Elina Oksanen

List of Publications by Year
in descending order

110	4,607	87888	110387
papers	citations	38 h-index	64 g-index

112	112	112	3952
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	BVOC Emissions From a Subarctic Ecosystem, as Controlled by Insect Herbivore Pressure and Temperature. Ecosystems, 2022, 25, 872-891.	3.4	5
2	Strategic roadmap to assess forest vulnerability under air pollution and climate change. Global Change Biology, 2022, 28, 5062-5085.	9.5	31
3	Plants have different strategies to defend against air pollutants. Current Opinion in Environmental Science and Health, 2021, 19, 100222.	4.1	26
4	Emerging challenges of ozone impacts on asian plants: actions are needed to protect ecosystem health. Ecosystem Health and Sustainability, 2021, 7, .	3.1	32
5	Birch as a Model Species for the Acclimation and Adaptation of Northern Forest Ecosystem to Changing Environment. Frontiers in Forests and Global Change, 2021, 4, .	2.3	10
6	Impacts of Ozone on Forest Plants and Ecosystems. Forests, 2021, 12, 1345.	2.1	1
7	Strategy by latitude? Higher photosynthetic capacity and root mass fraction in northern than southern silver birch (Betula pendula Roth) in uniform growing conditions. Tree Physiology, 2021, 41, 974-991.	3.1	6
8	Climate and Competitive Status Modulate the Variation in Secondary Metabolites More in Leaves Than in Fine Roots of Betula pendula. Frontiers in Plant Science, 2021, 12, 746165.	3.6	5
9	Strong Interactive Effects of Warming and Insect Herbivory on Soil Carbon and Nitrogen Dynamics at Subarctic Tree Line. Frontiers in Forests and Global Change, 2021, 4, .	2.3	1
10	Differences in growth and gas exchange between southern and northern provenances of silver birch (Betula pendula Roth) in northern Europe. Tree Physiology, 2020, 40, 198-214.	3.1	14
11	Ozone affects plant, insect, and soil microbial communities: A threat to terrestrial ecosystems and biodiversity. Science Advances, 2020, 6, eabc1176.	10.3	181
12	Spectral Reflectance in Silver Birch Genotypes from Three Provenances in Finland. Remote Sensing, 2020, 12, 2677.	4.0	2
13	Development and evaluation of a recombinase polymerase amplification assay for rapid detection of strawberry red stele pathogen. Phytopathology Research, 2020, 2, .	2.4	1
14	RPA-PCR couple: an approach to expedite plant diagnostics and overcome PCR inhibitors. BioTechniques, 2020, 69, 270-280.	1.8	14
15	Insect herbivory dampens Subarctic birch forest C sink response to warming. Nature Communications, 2020, 11, 2529.	12.8	18
16	Elevated temperature and ozone modify structural characteristics of silver birch (Betula pendula) leaves. Tree Physiology, 2020, 40, 467-483.	3.1	11
17	High Variation in Resource Allocation Strategies among 11 Indian Wheat (Triticum aestivum) Cultivars Growing in High Ozone Environment. Climate, 2019, 7, 23.	2.8	25
18	Leaf Canopy Layers Affect Spectral Reflectance in Silver Birch. Remote Sensing, 2019, 11, 2884.	4.0	21

