Marc Hanewinkel

List of Publications by Year
in descending order

91 papers	5,377 citations	94381 37 h-index	85498 71 g-index
94 all docs	94 docs citations	94 times ranked	6362 citing authors

#	Article	IF	Citations
1	Climate change may cause severe loss in the economic value of European forest land. Nature Climate Change, 2013, 3, 203-207.	8.1	744
2	Plant functional traits have globally consistent effects on competition. Nature, 2016, 529, 204-207.	13.7	655
3	Climate change and European forests: What do we know, what are the uncertainties, and what are the implications for forest management?. Journal of Environmental Management, 2014, 146, 69-83.	3.8	460
4	A review of decision-making approaches to handle uncertainty and risk in adaptive forest management under climate change. Annals of Forest Science, 2012, 69, 1-15.	0.8	165
5	Climate Change: Believing and Seeing Implies Adapting. PLoS ONE, 2012, 7, e50182.	1.1	143
6	Are forest disturbances amplifying or canceling out climate change-induced productivity changes in European forests?. Environmental Research Letters, 2017, 12, 034027.	2.2	142
7	Assessing natural hazards in forestry for risk management: a review. European Journal of Forest Research, 2011, 130, 329-351.	1.1	138
8	By 2050 the Mitigation Effects of EU Forests Could Nearly Double through Climate Smart Forestry. Forests, 2017, 8, 484.	0.9	124
9	How does silviculture affect storm damage in forests of south-western Germany? Results from empirical modeling based on long-term observations. European Journal of Forest Research, 2012, 131, 229-247.	1.1	123
10	Digitization in wood supply â€“ A review on how Industry 4.0 will change the forest value chain. Computers and Electronics in Agriculture, 2019, 162, 206-218.	3.7	113
11	An inventory-based approach for modeling single-tree storm damageÂâ€” experiences with the winter storm of 1999 in southwestern Germany. Canadian Journal of Forest Research, 2010, 40, 1636-1652.	0.8	112
12	Survival of Norway spruce remains higher in mixed stands under a dryer and warmer climate. Global Change Biology, 2015, 21, 935-946.	4.2	110
13	Retention as an integrated biodiversity conservation approach for continuous-cover forestry in Europe. Ambio, 2020, 49, 85-97.	2.8	106
14	Alternative forest management strategies to account for climate change-induced productivity and species suitability changes in Europe. Regional Environmental Change, 2015, 15, 1581-1594.	1.4	93
15	Predicting constant decay rates of coarse woody debrisâ€”A meta-analysis approach with a mixed model. Ecological Modelling, 2009, 220, 904-912.	1.2	86
16	Seventy-sevenÂyears of natural disturbances in a mountain forest areaâ€‰â€”â€‰the influence of storm, snow, and insect damage analysed with a long-term time series. Canadian Journal of Forest Research, 2008, 38, 2249-2261.	0.8	81
17	Vulnerability of uneven-aged forests to storm damage. Forestry, 2014, 87, 525-534.	1.2	72
18	A framework for modeling adaptive forest management and decision making under climate change. Ecology and Society, 2017, 22, .	1.0	72

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19	Modelling and economic evaluation of forest biome shifts under climate change in Southwest Germany. Forest Ecology and Management, 2010, 259, 710-719.	1.4	69
20	Management of ecosystem services in mountain forests: Review of indicators and value functions for model based multi-criteria decision analysis. Ecological Indicators, 2017, 79, 391-409.	2.6	69
21	Growth resistance and resilience of mixed silver fir and Norway spruce forests in central Europe: Contrasting responses to mild and severe droughts. Global Change Biology, 2021, 27, 4403-4419.	4.2	64
22	A forest management risk insurance model and its application to coniferous stands in southwest Germany. Forest Policy and Economics, 2006, 8, 161-174.	1.5	60
23	Modelling the conversion from even-aged to uneven-aged stands of Norway spruce (Picea abies L.) Tj ETQq1 1 0.784314 rgBT /Overlock	1.4	58
24	Evaluating the effectiveness of retention forestry to enhance biodiversity in production forests of Central Europe using an interdisciplinary, multiâ€scale approach. Ecology and Evolution, 2020, 10, 1489-1509.	0.8	56
25	Concerns about reported harvests in European forests. Nature, 2021, 592, E15-E17.	13.7	56
26	A neural network approach to identify forest stands susceptible to wind damage. Forest Ecology and Management, 2004, 196, 227-243.	1.4	53
27	Modelling of forest conversion planning with an adaptive simulation-optimization approach and simultaneous consideration of the values of timber, carbon and biodiversity. Ecological Economics, 2009, 68, 1711-1722.	2.9	51
28	Realizing Mitigation Efficiency of European Commercial Forests by Climate Smart Forestry. Scientific Reports, 2018, 8, 345.	1.6	50
29	Applying a scienceâ€based systems perspective to dispel misconceptions about climate effects of forest bioenergy. GCB Bioenergy, 2021, 13, 1210-1231.	2.5	49
30	Forestry professionalsâ€™ perceptions of climate change, impacts and adaptation strategies for forests in south-west Germany. Climatic Change, 2015, 130, 273-286.	1.7	48
31	Can nature conservation and wood production be reconciled in managed forests? A review of driving factors for integrated forest management in Europe. Journal of Environmental Management, 2020, 268, 110670.	3.8	46
32	Economic aspects of the transformation from even-aged pure stands of Norway spruce to uneven-aged mixed stands of Norway spruce and beech. Forest Ecology and Management, 2001, 151, 181-193.	1.4	43
33	Climate Change Impairs Nitrogen Cycling in European Beech Forests. PLoS ONE, 2016, 11, e0158823.	1.1	42
34	Climate Change and Decision-Making Under Uncertainty. Current Forestry Reports, 2016, 2, 143-149.	3.4	42
35	Evaluating the Suitability of Management Strategies of Pure Norway Spruce Forests in the Black Forest Area of Southwest Germany for Adaptation to or Mitigation of Climate Change. Environmental Management, 2010, 45, 387-402.	1.2	41
36	Storm damage of Douglas-fir unexpectedly high compared to Norway spruce. Annals of Forest Science, 2013, 70, 195-207.	0.8	40

