling in a range of environments*. *Plant and Soil*, **2003**, 256, 217-229	4.2	115
170	Impacts of recent climate warming, cultivar changes, and crop management on winter wheat phenology across the Loess Plateau of China. *Agricultural and Forest Meteorology*, **2015**, 200, 135-143	5.8	114
169	Performance and application of the APSIM Nwheat model in the Netherlands. *European Journal of Agronomy*, **2000**, 12, 37-54	5	114
168	Use of the APSIM wheat model to predict yield, drainage, and NO3- leaching for a deep sand. *Australian Journal of Agricultural Research*, **1998**, 49, 363		114
167	Adaptation of grain legumes to climate change: a review. *Agronomy for Sustainable Development*, **2012**, 32, 31-44	6.8	111
166	Root growth and water uptake during water deficit and recovering in wheat. *Plant and Soil*, **1998**, 201, 265-273	4.2	111
165	Contribution of Crop Models to Adaptation in Wheat. *Trends in Plant Science*, **2017**, 22, 472-490	13.1	110
164	Nitrogen and water flows under pasture - wheat and lupin - wheat rotations in deep sands in Western Australia. 2. Drainage and nitrate leaching. *Australian Journal of Agricultural Research*, **1998**, 49, 345		108
163	Sensitivity of productivity and deep drainage of wheat cropping systems in a Mediterranean environment to changes in CO2, temperature and precipitation. *Agriculture, Ecosystems and Environment*, **2003**, 97, 255-273	5.7	107
162	Productivity, sustainability, and rainfall-use efficiency in Australian rainfed Mediterranean agricultural systems. *Australian Journal of Agricultural Research*, **2005**, 56, 1123		101
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160	The uncertainty of crop yield projections is reduced by improved temperature response functions. *Nature Plants*, **2017**, 3, 17102	11.5	95
159	Temperature and precipitation effects on wheat yield across a European transect: a crop model ensemble analysis using impact response surfaces. *Climate Research*, **2015**, 65, 87-105	1.6	91
158	Potential benefits of early vigor and changes in phenology in wheat to adapt to warmer and drier climates. *Agricultural Systems*, **2010**, 103, 127-136	6.1	90
157	Determining the Causes of Spatial and Temporal Variability of Wheat Yields at Sub-field Scale Using a New Method of Upscaling a Crop Model. *Plant and Soil*, **2006**, 283, 203-215	4.2	88
156	Optimising sowing date of durum wheat in a variable Mediterranean environment. *Field Crops Research*, **2009**, 111, 109-118	5.5	85

155	Post-heading heat stress and yield impact in winter wheat of China. *Global Change Biology*, **2014**, 20, 372-81	11.4	83
154	Improving the use of crop models for risk assessment and climate change adaptation. *Agricultural Systems*, **2018**, 159, 296-306	6.1	82
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150	Towards a multiscale crop modelling framework for climate change adaptation assessment. *Nature Plants*, **2020**, 6, 338-348	11.5	72
149	Crop model improvement reduces the uncertainty of the response to temperature of multi-model ensembles. *Field Crops Research*, **2017**, 202, 5-20	5.5	70
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147	Global wheat production with 1.5 and 2.0°C above pre-industrial warming. *Global Change Biology*, **2018**, 25, 1428	11.4	69
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145	Multimodel ensembles improve predictions of crop-environment-management interactions. *Global Change Biology*, **2018**, 24, 5072-5083	11.4	68
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142	Impacts of recent climate change on wheat production systems in Western Australia. *Climatic Change*, **2009**, 92, 495-517	4.5	65
141	A potato model intercomparison across varying climates and productivity levels. *Global Change Biology*, **2017**, 23, 1258-1281	11.4	64
140	Simulating phenology and yield response of canola to sowing date in Western Australia using the APSIM model. *Australian Journal of Agricultural Research*, **2002**, 53, 1155		63
139	Climate variability and change in the Central Rift Valley of Ethiopia: challenges for rainfed crop production. *Journal of Agricultural Science*, **2014**, 152, 58-74	1	61
138	Optimizing wheat productivity in two rain-fed environments of the West Asia–North Africa region using a simulation model. *European Journal of Agronomy*, **2007**, 26, 121-129	5	60

