Eryuan Liang

List of Publications by Year
in descending order

137 papers	6,545 citations	71097 41 h-index	74160 75 g-index
142 all docs	142 docs citations	142 times ranked	3961 citing authors

#	Article	IF	Citations
1	Rapid warming accelerates tree growth decline in semiâ€arid forests of Inner Asia. Global Change Biology, 2013, 19, 2500-2510.	9.5	311
2	Woody biomass production lags stem-girth increase by over one month in coniferous forests. Nature Plants, 2015, 1, 15160.	9.3	294
3	Species interactions slow warming-induced upward shifts of treelines on the Tibetan Plateau. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4380-4385.	7.1	221
4	The 1920S Drought Recorded by Tree Rings and Historical Documents in the Semi-Arid and Arid Areas of Northern China. Climatic Change, 2006, 79, 403-432.	3.6	204
5	Climatic implications of a 3585-year tree-ring width chronology from the northeastern Qinghai-Tibetan Plateau. Quaternary Science Reviews, 2010, 29, 2111-2122.	3.0	203
6	Is the growth of birch at the upper timberline in the Himalayas limited by moisture or by temperature?. Ecology, 2014, 95, 2453-2465.	3.2	200
7	Tree-ring based summer temperature reconstruction for the source region of the Yangtze River on the Tibetan Plateau. Global and Planetary Change, 2008, 61, 313-320.	3.5	187
8	Pattern of xylem phenology in conifers of cold ecosystems at the Northern Hemisphere. Global Change Biology, 2016, 22, 3804-3813.	9.5	174
9	Little change in the fir treeâ€line position on the southeastern Tibetan Plateau after 200â€ƒyears of warming. New Phytologist, 2011, 190, 760-769.	7.3	173
10	Tree-ring evidence of recent abnormal warming on the southeast Tibetan Plateau. Theoretical and Applied Climatology, 2009, 98, 9-18.	2.8	168
11	Global warming-related tree growth decline and mortality on the north-eastern Tibetan plateau. Climatic Change, 2016, 134, 163-176.	3.6	153
12	Growth variation in Abies georgei var. smithii along altitudinal gradients in the Sygera Mountains, southeastern Tibetan Plateau. Trees - Structure and Function, 2010, 24, 363-373.	1.9	129
13	Age dependence of xylogenesis and its climatic sensitivity in Smith fir on the south-eastern Tibetan Plateau. Tree Physiology, 2013, 33, 48-56.	3.1	122
14	Photoperiod and temperature as dominant environmental drivers triggering secondary growth resumption in Northern Hemisphere conifers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20645-20652.	7.1	113
15	Topography- and species-dependent growth responses of Sabina przewalskii and Picea crassifolia to climate on the northeast Tibetan Plateau. Forest Ecology and Management, 2006, 236, 268-277.	3.2	112
16	Critical minimum temperature limits xylogenesis and maintains treelines on the southeastern Tibetan Plateau. Science Bulletin, 2017, 62, 804-812.	9.0	110
17	Moistureâ€mediated responsiveness of treeline shifts to global warming in the Himalayas. Global Change Biology, 2018, 24, 5549-5559.	9.5	109
18	Twentieth-Century Droughts and Their Impacts on Terrestrial Carbon Cycling in China. Earth Interactions, 2009, 13, 1-31.	1.5	99

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19	Is precipitation a trigger for the onset of xylogenesis in Juniperus przewalskii on the north-eastern Tibetan Plateau?. Annals of Botany, 2015, 115, 629-639.	2.9	94
20	The extreme drought in the 1920s and its effect on tree growth deduced from tree ring analysis: a case study in North China. Annals of Forest Science, 2003, 60, 145-152.	2.0	93
21	Pre-monsoon precipitation signal in tree rings of timberline Betula utilis in the central Himalayas. Quaternary International, 2013, 283, 72-77.	1.5	93
22	Increased stem density and competition may diminish the positive effects of warming at alpine treeline. Ecology, 2016, 97, 1668-1679.	3.2	93
23	Responses and feedback of the Tibetan Plateau’s alpine ecosystem to climate change. Chinese Science Bulletin, 2019, 64, 2842-2855.	0.7	91
