David B Lobell

List of Publications by Year
in descending order

202 papers	36,440 citations	7087 78 h-index	3321 184 g-index
205 all docs	205 docs citations	205 times ranked	27876 citing authors

#	Article	IF	Citations
1	Climate Trends and Global Crop Production Since 1980. Science, 2011, 333, 616-620.	6.0	3,040
2	Prioritizing Climate Change Adaptation Needs for Food Security in 2030. Science, 2008, 319, 607-610.	6.0	2,309
3	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
4	Global scale climateâ€"crop yield relationships and the impacts of recent warming. Environmental Research Letters, 2007, 2, 014002.	2.2	1,494
5	Crop Yield Gaps: Their Importance, Magnitudes, and Causes. Annual Review of Environment and Resources, 2009, 34, 179-204.	5.6	1,038
6	Robust negative impacts of climate change on African agriculture. Environmental Research Letters, 2010, 5, 014010.	2.2	979
7	Combining satellite imagery and machine learning to predict poverty. Science, 2016, 353, 790-794.	6.0	938
8	Nonlinear heat effects on African maize as evidenced by historical yield trials. Nature Climate Change, 2011, 1, 42-45.	8.1	860
9	The Influence of Climate Change on Global Crop Productivity. Plant Physiology, 2012, 160, 1686-1697.	2.3	839
10	Greenhouse gas mitigation by agricultural intensification. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12052-12057.	3.3	835
11	Greater Sensitivity to Drought Accompanies Maize Yield Increase in the U.S. Midwest. Science, 2014, 344, 516-519.	6.0	779
12	Warming increases the risk of civil war in Africa. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20670-20674.	3.3	711
13	The critical role of extreme heat for maize production in the United States. Nature Climate Change, 2013, 3, 497-501.	8.1	706
14	Biomass energy: the scale of the potential resource. Trends in Ecology and Evolution, 2008, 23, 65-72.	4.2	637
15	On the use of statistical models to predict crop yield responses to climate change. Agricultural and Forest Meteorology, 2010, 150, 1443-1452.	1.9	636
16	Extreme heat effects on wheat senescence in India. Nature Climate Change, 2012, 2, 186-189.	8.1	606
17	The Global Potential of Bioenergy on Abandoned Agriculture Lands. Environmental Science & Technology, 2008, 42, 5791-5794.	4.6	546
18	Moisture Effects on Soil Reflectance. Soil Science Society of America Journal, 2002, 66, 722-727.	1.2	452

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19	A method for quantifying vulnerability, applied to the agricultural system of the Yaqui Valley, Mexico. Global Environmental Change, 2003, 13, 255-267.	3.6	428
20	Quantifying Vegetation Change in Semiarid Environments. Remote Sensing of Environment, 2000, 73, 87-102.	4.6	413
21	The poverty implications of climate-induced crop yield changes by 2030. Global Environmental Change, 2010, 20, 577-585.	3.6	364
22	A scalable satellite-based crop yield mapper. Remote Sensing of Environment, 2015, 164, 324-333.	4.6	361
23	Climate variability and crop production in Tanzania. Agricultural and Forest Meteorology, 2011, 151, 449-460.	1.9	354
24	Similar estimates of temperature impacts on global wheat yield by three independent methods. Nature Climate Change, 2016, 6, 1130-1136.	8.1	352
25	Global crop exposure to critical high temperatures in the reproductive period: historical trends and future projections. Environmental Research Letters, 2013, 8, 024041.	2.2	350
26	Anthropogenic climate change has slowed global agricultural productivity growth. Nature Climate Change, 2021, 11, 306-312.	8.1	336
27	A Biogeophysical Approach for Automated SWIR Unmixing of Soils and Vegetation. Remote Sensing of Environment, 2000, 74, 99-112.	4.6	324
28	Integrating satellite and climate data to predict wheat yield in Australia using machine learning approaches. Agricultural and Forest Meteorology, 2019, 274, 144-159.	1.9	319
29	Remote sensing of regional crop production in the Yaqui Valley, Mexico: estimates and uncertainties. Agriculture, Ecosystems and Environment, 2003, 94, 205-220.	2.5	301
30	Why are agricultural impacts of climate change so uncertain? The importance of temperature relative to precipitation. Environmental Research Letters, 2008, 3, 034007.	2.2	299
31	Cropland distributions from temporal unmixing of MODIS data. Remote Sensing of Environment, 2004, 93, 412-422.	4.6	272
32	Feedbacks of Terrestrial Ecosystems to Climate Change. Annual Review of Environment and Resources, 2007, 32, 1-29.	5.6	268
33	The use of satellite data for crop yield gap analysis. Field Crops Research, 2013, 143, 56-64.	2.3	256
34	Satellite-based assessment of yield variation and its determinants in smallholder African systems. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2189-2194.	3.3	256
35	Changes in diurnal temperature range and national cereal yields. Agricultural and Forest Meteorology, 2007, 145, 229-238.	1.9	250
36	Impacts of future climate change on California perennial crop yields: Model projections with climate and crop uncertainties. Agricultural and Forest Meteorology, 2006, 141, 208-218.	1.9	246

