

Christoph MÃ¼ller

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6936948/publications.pdf>

Version: 2024-02-01

163
papers

23,348
citations

14644

66
h-index

8618

146
g-index

213
all docs

213
docs citations

213
times ranked

19019
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	3.3	1,708
2	Assessing agricultural risks of climate change in the 21st century in a global gridded crop model intercomparison. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3268-3273.	3.3	1,649
3	Rising temperatures reduce global wheat production. Nature Climate Change, 2015, 5, 143-147.	8.1	1,544
4	Modelling the role of agriculture for the 20th century global terrestrial carbon balance. Global Change Biology, 2007, 13, 679-706.	4.2	1,133
5	Uncertainty in simulating wheat yields under climate change. Nature Climate Change, 2013, 3, 827-832.	8.1	1,021
6	Constraints and potentials of future irrigation water availability on agricultural production under climate change. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3239-3244.	3.3	795
7	Climate change effects on agriculture: Economic responses to biophysical shocks. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3274-3279.	3.3	568
8	How do various maize crop models vary in their responses to climate change factors?. Global Change Biology, 2014, 20, 2301-2320.	4.2	525
9	Energy, land-use and greenhouse gas emissions trajectories under a green growth paradigm. Global Environmental Change, 2017, 42, 237-250.	3.6	523
10	Uncertainties in climate responses to past land cover change: First results from the LUCID intercomparison study. Geophysical Research Letters, 2009, 36, .	1.5	444
11	The yield gap of global grain production: A spatial analysis. Agricultural Systems, 2010, 103, 316-326.	3.2	420
12	Fossil-fueled development (SSP5): An energy and resource intensive scenario for the 21st century. Global Environmental Change, 2017, 42, 297-315.	3.6	418
13	Multimodel ensembles of wheat growth: many models are better than one. Global Change Biology, 2015, 21, 911-925.	4.2	387
14	Reactive nitrogen requirements to feed the world in 2050 and potential to mitigate nitrogen pollution. Nature Communications, 2014, 5, 3858.	5.8	356
15	Similar estimates of temperature impacts on global wheat yield by three independent methods. Nature Climate Change, 2016, 6, 1130-1136.	8.1	352
16	Climate change risks for African agriculture. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4313-4315.	3.3	342
17	Consistent negative response of US crops to high temperatures in observations and crop models. Nature Communications, 2017, 8, 13931.	5.8	321
18	Determining Robust Impacts of Land-Use-Induced Land Cover Changes on Surface Climate over North America and Eurasia: Results from the First Set of LUCID Experiments. Journal of Climate, 2012, 25, 3261-3281.	1.2	313