24	Millennial temperature reconstruction based on tree-ring widths of Qilian juniper from Wulan, Qinghai Province, China. Science Bulletin, 2008, 53, 3914-3920.	9.0	86
25	Dendrochronological potential of the alpine shrub Rhododendron nivale on the south-eastern Tibetan Plateau. Annals of Botany, 2009, 104, 665-670.	2.9	84
26	Tree-ring based PDSI reconstruction since AD 1842 in the Ortindag Sand Land, east Inner Mongolia. Science Bulletin, 2007, 52, 2715-2721.	1.7	83
27	Critical temperature and precipitation thresholds for the onset of xylogenesis of Juniperus przewalskii in a semi-arid area of the north-eastern Tibetan Plateau. Annals of Botany, 2018, 121, 617-624.	2.9	83
28	Multifeature analyses of vascular cambial cells reveal longevity mechanisms in old <i>Ginkgo biloba</i> trees. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2201-2210.	7.1	81
29	Annual increments of juniper dwarf shrubs above the tree line on the central Tibetan Plateau: a useful climatic proxy. Annals of Botany, 2012, 109, 721-728.	2.9	80
30	An earlier start of the thermal growing season enhances tree growth in cold humid areas but not in dry areas. Nature Ecology and Evolution, 2022, 6, 397-404.	7.8	78
31	Enhanced habitat loss of the Himalayan endemic flora driven by warming-forced upslope tree expansion. Nature Ecology and Evolution, 2022, 6, 890-899.	7.8	72
32	Annual Precipitation Variation Inferred from Tree Rings Since A.D. 1770 for the Western Qilian Mts., Northern Tibetan Plateau. Tree-Ring Research, 2009, 65, 95-103.	0.6	68
33	Ecological change on the Tibetan Plateau. Chinese Science Bulletin, 2015, 60, 3048-3056.	0.7	66
34	Mountain treelines climb slowly despite rapid climate warming. Global Ecology and Biogeography, 2021, 30, 305-315.	5.8	62
35	Dendroclimatic evaluation of climate-growth relationships of Meyer spruce (Picea meyeri) on a sandy substrate in semi-arid grassland, north China. Trees - Structure and Function, 2001, 15, 230-235.	1.9	60
36	Growth rate rather than growing season length determines wood biomass in dry environments. Agricultural and Forest Meteorology, 2019, 271, 46-53.	4.8	59

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37	Reconstruction of a 1436-year soil moisture and vegetation water use history based on tree-ring widths from Qilian junipers in northeastern Qaidam Basin, northwestern China. International Journal of Climatology, 2007, 28, 37-53.	3.5	57
38	Does increasing intrinsic water use efficiency (iWUE) stimulate tree growth at natural alpine timberline on the southeastern Tibetan Plateau?. Global and Planetary Change, 2017, 148, 217-226.	3.5	57
39	Spatial variability of tree growth along a latitudinal transect in the Qilian Mountains, northeastern Tibetan Plateau. Canadian Journal of Forest Research, 2010, 40, 200-211.	1.7	51
40	Species-dependent responses of juniper and spruce to increasing CO2 concentration and to climate in semi-arid and arid areas of northwestern China. Plant Ecology, 2007, 193, 195-209.	1.6	46
41	Global fading of the temperatureâ€“growth coupling at alpine and polar treelines. Global Change Biology, 2021, 27, 1879-1889.	9.5	46
42	A tree ring-based winter temperature reconstruction for the southeastern Tibetan Plateau since 1340 CE. Climate Dynamics, 2019, 53, 3221-3233.	3.8	45
43	SEASONAL CAMBIAL ACTIVITY OF RELICT CHINESE PINE AT THE NORTHERN LIMIT OF ITS NATURAL DISTRIBUTION IN NORTH CHINA â€“ EXPLORATORY RESULTS. IAWA Journal, 2009, 30, 371-378.	2.7	42
44	Light rings in Chinese pine (Pinus tabulaeformis) in semiarid areas of north China and their palaeoâ€climatological potential. New Phytologist, 2006, 171, 783-791.	7.3	41
45	Climatic significance of tree-ring Î´18O in the Qilian Mountains, northwestern China and its relationship to atmospheric circulation patterns. Chemical Geology, 2009, 268, 147-154.	3.3	41