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37	Diversification of forest management regimes secures tree microhabitats and bird abundance under climate change. Science of the Total Environment, 2019, 650, 2717-2730.	3.9	40
38	Comparative economic investigations of even-aged and uneven-aged silvicultural systems: a critical analysis of different methods. Forestry, 2002, 75, 473-481.	1.2	39
39	An actuarial model of forest insurance against multiple natural hazards in fir (Abies Alba Mill.) stands in Slovakia. Forest Policy and Economics, 2015, 55, 46-57.	1.5	37
40	Forest owner motivations and attitudes towards supplying biomass for energy in Europe. Biomass and Bioenergy, 2014, 67, 223-230.	2.9	35
41	Terrestrial laser scanning improves digital elevation models and topsoil pH modelling in regions with complex topography and dense vegetation. Environmental Modelling and Software, 2017, 95, 13-21.	1.9	35
42	Segregated versus integrated biodiversity conservation: Value-based ecosystem service assessment under varying forest management strategies in a Swiss case study. Ecological Indicators, 2018, 95, 751-764.	2.6	34
43	Updating beliefs and combining evidence in adaptive forest management under climate change: A case study of Norway spruce (Picea abies L. Karst) in the Black Forest, Germany. Journal of Environmental Management, 2013, 122, 56-64.	3.8	31
44	Productivity of Fagus sylvatica under climate change â€" A Bayesian analysis of risk and uncertainty using the model 3-PG. Forest Ecology and Management, 2017, 401, 192-206.	1.4	31
45	Neural networks for assessing the risk of windthrow on the forest division level: a case study in southwest Germany. European Journal of Forest Research, 2005, 124, 243-249.	1.1	26
46	Quantification of basal friction for technical and silvicultural glide-snow avalanche mitigation measures. Natural Hazards and Earth System Sciences, 2014, 14, 2921-2931.	1.5	26
47	Forest recreation as a governance problem: four case studies from Switzerland. European Journal of Forest Research, 2017, 136, 511-526.	1.1	25
48	Socially optimal forest management and biodiversity conservation in temperate forests under climate change. Ecological Economics, 2020, 169, 106504.	2.9	22
49	Converting probabilistic tree species range shift projections into meaningful classes for management. Journal of Environmental Management, 2014, 134, 153-165.	3.8	21
50	Institutional factors and opportunities for adapting European forest management to climate change. Regional Environmental Change, 2015, 15, 1595-1609.	1.4	20
51	Models for adaptive forest management. Regional Environmental Change, 2015, 15, 1483-1487.	1.4	20
52	Pertinence of reactive, active, and robust adaptation strategies in forest management under climate change. Annals of Forest Science, 2017, 74, 1.	0.8	20
53	Adopting robust decision-making to forest management under climate change. Annals of Forest Science, 2017, 74, 1.	0.8	20
54	Risk aversion hinders forestry professionals to adapt to climate change. Climatic Change, 2020, 162, 2157-2180.	1.7	19

