Christof Bigler

List of Publications by Year
in descending order

68 papers	5,586 citations	126907 33 h-index	102487 66 g-index
70 all docs	70 docs citations	70 times ranked	7356 citing authors

#	Article	IF	Citations
1	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
2	Drought as an Inciting Mortality Factor in Scots Pine Stands of the Valais, Switzerland. Ecosystems, 2006, 9, 330-343.	3.4	429
3	A synthesis of radial growth patterns preceding tree mortality. Global Change Biology, 2017, 23, 1675-1690.	9.5	394
4	Driving factors of a vegetation shift from Scots pine to pubescent oak in dry Alpine forests. Global Change Biology, 2013, 19, 229-240.	9.5	280
5	Drought induces lagged tree mortality in a subalpine forest in the Rocky Mountains. Oikos, 2007, 116, 1983-1994.	2.7	259
6	Low growth resilience to drought is related to future mortality risk in trees. Nature Communications, 2020, 11, 545.	12.8	228
7	MULTIPLE DISTURBANCE INTERACTIONS AND DROUGHT INFLUENCE FIRE SEVERITY IN ROCKY MOUNTAIN SUBALPINE FORESTS. Ecology, 2005, 86, 3018-3029.	3.2	190
8	Contrasting resistance and resilience to extreme drought and late spring frost in five major European tree species. Global Change Biology, 2019, 25, 3781-3792.	9.5	152
9	Synergistic effects of past historical logging and drought on the decline of Pyrenean silver fir forests. Forest Ecology and Management, 2011, 262, 759-769.	3.2	144
10	Growth-dependent tree mortality models based on tree rings. Canadian Journal of Forest Research, 2003, 33, 210-221.	1.7	143
11	PREDICTING THE TIME OF TREE DEATH USING DENDROCHRONOLOGICAL DATA. , 2004, 14, 902-914.		141
12	Increased early growth rates decrease longevities of conifers in subalpine forests. Oikos, 2009, 118, 1130-1138.	2.7	138
13	Early-Warning Signals of Individual Tree Mortality Based on Annual Radial Growth. Frontiers in Plant Science, 2018, 9, 1964.	3.6	117
14	Effects of salvage logging and sanitation felling on bark beetle (Ips typographus L.) infestations. Forest Ecology and Management, 2013, 305, 273-281.	3.2	100
15	Disentangling the effects of competition and climate on individual tree growth: A retrospective and dynamic approach in Scots pine. Forest Ecology and Management, 2015, 358, 12-25.	3.2	100
16	Forest and woodland replacement patterns following drought-related mortality. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29720-29729.	7.1	99
17	Growth patterns as indicators of impending tree death in silver fir. Forest Ecology and Management, 2004, 199, 183-190.	3.2	95
18	Will the CO_2 fertilization effect in forests be offset by reduced tree longevity?. Oecologia, 2011, 165, 533-544.	2.0	93

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19	Linking Increasing Drought Stress to Scots Pine Mortality and Bark Beetle Infestations. Scientific World Journal, The, 2007, 7, 231-239.	2.1	85
20	Spatial interactions between storm damage and subsequent infestations by the European spruce bark beetle. Forest Ecology and Management, 2014, 318, 167-174.	3.2	80
21	Drought and frost contribute to abrupt growth decreases before tree mortality in nine temperate tree species. Forest Ecology and Management, 2016, 382, 51-63.	3.2	76
22	Climate-induced shifts in leaf unfolding and frost risk of European trees and shrubs. Scientific Reports, 2018, 8, 9865.	3.3	74
23	A predictive framework to assess spatioâ€temporal variability of infestations by the European spruce bark beetle. Ecography, 2013, 36, 1208-1217.	4.5	61
24	Climate sensitivity and drought seasonality determine post-drought growth recovery of Quercus petraea and Quercus robur in Europe. Science of the Total Environment, 2021, 784, 147222.	8.0	61
25	Contrasting responses of Central Asian rock glaciers to global warming. Scientific Reports, 2015, 5, 8228.	3.3	57
26	Fifty years of natural succession in Swiss forest reserves: changes in stand structure and mortality rates of oak and beech. Journal of Vegetation Science, 2012, 23, 892-905.	2.2	53
27	Trade-Offs between Growth Rate, Tree Size and Lifespan of Mountain Pine (Pinus montana) in the Swiss National Park. PLoS ONE, 2016, 11, e0150402.	2.5	52
28	Analysis and modelling of tree succession on a recent rockslide deposit. Plant Ecology, 2012, 213, 35-46.	1.6	46
29	Growthâ€“mortality relationships as indicators of lifeâ€history strategies: a comparison of nine tree species in unmanaged European forests. Oikos, 2008, 117, 815-828.	2.7	45
30	Quantifying the effects of drought on abrupt growth decreases of major tree species in Switzerland. Ecology and Evolution, 2016, 6, 3555-3570.	1.9	45
31	Predicting tree death for Fagus sylvatica and Abies alba using permanent plot data. Journal of Vegetation Science, 2007, 18, 525-534.	2.2	41
32	Structural patterns of beech and silver fir suggest stability and resilience of the virgin forest Sinca in the Southern Carpathians, Romania. Forest Ecology and Management, 2015, 356, 184-195.	3.2	41
33	Assessing the performance of theoretical and empirical tree mortality models using tree-ring series of Norway spruce. Ecological Modelling, 2004, 174, 225-239.	2.5	39
34	Towards a common methodology for developing logistic tree mortality models based on ringâ€width data. Ecological Applications, 2016, 26, 1827-1841.	3.8	36
35	Tree growth responses to changing temperatures across space and time: a fine-scale analysis at the treeline in the Swiss Alps. Trees - Structure and Function, 2018, 32, 645-660.	1.9	36
36	Premature leaf discoloration of European deciduous trees is caused by drought and heat in late spring and cold spells in early fall. Agricultural and Forest Meteorology, 2021, 307, 108492.	4.8	35