46	Climate Signals from Tree Ring Chronologies of the Upper and Lower Treelines in the Dulan Region of the Northeastern Qinghai-Tibetan Plateau. Journal of Integrative Plant Biology, 2006, 48, 278-285.	8.5	39
47	Strong link between large tropical volcanic eruptions and severe droughts prior to monsoon in the central Himalayas revealed by tree-ring records. Science Bulletin, 2019, 64, 1018-1023.	9.0	39
48	Spatial patterns of Smith fir alpine treelines on the south-eastern Tibetan Plateau support that contingent local conditions drive recent treeline patterns. Plant Ecology and Diversity, 2012, 5, 311-321.	2.4	36
49	Temperature thresholds for the onset of xylogenesis in alpine shrubs on the Tibetan Plateau. Trees - Structure and Function, 2016, 30, 2091-2099.	1.9	36
50	Are Karakoram temperatures out of phase compared to hemispheric trends?. Climate Dynamics, 2017, 48, 3381-3390.	3.8	36
51	Can changes in autumn phenology facilitate earlier green-up date of northern vegetation?. Agricultural and Forest Meteorology, 2020, 291, 108077.	4.8	36
52	Carbon pools of semi-arid Picea crassifolia forests in the Qilian Mountains (north-eastern Tibetan) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.2	35
53	Seasonal divergence in the interannual responses of Northern Hemisphere vegetation activity to variations in diurnal climate. Scientific Reports, 2016, 6, 19000.	3.3	35
54	Centennial-scale process activity in a complex landslide body in the Qilian Mountains, northeast Tibetan Plateau, China. Catena, 2019, 179, 29-38.	5.0	35

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55	Treeâ€toâ€tree interactions slow down Himalayan treeline shifts as inferred from tree spatial patterns. Journal of Biogeography, 2020, 47, 1816-1826.	3.0	34
56	Has global change induced divergent trends in radial growth of Pinus sylvestris and Pinus halepensis at their bioclimatic limit? The example of the Sainte-Baume forest (south-east France). Annals of Forest Science, 2008, 65, 709-709.	2.0	33
57	Climateâ€growth relationships of relict Pinus tabulaeformis at the northern limit of its natural distribution in northern China. Journal of Vegetation Science, 2008, 19, 393-406.	2.2	33
58	Moisture-Limited Tree Growth for a Subtropical Himalayan Conifer Forest in Western Nepal. Forests, 2018, 9, 340.	2.1	32
59	Warmingâ€induced shrubline advance stalled by moisture limitation on the Tibetan Plateau. Ecography, 2021, 44, 1631-1641.	4.5	32
60	Relationships between tree growth and NDVI of grassland in the semiâ€arid grassland of north China. International Journal of Remote Sensing, 2005, 26, 2901-2908.	2.9	31
61	A 3585-YEAR RING-WIDTH DATING CHRONOLOGY OF QILIAN JUNIPER FROM THE NORTHEASTERN QINGHAI-TIBETAN PLATEAU. IAWA Journal, 2009, 30, 379-394.	2.7	30
62	Assessing the recent grassland greening trend in a long-term context based on tree-ring analysis: A case study in North China. Ecological Indicators, 2009, 9, 1280-1283.	6.3	30
63	A short note on linkage of climatic records between a river valley and the upper timberline in the Sygera Mountains, southeastern Tibetan Plateau. Global and Planetary Change, 2011, 77, 97-102.	3.5	30
64	Temperature signals in tree-ring oxygen isotope series from the northern slope of the Himalaya. Earth and Planetary Science Letters, 2019, 506, 455-465.	4.4	30
65	Relationships between tree increment, climate and above-ground biomass of grass: a case study in the typical steppe, north China. Acta Oecologica, 2003, 24, 87-94.	1.1	29
66	Response and dendroclimatic implications of <i>Î´</i>¹³C in tree rings to increasing drought on the northeastern Tibetan Plateau. Journal of Geophysical Research, 2008, 113, .	3.3	29
67	Microclimatic Conditions for<i>Juniperus saltuaria</i>Treeline in the Sygera Mountains, Southeastern Tibetan Plateau. Mountain Research and Development, 2011, 31, 45-53.	1.0	27
