Benjamin L Bodirsky

List of Publications by Year
in descending order

77	10,040	57631	71532
papers	citations	44 h-index	76 g-index

83	83	83	11040
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Options for keeping the food system within environmental limits. Nature, 2018, 562, 519-525.	13.7	1,709
2	Land-use futures in the shared socio-economic pathways. Global Environmental Change, 2017, 42, 331-345.	3.6	645
3	Fossil-fueled development (SSP5): An energy and resource intensive scenario for the 21st century. Global Environmental Change, 2017, 42, 297-315.	3.6	418
4	Assessing the impacts of 1.5â€Â°C global warming â€“ simulation protocol of the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP2b). Geoscientific Model Development, 2017, 10, 4321-4345.	1.3	410
5	Harmonization of global land use change and management for the period 850â€“2100 (LUH2) for CMIP6. Geoscientific Model Development, 2020, 13, 5425-5464.	1.3	408
6	The future of food demand: understanding differences in global economic models. Agricultural Economics (United Kingdom), 2014, 45, 51-67.	2.0	357
7	Reactive nitrogen requirements to feed the world in 2050 and potential to mitigate nitrogen pollution. Nature Communications, 2014, 5, 3858.	5.8	356
8	Food consumption, diet shifts and associated non-CO2 greenhouse gases from agricultural production. Global Environmental Change, 2010, 20, 451-462.	3.6	323
9	Risk of increased food insecurity under stringent global climate change mitigation policy. Nature Climate Change, 2018, 8, 699-703.	8.1	319
10	Feeding ten billion people is possible within four terrestrial planetary boundaries. Nature Sustainability, 2020, 3, 200-208.	11.5	306
11	Innovation can accelerate the transition towards a sustainable food system. Nature Food, 2020, 1, 266-272.	6.2	285
12	Future air pollution in the Shared Socio-economic Pathways. Global Environmental Change, 2017, 42, 346-358.	3.6	277
13	Climate change impacts on agriculture in 2050 under a range of plausible socioeconomic and emissions scenarios. Environmental Research Letters, 2015, 10, 085010.	2.2	216
14	The worldâ€™s growing municipal solid waste: trends and impacts. Environmental Research Letters, 2020, 15, 074021.	2.2	207
15	Environmental co-benefits and adverse side-effects of alternative power sector decarbonization strategies. Nature Communications, 2019, 10, 5229.	5.8	188
16	A sustainable development pathway for climate action within the UN 2030 Agenda. Nature Climate Change, 2021, 11, 656-664.	8.1	179
17	Global Food Demand Scenarios for the 21st Century. PLoS ONE, 2015, 10, e0139201.	1.1	178
18	Land-use protection for climate change mitigation. Nature Climate Change, 2014, 4, 1095-1098.	8.1	164