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37	Poor methodology for predicting large-scale tree die-off. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, E106-E106.	7.1	34
38	Pervasive effects of drought on tree growth across a wide climatic gradient in the temperate forests of the Caucasus. Global Ecology and Biogeography, 2018, 27, 1314-1325.	5.8	34
39	Do small-grain processes matter for landscape scale questions? Sensitivity of a forest landscape model to the formulation of tree growth rate. Landscape Ecology, 2012, 27, 697-711.	4.2	31
40	Site-specific water-use strategies of mountain pine and larch to cope with recent climate change. Tree Physiology, 2016, 36, 942-953.	3.1	24
41	Amongâ€tree variability and feedback effects result in different growth responses to climate change at the upper treeline in the Swiss Alps. Ecology and Evolution, 2017, 7, 7937-7953.	1.9	23
42	Phenological shifts induced by climate change amplify drought for broad-leaved trees at low elevations in Switzerland. Agricultural and Forest Meteorology, 2021, 307, 108485.	4.8	22
43	Early emergence increases survival of tree seedlings in Central European temperate forests despite severe late frost. Ecology and Evolution, 2019, 9, 8238-8252.	1.9	20
44	Optimisation of tree mortality models based on growth patterns. Ecological Modelling, 2006, 197, 196-206.	2.5	18
45	Estimating the ageâ€“diameter relationship of oak species in Switzerland using nonlinear mixed-effects models. European Journal of Forest Research, 2013, 132, 751-764.	2.5	18
46	Long-term effects of increment coring on Norway spruce mortality. Canadian Journal of Forest Research, 2011, 41, 2326-2336.	1.7	17
47	Changes in litter and dead wood loads following tree death beneath subalpine conifer species in northern Colorado. Canadian Journal of Forest Research, 2011, 41, 331-340.	1.7	17
48	Effects of growth rates, tree morphology and site conditions on longevity of Norway spruce in the northern Swiss Alps. European Journal of Forest Research, 2012, 131, 1117-1125.	2.5	17
49	How do tree mortality models from combined tree-ring and inventory data affect projections of forest succession?. Forest Ecology and Management, 2019, 433, 606-617.	3.2	17
50	Precision and accuracy of tree-ring-based death dates of mountain pines in the Swiss National Park. Trees - Structure and Function, 2013, 27, 1703-1712.	1.9	16
51	A climate-sensitive empirical growth and yield model for forest management planning of even-aged beech stands. European Journal of Forest Research, 2016, 135, 263-282.	2.5	16
52	Tree recruitment is determined by stand structure and shade tolerance with uncertain role of climate and water relations. Ecology and Evolution, 2021, 11, 12182-12203.	1.9	15
53	Lessons learned from a longâ€term irrigation experiment in a dry Scots pine forest: Impacts on traits and functioning. Ecological Monographs, 2022, 92, e1507.	5.4	15
54	Daily Maximum Temperatures Induce Lagged Effects on Leaf Unfolding in Temperate Woody Species Across Large Elevational Gradients. Frontiers in Plant Science, 2019, 10, 398.	3.6	14

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55	Growth and resource allocation of juvenile European beech and sycamore maple along light availability gradients in uneven-aged forests. Forest Ecology and Management, 2020, 474, 118314.	3.2	14
56	Post-glacial re-colonization and natural selection have shaped growth responses of silver fir across Europe. Science of the Total Environment, 2021, 779, 146393.	8.0	14
57	Compound-Specific Carbon Isotopes and Concentrations of Carbohydrates and Organic Acids as Indicators of Tree Decline in Mountain Pine. Forests, 2018, 9, 363.	2.1	12
58	Legacies of past forest management determine current responses to severe drought events of conifer species in the Romanian Carpathians. Science of the Total Environment, 2021, 751, 141851.	8.0	12
59	Towards non-destructive estimation of tree age. Forest Ecology and Management, 2013, 304, 286-295.	3.2	11
60	Compound-specific carbon isotope patterns in needles of conifer tree species from the Swiss National Park under recent climate change. Plant Physiology and Biochemistry, 2019, 139, 264-272.	5.8	11
61	Temperature rather than individual growing period length determines radial growth of sessile oak in the Pyrenees. Agricultural and Forest Meteorology, 2022, 317, 108885.	4.8	11
62	Disturbances and Climate Drive Structure, Stability, and Growth in Mixed Temperate Old-growth Rainforests in the Caucasus. Ecosystems, 2020, 23, 1170-1185.	3.4	9
63	Predicting tree mortality from growth data: how virtual ecologists can help real ecologists. Journal of Ecology, 2008, 96, 174-187.	4.0	8
64	Abiotic and biotic determinants of height growth of Picea abies regeneration in small forest gaps in the Swiss Alps. Forest Ecology and Management, 2021, 490, 119076.	3.2	6
65	Light availability predicts mortality probability of conifer saplings in Swiss mountain forests better than radial growth and tree size. Forest Ecology and Management, 2021, 479, 118607.	3.2	3
66	Spatial patterns of living and dead small trees in subalpine Norway spruce forest reserves in Switzerland. Forest Ecology and Management, 2021, 494, 119315.	3.2	3
67	Predicting tree death for Fagus sylvatica and Abies alba using permanent plot data. Journal of Vegetation Science, 2007, 18, 525.	2.2	1
68	EichenrÃ¼ckgang in Schweizer Naturwaldreservaten. Schweizerische Zeitschrift Fur Forstwesen, 2013, 164, 328-336.	0.1	0