Herman H Shugart

List of Publications by Year
in descending order

228 papers	16,806 citations	19608 61 h-index	19690 117 g-index
239 all docs	239 docs citations	239 times ranked	14355 citing authors

#	Article	IF	Citations
1	A Theory of Forest Dynamics. , 1984, , .		814
2	Tree Death as an Ecological Process. BioScience, 1987, 37, 550-556.	2.2	756
3	Landscape Ecology. BioScience, 1987, 37, 119-127.	2.2	706
4	Environmental Factors and Ecological Processes in Boreal Forests. Annual Review of Ecology, Evolution, and Systematics, 1989, 20, 1-28.	6.7	643
5	Climate-induced boreal forest change: Predictions versus current observations. Global and Planetary Change, 2007, 56, 274-296.	1.6	619
6	The BIOMASS mission: Mapping global forest biomass to better understand the terrestrial carbon cycle. Remote Sensing of Environment, 2011, 115, 2850-2860.	4.6	582
7	Climatic change and the broad-scale distribution of terrestrial ecosystem complexes. Climatic Change, 1985, 7, 29-43.	1.7	521
8	Surface Lidar Remote Sensing of Basal Area and Biomass in Deciduous Forests of Eastern Maryland, USA. Remote Sensing of Environment, 1999, 67, 83-98.	4.6	480
9	Global tests of biodiversity concordance and the importance of endemism. Nature, 2006, 440, 212-214.	13.7	433
10	Insights into nitrogen and carbon dynamics of ectomycorrhizal and saprotrophic fungi from isotopic evidence. Oecologia, 1999, 118, 353.	0.9	291
11	Forest disturbance and recovery: A general review in the context of spaceborne remote sensing of impacts on aboveground biomass and canopy structure. Journal of Geophysical Research, 2009, 114, .	3.3	281
12	Microhabitats in a Forest-Floor Small Mammal Fauna. Ecology, 1978, 59, 89-98.	1.5	271
13	The transient response of terrestrial carbon storage to a perturbed climate. Nature, 1993, 361, 523-526.	13.7	240
14	Forest Succession Models. BioScience, 1980, 30, 308-313.	2.2	239
15	Nitrogen cycling in the soil-plant system along a precipitation gradient in the Kalahari sands. Global Change Biology, 2004, 10, 359-373.	4.2	234
16	Characterizing 3D vegetation structure from space: Mission requirements. Remote Sensing of Environment, 2011, 115, 2753-2775.	4.6	228
17	Responses of net ecosystem exchanges of carbon dioxide to changes in cloudiness: Results from two North American deciduous forests. Journal of Geophysical Research, 1999, 104, 31421-31434.	3.3	222
18	Tree height explains mortality risk during an intense drought. Nature Communications, 2019, 10, 4385.	5.8	191

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19	Territory Size Variation in the Ovenbird: The Role of Habitat Structure. Ecology, 1987, 68, 695-704.	1.5	185
20	The Holdridge life zones of the conterminous United States in relation to ecosystem mapping. Journal of Biogeography, 1999, 26, 1025-1038.	1.4	181
21	Spatial applications of gap models. Forest Ecology and Management, 1991, 42, 95-110.	1.4	178
22	State-of-the-Art of Models of Production-Decomposition Linkages in Conifer and Grassland Ecosystems. , 1991, 1, 118-138.		177
23	â€˜Integronstersâ€™, integral and integrated modeling. Environmental Modelling and Software, 2013, 39, 149-158.	1.9	176
24	A Physiology-Based Gap Model of Forest Dynamics. Ecology, 1993, 74, 792-797.	1.5	172
25	Estimating fire emissions and disparities in boreal Siberia (1998â€“2002). Journal of Geophysical Research, 2004, 109, .	3.3	165
26	Sensitivity of terrestrial carbon storage to CO2-induced climate change: Comparison of four scenarios based on general circulation models. Climatic Change, 1992, 21, 367-384.	1.7	156
27	Trends in savanna structure and composition along an aridity gradient in the Kalahari. Journal of Vegetation Science, 2002, 13, 419-428.	1.1	155
28	Habitat Selection of Breeding Birds in an East Tennessee Deciduous Forest. Ecology, 1974, 55, 828-837.	1.5	146
29	Importance of structure and its measurement in quantifying function of forest ecosystems. Journal of Geophysical Research, 2010, 115, .	3.3	142
30	The Potential for Application of Individual-Based Simulation Models for Assessing the Effects of Global Change. Annual Review of Ecology, Evolution, and Systematics, 1992, 23, 15-38.	6.7	139
31	The sensitivity of some high-latitude boreal forests to climatic parameters. Climatic Change, 1990, 16, 9-29.	1.7	138
32	Model of Fish Biomass Dynamics. Transactions of the American Fisheries Society, 1974, 103, 786-798.	0.6	133
33	Niche Pattern in a Forest-Floor Small-Mammal Fauna. Ecology, 1979, 60, 108-118.	1.5	120
34	Non-destructive aboveground biomass estimation of coniferous trees using terrestrial LiDAR. Remote Sensing of Environment, 2017, 200, 31-42.	4.6	115
35	Landscapeâ€scale extent, height, biomass, and carbon estimation of Mozambique's mangrove forests with Landsat ETM+ and Shuttle Radar Topography Mission elevation data. Journal of Geophysical Research, 2008, 113, .	3.3	114
36	Long-Term Research at the Virginia Coast Reserve. BioScience, 1991, 41, 310-318.	2.2	112