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19	Trichomes form an important first line of defence against adverse environmentâ€"New evidence for ozone stress mitigation. Plant, Cell and Environment, 2018, 41, 1497-1499.	5.7	37
20	Genotype- and provenance-related variation in the leaf surface secondary metabolites of silver birch. Canadian Journal of Forest Research, 2018, 48, 494-505.	1.7	19
21	Northern Forest Trees Under Increasing Atmospheric Humidity. Progress in Botany Fortschritte Der Botanik, 2018, , 317-336.	0.3	12
22	Evaluation of simulated ozone effects in forest ecosystems against biomass damage estimates from fumigation experiments. Biogeosciences, 2018, 15, 6941-6957.	3.3	11
23	Imaging lichen water content with visible to mid-wave infrared (400â€"5500â€¯nm) spectroscopy. Remote Sensing of Environment, 2018, 216, 301-310.	11.0	16
24	Susceptibility of silver birch (Betula pendula) to herbivorous insects is associated with the size and phenology of birch â€" implications for climate warming. Scandinavian Journal of Forest Research, 2017, 32, 95-104.	1.4	15
25	Growth of northern deciduous trees under increasing atmospheric humidity: possible mechanisms behind the growth retardation. Regional Environmental Change, 2017, 17, 2135-2148.	2.9	30
26	Genome sequencing and population genomic analyses provide insights into the adaptive landscape of silver birch. Nature Genetics, 2017, 49, 904-912.	21.4	221
27	Low vapor pressure deficit reduces glandular trichome density and modifies the chemical composition of cuticular waxes in silver birch leaves. Tree Physiology, 2017, 37, 1166-1181.	3.1	30
28	Low vapour pressure deficit affects nitrogen nutrition and foliar metabolites in silver birch. Journal of Experimental Botany, 2016, 67, 4353-4365.	4.8	23
29	Artificially decreased vapour pressure deficit in field conditions modifies foliar metabolite profiles in birch and aspen. Journal of Experimental Botany, 2016, 67, 4367-4378.	4.8	29
30	Root morphology, mycorrhizal roots and extramatrical mycelium growth in silver birch (Betula) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Soil, 2016, 407, 341-353.	3.7	13
31	Colonization of a host tree by herbivorous insects under a changing climate. Oikos, 2015, 124, 1013-1022.	2.7	19
32	Trait syndromes underlying stand-level differences in growth and acclimation in 10 silver birch (Betula pendula Roth) genotypes. Forest Ecology and Management, 2015, 343, 123-135.	3.2	7
33	Early shoot growth termination in Betula pendula is associated with the number of overwintering aphid eggs on boreal birches. Evolutionary Ecology, 2015, 29, 157-167.	1.2	4
34	New flux based doseâ€"response relationships for ozone for European forest tree species. Environmental Pollution, 2015, 206, 163-174.	7.5	106
35	Searching for common responsive parameters for ozone tolerance in 18 rice cultivars in India: Results from ethylenediurea studies. Science of the Total Environment, 2015, 532, 230-238.	8.0	63
36	Thermal and hyperspectral imaging for Norway spruce (Picea abies) seeds screening. Computers and Electronics in Agriculture, 2015, 116, 118-124.	7.7	36

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37	Volatile organic compounds emitted from silver birch of different provenances across a latitudinal gradient in Finland. Tree Physiology, 2015, 35, 975-986.	3.1	18
38	Insect herbivore damage on latitudinally translocated silver birch (Betula pendula) â€“ predicting the effects of climate change. Climatic Change, 2015, 131, 245-257.	3.6	16
39	Variation in 13 leaf morphological and physiological traits within a silver birch (<i>Betula) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 657-665.	1.7	27
40	Within-stand variation in silver birch (Betula pendula Roth) phenology. Trees - Structure and Function, 2014, 28, 1801-1812.	1.9	15
41	Ozone affects ascorbate and glutathione biosynthesis as well as amino acid contents in three Euramerican poplar genotypes. Tree Physiology, 2014, 34, 253-266.	3.1	53
42	Differences in responses of two mustard cultivars to ethylenediurea (EDU) at high ambient ozone concentrations in India. Agriculture, Ecosystems and Environment, 2014, 196, 158-166.	5.3	36
43	Genetic and environmental determinants of insect herbivore community structure in a Betula pendula population. F1000Research, 2014, 3, 34.	1.6	9
44	Natural Vision Data File Format as a New Spectral Image Format for Biological Applications. Lecture Notes in Computer Science, 2014, , 124-132.	1.3	0
45	Metabolomics and Transcriptomics Increase Our Understanding About Defence Responses and Genotypic Differences of Northern Deciduous Trees to Elevating Ozone, CO2 and Climate Warming. Developments in Environmental Science, 2013, 13, 309-329.	0.5	8
46	Impacts of Air Pollution and Climate Change on Plants. Developments in Environmental Science, 2013, , 391-409.	0.5	6
47	Impacts of increasing ozone on Indian plants. Environmental Pollution, 2013, 177, 189-200.	7.5	85
48	Carbohydrate concentrations and freezing stress resistance of silver birch buds grown under elevated temperature and ozone. Tree Physiology, 2013, 33, 311-319.	3.1	17
49	Proteomic Analysis of Two Hybrid Aspen Clones Subjected to Long-term Chronic Ozone Exposure in Open Field. Current Proteomics, 2013, 10, 67-74.	0.3	3
50	Interactive effects of elevated ozone and temperature on carbon allocation of silver birch (Betula) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.1	41
51	Needle metabolome, freezing tolerance and gas exchange in Norway spruce seedlings exposed to elevated temperature and ozone concentration. Tree Physiology, 2012, 32, 1102-1112.	3.1	41
52	Impact of elevated temperature and ozone on the emission of volatile organic compounds and gas exchange of silver birch (Betula pendula Roth). Environmental and Experimental Botany, 2012, 84, 33-43.	4.2	70
53	Adaptability of birch (Betula pendula Roth) and aspen (Populus tremula L.) genotypes to different soil moisture conditions. Forest Ecology and Management, 2011, 262, 1387-1399.	3.2	43
54	Vertical profiles reveal impact of ozone and temperature on carbon assimilation of Betula pendula and Populus tremula. Tree Physiology, 2011, 31, 808-818.	3.1	40