#	ARTICLE	IF	CITATIONS
19	Climate change impact and adaptation for wheat protein. <i>Global Change Biology</i> , 2019, 25, 155-173.	4.2	312
20	Climate impacts on global agriculture emerge earlier in new generation of climate and crop models. <i>Nature Food</i> , 2021, 2, 873-885.	6.2	263
21	Diverging importance of drought stress for maize and winter wheat in Europe. <i>Nature Communications</i> , 2018, 9, 4249.	5.8	230
22	Farming with crops and rocks to address global climate, food and soil security. <i>Nature Plants</i> , 2018, 4, 138-147.	4.7	226
23	Adaptation to climate change through the choice of cropping system and sowing date in sub-Saharan Africa. <i>Global Environmental Change</i> , 2013, 23, 130-143.	3.6	222
24	Virtual water content of temperate cereals and maize: Present and potential future patterns. <i>Journal of Hydrology</i> , 2010, 384, 218-231.	2.3	219
25	Climate change impacts on renewable energy supply. <i>Nature Climate Change</i> , 2021, 11, 119-125.	8.1	218
26	Climate change impacts on agriculture in 2050 under a range of plausible socioeconomic and emissions scenarios. <i>Environmental Research Letters</i> , 2015, 10, 085010.	2.2	216
27	Global gridded crop model evaluation: benchmarking, skills, deficiencies and implications. <i>Geoscientific Model Development</i> , 2017, 10, 1403-1422.	1.3	213
28	Climate-driven simulation of global crop sowing dates. <i>Global Ecology and Biogeography</i> , 2012, 21, 247-259.	2.7	207
29	Global bioenergy potentials from agricultural land in 2050: Sensitivity to climate change, diets and yields. <i>Biomass and Bioenergy</i> , 2011, 35, 4753-4769.	2.9	202
30	The Global Gridded Crop Model Intercomparison: data and modeling protocols for Phase 1 (v1.0). <i>Geoscientific Model Development</i> , 2015, 8, 261-277.	1.3	190
31	Regional disparities in the beneficial effects of rising CO2 concentrations on crop water productivity. <i>Nature Climate Change</i> , 2016, 6, 786-790.	8.1	190
32	Agriculture and climate change in global scenarios: why don't the models agree. <i>Agricultural Economics (United Kingdom)</i> , 2014, 45, 85-101.	2.0	172
33	The uncertainty of crop yield projections is reduced by improved temperature response functions. <i>Nature Plants</i> , 2017, 3, 17102.	4.7	170
34	Projecting future crop productivity for global economic modeling. <i>Agricultural Economics (United Kingdom)</i> , 2014, 45, 169-179.	2.0	169
35	State-of-the-art global models underestimate impacts from climate extremes. <i>Nature Communications</i> , 2019, 10, 1005.	5.8	168
36	Land-use protection for climate change mitigation. <i>Nature Climate Change</i> , 2014, 4, 1095-1098.	8.1	164

#	ARTICLE	IF	CITATIONS
37	Linked sustainability challenges and trade-offs among fisheries, aquaculture and agriculture. <i>Nature Ecology and Evolution</i> , 2017, 1, 1240-1249.	3.4	161
38	Global food demand, productivity growth, and the scarcity of land and water resources: a spatially explicit mathematical programming approach. <i>Agricultural Economics (United Kingdom)</i> , 2008, 39, 325-338.	2.0	160
39	Land in sight? Achievements, deficits and potentials of continental to global scale land-use modeling. <i>Agriculture, Ecosystems and Environment</i> , 2006, 114, 141-158.	2.5	157
40	Multisectoral climate impact hotspots in a warming world. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3233-3238.	3.3	149
41	Intergenerational inequities in exposure to climate extremes. <i>Science</i> , 2021, 374, 158-160.	6.0	148
42	LPJmL4 – a dynamic global vegetation model with managed land – Part 1: Model description. <i>Geoscientific Model Development</i> , 2018, 11, 1343-1375.	1.3	140
43	Cross-scale intercomparison of climate change impacts simulated by regional and global hydrological models in eleven large river basins. <i>Climatic Change</i> , 2017, 141, 561-576.	1.7	137
44	Attributing the impacts of land-cover changes in temperate regions on surface temperature and heat fluxes to specific causes: Results from the first LUCID set of simulations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	133
45	Investigating afforestation and bioenergy CCS as climate change mitigation strategies. <i>Environmental Research Letters</i> , 2014, 9, 064029.	2.2	129
46	Crop rotation modelling – A European model intercomparison. <i>European Journal of Agronomy</i> , 2015, 70, 98-111.	1.9	125
47	Improving the use of crop models for risk assessment and climate change adaptation. <i>Agricultural Systems</i> , 2018, 159, 296-306.	3.2	122
48	Temperature and precipitation effects on wheat yield across a European transect: a crop model ensemble analysis using impact response surfaces. <i>Climate Research</i> , 2015, 65, 87-105.	0.4	122
49	Scenarios of global bioenergy production: The trade-offs between agricultural expansion, intensification and trade. <i>Ecological Modelling</i> , 2010, 221, 2188-2196.	1.2	119
50	The impact of high-end climate change on agricultural welfare. <i>Science Advances</i> , 2016, 2, e1501452.	4.7	118
51	Plausible rice yield losses under future climate warming. <i>Nature Plants</i> , 2017, 3, 16202.	4.7	114
52	Multimodel ensembles improve predictions of crop – environment – management interactions. <i>Global Change Biology</i> , 2018, 24, 5072-5083.	4.2	111
53	Crop model improvement reduces the uncertainty of the response to temperature of multi-model ensembles. <i>Field Crops Research</i> , 2017, 202, 5-20.	2.3	109
54	Sources of uncertainty in hydrological climate impact assessment: a cross-scale study. <i>Environmental Research Letters</i> , 2018, 13, 015006.	2.2	109