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37	Historical effects of temperature and precipitation on California crop yields. Climatic Change, 2007, 81, 187-203.	1.7	240
38	Improving the monitoring of crop productivity using spaceborne solarâ€induced fluorescence. Global Change Biology, 2016, 22, 716-726.	4.2	240
39	Smallholder maize area and yield mapping at national scales with Google Earth Engine. Remote Sensing of Environment, 2019, 228, 115-128.	4.6	235
40	Climate and Management Contributions to Recent Trends in U.S. Agricultural Yields. Science, 2003, 299, 1032-1032.	6.0	232
41	The shifting influence of drought and heat stress for crops in northeast Australia. Global Change Biology, 2015, 21, 4115-4127.	4.2	230
42	Crop type mapping without field-level labels: Random forest transfer and unsupervised clustering techniques. Remote Sensing of Environment, 2019, 222, 303-317.	4.6	229
43	Analysis of wheat yield and climatic trends in Mexico. Field Crops Research, 2005, 94, 250-256.	2.3	228
44	Shifts in African crop climates by 2050, and the implications for crop improvement and genetic resources conservation. Global Environmental Change, 2009, 19, 317-325.	3.6	221
45	Reduction of transpiration and altered nutrient allocation contribute to nutrient decline of crops grown in elevated CO₂ concentrations. Plant, Cell and Environment, 2013, 36, 697-705.	2.8	218
46	Comparing estimates of climate change impacts from process-based and statistical crop models. Environmental Research Letters, 2017, 12, 015001.	2.2	212
47	Direct impacts on local climate of sugar-cane expansion in Brazil. Nature Climate Change, 2011, 1, 105-109.	8.1	208
48	Water Use Efficiency as a Constraint and Target for Improving the Resilience and Productivity of C₃ and C₄ Crops. Annual Review of Plant Biology, 2019, 70, 781-808.	8.6	202
49	Empirical evidence for a recent slowdown in irrigation-induced cooling. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13582-13587.	3.3	199
50	Direct climate effects of perennial bioenergy crops in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4307-4312.	3.3	199
51	Adaptation potential of European agriculture in response to climate change. Nature Climate Change, 2014, 4, 610-614.	8.1	193
52	Regional Differences in the Influence of Irrigation on Climate. Journal of Climate, 2009, 22, 2248-2255.	1.2	185
53	The fingerprint of climate trends on European crop yields. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2670-2675.	3.3	176
54	The shared and unique values of optical, fluorescence, thermal and microwave satellite data for estimating large-scale crop yields. Remote Sensing of Environment, 2017, 199, 333-349.	4.6	165