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55	Leaf Volatile Emissions of Betula pendula during Autumn Coloration and Leaf Fall. Journal of Chemical Ecology, 2010, 36, 1068-1075.	1.8	33
56	Volatile emissions and phenolic compound concentrations along a vertical profile of Populus nigra leaves exposed to realistic ozone concentrations. Photosynthesis Research, 2010, 104, 61-74.	2.9	58
57	Leaf phenolic compounds in red clover (Trifolium pratense L.) induced by exposure to moderately elevated ozone. Environmental Pollution, 2010, 158, 440-446.	7.5	96
58	Gene expression responses of paper birch (Betula papyrifera) to elevated CO2 and O3 during leaf maturation and senescence. Environmental Pollution, 2010, 158, 959-968.	7.5	39
59	Red clover (Trifolium pratense L.) isoflavones: root phenolic compounds affected by biotic and abiotic stress factors. Journal of the Science of Food and Agriculture, 2010, 90, 418-423.	3.5	20
60	Differential gene expression in senescing leaves of two silver birch genotypes in response to elevated CO₂ and tropospheric ozone. Plant, Cell and Environment, 2010, 33, 1016-1028.	5.7	37
61	Realâ€time monitoring of herbivore induced volatile emissions in the field. Physiologia Plantarum, 2010, 138, 123-133.	5.2	93
62	Emissions of volatile organic compounds and leaf structural characteristics of European aspen (Populus tremula) grown under elevated ozone and temperature. Tree Physiology, 2009, 29, 1163-1173.	3.1	77
63	Interactive effect of elevated temperature and O3 on antioxidant capacity and gas exchange in Betula pendula saplings. Planta, 2009, 230, 419-427.	3.2	32
64	Genetic and environmental determinants of silver birch growth and herbivore resistance. Forest Ecology and Management, 2009, 257, 2145-2149.	3.2	25
65	Rising Atmospheric CO2Concentration Partially Masks the Negative Effects of Elevated O3in Silver Birch (Betula pendula Roth). Ambio, 2009, 38, 418-424.	5.5	17
66	Near-ambient Ozone Concentrations Reduce the Vigor ofBetulaandPopulusSpecies in Finland. Ambio, 2009, 38, 413-417.	5.5	17
67	Impact of Experimentally Elevated Ozone on Seed Germination and Growth of Russian Pine (Pinus) Tj ETQq1 1 0.784314 rgBT /Overlo	5.5	6
68	Application of metabolomics to genotype and phenotype discrimination of birch trees grown in a long-term open-field experiment. Metabolomics, 2008, 4, 39-51.	3.0	47
69	Interactive effects of elevated ozone and springtime frost on growth and physiology of birch (Betula) Tj ETQq1 1 0.784314 rgBT /Ove	1.9	6
70	Stomatal characteristics and infection biology of Pyrenopeziza betulicola in Betula pendula trees grown under elevated CO2 and O3. Environmental Pollution, 2008, 156, 536-543.	7.5	16
71	Effects of decadal exposure to interacting elevated CO2 and/or O3 on paper birch (Betula papyrifera) reproduction. Environmental Pollution, 2008, 155, 446-452.	7.5	48
72	Carbon gain and bud physiology in Populus tremuloides and Betula papyrifera grown under long-term exposure to elevated concentrations of CO2 and O3. Tree Physiology, 2008, 28, 243-254.	3.1	41