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37	Sensitivity of Siberian larch forests to climate change. Global Change Biology, 2011, 17, 2370-2384.	4.2	109
38	Tree-ring reconstructed rainfall variability in Zimbabwe. Climate Dynamics, 2006, 26, 677-685.	1.7	106
39	Functional Complexity and Ecosystem Stability. Ecology, 1980, 61, 1352-1360.	1.5	105
40	The advantage of long-distance clonal spreading in highly disturbed habitats. Evolutionary Ecology, 1994, 8, 172-187.	0.5	105
41	Modeling Terrestrial Ecosystems in the Global Carbon Cycle With Shifts in Carbon Storage Capacity by Land-Use Change. Ecology, 1984, 65, 970-983.	1.5	102
42	FAREAST: a forest gap model to simulate dynamics and patterns of eastern Eurasian forests. Journal of Biogeography, 2005, 32, 1641-1658.	1.4	102
43	A computer model of succession and fire response of the high-altitude Eucalyptus forest of the Brindabella Range, Australian Capital Territory. Austral Ecology, 1981, 6, 149-164.	0.7	101
44	Land-cover change and human population trends in the greater Serengeti ecosystem from 1984â€“2003. Biological Conservation, 2012, 147, 255-263.	1.9	100
45	A comparison of tree growth models. Ecological Modelling, 1985, 29, 145-169.	1.2	96
46	Using Remote Sensing to Assess Russian Forest Fire Carbon Emissions. Climatic Change, 2002, 55, 235-249.	1.7	93
47	Plant Functional Types. , 1993, , 272-292.		92
48	Silvics of the circumpolar boreal forest tree species. , 1992, , 13-84.		91
49	A review of forest patch models and their application to global change research. Climatic Change, 1996, 34, 131.	1.7	91
50	Analysis of vegetation distribution in Interior Alaska and sensitivity to climate change using a logistic regression approach. Journal of Biogeography, 2005, 32, 863-878.	1.4	82
51	Micrometeorology, biophysical exchanges and NEE decomposition in a two-story boreal forest â€" development and test of an integrated model. Agricultural and Forest Meteorology, 1999, 94, 123-148.	1.9	78
52	Cloud modulation of surface solar irradiance at a pasture site in southern Brazil. Agricultural and Forest Meteorology, 2001, 106, 117-129.	1.9	78
53	Patterns in N dynamics and N isotopes during primary succession in Glacier Bay, Alaska. Chemical Geology, 1998, 152, 3-11.	1.4	76
54	Soil aggregates as biogeochemical reactors and implications for soilâ€“atmosphere exchange of greenhouse gasesâ€"A concept. Global Change Biology, 2019, 25, 373-385.	4.2	76