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55	Landsat-based classification in the cloud: An opportunity for a paradigm shift in land cover monitoring. Remote Sensing of Environment, 2017, 202, 64-74.	4.6	160
56	The Effect of Irrigation on Regional Temperatures: A Spatial and Temporal Analysis of Trends in California, 1934â€“2002. Journal of Climate, 2008, 21, 2063-2071.	1.2	159
57	Using publicly available satellite imagery and deep learning to understand economic well-being in Africa. Nature Communications, 2020, 11, 2583.	5.8	158
58	The COVID-19 lockdowns: a window into the Earth System. Nature Reviews Earth & Environment, 2020, 1, 470-481.	12.2	153
59	Climate change adaptation in crop production: Beware of illusions. Global Food Security, 2014, 3, 72-76.	4.0	149
60	Incorporating Climate Uncertainty into Estimates of Climate Change Impacts. Review of Economics and Statistics, 2015, 97, 461-471.	2.3	148
61	The role of irrigation in changing wheat yields and heat sensitivity in India. Nature Communications, 2019, 10, 4144.	5.8	146
62	Impacts of Day Versus Night Temperatures on Spring Wheat Yields:A Comparison of Empirical and CERES Model Predictions in Three Locations. Agronomy Journal, 2007, 99, 469-477.	0.9	145
63	Towards fine resolution global maps of crop yields: Testing multiple methods and satellites in three countries. Remote Sensing of Environment, 2017, 202, 129-141.	4.6	145
64	Moisture Effects on Soil Reflectance. Soil Science Society of America Journal, 2002, 66, 722.	1.2	145
65	Using satellite imagery to understand and promote sustainable development. Science, 2021, 371, .	6.0	138
66	Weakly Supervised Deep Learning for Segmentation of Remote Sensing Imagery. Remote Sensing, 2020, 12, 207.	1.8	136
67	Irrigation cooling effect on temperature and heat index extremes. Geophysical Research Letters, 2008, 35, .	1.5	129
68	Regionalâ€scale Assessment of Soil Salinity in the Red River Valley Using Multiâ€year MODIS EVI and NDVI. Journal of Environmental Quality, 2010, 39, 35-41.	1.0	129
69	Colocation opportunities for large solar infrastructures and agriculture in drylands. Applied Energy, 2016, 165, 383-392.	5.1	125
70	Comparing and combining process-based crop models and statistical models with some implications for climate change. Environmental Research Letters, 2017, 12, 095010.	2.2	124
71	Climate change uncertainty for daily minimum and maximum temperatures: A model inter-comparison. Geophysical Research Letters, 2007, 34, .	1.5	122
72	Projected temperature changes indicate significant increase in interannual variability of U.S. maize yields. Climatic Change, 2012, 112, 525-533.	1.7	121

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73	Deep Transfer Learning for Crop Yield Prediction with Remote Sensing Data. , 2018, , .		117
74	Regional disparities in the CO ₂ fertilization effect and implications for crop yields. Environmental Research Letters, 2013, 8, 014054.	2.2	116
75	Climate volatility and poverty vulnerability in Tanzania. Global Environmental Change, 2011, 21, 46-55.	3.6	111
76	An assessment of wheat yield sensitivity and breeding gains in hot environments. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20122190.	1.2	97
77	Agricultural adaptation to climate change in rich and poor countries: Current modeling practice and potential for empirical contributions. Energy Economics, 2014, 46, 562-575.	5.6	93
78	Uniting remote sensing, crop modelling and economics for agricultural risk management. Nature Reviews Earth & Environment, 2021, 2, 140-159.	12.2	88
79	The challenge to detect and attribute effects of climate change on human and natural systems. Climatic Change, 2013, 121, 381-395.	1.7	87
80	Growing sensitivity of maize to water scarcity under climate change. Scientific Reports, 2016, 6, 19605.	1.6	87
81	Eyes in the Sky, Boots on the Ground: Assessing Satelliteâ€•and Groundâ€Based Approaches to Crop Yield Measurement and Analysis. American Journal of Agricultural Economics, 2020, 102, 202-219.	2.4	86
82	Getting caught with our plants down: the risks of a global crop yield slowdown from climate trends in the next two decades. Environmental Research Letters, 2014, 9, 074003.	2.2	82
83	Improving the accuracy of satellite-based high-resolution yield estimation: A test of multiple scalable approaches. Agricultural and Forest Meteorology, 2017, 247, 207-220.	1.9	81
84	Hot spots of wheat yield decline with rising temperatures. Global Change Biology, 2017, 23, 2464-2472.	4.2	80
85	Climate adaptation as mitigation: the case of agricultural investments. Environmental Research Letters, 2013, 8, 015012.	2.2	78
86	Tile2Vec: Unsupervised Representation Learning for Spatially Distributed Data. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 3967-3974.	3.6	78
87	A walk on the wild side. Nature Climate Change, 2011, 1, 374-375.	8.1	77
88	Identification of Saline Soils with Multiyear Remote Sensing of Crop Yields. Soil Science Society of America Journal, 2007, 71, 777-783.	1.2	74
89	Mapping Smallholder Wheat Yields and Sowing Dates Using Micro-Satellite Data. Remote Sensing, 2016, 8, 860.	1.8	74
90	Assessing climate adaptation options and uncertainties for cereal systems in West Africa. Agricultural and Forest Meteorology, 2017, 232, 291-305.	1.9	74