68	Annual ring widths are good predictors of changes in net primary productivity of alpine Rhododendron shrubs in the Sergyemla Mountains, southeast Tibet. Plant Ecology, 2012, 213, 1843-1855.	1.6	27
69	Past the climate optimum: Recruitment is declining at the world's highest juniper shrublines on the Tibetan Plateau. Ecology, 2019, 100, e02557.	3.2	27
70	Warming counteracts defoliationâ€induced mismatch by increasing herbivoreâ€plant phenological synchrony. Global Change Biology, 2020, 26, 2072-2080.	9.5	27
71	Assessing drought variability since 1650 AD from treeâ€rings on the Jade Dragon Snow Mountain, southwest China. International Journal of Climatology, 2015, 35, 4057-4065.	3.5	25
72	The alpine dwarf shrub Cassiope fastigiata in the Himalayas: does it reflect site-specific climatic signals in its annual growth rings?. Trees - Structure and Function, 2015, 29, 79-86.	1.9	25

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73	Frost controls spring phenology of juvenile Smith fir along elevational gradients on the southeastern Tibetan Plateau. International Journal of Biometeorology, 2019, 63, 963-972.	3.0	25
74	Precipitation dominants synergies and trade-offs among ecosystem services across the Qinghai-Tibet Plateau. Global Ecology and Conservation, 2021, 32, e01886.	2.1	25
75	Species- and Elevation-Dependent Growth Responses to Climate Warming of Mountain Forests in the Qinling Mountains, Central China. Forests, 2018, 9, 248.	2.1	24
76	Variation of Maximum Tree Height and Annual Shoot Growth of Smith Fir at Various Elevations in the Sygera Mountains, Southeastern Tibetan Plateau. PLoS ONE, 2012, 7, e31725.	2.5	23
77	Up to 400â€year-â€old <i>Rhododendron</i> shrubs on the southeastern Tibetan Plateau: prospects for shrubâ€based dendrochronology. Boreas, 2015, 44, 760-768.	2.4	23
78	Topography and age mediate the growth responses of Smith fir to climate warming in the southeastern Tibetan Plateau. International Journal of Biometeorology, 2016, 60, 1577-1587.	3.0	23
79	Facilitation stabilizes moisture-controlled alpine juniper shrublines in the central Tibetan Plateau. Global and Planetary Change, 2015, 132, 20-30.	3.5	22
80	Fences undermine biodiversity targets. Science, 2021, 374, 269-269.	12.6	22
81	Warming-induced tipping points of Arctic and alpine shrub recruitment. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	22
82	Has an extending growing season any effect on the radial growth of Smith fir at the timberline on the southeastern Tibetan Plateau?. Trees - Structure and Function, 2013, 27, 441-446.	1.9	20
83	Ring-widths of the above tree-line shrub Rhododendron reveal the change of minimum winter temperature over the past 211Âyears in Southwestern China. Climate Dynamics, 2017, 48, 3919-3933.	3.8	20
84	No benefits from warming even for subnival vegetation in the central Himalayas. Science Bulletin, 2021, 66, 1825-1829.	9.0	20
85	Phenological variation in height growth and needle unfolding of Smith fir along an altitudinal gradient on the southeastern Tibetan Plateau. Trees - Structure and Function, 2013, 27, 401-407.	1.9	18
86	The stability of spruce treelines on the eastern Tibetan Plateau over the last century is explained by pastoral disturbance. Forest Ecology and Management, 2019, 442, 34-45.	3.2	18
87	Unexpected climate variability inferred from a 380-year tree-ring earlywood oxygen isotope record in the Karakoram, Northern Pakistan. Climate Dynamics, 2021, 57, 701-715.	3.8	18
88	Contribution of winter precipitation to tree growth persists until the late growing season in the Karakoram of northern Pakistan. Journal of Hydrology, 2022, 607, 127513.	5.4	18
89	Threshold-dependent and non-linear associations between temperature and tree growth at and below the alpine treeline. Trees - Structure and Function, 2018, 32, 661-662.	1.9	17