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55	Soil moisture gradients and controls on a southern Appalachian hillslope from drought through recharge. Hydrology and Earth System Sciences, 1998, 2, 41-49.	1.9	74
56	AVHRR-derived fire frequency, distribution and area burned in Siberia. International Journal of Remote Sensing, 2004, 25, 1939-1960.	1.3	74
57	Interpretation of nitrogen isotope signatures using the NIFTE model. Oecologia, 1999, 120, 405-415.	0.9	73
58	Carbon storage in oldâ€growth forests of the Midâ€Atlantic: toward better understanding the eastern forest carbon sink. Ecology, 2015, 96, 311-317.	1.5	73
59	Northern Eurasia Future Initiative (NEFI): facing the challenges and pathways of global change in the twenty-first century. Progress in Earth and Planetary Science, 2017, 4, .	1.1	69
60	Assessing terrestrial laser scanning for developing non-destructive biomass allometry. Forest Ecology and Management, 2018, 427, 217-229.	1.4	69
61	Response to comment: Climatic change and the broad-scale distribution of terrestrial ecosystem complexes. Climatic Change, 1985, 7, 457-460.	1.7	67
62	Succession: Similarities of Species Turnover Rates. Science, 1973, 180, 1379-1381.	6.0	66
63	Modeling vegetation structure-ecosystem process interactions across sites and ecosystems. Ecological Modelling, 1993, 67, 49-80.	1.2	66
64	Computer and remoteâ€sensing infrastructure to enhance largeâ€scale testing of individualâ€based forest models. Frontiers in Ecology and the Environment, 2015, 13, 503-511.	1.9	64
65	Assessing spatiotemporal variation of drought in China and its impact on agriculture during 1982â€“2011 by using PDSI indices and agriculture drought survey data. Journal of Geophysical Research D: Atmospheres, 2016, 121, 2283-2298.	1.2	63
66	The southern borealâ€“northern hardwood forest border. , 1992, , 216-240.		61
67	Linking models and data on vegetation structure. Journal of Geophysical Research, 2010, 115, .	3.3	61
68	Forest forecasting with vegetation models across Russia. Canadian Journal of Forest Research, 2015, 45, 175-184.	0.8	60
69	A Production Model for Myriophyllum spicatum L.. Ecology, 1975, 56, 1129-1138.	1.5	58
70	Convective cloud downdrafts as the cause of large blowdowns in the Amazon rainforest. Meteorology and Atmospheric Physics, 1998, 67, 199-212.	0.9	58
71	Tree spacing along the Kalahari transect in southern Africa. Journal of Arid Environments, 2003, 54, 281-296.	1.2	57
72	Nutrient cycling responses to fire frequency in the Kruger National Park (South Africa) as indicated by Stable Isotope analysis. Isotopes in Environmental and Health Studies, 2003, 39, 141-158.	0.5	57

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73	Spatial pattern and process in forest stands within the Virginia piedmont. Journal of Vegetation Science, 2005, 16, 37-48.	1.1	56
74	Gap models and their individual-based relatives in the assessment of the consequences of global change. Environmental Research Letters, 2018, 13, 033001.	2.2	56
75	Models of forest dynamics based on roles of tree species. Ecological Modelling, 1996, 87, 267-284.	1.2	55
76	Age, and radial growth dynamics of Pterocarpus angolensis in southern Africa. Forest Ecology and Management, 2007, 244, 24-31.	1.4	54
77	Global climatic change, hurricanes, and a tropical forest. Climatic Change, 1992, 22, 175-190.	1.7	53
78	Remote sensing of structural complexity indices for habitat and species distribution modeling. Remote Sensing of Environment, 2010, 114, 792-804.	4.6	53
79	Improved global simulations of gross primary product based on a new definition of water stress factor and a separate treatment of C3 and C4 plants. Ecological Modelling, 2015, 297, 42-59.	1.2	53
80	Forest ecosystem dynamics: linking forest succession, soil process and radiation models. Ecological Modelling, 1993, 65, 199-219.	1.2	52
81	The effects of fire and elephants on species composition and structure of the Niassa Reserve, northern Mozambique. Forest Ecology and Management, 2008, 255, 1626-1636.	1.4	51
82	Using ecosystem models to assess potential consequences of global climatic change. Trends in Ecology and Evolution, 1990, 5, 303-307.	4.2	50
83	The effect of growth curve and sampling regime on instantaneousâ€growth, removalâ€summation, and Hynes/Hamilton estimates of aquatic insect production: A computer simulation 1. Limnology and Oceanography, 1978, 23, 184-189.	1.6	49
84	SAFARI-2000 characterization of fuels, fire behavior, combustion completeness, and emissions from experimental burns in infertile grass savannas in western Zambia. Journal of Arid Environments, 2003, 54, 381-394.	1.2	48
85	The Relevance of Forest Structure for Biomass and Productivity in Temperate Forests: New Perspectives for Remote Sensing. Surveys in Geophysics, 2019, 40, 709-734.	2.1	47
86	The Effect of Transmission-line Corridors on Bird Populations. American Midland Naturalist, 1977, 97, 216.	0.2	46
87	Habitat selection by a rare forest antelope: A multi-scale approach combining field data and imagery from three sensors. Remote Sensing of Environment, 2008, 112, 2033-2050.	4.6	46
88	Catastrophic Thresholds: A Synthesis of Concepts, Perspectives, and Applications. Ecology and Society, 2010, 15, .	1.0	46
89	Dynamic responses of African ecosystem carbon cycling to climate change. Climate Research, 2001, 17, 183-193.	0.4	45
90	The Northern Eurasia Earth Science Partnership: An Example of Science Applied to Societal Needs. Bulletin of the American Meteorological Society, 2009, 90, 671-688.	1.7	44