#	ARTICLE	IF	CITATIONS
55	Global wheat production with 1.5 and 2.0°C above pre-industrial warming. <i>Global Change Biology</i> , 2019, 25, 1428-1444.	4.2	107
56	Large-scale bioenergy production: how to resolve sustainability trade-offs?. <i>Environmental Research Letters</i> , 2018, 13, 024011.	2.2	96
57	Emergent constraint on crop yield response to warmer temperature from field experiments. <i>Nature Sustainability</i> , 2020, 3, 908-916.	11.5	96
58	Comparing impacts of climate change and mitigation on global agriculture by 2050. <i>Environmental Research Letters</i> , 2018, 13, 064021.	2.2	93
59	Understanding the weather signal in national crop yield variability. <i>Earth's Future</i> , 2017, 5, 605-616.	2.4	85
60	Livestock in a changing climate: production system transitions as an adaptation strategy for agriculture. <i>Environmental Research Letters</i> , 2015, 10, 094021.	2.2	84
61	Forecasting technological change in agriculture—An endogenous implementation in a global land use model. <i>Technological Forecasting and Social Change</i> , 2014, 81, 236-249.	6.2	83
62	Measuring agricultural land-use intensity—A global analysis using a model-assisted approach. <i>Ecological Modelling</i> , 2012, 232, 109-118.	1.2	82
63	Hotspots of climate change impacts in sub-Saharan Africa and implications for adaptation and development. <i>Global Change Biology</i> , 2014, 20, 2505-2517.	4.2	82
64	Framework for participatory food security research in rural food value chains. <i>Global Food Security</i> , 2014, 3, 8-15.	4.0	81
65	Climate analogues suggest limited potential for intensification of production on current croplands under climate change. <i>Nature Communications</i> , 2016, 7, 12608.	5.8	80
66	Crop productivity changes in 1.5°C and 2°C worlds under climate sensitivity uncertainty. <i>Environmental Research Letters</i> , 2018, 13, 064007.	2.2	79
67	Assessing 20th century climate—vegetation feedbacks of land use change and natural vegetation dynamics in a fully coupled vegetation—climate model. <i>International Journal of Climatology</i> , 2010, 30, 2055-2065.	1.5	70
68	Projecting Exposure to Extreme Climate Impact Events Across Six Event Categories and Three Spatial Scales. <i>Earth's Future</i> , 2020, 8, e2020EF001616.	2.4	69
69	How accurately do maize crop models simulate the interactions of atmospheric CO ₂ concentration levels with limited water supply on water use and yield?. <i>European Journal of Agronomy</i> , 2018, 100, 67-75.	1.9	68
70	Narrowing uncertainties in the effects of elevated CO ₂ on crops. <i>Nature Food</i> , 2020, 1, 775-782.	6.2	67
71	What can we learn from N ₂ O isotope data?—Analytics, processes and modelling. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8858.	0.7	67
72	Water Use in Global Livestock Production—Opportunities and Constraints for Increasing Water Productivity. <i>Water Resources Research</i> , 2020, 56, e2019WR026995.	1.7	66

