Kirsten Thonicke

List of Publications by Year
in descending order

83	12,765	71102 41	66911 78
papers	citations	h-index	g-index

129	129	129	17428
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of ecosystem dynamics, plant geography and terrestrial carbon cycling in the LPJ dynamic global vegetation model. Global Change Biology, 2003, 9, 161-185.	9.5	2,681
2	Climate extremes and the carbon cycle. Nature, 2013, 500, 287-295.	27.8	1,357
3	Ecosystem Service Supply and Vulnerability to Global Change in Europe. Science, 2005, 310, 1333-1337.	12.6	1,355
4	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. Global Change Biology, 2015, 21, 2861-2880.	9.5	683
5	The role of fire disturbance for global vegetation dynamics: coupling fire into a Dynamic Global Vegetation Model. Global Ecology and Biogeography, 2001, 10, 661-677.	5.8	545
6	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.	3.6	410
7	Global wildland fire emissions from 1960 to 2000. Global Biogeochemical Cycles, 2008, 22, .	4.9	382
8	Diversity enhances carbon storage in tropical forests. Global Ecology and Biogeography, 2015, 24, 1314-1328.	5.8	366
9	The influence of vegetation, fire spread and fire behaviour on biomass burning and trace gas emissions: results from a process-based model. Biogeosciences, 2010, 7, 1991-2011.	3.3	364
10	Enhanced seasonal CO ₂ exchange caused by amplified plant productivity in northern ecosystems. Science, 2016, 351, 696-699.	12.6	319
11	Adaptive responses of animals to climate change are most likely insufficient. Nature Communications, 2019, 10, 3109.	12.8	285
12	Changes in Climate and Land Use Over the Amazon Region: Current and Future Variability and Trends. Frontiers in Earth Science, 2018, 6, .	1.8	259
13	Resilience of Amazon forests emerges from plant traitÂdiversity. Nature Climate Change, 2016, 6, 1032-1036.	18.8	201
14	Modelâ€"data synthesis for the next generation of forest freeâ€air <scp>CO</scp>₂ enrichment (<scp>FACE</scp>) experiments. New Phytologist, 2016, 209, 17-28.	7.3	178
15	Codominant water control on global interannual variability and trends in land surface phenology and greenness. Global Change Biology, 2015, 21, 3414-3435.	9.5	165
16	Leaf and stem economics spectra drive diversity of functional plant traits in a dynamic global vegetation model. Global Change Biology, 2015, 21, 2711-2725.	9.5	162
17	Simulating fire regimes in human-dominated ecosystems: Iberian Peninsula case study. Global Change Biology, 2002, 8, 984-998.	9.5	151
18	A Global System for Monitoring Ecosystem Service Change. BioScience, 2012, 62, 977-986.	4.9	142

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19	LPJmL4 â€“ a dynamic global vegetation model with managed land â€“ PartÂ1: Model description. Geoscientific Model Development, 2018, 11, 1343-1375.	3.6	140
20	Estimating the risk of Amazonian forest dieback. New Phytologist, 2010, 187, 694-706.	7.3	132
21	Simulating past and future dynamics of natural ecosystems in the United States. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	4.9	127
22	Variation in stem mortality rates determines patterns of aboveâ€ground biomass in <scp>A</scp>mazonian forests: implications for dynamic global vegetation models. Global Change Biology, 2016, 22, 3996-4013.	9.5	116
23	Modelling the role of fires in the terrestrial carbon balance by incorporating SPITFIRE into the global vegetation model ORCHIDEE â€“ Part 1: simulating historical global burned area and fire regimes. Geoscientific Model Development, 2014, 7, 2747-2767.	3.6	109
24	SPITFIRE within the MPI <scp>E</scp>arth system model: <scp>M</scp>odel development and evaluation. Journal of Advances in Modeling Earth Systems, 2014, 6, 740-755.	3.8	100
25	Estimating carbon emissions from African wildfires. Biogeosciences, 2009, 6, 349-360.	3.3	84
26	From biota to chemistry and climate: towards a comprehensive description of trace gas exchange between the biosphere and atmosphere. Biogeosciences, 2010, 7, 121-149.	3.3	84
27	Coincidences of climate extremes and anomalous vegetation responses: comparing tree ring patterns to simulated productivity. Biogeosciences, 2015, 12, 373-385.	3.3	75
28	A novel bias correction methodology for climate impact simulations. Earth System Dynamics, 2016, 7, 71-88.	7.1	75
29	Effects of soil freezing and thawing on vegetation carbon density in Siberia: A modeling analysis with the Lund-Potsdam-Jena Dynamic Global Vegetation Model (LPJ-DGVM). Global Biogeochemical Cycles, 2007, 21, .	4.9	72
30	Forest edge burning in the Brazilian Amazon promoted by escaping fires from managed pastures. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2095-2107.	3.0	71
31	Modelling the role of fires in the terrestrial carbon balance by incorporating SPITFIRE into the global vegetation model ORCHIDEE â€“ Part 2: Carbon emissions and the role of fires in the global carbon balance. Geoscientific Model Development, 2015, 8, 1321-1338.	3.6	69
32	Impacts of future deforestation and climate change on the hydrology of the Amazon Basin: a multi-model analysis with a new set of land-cover change scenarios. Hydrology and Earth System Sciences, 2017, 21, 1455-1475.	4.9	69
33	Identifying environmental controls on vegetation greenness phenology through modelâ€“data integration. Biogeosciences, 2014, 11, 7025-7050.	3.3	68
34	The dimensionality of stability depends on disturbance type. Ecology Letters, 2019, 22, 674-684.	6.4	65
35	Net biome production of the Amazon Basin in the 21st century. Global Change Biology, 2010, 16, 2062-2075.	9.5	61
36	Extreme fire events are related to previous-year surface moisture conditions in permafrost-underlain larch forests of Siberia. Environmental Research Letters, 2012, 7, 044021.	5.2	57