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91	Testing individual-based models of forest dynamics: Issues and an example from the boreal forests of Russia. Ecological Modelling, 2014, 293, 102-110.	1.2	44
92	Computer Models of Forest Succession. , 1984, , 28-47.		44
93	Fire disturbance and climate change: implications for Russian forests. Environmental Research Letters, 2017, 12, 035003.	2.2	43
94	Functional classifications of coastal barrier island vegetation. Journal of Vegetation Science, 1996, 7, 391-396.	1.1	42
95	Aboveground biomass and leaf area index (LAI) mapping for Niassa Reserve, northern Mozambique. Journal of Geophysical Research, 2008, 113, .	3.3	42
96	Improved Biomass Calibration and Validation With Terrestrial LiDAR: Implications for Future LiDAR and SAR Missions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 3527-3537.	2.3	41
97	Dynamic Ecosystem Consequences of Tree Birth and Death Patterns. BioScience, 1987, 37, 596-602.	2.2	40
98	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.	1.9	39
99	Importance of tree- and species-level interactions with wildfire, climate, and soils in interior Alaska: Implications for forest change under a warming climate. Ecological Modelling, 2019, 409, 108765.	1.2	39
100	Spectral evidence of early-stage spruce beetle infestation in Engelmann spruce. Forest Ecology and Management, 2017, 384, 347-357.	1.4	37
101	Carbon and nitrogen in the soilâ€“plant system along rainfall and land-use gradients in southern Africa. Journal of Arid Environments, 2003, 54, 327-343.	1.2	36
102	Simulated Forest Response to Chronic Air Pollution Stress. Journal of Environmental Quality, 1980, 9, 43-49.	1.0	35
103	Diagnostic analysis of interannual variation of global land evapotranspiration over 1982â€“2011: Assessing the impact of ENSO. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8969-8983.	1.2	35
104	Forests and ozone: productivity, carbon storage and feedbacks. Scientific Reports, 2016, 6, 22133.	1.6	35
105	The SAFARI 2000 - Kalahari Transect Wet Season Campaign of year 2000. Global Change Biology, 2004, 10, 273-280.	4.2	34
106	Tree Canopy Effects on Simulated Water Stress in Southern African Savannas. Ecosystems, 2005, 8, 17-32.	1.6	34
107	Semivariograms from a forest transect gap model compared with remotely sensed data. Journal of Vegetation Science, 1992, 3, 521-526.	1.1	33
108	Increasing terrestrial carbon uptake from the 1980s to the 1990s with changes in climate and atmospheric CO2. Global Biogeochemical Cycles, 2002, 16, 17-1-17-11.	1.9	33