90	A tree-ringâ€“based summer (Juneâ€“July) minimum temperature reconstruction for the western Kunlun Mountains since AD 1681. Theoretical and Applied Climatology, 2019, 138, 673-682.	2.8	17

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91	An unusually high shrubline on the Tibetan Plateau. Ecology, 2021, 102, e03310.	3.2	17
92	Characteristics of extreme droughts inferred from tree-ring data in the Qilian Mountains, 1700â˘'2005. Climate Research, 2011, 50, 141-159.	1.1	17
93	Differences in xylogenesis between dominant and suppressed trees. American Journal of Botany, 2018, 105, 950-956.	1.7	16
94	Summer Temperature Drives Radial Growth of Alpine Shrub Willows on the Northeastern Tibetan Plateau. Arctic, Antarctic, and Alpine Research, 2016, 48, 461-468.	1.1	15
95	The Coupling of Treeline Elevation and Temperature is Mediated by Non-Thermal Factors on the Tibetan Plateau. Forests, 2017, 8, 109.	2.1	15
96	Temperature variability in northern Iran during the past 700â€¯years. Science Bulletin, 2018, 63, 462-464.	9.0	15
97	Fire facilitates warming-induced upward shifts of alpine treelines by altering interspecific interactions. Trees - Structure and Function, 2019, 33, 1051-1061.	1.9	15
98	Trees record changes of the temperate glaciers on the Tibetan Plateau: Potential and uncertainty. Global and Planetary Change, 2019, 173, 15-23.	3.5	14
99	The occurrence of vertical resin canals in Keteleeria, with reference to its systematic position in Pinaceae. Botanical Journal of the Linnean Society, 2000, 134, 567-574.	1.6	13
100	The onset of xylogenesis is not related to distance from the crown in Smith fir trees from the southeastern Tibetan Plateau. Canadian Journal of Forest Research, 2016, 46, 885-889.	1.7	13
101	Asymmetric impacts of dryness and wetness on tree growth and forest coverage. Agricultural and Forest Meteorology, 2020, 288-289, 107980.	4.8	13
102	High-elevation shrub-ring Î´18O on the northern slope of the central Himalayas records summer (Mayâ€"July) temperatures. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 524, 230-239.	2.3	12
103	New perspectives on sub-seasonal xylem anatomical responses to climatic variability. Trees - Structure and Function, 2019, 33, 973-975.	1.9	12
104	The onset of xylogenesis in Smith fir is not related to outer bark thickness. American Journal of Botany, 2019, 106, 1386-1391.	1.7	11
105	Negative growth responses to temperature of sympatric species converge under warming conditions on the southeastern Tibetan Plateau. Trees - Structure and Function, 2020, 34, 395-404.	1.9	11
106	Retreating Glacier and Advancing Forest Over the Past 200ÂYears in the Central Himalayas. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005751.	3.0	11
107	Tree growth responses and resilience after the 1950-Zayu-Medog earthquake, southeast Tibetan Plateau. Dendrochronologia, 2020, 62, 125724.	2.2	11
108	Sampling strategy and climatic implication of tree-ring cellulose oxygen isotopes of Hippophae tibetana and Abies georgei on the southeastern Tibetan Plateau. International Journal of Biometeorology, 2019, 63, 679-686.	3.0	10

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109	Habitat Ecology of Ophiocordyceps sinensis in Western Nepal. Mountain Research and Development, 2017, 37, 216.	1.0	9
110	How can Populus euphratica cope with extremely dry growth conditions at 2,800ÂmÂa.s.l. on the northern Tibetan Plateau?. Trees - Structure and Function, 2013, 27, 447-453.	1.9	8
111	Xylogenesis and Moisture Stress. , 2016, , 45-58.		8
112	Impact of plot shape and size on the evaluation of treeline dynamics in the Tibetan Plateau. Trees - Structure and Function, 2016, 30, 1045-1056.	1.9	8
113	Early growing-season precipitation drives radial growth of alpine juniper shrubs in the central Himalayas. Geografiska Annaler, Series A: Physical Geography, 2020, 102, 317-330.	1.5	8