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37	Towards representing human behavior and decision making in Earth system models â€“ an overview of techniques and approaches. Earth System Dynamics, 2017, 8, 977-1007.	7.1	57
38	LPJmL4 â€“ a dynamic global vegetation model with managed land â€“ PartÂ 2: Model evaluation. Geoscientific Model Development, 2018, 11, 1377-1403.	3.6	57
39	Recent global and regional trends in burned area and their compensating environmental controls. Environmental Research Communications, 2019, 1, 051005.	2.3	55
40	Biodiversity in species, traits, and structure determines carbon stocks and uptake in tropical forests. Biotropica, 2017, 49, 593-603.	1.6	52
41	A data-driven approach to identify controls on global fire activity from satellite and climate observations (SOFIA V1). Geoscientific Model Development, 2017, 10, 4443-4476.	3.6	51
42	Understanding the uncertainty in global forest carbon turnover. Biogeosciences, 2020, 17, 3961-3989.	3.3	45
43	Fire evolution in the radioactive forests of Ukraine and Belarus: future risks for the population and the environment. Ecological Monographs, 2015, 85, 49-72.	5.4	41
44	Modeling glacial-interglacial changes in global fire regimes and trace gas emissions. Global Biogeochemical Cycles, 2005, 19, .	4.9	40
45	Relationship between fire, climate oscillations, and drought in British Columbia, Canada, 1920â€“2000. Global Change Biology, 2010, 16, 977-989.	9.5	39
46	Modeling vegetation and carbon dynamics of managed grasslands at the global scale with LPJmL 3.6. Geoscientific Model Development, 2018, 11, 429-451.	3.6	39
47	Sensitivity of burned area in Europe to climate change, atmospheric CO₂ levels, and demography: A comparison of two fireâ€vegetation models. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2256-2272.	3.0	37
48	Tackling unresolved questions in forest ecology: The past and future role of simulation models. Ecology and Evolution, 2021, 11, 3746-3770.	1.9	37
49	Impact of droughts on the carbon cycle in European vegetation: a probabilistic risk analysis using six vegetation models. Biogeosciences, 2014, 11, 6357-6375.	3.3	32
50	Contrasting and interacting changes in simulated spring and summer carbon cycle extremes in European ecosystems. Environmental Research Letters, 2017, 12, 075006.	5.2	32
51	Cascading Hazards in the Aftermath of Australia's 2019/2020 Black Summer Wildfires. Earth's Future, 2021, 9, e2020EF001884.	6.3	32
52	Long-term Trends in Vegetation Dynamics and Forest Fires in Brandenburg (Germany) Under a Changing Climate. Natural Hazards, 2006, 38, 283-300.	3.4	31
53	Largeâ€scale impact of climate change vs. landâ€use change on future biome shifts in Latin America. Global Change Biology, 2016, 22, 3689-3701.	9.5	30
54	Development of probability density functions for future South American rainfall. New Phytologist, 2010, 187, 682-693.	7.3	29