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19	Trading more food: Implications for land use, greenhouse gas emissions, and the food system. Global Environmental Change, 2012, 22, 189-209.	3.6	154
20	A multi-model assessment of food security implications of climate change mitigation. Nature Sustainability, 2019, 2, 386-396.	11.5	152
21	Articulating the effect of food systems innovation on the Sustainable Development Goals. Lancet Planetary Health, The, 2021, 5, e50-e62.	5.1	135
22	Investigating afforestation and bioenergy CCS as climate change mitigation strategies. Environmental Research Letters, 2014, 9, 064029.	2.2	129
23	Decoupling Livestock from Land Use through Industrial Feed Production Pathways. Environmental Science & Technology, 2018, 52, 7351-7359.	4.6	124
24	Drivers of meat consumption. Appetite, 2019, 141, 104313.	1.8	123
25	Key determinants of global land-use projections. Nature Communications, 2019, 10, 2166.	5.8	123
26	The impact of high-end climate change on agricultural welfare. Science Advances, 2016, 2, e1501452.	4.7	118
27	Tradeâ€offs between land and water requirements for largeâ€scale bioenergy production. GCB Bioenergy, 2016, 8, 11-24.	2.5	108
28	Quantification of global and national nitrogen budgets for crop production. Nature Food, 2021, 2, 529-540.	6.2	108
29	N₂O emissions from the global agricultural nitrogen cycle â€“ current state and future scenarios. Biogeosciences, 2012, 9, 4169-4197.	1.3	96
30	Large-scale bioenergy production: how to resolve sustainability trade-offs?. Environmental Research Letters, 2018, 13, 024011.	2.2	96
31	Comparing impacts of climate change and mitigation on global agriculture by 2050. Environmental Research Letters, 2018, 13, 064021.	2.2	93
32	Microbes and the Next Nitrogen Revolution. Environmental Science & Technology, 2017, 51, 7297-7303.	4.6	85
33	The ongoing nutrition transition thwarts long-term targets for food security, public health and environmental protection. Scientific Reports, 2020, 10, 19778.	1.6	85
34	Afforestation to mitigate climate change: impacts on food prices under consideration of albedo effects. Environmental Research Letters, 2016, 11, 085001.	2.2	74
35	Projected environmental benefits of replacing beef with microbial protein. Nature, 2022, 605, 90-96.	13.7	72
36	Combining ambitious climate policies with efforts to eradicate poverty. Nature Communications, 2021, 12, 2342.	5.8	63

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37	Deriving life cycle assessment coefficients for application in integrated assessment modelling. Environmental Modelling and Software, 2018, 99, 111-125.	1.9	59
38	On sustainability of bioenergy production: Integrating co-emissions from agricultural intensification. Biomass and Bioenergy, 2011, 35, 4770-4780.	2.9	58
39	Shared Socio-economic Pathways for European agriculture and food systems: The Eur-Agri-SSPs. Global Environmental Change, 2020, 65, 102159.	3.6	58
40	Mitigation Strategies for Greenhouse Gas Emissions from Agriculture and Land-Use Change: Consequences for Food Prices. Environmental Science & Technology, 2017, 51, 365-374.	4.6	57
41	Large uncertainty in carbon uptake potential of landâ€based climateâ€change mitigation efforts. Global Change Biology, 2018, 24, 3025-3038.	4.2	56
42	MAgPIE 4 â€“ aÂmodular open-source framework for modeling global land systems. Geoscientific Model Development, 2019, 12, 1299-1317.	1.3	56
43	Blue water scarcity and the economic impacts of future agricultural trade and demand. Water Resources Research, 2013, 49, 3601-3617.	1.7	52
44	Environmental flow provision: Implications for agricultural water and land-use at the global scale. Global Environmental Change, 2015, 30, 113-132.	3.6	47
45	Livestock and human use of land: Productivity trends and dietary choices as drivers of future land and carbon dynamics. Global and Planetary Change, 2017, 159, 1-10.	1.6	44
46	Modeling vegetation and carbon dynamics of managed grasslands at the global scale with LPJmL 3.6. Geoscientific Model Development, 2018, 11, 429-451.	1.3	39
47	The role of methane in future climate strategies: mitigation potentials and climate impacts. Climatic Change, 2020, 163, 1409-1425.	1.7	39
48	Bio-IGCC with CCS as a long-term mitigation option in a coupled energy-system and land-use model. Energy Procedia, 2011, 4, 2933-2940.	1.8	36
49	Land-Use and Carbon Cycle Responses to Moderate Climate Change: Implications for Land-Based Mitigation?. Environmental Science & Technology, 2015, 49, 6731-6739.	4.6	36
50	Livestock production and the water challenge of future food supply: Implications of agricultural management and dietary choices. Global Environmental Change, 2017, 47, 121-132.	3.6	34
51	We need a food system transformationâ€”In the face of the Russia-Ukraine war, now more than ever. One Earth, 2022, 5, 470-472.	3.6	34
52	Global consequences of afforestation and bioenergy cultivation on ecosystem service indicators. Biogeosciences, 2017, 14, 4829-4850.	1.3	33
53	Robust relationship between yields and nitrogen inputs indicates three ways to reduce nitrogen pollution. Environmental Research Letters, 2014, 9, 111005.	2.2	31
54	A framework for nitrogen futures in the shared socioeconomic pathways. Global Environmental Change, 2020, 61, 102029.	3.6	30