114	Phylogenetic conservatism in heat requirement of leaf-out phenology, rather than temperature sensitivity, in Tibetan Plateau. Agricultural and Forest Meteorology, 2021, 304-305, 108413.	4.8	8
115	Spring Hydroclimate Reconstruction on the Southâ€Central Tibetan Plateau Inferred From <i>Juniperus Pingii</i> Var. <i>Wilsonii</i> Shrub Rings Since 1605. Geophysical Research Letters, 2020, 47, e2020GL087707.	4.0	8
116	Species richness is a strong driver of forest biomass along broad bioclimatic gradients in the Himalayas. Ecosphere, 2022, 13, .	2.2	8
117	Synoptic-scale circulation patterns during summer derived from tree rings in mid-latitude Asia. Climate Dynamics, 2017, 49, 1917-1931.	3.8	7
118	Progresses in dendrochronology of shrubs. Acta Ecologica Sinica, 2013, 33, 1367-1374.	0.1	7
119	Phenological Differentiation in Sugar Maple Populations and Responses of Bud Break to an Experimental Warming. Forests, 2020, 11, 929.	2.1	6
120	Warming menaces high-altitude Himalayan birch forests: Evidence from cambial phenology and wood anatomy. Agricultural and Forest Meteorology, 2021, 308-309, 108577.	4.8	6
121	Evaluation of Tree Growth Relevant Atmospheric Circulation Patterns for Geopotential Height Field Reconstructions for Asia. Journal of Climate, 2018, 31, 4391-4401.	3.2	5
122	Dendrochronological investigation of selected conifers from Karakoram-Himalaya, northern Pakistan. Pakistan Journal of Botany, 2021, 53, .	0.5	5
123	Detecting Ecological Patterns Along Environmental Gradients: Alpine Treeline Ecotones. Chance, 2016, 29, 10-15.	0.2	3
124	Bud break in sugar maple submitted to changing conditions simulating a northward migration. Canadian Journal of Forest Research, 2021, 51, 842-847.	1.7	3
125	Tree regeneration after fire and logging in sub-alpine forest on the southeastern Tibetan Plateau. Chinese Science Bulletin, 2019, 64, 2907-2914.	0.7	3
126	Intensity, frequency and rate of insect herbivory for an alpine Rhododendron shrub: elevational patterns and leaf-age effects. Alpine Botany, 2022, 132, 233-243.	2.4	3

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127	Terminal bud size, spring and summer temperatures regulate the timing of height-growth cessation of Smith fir on the southeastern Tibetan Plateau. Agricultural and Forest Meteorology, 2022, 316, 108883.	4.8	3
128	Tree-ring cellulose oxygen isotopes indicate atmospheric aridity in the western Kunlun Mountains. Ecological Indicators, 2022, 137, 108776.	6.3	3
129	Threshold responses of juniper tree growth and regeneration to climate warming and drought stress at alpine treeline. Trees - Structure and Function, 2021, 35, 1081-1083.	1.9	2
130	Tree growth and treeline responses to temperature: Different questions and concepts. Global Change Biology, 2021, 27, e13-e14.	9.5	2
131	Reply to Elmendorf and Ettinger: Photoperiod plays a dominant and irreplaceable role in triggering secondary growth resumption. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32865-32867.	7.1	2
132	Research advances in disturbance and ecological processes of the treeline ecotone. Chinese Science Bulletin, 2019, 64, 1711-1721.	0.7	2
133	Global Cryosphere Evolution and Land Surface Processes on the Tibetan Plateau. Springer Geography, 2017, , 263-279.	0.4	1
134	Past the Climate Optimum: Recruitment Is Declining at the World's Highest Juniper Shrublines on the Tibetan Plateau. Bulletin of the Ecological Society of America, 2019, 100, e01497.	0.2	1
135	The occurrence of vertical resin canals in Keteleeria, with reference to its systematic position in Pinaceae. Botanical Journal of the Linnean Society, 2000, 134, 567-574.	1.6	1
136	Editorial note for the special section on â€˜Tree-Ring Research in Asiaâ€™ of TREES: structure and function. Trees - Structure and Function, 2017, 31, 377-378.	1.9	0
137	Records of Environmental Changes in Physical Geography. Springer Geography, 2017, , 481-494.	0.4	0