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91	Increasing drought and diminishing benefits of elevated carbon dioxide for soybean yields across the US Midwest. Global Change Biology, 2018, 24, e522-e533.	4.2	74
92	Testing Remote Sensing Approaches for Assessing Yield Variability among Maize Fields. Agronomy Journal, 2014, 106, 24-32.	0.9	73
93	California perennial crops in a changing climate. Climatic Change, 2011, 109, 317-333.	1.7	69
94	A new spin on an old debate: Errors in farmer-reported production and their implications for inverse scale - Productivity relationship in Uganda. Journal of Development Economics, 2019, 141, 102376.	2.1	69
95	The impacts of future climate and carbon dioxide changes on the average and variability of US maize yields under two emission scenarios. Environmental Research Letters, 2015, 10, 045003.	2.2	68
96	Response of double cropping suitability to climate change in the United States. Environmental Research Letters, 2015, 10, 024002.	2.2	68
97	Changes in the drought sensitivity of US maize yields. Nature Food, 2020, 1, 729-735.	6.2	68
98	Satellite detection of earlier wheat sowing in India and implications for yield trends. Agricultural Systems, 2013, 115, 137-143.	3.2	67
99	Mapping Smallholder Yield Heterogeneity at Multiple Scales in Eastern Africa. Remote Sensing, 2017, 9, 931.	1.8	66
100	Impacts of precipitation and temperature on crop yields in the Pampas. Climatic Change, 2015, 130, 235-245.	1.7	65
101	Climate robustly linked to African civil war. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, E185; author reply E186-7.	3.3	64
102	Historical climate trends, deforestation, and maize and bean yields in Nicaragua. Agricultural and Forest Meteorology, 2015, 200, 270-281.	1.9	64
103	Continuous Corn and Soybean Yield Penalties across Hundreds of Thousands of Fields. Agronomy Journal, 2017, 109, 541-548.	0.9	64
104	The cost of uncertainty for nitrogen fertilizer management: A sensitivity analysis. Field Crops Research, 2007, 100, 210-217.	2.3	60
105	The benefits of recent warming for maize production in high latitude China. Climatic Change, 2014, 122, 341-349.	1.7	60
106	Effect of vineyard-scale climate variability on Pinot noir phenolic composition. Agricultural and Forest Meteorology, 2011, 151, 1556-1567.	1.9	59
107	Remote Sensing of Soil Degradation: Introduction. Journal of Environmental Quality, 2010, 39, 1-4.	1.0	58
108	What aspects of future rainfall changes matter for crop yields in West Africa?. Geophysical Research Letters, 2015, 42, 8001-8010.	1.5	57