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109	An air relativeâ€humidityâ€based evapotranspiration model from eddy covariance data. Journal of Geophysical Research, 2010, 115, .	3.3	33
110	The transition between boreal forest and tundra. , 1992, , 196-215.		33
111	Development of a simulation model of the forestâ€“tundra transition zone of northeastern Canada. Canadian Journal of Forest Research, 1994, 24, 697-706.	0.8	32
112	Regional fuel load for two climatically contrasting years in southern Africa. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	32
113	Assessment of carbon stores in tree biomass for two management scenarios in Russia. Environmental Research Letters, 2013, 8, 045019.	2.2	32
114	Carbon dioxide increase: the implications at the ecosystem level*. Plant, Cell and Environment, 1985, 8, 381-386.	2.8	31
115	Species richness loss after nutrient addition as affected by N:C ratios and phytohormone GA₃contents in an alpine meadow community. Journal of Plant Ecology, 2016, 9, 201-211.	1.2	31
116	Detection of vegetation change using reconnaissance imagery. Global Change Biology, 2001, 7, 247-252.	4.2	30
117	Nutrient limitations on understory grass productivity and carbon assimilation in an African woodland savanna. Journal of Arid Environments, 2008, 72, 1423-1430.	1.2	30
118	A Novel Diffuse Fractionâ€Based Twoâ€Leaf Light Use Efficiency Model: An Application Quantifying Photosynthetic Seasonality across 20 AmeriFlux Flux Tower Sites. Journal of Advances in Modeling Earth Systems, 2017, 9, 2317-2332.	1.3	30
119	Late-Eighteenth-Century Precipitation Reconstructions from James Madison's Montpelier Plantation. Bulletin of the American Meteorological Society, 2003, 84, 57-72.	1.7	29
120	Evaluating the sensitivity of Eurasian forest biomass to climate change using a dynamic vegetation model. Environmental Research Letters, 2009, 4, 045024.	2.2	29
121	Redefining temperate forest responses to climate and disturbance in the eastern United States: New insights at the mesoscale. Global Ecology and Biogeography, 2019, 28, 557-575.	2.7	28
122	A Model of Calcium-Cycling in An East Tennessee Liriodendron Forest: Model Structure, Parameters and Frequency Response Analysis. Ecology, 1976, 57, 99-109.	1.5	27
123	Environmental gradients in a simulation model of a beech-yellow-poplar stand. Mathematical Biosciences, 1980, 50, 163-170.	0.9	27
124	Development and application of desirable ecological models. Ecological Modelling, 1983, 18, 171-186.	1.2	27
125	Evaluating the impacts of slope aspect on forest dynamic succession in Northwest China based on FAREAST model. Environmental Research Letters, 2018, 13, 034027.	2.2	27
126	Using MODIS to evaluate heterogeneity of biomass burning in southern African savannahs: a case study in Etosha. International Journal of Remote Sensing, 2005, 26, 4219-4237.	1.3	26

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127	Nutrient limitations on aboveground grass production in four savanna types along the Kalahari Transect. Journal of Arid Environments, 2010, 74, 284-290.	1.2	26
128	Forest textural properties from simulated microwave backscatter: The influence of spatial resolution. Remote Sensing of Environment, 1994, 47, 120-131.	4.6	25
129	Evaluating carbon fluxes of global forest ecosystems by using an individual tree-based model FORCCHN. Science of the Total Environment, 2017, 586, 939-951.	3.9	25
130	Relationship between small-scale structural variability and simulated vegetation productivity across a regional moisture gradient in southern Africa. Global Change Biology, 2004, 10, 374-382.	4.2	24
131	Simulated productivity of heterogeneous patches in Southern African savanna landscapes using a canopy productivity model. Landscape Ecology, 2004, 19, 401-415.	1.9	24
132	Remote sensing of boreal forest biophysical and inventory parameters: a review. Canadian Journal of Remote Sensing, 2008, 34, S286-S313.	1.1	24
133	Using climateâ€driven leaf phenology and growth to improve predictions of gross primary productivity in North American forests. Global Change Biology, 2020, 26, 6974-6988.	4.2	24
134	A spatial model of long-term forest fire dynamics and its applications to forests in western Siberia. , 1992, , 373-403.		24
135	Gap model development, validation, and application to succession of secondary subtropical dry forests of Puerto Rico. Ecological Modelling, 2012, 233, 70-82.	1.2	23
136	Ecological Modeling of Landscape Dynamics. Ecological Studies, 1983, , 29-45.	0.4	23
137	Terrestrial Ecosystems and Their Change. Springer Environmental Science and Engineering, 2013, , 171-249.	0.1	22
138	The response of terrestrial c storage to climate change: Modeling C dynamics at varying temporal and spatial scales. Water, Air, and Soil Pollution, 1992, 64, 307-326.	1.1	21
139	Simulating the effects of climate changes on Eastern Eurasia forests. Climatic Change, 2009, 95, 341-361.	1.7	21
140	Trophic Structure, Effective Trophic Position, and Connectivity in Food Webs. American Naturalist, 1975, 109, 191-206.	1.0	20
141	Evaluating performance of an Appalachian oak forest dynamics model. Plant Ecology, 1990, 86, 1-13.	1.2	20
142	Satellite remote sensing of breeding habitat for an African weaver-bird. Landscape Ecology, 1992, 7, 87-99.	1.9	20
143	Sensitivity of Russian forest timber harvest and carbon storage to temperature increase. Forestry, 2013, 86, 283-293.	1.2	20
144	Development of a remotely sensing seasonal vegetationâ€based Palmer Drought Severity Index and its application of global drought monitoring over 1982â€“2011. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9419-9440.	1.2	20