#	ARTICLE	IF	CITATIONS
73	Spatial and temporal uncertainty of crop yield aggregations. <i>European Journal of Agronomy</i> , 2017, 88, 10-21.	1.9	63
74	A regional nuclear conflict would compromise global food security. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 7071-7081.	3.3	63
75	Large potential for crop production adaptation depends on available future varieties. <i>Global Change Biology</i> , 2021, 27, 3870-3882.	4.2	62
76	Separate and combined effects of temperature and precipitation change on maize yields in sub-Saharan Africa for mid- to late-21st century. <i>Global and Planetary Change</i> , 2013, 106, 1-12.	1.6	61
77	Implementing the nitrogen cycle into the dynamic global vegetation, hydrology, and crop growth model LPJmL (version 5.0). <i>Geoscientific Model Development</i> , 2018, 11, 2789-2812.	1.3	61
78	Global irrigation contribution to wheat and maize yield. <i>Nature Communications</i> , 2021, 12, 1235.	5.8	61
79	Exploring global irrigation patterns: A multilevel modelling approach. <i>Agricultural Systems</i> , 2011, 104, 703-713.	3.2	58
80	Mitigation Strategies for Greenhouse Gas Emissions from Agriculture and Land-Use Change: Consequences for Food Prices. <i>Environmental Science & Technology</i> , 2017, 51, 365-374.	4.6	57
81	Greenhouse gas emission curves for advanced biofuel supply chains. <i>Nature Climate Change</i> , 2017, 7, 920-924.	8.1	57
82	LPJmL4 "a dynamic global vegetation model with managed land" Part 2: Model evaluation. <i>Geoscientific Model Development</i> , 2018, 11, 1377-1403.	1.3	57
83	The Global Gridded Crop Model Intercomparison phase 1 simulation dataset. <i>Scientific Data</i> , 2019, 6, 50.	2.4	57
84	Large uncertainty in carbon uptake potential of land-based climate change mitigation efforts. <i>Global Change Biology</i> , 2018, 24, 3025-3038.	4.2	56
85	Dissecting the nonlinear response of maize yield to high temperature stress with model-data integration. <i>Global Change Biology</i> , 2019, 25, 2470-2484.	4.2	56
86	Global historical soybean and wheat yield loss estimates from ozone pollution considering water and temperature as modifying effects. <i>Agricultural and Forest Meteorology</i> , 2019, 265, 1-15.	1.9	55
87	Simulation of the phenological development of wheat and maize at the global scale. <i>Global Ecology and Biogeography</i> , 2015, 24, 1018-1029.	2.7	54
88	An AgMIP framework for improved agricultural representation in integrated assessment models. <i>Environmental Research Letters</i> , 2017, 12, 125003.	2.2	54
89	Biomass responses in a temperate European grassland through 17 years of elevated CO_2 . <i>Global Change Biology</i> , 2018, 24, 3875-3885.	4.2	53
90	Exploring uncertainties in global crop yield projections in a large ensemble of crop models and CMIP5 and CMIP6 climate scenarios. <i>Environmental Research Letters</i> , 2021, 16, 034040.	2.2	53