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109	The effects of extremely wet planting conditions on maize and soybean yields. Climatic Change, 2015, 130, 247-260.	1.7	57
110	Soil, climate, and management impacts on regional wheat productivity in Mexico from remote sensing. Agricultural and Forest Meteorology, 2002, 114, 31-43.	1.9	56
111	Identification of external influences on temperatures in California. Climatic Change, 2008, 87, 43-55.	1.7	56
112	Mapping twenty years of corn and soybean across the US Midwest using the Landsat archive. Scientific Data, 2020, 7, 307.	2.4	56
113	A million kernels of truth: Insights into scalable satellite maize yield mapping and yield gap analysis from an extensive ground dataset in the US Corn Belt. Remote Sensing of Environment, 2021, 253, 112174.	4.6	54
114	Regional importance of crop yield constraints: Linking simulation models and geostatistics to interpret spatial patterns. Ecological Modelling, 2006, 196, 173-182.	1.2	52
115	Satellite detection of cover crops and their effects on crop yield in the Midwestern United States. Environmental Research Letters, 2018, 13, 064033.	2.2	52
116	Tradeoffs and Synergies between Biofuel Production and Large Solar Infrastructure in Deserts. Environmental Science & Technology, 2014, 48, 3021-3030.	4.6	50
117	Errors in climate datasets and their effects on statistical crop models. Agricultural and Forest Meteorology, 2013, 170, 58-66.	1.9	48
118	Mapping Crop Types in Southeast India with Smartphone Crowdsourcing and Deep Learning. Remote Sensing, 2020, 12, 2957.	1.8	48
119	Food Security and Adaptation to Climate Change: What Do We Know?. Advances in Global Change Research, 2010, , 133-153.	1.6	48
120	Estimation of the carbon dioxide (CO₂) fertilization effect using growth rate anomalies of CO₂ and crop yields since 1961. Global Change Biology, 2008, 14, 39-45.	4.2	47
121	Satellite mapping of tillage practices in the North Central US region from 2005 to 2016. Remote Sensing of Environment, 2019, 221, 417-429.	4.6	47
122	Estimated impacts of emission reductions on wheat and maize crops. Climatic Change, 2018, 146, 533-545.	1.7	45
123	Estimation of the CO₂ fertilization effect using growth rate anomalies of CO₂ and crop yields since 1961. Global Change Biology, 2008, 14, 451-451.	4.2	42
124	An independent method of deriving the carbon dioxide fertilization effect in dry conditions using historical yield data from wet and dry years. Global Change Biology, 2011, 17, 2689-2696.	4.2	42
125	Early- and in-season crop type mapping without current-year ground truth: Generating labels from historical information via a topology-based approach. Remote Sensing of Environment, 2022, 274, 112994.	4.6	42
126	Remote sensing assessment of regional yield losses due to sub-optimal planting dates and fallow period weed management. Field Crops Research, 2007, 101, 80-87.	2.3	41

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127	Satellite detection of rising maize yield heterogeneity in the U.S. Midwest. Environmental Research Letters, 2017, 12, 014014.	2.2	41
128	The important but weakening maize yield benefit of grain filling prolongation in the US Midwest. Global Change Biology, 2018, 24, 4718-4730.	4.2	41
129	Evaluating strategies for improved water use in spring wheat with CERES. Agricultural Water Management, 2006, 84, 249-258.	2.4	40
130	Contribution of persistent factors to yield gaps in high-yield irrigated maize. Field Crops Research, 2016, 186, 124-132.	2.3	40
131	Anticipated burden and mitigation of carbon-dioxide-induced nutritional deficiencies and related diseases: A simulation modeling study. PLoS Medicine, 2018, 15, e1002586.	3.9	40
132	Satellites reveal a small positive yield effect from conservation tillage across the US Corn Belt. Environmental Research Letters, 2019, 14, 124038.	2.2	39
133	Land-Cover and Surface Water Change Drive Large Albedo Increases in South America*. Earth Interactions, 2011, 15, 1-16.	0.7	38
134	Yield trends under varying environmental conditions for sorghum and wheat across Australia. Agricultural and Forest Meteorology, 2016, 228-229, 276-285.	1.9	38
135	Subpixel canopy cover estimation of coniferous forests in Oregon using SWIR imaging spectrometry. Journal of Geophysical Research, 2001, 106, 5151-5160.	3.3	37
136	The Role of Irrigation Expansion in Past and Future Temperature Trends. Earth Interactions, 2008, 12, 1-11.	0.7	37
137	The impact of agricultural interventions can be doubled by using satellite data. Nature Sustainability, 2019, 2, 931-934.	11.5	37
138	Generating Interpretable Poverty Maps using Object Detection in Satellite Images. , 2020, , .		37
139	Yield uncertainty at the field scale evaluated with multi-year satellite data. Agricultural Systems, 2007, 92, 76-90.	3.2	36
140	US maize adaptability. Nature Climate Change, 2013, 3, 690-691.	8.1	35
141	Sight for Sorghums: Comparisons of Satellite- and Ground-Based Sorghum Yield Estimates in Mali. Remote Sensing, 2020, 12, 100.	1.8	35
142	Climate extremes in California agriculture. Climatic Change, 2011, 109, 355-363.	1.7	34
143	Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases. Science, 2019, 363, .	6.0	34
144	Meta-Learning for Few-Shot Land Cover Classification. , 2020, , .		34

