

# Flurin Babst

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

56 papers	2,666 citations	24 h-index	51 g-index
70 ext. papers	3,449 ext. citations	8.5 avg, IF	5.09 L-index

#	Paper	IF	Citations
56	The 2018 European heatwave led to stem dehydration but not to consistent growth reductions in forests.. <i>Nature Communications</i> , <b>2022</b> , 13, 28	17.4	7
55	Adding Tree Rings to North America's National Forest Inventories: An Essential Tool to Guide Drawdown of Atmospheric CO <sub>2</sub> .. <i>BioScience</i> , <b>2022</b> , 72, 233-246	5.7	1
54	Warming-induced tipping points of Arctic and alpine shrub recruitment.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119,	11.5	2
53	An earlier start of the thermal growing season enhances tree growth in cold humid areas but not in dry areas.. <i>Nature Ecology and Evolution</i> , <b>2022</b> ,	12.3	5
52	Jet stream position explains regional anomalies in European beech forest productivity and tree growth.. <i>Nature Communications</i> , <b>2022</b> , 13, 2015	17.4	0
51	Cross-biome synthesis of source versus sink limits to tree growth.. <i>Science</i> , <b>2022</b> , 376, 758-761	33.3	7
50	Drought-induced decoupling between carbon uptake and tree growth impacts forest carbon turnover time. <i>Agricultural and Forest Meteorology</i> , <b>2022</b> , 322, 108996	5.8	1
49	Stable isotopes of tree rings reveal seasonal-to-decadal patterns during the emergence of a megadrought in the Southwestern US. <i>Oecologia</i> , <b>2021</b> , 197, 1079-1094	2.9	7
48	Tree growth in Switzerland is increasingly constrained by rising evaporative demand. <i>Journal of Ecology</i> , <b>2021</b> , 109, 2981-2990	6	3
47	Modeling Ambitions Outpace Observations of Forest Carbon Allocation. <i>Trends in Plant Science</i> , <b>2021</b> , 26, 210-219	13.1	11
46	Mountain treelines climb slowly despite rapid climate warming. <i>Global Ecology and Biogeography</i> , <b>2021</b> , 30, 305-315	6.1	24
45	Climate sensitivity and drought seasonality determine post-drought growth recovery of <i>Quercus petraea</i> and <i>Quercus robur</i> in Europe. <i>Science of the Total Environment</i> , <b>2021</b> , 784, 147222	10.2	13
44	No benefits from warming even for subnival vegetation in the central Himalayas. <i>Science Bulletin</i> , <b>2021</b> , 66, 1825-1829	10.6	6
43	Using the International Tree-Ring Data Bank (ITRDB) records as century-long benchmarks for global land-surface models. <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 5891-5913	6.3	0
42	Continental-scale tree-ring-based projection of Douglas-fir growth: Testing the limits of space-for-time substitution. <i>Global Change Biology</i> , <b>2020</b> , 26, 5146-5163	11.4	18
41	Axial changes in wood functional traits have limited net effects on stem biomass increment in European beech ( <i>Fagus sylvatica</i> ). <i>Tree Physiology</i> , <b>2020</b> , 40, 498-510	4.2	5
40	Assessing the response of forest productivity to climate extremes in Switzerland using model-data fusion. <i>Global Change Biology</i> , <b>2020</b> , 26, 2463	11.4	25

39	The PROFOUND Database for evaluating vegetation models and simulating climate impacts on European forests. <i>Earth System Science Data</i> , <b>2020</b> , 12, 1295-1320	10.5	18
38	Seasonal and synoptic climatic drivers of tree growth in the Bighorn Mountains, WY, USA (1654–1983 CE). <i>Dendrochronologia</i> , <b>2019</b> , 58, 125633	2.8	6
37	The climatic drivers of primary Picea forest growth along the Carpathian arc are changing under rising temperatures. <i>Global Change Biology</i> , <b>2019</b> , 25, 3136-3150	11.4	23
36	Past the climate optimum: Recruitment is declining at the world's highest juniper shrublines on the Tibetan Plateau. <i>Ecology</i> , <b>2019</b> , 100, e02557	4.6	19
35	Twentieth century redistribution in climatic drivers of global tree growth. <i>Science Advances</i> , <b>2019</b> , 5, eaat4313	14.3	150
34	Uneven winter snow influence on tree growth across temperate China. <i>Global Change Biology</i> , <b>2019</b> , 25, 144-154	11.4	22
33	Recent enhanced high-summer North Atlantic Jet variability emerges from three-century context. <i>Nature Communications</i> , <b>2018</b> , 9, 180	17.4	51
32	Differentiating drought legacy effects on vegetation growth over the temperate Northern Hemisphere. <i>Global Change Biology</i> , <b>2018</b> , 24, 504-516	11.4	131
31	A Combined Tree Ring and Vegetation Model Assessment of European Forest Growth Sensitivity to Interannual Climate Variability. <i>Global Biogeochemical Cycles</i> , <b>2018</b> , 32, 1226	5.9	25
30	Untangling methodological and scale considerations in growth and productivity trend estimates of Canada's forests. <i>Environmental Research Letters</i> , <b>2018</b> , 13, 093001	6.2	21
29	When tree rings go global: Challenges and opportunities for retro- and prospective insight. <i>Quaternary Science Reviews</i> , <b>2018</b> , 197, 1-20	3.9	81
28	Converging Climate Sensitivities of European Forests Between Observed Radial Tree Growth and Vegetation Models. <i>Ecosystems</i> , <b>2018</b> , 21, 410-425	3.9	21
27	Relative influences of multiple sources of uncertainty on cumulative and incremental tree-ring-derived aboveground biomass estimates. <i>Trees - Structure and Function</i> , <b>2018</b> , 32, 265-276	2.6	24
26	The climatic drivers of normalized difference vegetation index and tree-ring-based estimates of forest productivity are spatially coherent but temporally decoupled in Northern Hemispheric forests. <i>Global Ecology and Biogeography</i> , <b>2018</b> , 27, 1352-1365	6.1	31
25	Improved tree-ring archives will support earth-system science. <i>Nature Ecology and Evolution</i> , <b>2017</b> , 1, 8	12.3	49
24	Evaluating the effect of alternative carbon allocation schemes in a land surface model (CLM4.5) on carbon fluxes, pools, and turnover in temperate forests. <i>Geoscientific Model Development</i> , <b>2017</b> , 10, 3499-3517	6.3	20
23	Ecosystem functioning is enveloped by hydrometeorological variability. <i>Nature Ecology and Evolution</i> , <b>2017</b> , 1, 1263-1270	12.3	24
22	Northern Hemisphere Jet Stream Position Indices as Diagnostic Tools for Climate and Ecosystem Dynamics. <i>Earth Interactions</i> , <b>2017</b> , 21, 1-23	1.5	23

