Giorgio Vacchiano

List of Publications by Year
in descending order

85 papers	4,493 citations	159585 30 h-index	114465 63 g-index
100 all docs	100 docs citations	100 times ranked	5779 citing authors

#	Article	IF	Citations
1	Forest disturbances under climate change. Nature Climate Change, 2017, 7, 395-402.	18.8	1,561
2	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
3	Generalized biomass and leaf area allometric equations for European tree species incorporating stand structure, tree age and climate. Forest Ecology and Management, 2017, 396, 160-175.	3.2	219
4	A walk on the wild side: Disturbance dynamics and the conservation and management of European mountain forest ecosystems. Forest Ecology and Management, 2017, 388, 120-131.	3.2	172
5	Tree mortality submodels drive simulated longâ€term forest dynamics: assessing 15 models from the stand to global scale. Ecosphere, 2019, 10, e02616.	2.2	93
6	Climatically controlled reproduction drives interannual growth variability in a temperate tree species. Ecology Letters, 2018, 21, 1833-1844.	6.4	92
7	Spatial patterns and broadâ€scale weather cues of beech mast seeding in Europe. New Phytologist, 2017, 215, 595-608.	7.3	86
8	Forest carbon allocation modelling under climate change. Tree Physiology, 2019, 39, 1937-1960.	3.1	70
9	From theory to experiments for testing the proximate mechanisms of mast seeding: an agenda for an experimental ecology. Ecology Letters, 2020, 23, 210-220.	6.4	64
10	Available and missing data to model impact of climate change on European forests. Ecological Modelling, 2020, 416, 108870.	2.5	58
11	Inter-annual and decadal changes in teleconnections drive continental-scale synchronization of tree reproduction. Nature Communications, 2017, 8, 2205.	12.8	56
12	Geographical adaptation prevails over speciesâ€specific determinism in treesâ€™ vulnerability to climate change at Mediterranean rearâ€edge forests. Global Change Biology, 2019, 25, 1296-1314.	9.5	55
13	Evidences of drought stress as a predisposing factor to Scots pine decline in Valle dâ€™Aosta (Italy). European Journal of Forest Research, 2012, 131, 989-1000.	2.5	54
14	Reproducing reproduction: How to simulate mast seeding in forest models. Ecological Modelling, 2018, 376, 40-53.	2.5	53
15	Nutrient scarcity as a selective pressure for mast seeding. Nature Plants, 2019, 5, 1222-1228.	9.3	53
16	Forest dynamics and disturbance regimes in the Italian Apennines. Forest Ecology and Management, 2017, 388, 57-66.	3.2	50
17	Analysis of intraspecific competition in two subalpine Norway spruce (Picea abies (L.) Karst.) stands in Paneveggio (Trento, Italy). Forest Ecology and Management, 2008, 255, 651-659.	3.2	48
18	Two centuries of masting data for <scp>E</scp>uropean beech and <scp>N</scp>orway spruce across the <scp>E</scp>uropean continent. Ecology, 2017, 98, 1473-1473.	3.2	47

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19	Precision restoration: a necessary approach to foster forest recovery in the 21st century. Restoration Ecology, 2021, 29, e13421.	2.9	45
20	Is there tree senescence? The fecundity evidence. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	42
21	Predicting the spatial and temporal dynamics of species interactions in Fagus sylvatica and Pinus sylvestris forests across Europe. Forest Ecology and Management, 2017, 405, 112-133.	3.2	40
22	Meta-analysis Reveals Different Competition Effects on Tree Growth Resistance and Resilience to Drought. Ecosystems, 2022, 25, 30-43.	3.4	40
23	Scaling issues in forest ecosystem management and how to address them with models. European Journal of Forest Research, 2013, 132, 653-666.	2.5	39
24	Development of old-growth characteristics in uneven-aged forests of the Italian Alps. European Journal of Forest Research, 2015, 134, 19-31.	2.5	39
25	Tackling unresolved questions in forest ecology: The past and future role of simulation models. Ecology and Evolution, 2021, 11, 3746-3770.	1.9	37
26	The ecology and evolution of synchronized reproduction in long-lived plants. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200369.	4.0	36
27	Fire severity, residuals and soil legacies affect regeneration of Scots pine in the Southern Alps. Science of the Total Environment, 2014, 472, 778-788.	8.0	35
28	Modeling anthropogenic and natural fire ignitions in an inner-alpine valley. Natural Hazards and Earth System Sciences, 2018, 18, 935-948.	3.6	35
29	Climate teleconnections synchronize Picea glauca masting and fire disturbance: Evidence for a fireâ€related form of environmental prediction. Journal of Ecology, 2020, 108, 1186-1198.	4.0	35
30	Temperature and masting control Norway spruce growth, but with high individual tree variability. Forest Ecology and Management, 2019, 438, 142-150.	3.2	34
31	How robust are future projections of forest landscape dynamics? Insights from a systematic comparison of four forest landscape models. Environmental Modelling and Software, 2020, 134, 104844.	4.5	34
32	The synchronicity of masting and intermediate severity fire effects favors beech recruitment. Forest Ecology and Management, 2015, 353, 126-135.	3.2	30
33	Effects of forest management on ground beetle diversity in alpine beech (Fagus sylvatica L.) stands. Forest Ecology and Management, 2014, 328, 300-309.	3.2	28
34	A density management diagram for Scots pine (Pinus sylvestris L.): A tool for assessing the forest's protective effect. Forest Ecology and Management, 2008, 255, 2542-2554.	3.2	27
35	Large-scale atmospheric circulation enhances the Mediterranean East-West tree growth contrast at rear-edge deciduous forests. Agricultural and Forest Meteorology, 2017, 239, 86-95.	4.8	27
36	Species-specific, pan-European diameter increment models based on data of 2.3 million trees. Forest Ecosystems, 2018, 5, .	3.1	27