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135	Optimal N fertiliser management based on a seasonal forecast. *European Journal of Agronomy*, **2012**, 38, 66-73	5	56
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133	Spatial Growth and Nitrogen Uptake Variability of Corn at Two Nitrogen Levels. *Agronomy Journal*, **2003**, 95, 10	2.2	54
132	Environmental and genotypic control of time to flowering in canola and Indian mustard. *Australian Journal of Agricultural Research*, **2002**, 53, 793		54
131	Potato, sweet potato, and yam models for climate change: A review. *Field Crops Research*, **2014**, 166, 173-185	5.5	52
130	Adapting dryland agriculture to climate change: Farming implications and research and development needs in Western Australia. *Climatic Change*, **2013**, 118, 167-181	4.5	52
129	A simulation analysis that predicts the influence of physiological traits on the potential yield of wheat. *European Journal of Agronomy*, **2002**, 17, 123-141	5	52
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127	Lessons from climate modeling on the design and use of ensembles for crop modeling. *Climatic Change*, **2016**, 139, 551-564	4.5	47
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112	Performance of DSSAT-Nwheat across a wide range of current and future growing conditions. *European Journal of Agronomy*, **2016**, 81, 27-36	5	37
111	Uncertainty of wheat water use: Simulated patterns and sensitivity to temperature and CO2. *Field Crops Research*, **2016**, 198, 80-92	5.5	36
110	Yield and environmental benefits of ameliorating subsoil constraints under variable rainfall in a Mediterranean environment. *Plant and Soil*, **2007**, 297, 29-42	4.2	36
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105	Classifying multi-model wheat yield impact response surfaces showing sensitivity to temperature and precipitation change. *Agricultural Systems*, **2018**, 159, 209-224	6.1	32
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103	Wheat yield potential in controlled-environment vertical farms. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 19131-19135	11.5	32
102	Simulating the impact of source-sink manipulations in wheat. *Field Crops Research*, **2017**, 202, 47-56	5.5	31

101	Influences of increasing temperature on Indian wheat: quantifying limits to predictability. *Environmental Research Letters*, **2013**, 8, 034016	6.2	31
100	Emergent constraint on crop yield response to warmer temperature from field experiments. *Nature Sustainability*, **2020**, 3, 908-916	22.1	30
99	Modelling yield losses of aluminium-resistant and aluminium-sensitive wheat due to subsurface soil acidity: effects of rainfall, liming and nitrogen application. *Plant and Soil*, **2003**, 254, 349-360	4.2	30
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93	Spatiotemporal changes in wheat phenology, yield and water use efficiency under the CMIP5 multimodel ensemble projections in eastern Australia. *Climate Research*, **2017**, 72, 83-99	1.6	28
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89	A flexible approach to managing variability in grain yield and nitrate leaching at within-field to farm scales. *Precision Agriculture*, **2006**, 7, 405-417	5.6	26
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75	Soil Organic Carbon and Nitrogen Feedbacks on Crop Yields under Climate Change. *Agricultural and Environmental Letters*, **2018**, 3, 180026	1.5	20
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39	Tailoring wheat management to ENSO phases for increased wheat production in Paraguay. *Climate Risk Management*, **2014**, 3, 24-38	4.6	8
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37	How well do crop modeling groups predict wheat phenology, given calibration data from the target population?		7
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35	Benchmark data set for wheat growth models: field experiments and AgMIP multi-model simulations **2015**, 1, 1-5		6
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18	Modeling growth, development and yield of cassava: A review. *Field Crops Research*, **2021**, 267, 108140	5.5	3
17	The chaos in calibrating crop models: Lessons learned from a multi-model calibration exercise. *Environmental Modelling and Software*, **2021**, 145, 105206	5.2	3
16	Simulation Models as Tools for Crop Management **2019**, 433-452		2
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