21	Fusing tree-ring and forest inventory data to infer influences on tree growth. <i>Ecosphere</i> , <b>2017</b> , 8, e018893.1	27
20	Multi-century evaluation of Sierra Nevada snowpack. <i>Nature Climate Change</i> , <b>2016</b> , 6, 2-3	21.4 127
19	Latitudinal gradients in tree ring stable carbon and oxygen isotopes reveal differential climate influences of the North American Monsoon System. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2016</b> , 121, 1978-1991	3.7 48
18	Observed forest sensitivity to climate implies large changes in 21st century North American forest growth. <i>Ecology Letters</i> , <b>2016</b> , 19, 1119-28	10 109
17	Blue intensity parameters derived from Ponderosa pine tree rings characterize intra-annual density fluctuations and reveal seasonally divergent water limitations. <i>Trees - Structure and Function</i> , <b>2016</b> , 30, 1403-1415	2.6 33
16	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. <i>Global Change Biology</i> , <b>2015</b> , 21, 2861-80	11.4 454
15	Coincidences of climate extremes and anomalous vegetation responses: comparing tree ring patterns to simulated productivity. <i>Biogeosciences</i> , <b>2015</b> , 12, 373-385	4.6 60
14	Above-ground woody carbon sequestration measured from tree rings is coherent with net ecosystem productivity at five eddy-covariance sites. <i>New Phytologist</i> , <b>2014</b> , 201, 1289-1303	9.8 126
13	The influence of sampling design on tree-ring-based quantification of forest growth. <i>Global Change Biology</i> , <b>2014</b> , 20, 2867-85	11.4 186
12	A tree-ring perspective on the terrestrial carbon cycle. <i>Oecologia</i> , <b>2014</b> , 176, 307-22	2.9 106
11	Climate-mediated spatiotemporal variability in terrestrial productivity across Europe. <i>Biogeosciences</i> , <b>2014</b> , 11, 3057-3068	4.6 8
10	Toward consistent measurements of carbon accumulation: A multi-site assessment of biomass and basal area increment across Europe. <i>Dendrochronologia</i> , <b>2014</b> , 32, 153-161	2.8 64
9	Site- and species-specific responses of forest growth to climate across the European continent. <i>Global Ecology and Biogeography</i> , <b>2013</b> , 22, 706-717	6.1 248
8	Continuously missing outer rings in woody plants at their distributional margins. <i>Dendrochronologia</i> , <b>2012</b> , 30, 213-222	2.8 58
7	500 years of regional forest growth variability and links to climatic extreme events in Europe. <i>Environmental Research Letters</i> , <b>2012</b> , 7, 045705	6.2 48
6	Landsat TM/ETM+ and tree-ring based assessment of spatiotemporal patterns of the autumnal moth ( <i>Epirrita autumnata</i> ) in northernmost Fennoscandia. <i>Remote Sensing of Environment</i> , <b>2010</b> , 114, 637-646	13.2 46
5	Verification of NCEP Reanalysis Shortwave Radiation With Mesoscale Remote Sensing Data. <i>IEEE Geoscience and Remote Sensing Letters</i> , <b>2008</b> , 5, 34-37	4.1 20
4	Tree-ring responses to extreme climate events as benchmarks for terrestrial dynamic vegetation models	12

3	Using the International Tree-Ring Data Bank (ITRDB) records as century-long benchmarks for land-surface models		1
2	Warming-induced shrubline advance stalled by moisture limitation on the Tibetan Plateau. <i>Ecography</i> ,	6.5	7
1	Tropical tree growth driven by dry-season climate variability. <i>Nature Geoscience</i> ,	18.3	2