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37	Diachronic analysis of individual-tree mortality in a Norway spruce stand in the eastern Italian Alps. Annals of Forest Science, 2010, 67, 304-304.	2.0	26
38	Modeling Italian forests: state of the art and future challenges. IForest, 2012, 5, 113-120.	1.4	26
39	Interactions between climate, growth and seed production in Spanish black pine (Pinus nigra Arn. ssp.) Tj ETQq1 1 0.784314 rgBT /Over	1.7	26
40	A comprehensive framework of forest stand propertyâ€“density relationships: perspectives for plant population ecology and forest management. Annals of Forest Science, 2014, 71, 325-335.	2.0	23
41	Building Rothermel fire behaviour fuel models by genetic algorithm optimisation. International Journal of Wildland Fire, 2015, 24, 317.	2.4	22
42	An Implementation of the Rothermel Fire Spread Model in the R Programming Language. Fire Technology, 2015, 51, 523-535.	3.0	22
43	Comparison of integrative nature conservation in forest policy in Europe: a qualitative pilot study of institutional determinants. Biodiversity and Conservation, 2014, 23, 3425-3450.	2.6	21
44	Effect of avalanche frequency on forest ecosystem services in a spruceâ€“fir mountain forest. Cold Regions Science and Technology, 2015, 115, 9-21.	3.5	21
45	Limits to reproduction and seed size-number trade-offs that shape forest dominance and future recovery. Nature Communications, 2022, 13, 2381.	12.8	21
46	A density management diagram for Norway spruce in the temperate European montane region. European Journal of Forest Research, 2013, 132, 535-549.	2.5	20
47	An improved species distribution model for Scots pine and downy oak under future climate change in the NW Italian Alps. Annals of Forest Science, 2015, 72, 321-334.	2.0	20
48	The 63-year changes in annual streamflow volumes across Europe with a focus on the Mediterranean basin. Hydrology and Earth System Sciences, 2021, 25, 5589-5601.	4.9	20
49	Assessing the Effect of Disturbances on the Functionality of Direct Protection Forests. Mountain Research and Development, 2016, 36, 41.	1.0	19
50	MASTREE+: Timeâ€series of plant reproductive effort from six continents. Global Change Biology, 2022, 28, 3066-3082.	9.5	19
51	Repeated spring precipitation shortage alters individual growth patterns in Scots pine forests in the Western Alps. Trees - Structure and Function, 2015, 29, 1699-1712.	1.9	18
52	An integrated approach to assess carbon credit from improved forest management. Journal of Sustainable Forestry, 2019, 38, 31-45.	1.4	17
53	Stand and coarse woody debris dynamics in subalpine Norway spruce forests withdrawn from regular management. Annals of Forest Science, 2010, 67, 803-803.	2.0	16
54	Frequent coppicing deteriorates the conservation status of black alder forests in the Po plain (northern Italy). Forest Ecology and Management, 2016, 382, 31-38.	3.2	16