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145	Using Sentinel-1, Sentinel-2, and Planet Imagery to Map Crop Type of Smallholder Farms. Remote Sensing, 2021, 13, 1870.	1.8	34
146	Relative importance of soil and climate variability for nitrogen management in irrigated wheat. Field Crops Research, 2004, 87, 155-165.	2.3	33
147	The impact of groundwater depletion on agricultural production in India. Environmental Research Letters, 2021, 16, 085003.	2.2	33
148	Spatiotemporal patterns of cropland area and net primary production in the central United States estimated from USDA agricultural information. Geophysical Research Letters, 2004, 31, .	1.5	32
149	How much will precision nitrogen management pay off? An evaluation based on simulating thousands of corn fields over the US Corn-Belt. Field Crops Research, 2019, 240, 12-22.	2.3	32
150	Evaluating the Contribution of Weather to Maize and Wheat Yield Trends in 12 U.S. Counties. Agronomy Journal, 2012, 104, 301-311.	0.9	31
151	Predicting Economic Development using Geolocated Wikipedia Articles. , 2019, , .		31
152	Climate Effects on Food Security: An Overview. Advances in Global Change Research, 2010, , 13-30.	1.6	30
153	Using satellite remote sensing to understand maize yield gaps in the North China Plain. Field Crops Research, 2015, 183, 31-42.	2.3	29
154	Infrastructure Quality Assessment in Africa using Satellite Imagery and Deep Learning. , 2018, , .		29
155	Satellite evidence for yield growth opportunities in Northwest India. Field Crops Research, 2010, 118, 13-20.	2.3	26
156	Synthesis and Review: an inter-method comparison of climate change impacts on agriculture. Environmental Research Letters, 2018, 13, 070401.	2.2	25
157	Temperature and violence. Nature Climate Change, 2014, 4, 234-235.	8.1	24
158	Cleaner air has contributed one-fifth of US maize and soybean yield gains since 1999. Environmental Research Letters, 2021, 16, 074049.	2.2	21
159	Two shifts for crop mapping: Leveraging aggregate crop statistics to improve satellite-based maps in new regions. Remote Sensing of Environment, 2021, 262, 112488.	4.6	21
160	Combining GEDI and Sentinel-2 for wall-to-wall mapping of tall and short crops. Environmental Research Letters, 2021, 16, 125002.	2.2	21
161	Globally ubiquitous negative effects of nitrogen dioxide on crop growth. Science Advances, 2022, 8, .	4.7	21
162	Interpreting recent temperature trends in California. Eos, 2007, 88, 409-410.	0.1	20

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163	Reply to 'Temperature and drought effects on maize yield'. Nature Climate Change, 2014, 4, 234-234.	8.1	20
164	Assessing the heterogeneity and persistence of farmersâ€™ maize yield performance across the North China Plain. Field Crops Research, 2017, 205, 55-66.	2.3	20
165	Historical effects of CO2 and climate trends on global crop water demand. Nature Climate Change, 2017, 7, 901-905.	8.1	19
166	Per-Pixel Analysis of Forest Structure. , 2003, , 209-254.		18
167	Seasonal energy storage using bioenergy production from abandoned croplands. Environmental Research Letters, 2013, 8, 035012.	2.2	18
168	Monitoring Ethiopian Wheat Fungus with Satellite Imagery and Deep Feature Learning. , 2017, , .		18
169	Using remotely sensed temperature to estimate climate response functions. Environmental Research Letters, 2017, 12, 014013.	2.2	17
170	Differences, or lack thereof, in wheat and maize yields under three low-warming scenarios. Environmental Research Letters, 2018, 13, 065001.	2.2	17
171	High-Resolution Soybean Yield Mapping Across the US Midwest Using Subfield Harvester Data. Remote Sensing, 2020, 12, 3471.	1.8	16
172	Scalable deep learning to identify brick kilns and aid regulatory capacity. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	16
173	An approach to understanding persistent yield variationâ€"A case study in North China Plain. European Journal of Agronomy, 2016, 77, 10-19.	1.9	15
174	Mapping Missing Population in Rural India. , 2019, , .		15
175	Factors Constraining Timely Sowing of Wheat as an Adaptation to Climate Change in Eastern India. Weather, Climate, and Society, 2020, 12, 515-528.	0.5	15
176	Farm Parcel Delineation Using Spatio-temporal Convolutional Networks. , 2020, , .		14
177	Weather-based yield forecasts developed for 12 California crops. California Agriculture, 2006, 60, 211-215.	0.5	14
178	Learning to Interpret Satellite Images using Wikipedia. , 2019, , .		13
179	Evaluation of soil-dependent crop yield outcomes in Nepal using ground and satellite-based approaches. Field Crops Research, 2021, 260, 107987.	2.3	12
180	Hierarchical modeling of seed variety yields and decision making for future planting plans. Environment Systems and Decisions, 2018, 38, 458-470.	1.9	11