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55	Adaptation to Climate Change in Forestry: A Multiple Correspondence Analysis (MCA). Forests, 2018, 9, 20.	0.9	18
56	Financial optimisation of target diameter harvest of European beech (Fagus sylvatica) considering the risk of decrease of timber quality due to red heartwood. Forest Policy and Economics, 2004, 6, 579-593.	1.5	17
57	Extracting environmentally driven growth trends from diameter increment series based on a multiplicative decomposition model. Canadian Journal of Forest Research, 2011, 41, 1577-1589.	0.8	17
58	Microtopography shapes soil pH in flysch regions across Switzerland. Geoderma, 2020, 380, 114663.	2.3	17
59	Quantifying the risk mitigation efficiency of changing silvicultural systems under storm risk throughout history. Annals of Forest Science, 2019, 76, 1.	0.8	16
60	Gains or Losses in Forest Productivity under Climate Change? The Uncertainty of CO2 Fertilization and Climate Effects. Climate, 2020, 8, 141.	1.2	16
61	Magnitude and timing of density reduction are key for the resilience to severe drought in conifer-broadleaf mixed forests in Central Europe. Annals of Forest Science, 2021, 78, 1.	0.8	16
62	Machine learning based soil maps for a wide range of soil properties for the forested area of Switzerland. Geoderma Regional, 2021, 27, e00437.	0.9	16
63	Identifying decision-relevant uncertainties for dynamic adaptive forest management under climate change. Climatic Change, 2020, 163, 891-911.	1.7	16
64	Spatial patterns in mixed coniferous even-aged, uneven-aged and conversion stands. European Journal of Forest Research, 2004, 123, 139.	1.1	15
65	Balancing Decisions for Adaptive and Multipurpose Conversion of Norway Spruce (<i>Picea abies</i> L.) Tj ETQq1 1 0.784314 rgBT /Ove	0.5	15
66	Conservation Costs of Retention Forestry and Optimal Habitat Network Selection in Southwestern Germany. Ecological Economics, 2018, 148, 92-102.	2.9	13
67	Forest Owners' Response to Climate Change: University Education Trumps Value Profile. PLoS ONE, 2016, 11, e0155137.	1.1	13
68	How treatment, storm events and changed climate affect productivity of temperate forests in SW Germany. Regional Environmental Change, 2015, 15, 1531-1542.	1.4	12
69	Reconciling forest profitability and biodiversity conservation under disturbance risk: the role of forest management and salvage logging. Environmental Research Letters, 2020, 15, 0940a3.	2.2	12
70	Economic performance of uneven-aged forests analysed with annuities. Forestry, 2014, 87, 49-60.	1.2	11
71	Strategies of Handling Risk and Uncertainty in Forest Management in Central Europe. Current Forestry Reports, 2017, 3, 60-73.	3.4	11
72	Changes in sessile oak (Quercus petraea) productivity under climate change by improved leaf phenology in the 3-PG model. Ecological Modelling, 2020, 438, 109285.	1.2	11

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73	Multiple uncertainties require a change of conservation practices for saproxylic beetles in managed temperate forests. Scientific Reports, 2018, 8, 14964.	1.6	10
74	Financial Results of Selection Forest Enterprises with High Proportions of Valuable Timber â€“ Results of an Empirical Study and their Application. Schweizerische Zeitschrift Fur Forstwesen, 2001, 152, 343-349.	0.5	10
75	Linking annual variations of roe deer bag records to large-scale winter conditions: spatio-temporal development in Europe between 1961 and 2013. European Journal of Wildlife Research, 2017, 63, 1.	0.7	9
76	Roadmap to develop a stress test for forest ecosystem services supply. One Earth, 2022, 5, 25-34.	3.6	9
77	Abiotic disturbances affect forest short-term vegetation cover and phenology in Southwest China. Ecological Indicators, 2021, 124, 107393.	2.6	7
78	Climate change may induce connectivity loss and mountaintop extinction in Central American forests. Communications Biology, 2021, 4, 869.	2.0	7
79	Managing Alpine Forests in a Changing Climate. , 2013, , .		5
80	Potential Future Ranges of Tree Species in the Alps. , 0, , .		5
81	Simulation of extreme storm effects on regional forest soil carbon stock. Ecological Modelling, 2019, 399, 39-53.	1.2	5
82	Financial viability of a fully simulated transformation from even-aged to uneven-aged stand structure in forests of different ages. Forestry, 2021, 94, 479-491.	1.2	5
83	Tackling climate changeâ€"the contribution of scientific knowledge in forestry. Annals of Forest Science, 2014, 71, 113-115.	0.8	4
84	Challenging the assumptions of a standard model: How historical triggers in terms of technical innovations, labor costs and timber price change the land expectation value. Forest Policy and Economics, 2018, 95, 46-56.	1.5	4
85	Broad-scale and long-term forest growth predictions and management for native, mixed species plantations and teak in Costa Rica and Panama. Forest Ecology and Management, 2022, 520, 120386.	1.4	4
86	Climate change and the provision of biodiversity in public temperate forests â€“ A mechanism design approach for the implementation of biodiversity conservation policies. Journal of Environmental Management, 2019, 246, 706-716.	3.8	3
87	Number and height of unbrowsed saplings are more appropriate than the proportion of browsed saplings for predicting silvicultural regeneration success. Annals of Forest Science, 2021, 78, 1.	0.8	3
88	Recent approaches to model the risk of storm and fire. Forest Systems, 2011, 3, 30.	0.1	2
89	Management Strategies to Adapt Alpine Space Forests to Climate Change Risks â€“ An Introduction to the Manfred Project. , 2013, , .		1
90	Der Klimawandel als Herausforderung fÃ¼r die Forstwirtschaft: Wissenschaftliche Klimamodelle, Unsicherheit und die Suche nach EntscheidungsunterstÃ¼tzungs-Systemen fÃ¼r die Forstpraxis. , 2013, , 33-52.		1

#	Article	IF	Citations
91	Description of Case Study Areas for Deriving Management Strategies to Adapt Alpine Space Forests to Climate Change Risks. , 0, , .		0