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145	An individual-based model of forest volatile organic compound emissionsâ€"UVAFME-VOC v1.0. Ecological Modelling, 2017, 350, 69-78.	1.2	20
146	OUTENIQUA â€" A computer model to simulate succession in the mixed evergreen forests of the southern Cape, South Africa. Landscape Ecology, 1989, 2, 255-267.	1.9	19
147	The Role of Ecological Models in Long-Term Ecological Studies. , 1989, , 90-109.		19
148	Importance of structure in the longer-term dynamics of landscapes. Journal of Geophysical Research, 2000, 105, 20065-20075.	3.3	19
149	Reconstructing disturbance history using satellite-based assessment of the distribution of land cover in the Russian Far East. Remote Sensing of Environment, 2012, 118, 241-248.	4.6	19
150	Satellite-Derived Mean Fire Return Intervals As Indicators Of Change In Siberia (1995â€"2002). Mitigation and Adaptation Strategies for Global Change, 2006, 11, 75-96.	1.0	18
151	A Temporally Explicit Production Efficiency Model for Fuel Load Allocation in Southern Africa. Ecosystems, 2007, 10, 1116-1132.	1.6	18
152	Forest biomass and the science of inventory from space. Nature Climate Change, 2012, 2, 826-827.	8.1	18
153	Shifts in biomass and productivity for a subtropical dry forest in response to simulated elevated hurricane disturbances. Environmental Research Letters, 2017, 12, 025007.	2.2	18
154	Unexpected Evergreen Expansion in the Siberian Forest under Warming Hiatus. Journal of Climate, 2017, 30, 5021-5039.	1.2	18
155	The potential response of global terrestrial carbon storage to a climate change. Water, Air, and Soil Pollution, 1993, 70, 629-642.	1.1	17
156	Simulation of transpiration sensitivity to environmental changes for shrub (Myrica cerifera) thickets on a Virginia barrier island. Ecological Modelling, 1995, 78, 235-248.	1.2	17
157	Characterization of Community Composition and Forest Structure in a Madagascar Lowland Rainforest. Tropical Conservation Science, 2011, 4, 428-444.	0.6	17
158	An analysis of structure: biomass structure relationships for characteristic species of the western <scp>K</scp>alahari, <scp>B</scp>otswana. African Journal of Ecology, 2014, 52, 20-29.	0.4	17
159	SIBBORK: A new spatially-explicit gap model for boreal forest. Ecological Modelling, 2016, 320, 182-196.	1.2	17
160	Individual-tree-based models of forest dynamics and their application in global change research. , 1992, , 313-333.		17
161	The Phenology of the Nesting Season of the American Robin (Turdus migratorius) in the United States. Condor, 1974, 76, 159.	0.7	16
162	Spectral analysis of forest model time series. Ecological Modelling, 1978, 4, 313-326.	1.2	16

