Hugo Valin

List of Publications by Year
in descending order

72 papers	10,245 citations	50276 46 h-index	74163 75 g-index
78 all docs	78 docs citations	78 times ranked	10970 citing authors

#	Article	IF	Citations
1	Biomass use, production, feed efficiencies, and greenhouse gas emissions from global livestock systems. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20888-20893.	7.1	867
2	A low energy demand scenario for meeting the 1.5â€‰Â°C target and sustainable development goals without negative emission technologies. Nature Energy, 2018, 3, 515-527.	39.5	733
3	Land-use futures in the shared socio-economic pathways. Global Environmental Change, 2017, 42, 331-345.	7.8	645
4	The marker quantification of the Shared Socioeconomic Pathway 2: A middle-of-the-road scenario for the 21st century. Global Environmental Change, 2017, 42, 251-267.	7.8	590
5	Greenhouse gas mitigation potentials in the livestock sector. Nature Climate Change, 2016, 6, 452-461.	18.8	588
6	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.	7.1	568
7	Bending the curve of terrestrial biodiversity needs an integrated strategy. Nature, 2020, 585, 551-556.	27.8	413
8	Climate change mitigation through livestock system transitions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3709-3714.	7.1	407
9	The future of food demand: understanding differences in global economic models. Agricultural Economics (United Kingdom), 2014, 45, 51-67.	3.9	357
10	Risk of increased food insecurity under stringent global climate change mitigation policy. Nature Climate Change, 2018, 8, 699-703.	18.8	319
11	Innovation can accelerate the transition towards a sustainable food system. Nature Food, 2020, 1, 266-272.	14.0	285
12	Impacts of population growth, economic development, and technical change on global food production and consumption. Agricultural Systems, 2011, 104, 204-215.	6.1	226
13	Land-use change trajectories up to 2050: insights from a global agro-economic model comparison. Agricultural Economics (United Kingdom), 2014, 45, 69-84.	3.9	220
14	The potential of future foods for sustainable and healthy diets. Nature Sustainability, 2018, 1, 782-789.	23.7	197
15	Why do global long-term scenarios for agriculture differ? An overview of the AgMIP Global Economic Model Intercomparison. Agricultural Economics (United Kingdom), 2014, 45, 3-20.	3.9	183
16	Cattle ranching intensification in Brazil can reduce global greenhouse gas emissions by sparing land from deforestation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7236-7241.	7.1	182
17	Can N₂O emissions offset the benefits from soil organic carbon storage?. Global Change Biology, 2021, 27, 237-256.	9.5	174
18	Agriculture and climate change in global scenarios: why don't the models agree. Agricultural Economics (United Kingdom), 2014, 45, 85-101.	3.9	172

#	Article	IF	Citations
19	Reducing greenhouse gas emissions in agriculture without compromising food security?. Environmental Research Letters, 2017, 12, 105004.	5.2	172
20	Assessing the land resourceâ€"food price nexus of the Sustainable Development Goals. Science Advances, 2016, 2, e1501499.	10.3	162
21	Agricultural productivity and greenhouse gas emissions: trade-offs or synergies between mitigation and food security?. Environmental Research Letters, 2013, 8, 035019.	5.2	144
22	Agricultural non-CO2 emission reduction potential in the context of the 1.5â€‰Â°C target. Nature Climate Change, 2019, 9, 66-72.	18.8	139
23	Articulating the effect of food systems innovation on the Sustainable Development Goals. Lancet Planetary Health, The, 2021, 5, e50-e62.	11.4	135
24	Key determinants of global land-use projections. Nature Communications, 2019, 10, 2166.	12.8	123
25	How to spend a dwindling greenhouse gas budget. Nature Climate Change, 2018, 8, 7-10.	18.8	119
26	Global hunger and climate change adaptation through international trade. Nature Climate Change, 2020, 10, 829-835.	18.8	117
27	Chinaâ€™s future food demand and its implications for trade and environment. Nature Sustainability, 2021, 4, 1042-1051.	23.7	112
28	Global bioenergy scenarios â€" Future forest development, land-use implications, and trade-offs. Biomass and Bioenergy, 2013, 57, 86-96.	5.7	110
29	Crop Productivity and the Global Livestock Sector: Implications for Land Use Change and Greenhouse Gas Emissions. American Journal of Agricultural Economics, 2013, 95, 442-448.	4.3	102
30	Comparing impacts of climate change and mitigation on global agriculture by 2050. Environmental Research Letters, 2018, 13, 064021.	5.2	93
31	Linking regional stakeholder scenarios and shared socioeconomic pathways: Quantified West African food and climate futures in a global context. Global Environmental Change, 2017, 45, 227-242.	7.8	92
32	The role of trade in the greenhouse gas footprints of EU diets. Global Food Security, 2018, 19, 48-55.	8.1	89
33	Impacts of increased bioenergy demand on global food markets: an AgMIP economic model intercomparison. Agricultural Economics (United Kingdom), 2014, 45, 103-116.	3.9	85
34	Healthy, affordable and climate-friendly diets in India. Global Environmental Change, 2018, 49, 154-165.	7.8	77
35	CORSIA: The first internationally adopted approach to calculate life-cycle GHG emissions for aviation fuels. Renewable and Sustainable Energy Reviews, 2021, 150, 111398.	16.4	75
36	Comparing supply-side specifications in models of global agriculture and the food system. Agricultural Economics (United Kingdom), 2014, 45, 21-35.	3.9	68