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55	Integrating degrowth and efficiency perspectives enables an emission-neutral food system by 2100. Nature Food, 2022, 3, 341-348.	6.2	28
56	Options to overcome the barriers to pricing European agricultural emissions. Climate Policy, 2018, 18, 151-169.	2.6	27
57	The global economic long-term potential of modern biomass in a climate-constrained world. Environmental Research Letters, 2014, 9, 074017.	2.2	26
58	A protocol to develop Shared Socio-economic Pathways for European agriculture. Journal of Environmental Management, 2019, 252, 109701.	3.8	26
59	Food system development pathways for healthy, nature-positive and inclusive food systems. Nature Food, 2021, 2, 928-934.	6.2	24
60	Pasture intensification is insufficient to relieve pressure on conservation priority areas in open agricultural markets. Global Change Biology, 2018, 24, 3199-3213.	4.2	22
61	The value of climate-resilient seeds for smallholder adaptation in sub-Saharan Africa. Climatic Change, 2020, 162, 1213-1229.	1.7	22
62	Taking account of governance: Implications for land-use dynamics, food prices, and trade patterns. Ecological Economics, 2016, 122, 12-24.	2.9	21
63	Beyond land-use intensity: Assessing future global crop productivity growth under different socioeconomic pathways. Technological Forecasting and Social Change, 2020, 160, 120208.	6.2	21
64	Quantifying sustainable intensification of agriculture: The contribution of metrics and modelling. Ecological Indicators, 2021, 129, 107870.	2.6	18
65	A cross-scale impact assessment of European nature protection policies under contrasting future socio-economic pathways. Regional Environmental Change, 2018, 18, 751-762.	1.4	15
66	Will the world run out of land? A Kaya-type decomposition to study past trends of cropland expansion. Environmental Research Letters, 2014, 9, 024011.	2.2	14
67	Reforming Chinaâ€™s fertilizer policies: implications for nitrogen pollution reduction and food security. Sustainability Science, 2023, 18, 407-420.	2.5	14
68	The role of nitrogen in achieving sustainable food systems for healthy diets. Global Food Security, 2021, 28, 100408.	4.0	11
69	Quantifying synergies and trade-offs in the global water-land-food-climate nexus using a multi-model scenario approach. Environmental Research Letters, 2022, 17, 045004.	2.2	11
70	Research meetings must be more sustainable. Nature Food, 2020, 1, 187-189.	6.2	7
71	German pig farmersâ€™ perceived agency under different nitrogen policies. Environmental Research Communications, 2021, 3, 085002.	0.9	4
72	Australia at the crossroads. Nature, 2015, 527, 40-41.	13.7	3

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73	Focus on reactive nitrogen and the UN sustainable development goals. Environmental Research Letters, 2022, 17, 050401.	2.2	3
74	Reply to: An appeal to cost undermines food security risks of delayed mitigation. Nature Climate Change, 2020, 10, 420-421.	8.1	2
75	Estimating global land system impacts of timber plantations using MAgPIE 4.3.5. Geoscientific Model Development, 2021, 14, 6467-6494.	1.3	2
76	Food futures: Storylines of dietary megatrends along the Shared Socioeconomic Pathways (SSPs). Proceedings of the Nutrition Society, 2020, 79, .	0.4	1
77	Agriculture: Sleeping Beauty of EU Climate Policy? Overcoming Barriers to Implementation. SSRN Electronic Journal, 0, , .	0.4	1