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163	Faunal Richness and Turnover on Dynamic Landscapes: A Simulation Study. Journal of Biogeography, 1985, 12, 499.	1.4	16
164	Biodiversity matters in feedbacks between climate change and air quality: a study using an individualâ€based model. Ecological Applications, 2018, 28, 1223-1231.	1.8	16
165	Reply to â€œHeight-related changes in forest composition explain increasing tree mortality with height during an extreme droughtâ€. Nature Communications, 2020, 11, 3401.	5.8	16
166	Modelling succession of Eastern Canadian mixedwood forest. Ecological Modelling, 1984, 21, 175-198.	1.2	14
167	Validation and application of a forest gap model to the southern Rocky Mountains. Ecological Modelling, 2017, 351, 109-128.	1.2	14
168	Simulation of the Unexpected Photosynthetic Seasonality in Amazonian Evergreen Forests by Using an Improved Diffuse Fractionâ€Based Light Use Efficiency Model. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3014-3030.	1.3	14
169	Niche theory and community organization. Canadian Journal of Botany, 1988, 66, 2634-2639.	1.2	13
170	A role-type model (rope) and its application in assessing climate change impacts on forest landscapes. Plant Ecology, 1995, 121, 135-146.	1.2	13
171	Scale dependence in quantification of land-cover and biomass change over Siberian boreal forest landscapes. Landscape Ecology, 2009, 24, 1299-1313.	1.9	13
172	Sensitivity of global greenhouse gas budgets to tropospheric ozone pollution mediated by the biosphere. Environmental Research Letters, 2017, 12, 084001.	2.2	13
173	Multi-Level Interactions Arising from Herbivory: A Simulation Analysis of Deciduous Forests Utilizing Foret. , 1992, 2, 376-386.		12
174	Watershed base-cation cycle dynamics modeled over forest regrowth in a Central Appalachian ecosystem. Water, Air, and Soil Pollution, 1996, 89, 1-22.	1.1	12
175	Retrospective assessment of dryland soil stability in relation to grazing and climate change. Environmental Monitoring and Assessment, 2010, 160, 101-121.	1.3	12
176	Modeling the interactive effects of spruce beetle infestation and climate on subalpine vegetation. Ecosphere, 2018, 9, e02437.	1.0	12
177	Gap models across micro- to mega-scales of time and space: examples of Tansleyâ€™s ecosystem concept. Forest Ecosystems, 2020, 7, .	1.3	12
178	The Niche-Variation Hypothesis: An Experimental Study with Drosophila Populations. American Naturalist, 1973, 107, 575-579.	1.0	11
179	Boreal forest sensitivity to increased temperatures at multiple successional stages. Annals of Forest Science, 2013, 70, 299-308.	0.8	11
180	Coyote(Canis latrans)mammalian prey diet shifts in response to seasonal vegetation change. Isotopes in Environmental and Health Studies, 2014, 50, 343-360.	0.5	11

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181	Simulating Changes in Fires and Ecology of the 21st Century Eurasian Boreal Forests of Siberia. Forests, 2017, 8, 49.	0.9	11
182	Effects of Light Component and Water Stress on Photosynthesis of Amazon Rainforests During the 2015/2016 El NiÃ±o Drought. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1574-1590.	1.3	11
183	Forest Greening Increases Land Surface Albedo During the Main Growing Period Between 2002 and 2019 in China. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033582.	1.2	11
184	Resource Competition and an Analytical Model of Zooplankton Feeding on Phytoplankton. American Naturalist, 1975, 109, 571-591.	1.0	11
185	Discriminant analysis some east Tennessee forest herb niches. Plant Ecology, 1983, 52, 77-89.	1.2	10
186	Ordination of simulated complex forest succession: A new test of ordination methods. Plant Ecology, 1983, 51, 141-155.	1.2	10
187	Release of gaseous and particulate carbonaceous compounds from biomass burning during the SAFARI 2000 dry season field campaign. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	10
188	Forest History of James Madison's Montpelier Plantation. Journal of the Torrey Botanical Society, 2004, 131, 204.	0.1	10
189	Predictive distribution modeling with enhanced remote sensing and multiple validation techniques to support mountain bongo antelope recovery. Animal Conservation, 2011, 14, 521-532.	1.5	10
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