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37	The impact of climate change on Brazil's agriculture. Science of the Total Environment, 2020, 740, 139384.	8.0	67
38	Climate change induced transformations of agricultural systems: insights from a global model. Environmental Research Letters, 2014, 9, 124018.	5.2	64
39	Intensification pathways for beef and dairy cattle production systems: Impacts on GHG emissions, land occupation and land use change. Agriculture, Ecosystems and Environment, 2017, 240, 135-147.	5.3	62
40	Land-based climate change mitigation measures can affect agricultural markets and food security. Nature Food, 2022, 3, 110-121.	14.0	61
41	Alternative U.S. biofuel mandates and global GHG emissions: The role of land use change, crop management and yield growth. Energy Policy, 2013, 57, 602-614.	8.8	57
42	Model collaboration for the improved assessment of biomass supply, demand, and impacts. GCB Bioenergy, 2015, 7, 422-437.	5.6	54
43	MODELING LAND-USE CHANGES IN A GLOBAL CGE: ASSESSING THE EU BIOFUEL MANDATES WITH THE MIRAGE-BioF MODEL. Climate Change Economics, 2012, 03, 1250017.	5.0	53
44	Structural change as a key component for agricultural non-CO2 mitigation efforts. Nature Communications, 2018, 9, 1060.	12.8	52
45	Future environmental and agricultural impacts of Brazilâ€™s Forest Code. Environmental Research Letters, 2018, 13, 074021.	5.2	51
46	Reconciling regional nitrogen boundaries with global food security. Nature Food, 2021, 2, 700-711.	14.0	51
47	Tackling food consumption inequality to fight hunger without pressuring the environment. Nature Sustainability, 2019, 2, 826-833.	23.7	49
48	Coordinating AgMIP data and models across global and regional scales for 1.5Â°C and 2.0Â°C assessments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20160455.	3.4	48
49	Advanced biomaterials scenarios for the EU28 up to 2050 and their respective biomass demand. Biomass and Bioenergy, 2017, 96, 19-27.	5.7	36
50	Exploring future scenarios of ethanol demand in Brazil and their land-use implications. Energy Policy, 2019, 134, 110958.	8.8	36
51	Modelling alternative futures of global food security: Insights from FOODSECURE. Global Food Security, 2020, 25, 100358.	8.1	35
52	Land-based climate change mitigation potentials within the agenda for sustainable development. Environmental Research Letters, 2021, 16, 024006.	5.2	32
53	How effective are the sustainability criteria accompanying the European Union 2020 biofuel targets?. GCB Bioenergy, 2013, 5, 306-314.	5.6	31
54	Evaluating the effects of climate change on US agricultural systems: sensitivity to regional impact and trade expansion scenarios. Environmental Research Letters, 2018, 13, 064019.	5.2	27

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55	Global food markets, trade and the cost of climate change adaptation. Food Security, 2014, 6, 29-44.	5.3	26
56	How can land-use modelling tools inform bioenergy policies?. Interface Focus, 2011, 1, 212-223.	3.0	25
57	A Global-Level Model of the Potential Impacts of Climate Change on Child Stunting via Income and Food Price in 2030. Environmental Health Perspectives, 2018, 126, 97007.	6.0	22
58	Conserving the Cerrado and Amazon biomes of Brazil protects the soy economy from damaging warming. World Development, 2021, 146, 105582.	4.9	22
59	Integrated Management of Land Use Systems under Systemic Risks and Security Targets: A Stochastic Global Biosphere Management Model. Journal of Agricultural Economics, 2016, 67, 584-601.	3.5	20
60	The market impacts of shortening feed supply chains in Europe. Food Security, 2018, 10, 1401-1410.	5.3	20
61	Stakeholder-designed scenarios for global food security assessments. Global Food Security, 2020, 24, 100352.	8.1	18
62	Using social media audience data to analyse the drivers of low-carbon diets. Environmental Research Letters, 2021, 16, 074001.	5.2	15
63	Are scenario projections overly optimistic about future yield progress?. Global Environmental Change, 2020, 64, 102120.	7.8	11
64	International trade is a key component of climate change adaptation. Nature Climate Change, 2021, 11, 915-916.	18.8	7
65	Dynamic Merge of the Global and Local Models for Sustainable Land Use Planning with Regard for Global Projections from GLOBIOM and Local Technicalâ€"Economic Feasibility and Resource Constraints*. Cybernetics and Systems Analysis, 2017, 53, 176-185.	0.7	4
66	How much multilateralism do we need? Effectiveness of unilateral agricultural mitigation efforts in the global context. Environmental Research Letters, 2021, 16, 104038.	5.2	4
67	Current issues and uncertainties in estimating global land availability for biofuel production. Biofuels, 2013, 4, 343-345.	2.4	3
68	Toward resilient food systems after COVID-19. Current Research in Environmental Sustainability, 2022, 4, 100110.	3.5	3
69	Evaluating the environmental cost of biofuels policy: An illustration with bioethanol. International Economics, 2010, 122, 89-120.	3.1	2
70	Potential impacts of climate change on child stunting via income and food price in 2030: a global-level model. Lancet Planetary Health, The, 2019, 3, S1.	11.4	2
71	Reply to: An appeal to cost undermines food security risks of delayed mitigation. Nature Climate Change, 2020, 10, 420-421.	18.8	2
72	Multiple rotations of Gaussian quadratures: An efficient method for uncertainty analyses in large-scale simulation models. Environmental Modelling and Software, 2021, 136, 104929.	4.5	1