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55	National indicators for observing ecosystem service change. Global Environmental Change, 2015, 35, 12-21.	7.8	28
56	Can Intensification of Cattle Ranching Reduce Deforestation in the Amazon? Insights From an Agent-based Social-Ecological Model. Ecological Economics, 2019, 159, 198-211.	5.7	28
57	Constraining modelled global vegetation dynamics and carbon turnover using multiple satellite observations. Scientific Reports, 2019, 9, 18757.	3.3	28
58	Advancing the Understanding of Adaptive Capacity of Socialâ€Ecological Systems to Absorb Climate Extremes. Earth's Future, 2020, 8, e2019EF001221.	6.3	28
59	Rice ecosystem services in South-east Asia. Paddy and Water Environment, 2018, 16, 211-224.	1.8	20
60	Climate change reduces winter overland travel across the Pan-Arctic even under low-end global warming scenarios. Environmental Research Letters, 2021, 16, 024049.	5.2	20
61	Ecosystem Services. , 2017, , 39-78.		19
62	Simulating functional diversity of European natural forests along climatic gradients. Journal of Biogeography, 2020, 47, 1069-1085.	3.0	19
63	Alberta wildfire 2016: Apt contribution from anomalous planetary wave dynamics. Scientific Reports, 2018, 8, 12375.	3.3	18
64	Improving the LPJmL4-SPITFIRE vegetationâ€"fire model for South America using satellite data. Geoscientific Model Development, 2019, 12, 5029-5054.	3.6	16
65	Potential impacts of oil and gas development and climate change on migratory reindeer calving grounds across the Russian Arctic. Diversity and Distributions, 2014, 20, 416-429.	4.1	15
66	A matrix clustering method to explore patterns of land-cover transitions in satellite-derived maps of the Brazilian Amazon. Nonlinear Processes in Geophysics, 2017, 24, 113-123.	1.3	15
67	Precipitation-driven decrease in wildfires in British Columbia. Regional Environmental Change, 2013, 13, 165-177.	2.9	14
68	CM2Mc-LPJmL v1.0: biophysical coupling of a process-based dynamic vegetation model with managed land to a general circulation model. Geoscientific Model Development, 2021, 14, 4117-4141.	3.6	13
69	Modelling carbon stock and carbon sequestration ecosystem services for policy design: a comprehensive approach using a dynamic vegetation model. Ecosystems and People, 2019, 15, 42-60.	3.2	12
70	The integration of empirical, remote sensing and modelling approaches enhances insight in the role of biodiversity in climate change mitigation by tropical forests. Current Opinion in Environmental Sustainability, 2017, 26-27, 69-76.	6.3	11
71	The LEGATO cross-disciplinary integrated ecosystem service research framework: an example of integrating research results from the analysis of global change impacts and the social, cultural and economic system dynamics of irrigated rice production. Paddy and Water Environment, 2018, 16, 287-319.	1.8	11
72	Variable tree rooting strategies are key for modelling the distribution, productivity and evapotranspiration of tropical evergreen forests. Biogeosciences, 2021, 18, 4091-4116.	3.3	11

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73	A probabilistic risk assessment for the vulnerability of the European carbon cycle to weather extremes: the ecosystem perspective. Biogeosciences, 2015, 12, 1813-1831.	3.3	10
74	Climate change increases riverine carbon outgassing, while export to the ocean remains uncertain. Earth System Dynamics, 2016, 7, 559-582.	7.1	7
75	When do Farmers Burn Pasture in Brazil: A Model-Based Approach to Determine Burning Date. Rangeland Ecology and Management, 2021, 79, 110-125.	2.3	7
76	A generic pixel-to-point comparison for simulated large-scale ecosystem properties and ground-based observations: an example from the Amazon region. Geoscientific Model Development, 2018, 11, 5203-5215.	3.6	6
77	Evapotranspiration trends and variability in southeastern South America: The roles of landâ€cover change and precipitation variability. International Journal of Climatology, 0, , .	3.5	6
78	Deforestation in Amazonia impacts riverine carbon dynamics. Earth System Dynamics, 2016, 7, 953-968.	7.1	4
79	Climate-induced hysteresis of the tropical forest in a fire-enabled Earth system model. European Physical Journal: Special Topics, 2021, 230, 3153-3162.	2.6	4
80	Impacts of Land Use Change and Atmospheric CO₂ on Gross Primary Productivity (GPP), Evaporation, and Climate in Southern Amazon. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	4
81	Using Dynamic Global Vegetation Models (DGVMs) for Projecting Ecosystem Services at Regional Scales. , 2019, , 57-61.		2
82	Adaptive capacity of coupled social-ecological systems to absorb climate extremes. , 2020, , 257-278.		1
83	DÃ¼rre, WaldbrÃnde, gravitative Massenbewegungen und andere klimarelevante Naturgefahren. , 2017, , 111-121.		0