#	ARTICLE	IF	CITATIONS
91	Multi-wheat-model ensemble responses to interannual climate variability. <i>Environmental Modelling and Software</i> , 2016, 81, 86-101.	1.9	50
92	Implications of climate mitigation for future agricultural production. <i>Environmental Research Letters</i> , 2015, 10, 125004.	2.2	49
93	Biophysical and economic implications for agriculture of +1.5Â° and +2.0Â°C global warming using AgMIP Coordinated Global and Regional Assessments. <i>Climate Research</i> , 2018, 76, 17-39.	0.4	49
94	Coordinating AgMIP data and models across global and regional scales for 1.5Â°C and 2.0Â°C assessments. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20160455.	1.6	48
95	Uncertainty of wheat water use: Simulated patterns and sensitivity to temperature and CO ₂ . <i>Field Crops Research</i> , 2016, 198, 80-92.	2.3	47
96	Classifying multi-model wheat yield impact response surfaces showing sensitivity to temperature and precipitation change. <i>Agricultural Systems</i> , 2018, 159, 209-224.	3.2	47
97	Modelling food security: Bridging the gap between the micro and the macro scale. <i>Global Environmental Change</i> , 2020, 63, 102085.	3.6	47
98	Parameterization-induced uncertainties and impacts of crop management harmonization in a global gridded crop model ensemble. <i>PLoS ONE</i> , 2019, 14, e0221862.	1.1	42
99	Global cotton production under climate change – Implications for yield and water consumption. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 2027-2044.	1.9	42
100	The effect of temporal aggregation of weather input data on crop growth models™ results. <i>Agricultural and Forest Meteorology</i> , 2011, 151, 607-619.	1.9	41
101	Key knowledge and data gaps in modelling the influence of CO ₂ concentration on the terrestrial carbon sink. <i>Journal of Plant Physiology</i> , 2016, 203, 3-15.	1.6	41
102	Rapid aggregation of global gridded crop model outputs to facilitate cross-disciplinary analysis of climate change impacts in agriculture. <i>Environmental Modelling and Software</i> , 2016, 75, 193-201.	1.9	40
103	Global patterns of crop yield stability under additional nutrient and water inputs. <i>PLoS ONE</i> , 2018, 13, e0198748.	1.1	40
104	Progress in modelling agricultural impacts of and adaptations to climate change. <i>Current Opinion in Plant Biology</i> , 2018, 45, 255-261.	3.5	39
105	Modeling vegetation and carbon dynamics of managed grasslands at the global scale with LPjml 3.6. <i>Geoscientific Model Development</i> , 2018, 11, 429-451.	1.3	39
106	Occurrence of crop pests and diseases has largely increased in China since 1970. <i>Nature Food</i> , 2022, 3, 57-65.	6.2	39
107	The Nexus Land-Use model version 1.0, an approach articulating biophysical potentials and economic dynamics to model competition for land-use. <i>Geoscientific Model Development</i> , 2012, 5, 1297-1322.	1.3	38
108	Feeding 10 billion people under climate change: How large is the production gap of current agricultural systems?. <i>Ecological Modelling</i> , 2014, 288, 103-111.	1.2	38

#	ARTICLE	IF	CITATIONS
109	Drivers and patterns of land biosphere carbon balance reversal. <i>Environmental Research Letters</i> , 2016, 11, 044002.	2.2	38
110	Evapotranspiration simulations in ISIMIP2a – Evaluation of spatio-temporal characteristics with a comprehensive ensemble of independent datasets. <i>Environmental Research Letters</i> , 2018, 13, 075001.	2.2	38
111	Global Response Patterns of Major Rainfed Crops to Adaptation by Maintaining Current Growing Periods and Irrigation. <i>Earth's Future</i> , 2019, 7, 1464-1480.	2.4	38
112	The GGCMI Phase 2 experiment: global gridded crop model simulations under uniform changes in CO ₂ , temperature, water, and nitrogen levels (protocol) <i>TJ ETQq0 0 0 rgBT /Overlook 10 Tf 5</i>	2.2	38
113	Land-Use and Carbon Cycle Responses to Moderate Climate Change: Implications for Land-Based Mitigation?. <i>Environmental Science & Technology</i> , 2015, 49, 6731-6739.	4.6	36
114	Modelling cropping periods of grain crops at the global scale. <i>Global and Planetary Change</i> , 2019, 174, 35-46.	1.6	35
115	Fertilizing hidden hunger. <i>Nature Climate Change</i> , 2014, 4, 540-541.	8.1	34
116	Livestock production and the water challenge of future food supply: Implications of agricultural management and dietary choices. <i>Global Environmental Change</i> , 2017, 47, 121-132.	3.6	34
117	Future climate change significantly alters interannual wheat yield variability over half of harvested areas. <i>Environmental Research Letters</i> , 2021, 16, 094045.	2.2	33
118	Harvesting from uncertainties. <i>Nature Climate Change</i> , 2011, 1, 253-254.	8.1	32
119	Generating a rule-based global gridded tillage dataset. <i>Earth System Science Data</i> , 2019, 11, 823-843.	3.7	32
120	Effects of changes in CO ₂ , climate, and land use on the carbon balance of the land biosphere during the 21st century. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	31
121	African Lessons on Climate Change Risks for Agriculture. <i>Annual Review of Nutrition</i> , 2013, 33, 395-411.	4.3	31
122	Robust relationship between yields and nitrogen inputs indicates three ways to reduce nitrogen pollution. <i>Environmental Research Letters</i> , 2014, 9, 111005.	2.2	31
123	A statistical analysis of three ensembles of crop model responses to temperature and CO ₂ concentration. <i>Agricultural and Forest Meteorology</i> , 2015, 214-215, 483-493.	1.9	31
124	Simulating the effect of tillage practices with the global ecosystem model LPJmL (version 5.0-tillage). <i>Geoscientific Model Development</i> , 2019, 12, 2419-2440.	1.3	31
125	A framework for nitrogen futures in the shared socioeconomic pathways. <i>Global Environmental Change</i> , 2020, 61, 102029.	3.6	30
126	Comparative impact of climatic and nonclimatic factors on global terrestrial carbon and water cycles. <i>Global Biogeochemical Cycles</i> , 2006, 20, n/a-n/a.	1.9	27