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181	From sunlight to seed: Assessing limits to solar radiation capture and conversion in agro-ecosystems. Agricultural and Forest Meteorology, 2020, 280, 107775.	1.9	11
182	Rotation Effects on Corn and Soybean Yield Inferred from Satellite and Fieldâ€level Data. Agronomy Journal, 2019, 111, 2940-2948.	0.9	10
183	Satellite Monitoring of Yield Responses to Irrigation Practices across Thousands of Fields. Agronomy Journal, 2008, 100, 1005-1012.	0.9	9
184	Twice Is Nice: The Benefits of Two Ground Measures for Evaluating the Accuracy of Satellite-Based Sustainability Estimates. Remote Sensing, 2021, 13, 3160.	1.8	9
185	Mapping Sugarcane in Central India with Smartphone Crowdsourcing. Remote Sensing, 2022, 14, 703.	1.8	9
186	Comments on â€œMethodology and Results of Calculating Central California Surface Temperature Trends: Evidence of Human-Induced Climate Change?â€. Journal of Climate, 2007, 20, 4486-4489.	1.2	8
187	Crop Responses to Climate: Time-Series Models. Advances in Global Change Research, 2010, , 85-98.	1.6	8
188	Prior crop season management constrains farmer adaptation to warming temperatures: Evidence from the Indo-Gangetic Plains. Science of the Total Environment, 2022, 807, 151671.	3.9	8
189	The case of the missing wheat. Environmental Research Letters, 2012, 7, 021002.	2.2	7
190	On the role of anthropogenic climate change in the emerging food crisis in southern Africa in the 2019â€“2020 growing season. Global Change Biology, 2020, 26, 2729-2730.	4.2	7
191	Combining randomized field experiments with observational satellite data to assess the benefits of crop rotations on yields. Environmental Research Letters, 2022, 17, 044066.	2.2	6
192	Satelliteâ€Based Detection of Salinity and Sodicity Impacts on Wheat Production in the Mexicali Valley. Soil Science Society of America Journal, 2011, 75, 699-707.	1.2	5
193	Pharaoh's Dream Revisited: An Integrated US Midwest Field Research Network for Climate Adaptation. BioScience, 2016, 66, 80-85.	2.2	5
194	Viewpoint: Principles and priorities for one CGIAR. Food Policy, 2020, 91, 101825.	2.8	5
195	Global and Regional Assessments. Advances in Global Change Research, 2010, , 177-192.	1.6	2
196	Evaluating maize yield response to fertilizer and soil in Mexico using ground and satellite approaches. Field Crops Research, 2022, 276, 108393.	2.3	2
197	Meta-Learning For Few-Shot Time Series Classification. , 2020, , .		2
198	Responseâ€"Energy Strategies and Efficiency. Science, 2009, 325, 812-813.	6.0	1

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199	Reply to Gonsamo and Chen: Yield findings independent of cause of climate trends. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2267-E2267.	3.3	1
200	African Agriculture in 2050: Climate Change Impacts and Adaptation Options. ICP Series on Climate Change Impacts, Adaptation, and Mitigation, 2010, , 255-266.	0.4	0
201	Agricultural Research and Management at the Field Scale. , 2012, , 139-169.		0
202	Landsat-Based Reconstruction of Corn and Soybean Yield Histories in the United States Since 1999. , 2020, , .		0