Rico Fischer

List of Publications by Year in Descending Order

39 papers	1,021 citations	15 h-index	31 g-index
52 ext. papers	1,307 ext. citations	6.7 avg, IF	4.78 L-index

#	Paper	IF	Citations
39	Importance of the forest state in estimating biomass losses from tropical forests: combining dynamic forest models and remote sensing. *Biogeosciences*, **2022**, 19, 1891-1911	4.6	0
38	Mapping Amazon Forest Productivity by Fusing GEDI Lidar Waveforms with an Individual-Based Forest Model. *Remote Sensing*, **2021**, 13, 4540	5	1
37	Prediction of forest parameters and carbon accounting under different fire regimes in Miombo woodlands, Niassa Special Reserve, Northern Mozambique. *Forest Policy and Economics*, **2021**, 133, 102625	3.6	4
36	Tackling unresolved questions in forest ecology: The past and future role of simulation models. *Ecology and Evolution*, **2021**, 11, 3746-3770	2.8	5
35	Tree Crowns Cause Border Effects in Area-Based Biomass Estimations from Remote Sensing. *Remote Sensing*, **2021**, 13, 1592	5	3
34	The Long-Term Consequences of Forest Fires on the Carbon Fluxes of a Tropical Forest in Africa. *Applied Sciences (Switzerland)*, **2021**, 11, 4696	2.6	6
33	Carbon Sequestration in Mixed Deciduous Forests: The Influence of Tree Size and Species Composition Derived from Model Experiments. *Forests*, **2021**, 12, 726	2.8	4
32	Climate change alters the ability of neotropical forests to provide timber and sequester carbon. *Forest Ecology and Management*, **2021**, 492, 119166	3.9	4
31	Defaunation and changes in climate and fire frequency have synergistic effects on aboveground biomass loss in the brazilian savanna. *Ecological Modelling*, **2021**, 454, 109628	3	4
30	Accelerated forest fragmentation leads to critical increase in tropical forest edge area. *Science Advances*, **2021**, 7, eabg7012	14.3	14
29	Deriving Tree Size Distributions of Tropical Forests from Lidar. *Remote Sensing*, **2021**, 13, 131	5	2
28	An analysis of forest biomass sampling strategies across scales. *Biogeosciences*, **2020**, 17, 1673-1683	4.6	6
27	Structure metrics to generalize biomass estimation from lidar across forest types from different continents. *Remote Sensing of Environment*, **2020**, 237, 111597	13.2	17
26	A multi-scaled analysis of forest structure using individual-based modeling in a costa rican rainforest. *Ecological Modelling*, **2020**, 433, 109226	3	3
25	Lianas in silico, ecological insights from a model of structural parasitism. *Ecological Modelling*, **2020**, 431, 109159	3	1
24	Dynamics of Forest Fragmentation and Connectivity Using Particle and Fractal Analysis. *Scientific Reports*, **2019**, 9, 12228	4.9	20
23	The Relevance of Forest Structure for Biomass and Productivity in Temperate Forests: New Perspectives for Remote Sensing. *Surveys in Geophysics*, **2019**, 40, 709-734	7.6	22

22	Understanding the Land Carbon Cycle with Space Data: Current Status and Prospects. *Surveys in Geophysics*, **2019**, 40, 735-755	7.6	14
21	From small-scale forest structure to Amazon-wide carbon estimates. *Nature Communications*, **2019**, 10, 5088	17.4	14
20	Remote Sensing Measurements of Forest Structure Types for Ecosystem Service Mapping **2019**, 63-67		1
19	The importance of forest structure for carbon fluxes of the Amazon rainforest. *Environmental Research Letters*, **2018**, 13, 054013	6.2	41
18	Global patterns of tropical forest fragmentation. *Nature*, **2018**, 554, 519-522	50.4	257
17	Gap models and their individual-based relatives in the assessment of the consequences of global change. *Environmental Research Letters*, **2018**, 13, 033001	6.2	42
16	Simulating Forest Dynamics of Lowland Rainforests in Eastern Madagascar. *Forests*, **2018**, 9, 214	2.8	3
15	Model-Assisted Estimation of Tropical Forest Biomass Change: A Comparison of Approaches. *Remote Sensing*, **2018**, 10, 731	5	12
14	Defaunation impacts on seed survival and its effect on the biomass of future tropical forests. *Oikos*, **2018**, 127, 1526-1538	4	11
13	Linking lidar and forest modeling to assess biomass estimation across scales and disturbance states. *Remote Sensing of Environment*, **2018**, 205, 199-209	13.2	53
12	Consequences of a Reduced Number of Plant Functional Types for the Simulation of Forest Productivity. *Forests*, **2018**, 9, 460	2.8	9
11	Simulation of succession in a neotropical forest: High selective logging intensities prolong the recovery times of ecosystem functions. *Forest Ecology and Management*, **2018**, 430, 517-525	3.9	10
10	High resolution analysis of tropical forest fragmentation and its impact on the global carbon cycle. *Nature Communications*, **2017**, 8, 14855	17.4	144
9	Using airborne LiDAR to assess spatial heterogeneity in forest structure on Mount Kilimanjaro. *Landscape Ecology*, **2017**, 32, 1881-1894	4.3	13
8	The carbon fluxes in different successional stages: modelling the dynamics of tropical montane forests in South Ecuador. *Forest Ecosystems*, **2017**, 4,	3.8	18
7	Monitoring of Forest Structure Dynamics by Means of L-Band SAR Tomography. *Remote Sensing*, **2017**, 9, 1229	5	35
6	Impacts of precipitation variability on the dynamics of a dry tropical montane forest. *Ecological Modelling*, **2016**, 320, 92-101	3	23
5	Lessons learned from applying a forest gap model to understand ecosystem and carbon dynamics of complex tropical forests. *Ecological Modelling*, **2016**, 326, 124-133	3	91

4	Monodominance in tropical forests: modelling reveals emerging clusters and phase transitions. *Journal of the Royal Society Interface*, **2016**, 13,	4.1	9
3	Computer and remote-sensing infrastructure to enhance large-scale testing of individual-based forest models. *Frontiers in Ecology and the Environment*, **2015**, 13, 503-511	5.5	51
2	Simulating carbon stocks and fluxes of an African tropical montane forest with an individual-based forest model. *PLoS ONE*, **2015**, 10, e0123300	3.7	16
1	Simulating the impacts of reduced rainfall on carbon stocks and net ecosystem exchange in a tropical forest. *Environmental Modelling and Software*, **2014**, 52, 200-206	5.2	34