#	ARTICLE	IF	CITATIONS
127	Harvesting the sun: New estimations of the maximum population of planet Earth. <i>Ecological Modelling</i> , 2011, 222, 2019-2026.	1.2	26
128	Meeting the radiative forcing targets of the representative concentration pathways in a world with agricultural climate impacts. <i>Earth's Future</i> , 2014, 2, 83-98.	2.4	25
129	A new climate dataset for systematic assessments of climate change impacts as a function of global warming. <i>Geoscientific Model Development</i> , 2013, 6, 1689-1703.	1.3	24
130	Agricultural trade and tropical deforestation: interactions and related policy options. <i>Regional Environmental Change</i> , 2015, 15, 1757-1772.	1.4	23
131	Agricultural breadbaskets shift poleward given adaptive farmer behavior under climate change. <i>Global Change Biology</i> , 2022, 28, 167-181.	4.2	23
132	Modeling forest plantations for carbon uptake with the LPJmL dynamic global vegetation model. <i>Earth System Dynamics</i> , 2019, 10, 617-630.	2.7	22
133	A multi-model analysis of teleconnected crop yield variability in a range of cropping systems. <i>Earth System Dynamics</i> , 2020, 11, 113-128.	2.7	21
134	Achieving High Crop Yields with Low Nitrogen Emissions in Global Agricultural Input Intensification. <i>Environmental Science & Technology</i> , 2018, 52, 13782-13791.	4.6	19
135	The GCMIP Phase 2 emulators: global gridded crop model responses to changes in CO ₂ , temperature, water, and nitrogen (version 1.0). <i>Geoscientific Model Development</i> , 2020, 13, 3995-4018.	1.3	19
136	Quantifying sustainable intensification of agriculture: The contribution of metrics and modelling. <i>Ecological Indicators</i> , 2021, 129, 107870.	2.6	18
137	A coupled hydrological-plant growth model for simulating the effect of elevated CO ₂ on a temperate grassland. <i>Agricultural and Forest Meteorology</i> , 2017, 246, 42-50.	1.9	17
138	Strong regional influence of climatic forcing datasets on global crop model ensembles. <i>Agricultural and Forest Meteorology</i> , 2021, 300, 108313.	1.9	17
139	Potential impacts of climate change on agriculture and fisheries production in 72 tropical coastal communities. <i>Nature Communications</i> , 2022, 13, .	5.8	17
140	Freshwater resources under success and failure of the Paris climate agreement. <i>Earth System Dynamics</i> , 2019, 10, 205-217.	2.7	15
141	First process-based simulations of climate change impacts on global tea production indicate large effects in the World's major producer countries. <i>Environmental Research Letters</i> , 2020, 15, 034023.	2.2	15
142	The role of cover crops for cropland soil carbon, nitrogen leaching, and agricultural yields – a global simulation study with LPJmL (V. 5.0-tillage-cc). <i>Biogeosciences</i> , 2022, 19, 957-977.	1.3	15
143	Robustness of terrestrial carbon and water cycle simulations against variations in spatial resolution. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	14
144	A network-based approach for semi-quantitative knowledge mining and its application to yield variability. <i>Environmental Research Letters</i> , 2016, 11, 123001.	2.2	13