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55	Resilience of European larch (Larix decidua Mill.) forests to wildfires in the western Alps. New Forests, 2017, 48, 663-683.	1.7	16
56	Effects of tree spacing and thinning on root reinforcement in mountain forests of the European Southern Alps. Forest Ecology and Management, 2021, 482, 118873.	3.2	16
57	Harmonized dataset of surface fuels under Alpine, temperate and Mediterranean conditions in Italy. A synthesis supporting fire management. IForest, 2020, 13, 513-522.	1.4	16
58	Application of vegetation index time series to value fire effect on primary production in a Southern European rare wetland. Ecological Engineering, 2019, 134, 9-17.	3.6	14
59	Douglas-fir climate sensitivity at two contrasting sites along the southern limit of the European planting range. Journal of Forestry Research, 2020, 31, 2193-2204.	3.6	14
60	The role of beliefs, expectations and values in decision-making favoring climate change adaptationâ€"implications for communications with European forest professionals. Environmental Research Letters, 2020, 15, 114061.	5.2	14
61	Voluntary carbon credits from improved forest management: policy guidelines and case study. IForest, 2018, 11, 1-10.	1.4	14
62	Natural disturbances and masting: from mechanisms to fitness consequences. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200384.	4.0	14
63	Modes of climate variability bridge proximate and evolutionary mechanisms of masting. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200380.	4.0	14
64	Monitoring and modeling the invasion of the fast spreading alienSenecio inaequidensDC. in an alpine region. Plant Biosystems, 2013, 147, 1139-1147.	1.6	12
65	Drivers ofPinus sylvestrisL. regeneration following small, high-severity fire in a dry, inner-alpine valley. Plant Biosystems, 2015, 149, 354-363.	1.6	12
66	Effects of Twenty Years of Ungulate Browsing on Forest Regeneration at Paneveggio Reserve, Italy. Forests, 2020, 11, 612.	2.1	12
67	Calibrating and Testing the Forest Vegetation Simulator to Simulate Tree Encroachment and Control Measures for Heathland Restoration in Southern Europe. Forest Science, 2014, 60, 241-252.	1.0	11
68	Globally, tree fecundity exceeds productivity gradients. Ecology Letters, 2022, 25, 1471-1482.	6.4	11
69	The effect of forest management on endangered insects assessed by radio-tracking: The case of the ground beetle Carabus olympiae in European beech Fagus sylvatica stands. Forest Ecology and Management, 2017, 406, 125-137.	3.2	10
70	Projecting Nonnative Douglas Fir Plantations in Southern Europe with the Forest Vegetation Simulator. Forest Science, 2017, 63, 101-110.	1.0	10
71	Effect of stand-replacing fires on Mediterranean plant species in their marginal alpine range. Alpine Botany, 2013, 123, 123-133.	2.4	9
72	No polarizationâ€"Expected Values of Climate Change Impacts among European Forest Professionals and Scientists. Sustainability, 2020, 12, 2659.	3.2	9

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73	Effects of the lack of forest management on spatiotemporal dynamics of a subalpine Pinus cembra forest. Scandinavian Journal of Forest Research, 2017, 32, 142-153.	1.4	8
74	Alternative stable states in mountain forest ecosystems: the case of European larch (Larix decidua) forests in the western Alps. Journal of Mountain Science, 2017, 14, 811-822.	2.0	8
75	Inconsistent recognition of uncertainty in studies of climate change impacts on forests. Environmental Research Letters, 2019, 14, 113003.	5.2	8
76	Temporal Dynamics of Root Reinforcement in European Spruce Forests. Forests, 2021, 12, 815.	2.1	8
77	Assessing the availability of forest biomass for bioenergy by publicly available satellite imagery. IForest, 2018, 11, 459-468.	1.4	7
78	Vegetative regeneration of beech coppices for biomass in Piedmont, NW Italy. Biomass and Bioenergy, 2017, 107, 271-278.	5.7	6
79	Reply to: Nutrient scarcity cannot cause mast seeding. Nature Plants, 2020, 6, 763-765.	9.3	6
80	Integrating Remote and In-Situ Data to Assess the Hydrological Response of a Post-Fire Watershed. Hydrology, 2021, 8, 169.	3.0	6
81	Contrasting responses of forest growth and carbon sequestration to heat and drought in the Alps. Environmental Research Letters, 2022, 17, 045015.	5.2	6
82	Point pattern analysis of crown-to-crown interactions in mountain forests. Procedia Environmental Sciences, 2011, 7, 269-274.	1.4	5
83	Resprouting in European beech confers resilience to high-frequency fire. Forestry, 2023, 96, 372-386.	2.3	4
84	Calibrating Rothermelâ€™s fuel models by genetic algorithms. , 0, , 102-106.		2
85	A Study Of Coppicing In Beech Trees. , 2018, , .		0