#	ARTICLE	IF	CITATIONS
145	Soil organic carbon dynamics from agricultural management practices under climate change. <i>Earth System Dynamics</i> , 2021, 12, 1037-1055.	2.7	12
146	Quantifying geomorphological heterogeneity to assess species diversity of set-aside arable land. <i>Agriculture, Ecosystems and Environment</i> , 2004, 104, 587-594.	2.5	11
147	Integrating the complexity of global change pressures on land and water. <i>Global Food Security</i> , 2012, 1, 88-93.	4.0	10
148	Options to model the effects of tillage on N ₂ O emissions at the global scale. <i>Ecological Modelling</i> , 2019, 392, 212-225.	1.2	9
149	Effects of long-term CO ₂ enrichment on forage quality of extensively managed temperate grassland. <i>Agriculture, Ecosystems and Environment</i> , 2021, 312, 107347.	2.5	9
150	Dynamics of soil organic carbon in the steppes of Russia and Kazakhstan under past and future climate and land use. <i>Regional Environmental Change</i> , 2021, 21, 1.	1.4	9
151	Can bioenergy cropping compensate high carbon emissions from large-scale deforestation of high latitudes?. <i>Earth System Dynamics</i> , 2013, 4, 409-424.	2.7	7
152	The International Heat Stress Genotype Experiment for modeling wheat response to heat: field experiments and AgMIP-Wheat multi-model simulations. <i>Open Data Journal for Agricultural Research</i> , 0, 3, 1-6.	1.3	7
153	Potential yield simulated by global gridded crop models: using a process-based emulator to explain their differences. <i>Geoscientific Model Development</i> , 2021, 14, 1639-1656.	1.3	6
154	A meta-analysis of crop response patterns to nitrogen limitation for improved model representation. <i>PLoS ONE</i> , 2019, 14, e0223508.	1.1	5
155	The importance of management information and soil moisture representation for simulating tillage effects on N ₂ O emissions in LPJm5.0-tillage. <i>Geoscientific Model Development</i> , 2020, 13, 3905-3923.	1.3	5
156	The AgMIP GRIDded Crop Modeling Initiative (AgGRID) and the Global Gridded Crop Model Intercomparison (GGCMI). <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2015, , 175-189.	0.4	3
157	Web-based access, aggregation, and visualization of future climate projections with emphasis on agricultural assessments. <i>SoftwareX</i> , 2018, 7, 15-22.	1.2	3
158	Insights on Nitrogen and Phosphorus Co-limitation in Global Croplands From Theoretical and Modeling Fertilization Experiments. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006915.	1.9	3
159	Statistical Analysis of Large Simulated Yield Datasets for Studying Climate Effects. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2015, , 279-295.	0.4	2
160	Reply to: An appeal to cost undermines food security risks of delayed mitigation. <i>Nature Climate Change</i> , 2020, 10, 420-421.	8.1	2
161	Do details matter? Disentangling the processes related to plant species interactions in two grassland models of different complexity. <i>Ecological Modelling</i> , 2021, 460, 109737.	1.2	2
162	Impacts of Climate Change on Food Availability: Agriculture. , 2014, , 681-688.		1

#	ARTICLE	IF	CITATIONS
163	Food Security in a Changing Climate. , 2012, , 33-43.		1