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73	Differences in leaf characteristics between ozone-sensitive and ozone-tolerant hybrid aspen (Populus) Tj ETQq1 1 0.784314 rgBT /Ove	3.1	47
74	Ozone Effects on the Metabolism and the Antioxidant System of Poplar Leaves at Different Stages of Development. , 2008, , 1317-1321.		2
75	Impacts of elevated ozone and nitrogen on growth and photosynthesis of European aspen (<i>Populus) Tj ETQq1 1 0.784314 rgBT /Ove Journal of Forest Research, 2007, 37, 2326-2336.	1.7	47
76	Impacts of Elevated Atmospheric CO2and O3on Paper Birch (Betula papyrifera): Reproductive Fitness. Scientific World Journal, The, 2007, 7, 240-246.	2.1	17
77	Effects of elevated O3, alone and in combination with elevated CO2, on tree leaf chemistry and insect herbivore performance: a meta-analysis. Global Change Biology, 2007, 13, 184-201.	9.5	164
78	Shift in birch leaf metabolome and carbon allocation during long-term open-field ozone exposure. Global Change Biology, 2007, 13, 1053-1067.	9.5	64
79	Emission of herbivore-induced volatile terpenoids from two hybrid aspen (Populus tremula Ã— Tj ETQq1 1 0.784314 rgBT /Overlock 10 Biology, 2007, 13, 2538-2550.	9.5	98
80	Free-Air Exposure Systems to Scale up Ozone Research to Mature Trees. Plant Biology, 2007, 9, 181-190.	3.8	132
81	Leaf litter decomposition differs among genotypes in a local Betula pendula population. Oecologia, 2007, 152, 707-714.	2.0	43
82	Shift in birch leaf metabolome and carbon allocation during long-term open-field ozone exposure. Global Change Biology, 2007, .	9.5	1
83	Chemical Composition and Decomposition of Silver Birch Leaf Litter Produced under Elevated CO2 and O3. Plant and Soil, 2006, 282, 261-280.	3.7	25
84	Structural characteristics and chemical composition of birch (Betula pendula) leaves are modified by increasing CO2 and ozone. Global Change Biology, 2005, 11, 732-748.	9.5	105
85	Leaf photosynthetic characteristics of silver birch during three years of exposure to elevated concentrations of CO2 and O3 in the field. Tree Physiology, 2005, 25, 621-632.	3.1	63
86	Photosynthesis of birch (Betula pendula) is sensitive to springtime frost and ozone. Canadian Journal of Forest Research, 2005, 35, 703-712.	1.7	31
87	Northern conditions enhance the susceptibility of birch (Betula pendula Roth) to oxidative stress caused by ozone. , 2005, , 29-35.		3
88	Silver birch and climate change: variable growth and carbon allocation responses to elevated concentrations of carbon dioxide and ozone. Tree Physiology, 2004, 24, 1227-1237.	3.1	71
89	Effects of elevated concentrations of ozone and carbon dioxide on the electrical impedance of leaves of silver birch (Betula pendula) clones. Tree Physiology, 2004, 24, 833-843.	3.1	24
90	Ozoneâ€induced H 2 O 2 accumulation in fieldâ€grown aspen and birch is linked to foliar ultrastructure and peroxisomal activity. New Phytologist, 2004, 161, 791-799.	7.3	108

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91	Tropospheric O3 moderates responses of temperate hardwood forests to elevated CO2 : a synthesis of molecular to ecosystem results from the Aspen FACE project. Functional Ecology, 2003, 17, 289-304.	3.6	269
92	Ozone exposure over two growing seasons alters root-to-shoot ratio and chemical composition of birch (Betula pendula Roth). Global Change Biology, 2003, 9, 1363-1377.	9.5	82
93	Interactive effect of springtime frost and elevated ozone on early growth, foliar injuries and leaf structure of birch (Betula pendula). New Phytologist, 2003, 159, 623-636.	7.3	57
94	Seasonal variation in physiological characteristics of two silver birch clones in the field. Canadian Journal of Forest Research, 2003, 33, 2164-2176.	1.7	22
95	Physiological responses of birch (Betula pendula) to ozone: a comparison between open-soil-grown trees exposed for six growing seasons and potted seedlings exposed for one season. Tree Physiology, 2003, 23, 603-614.	3.1	49
96	Altered performance of forest pests under atmospheres enriched by CO2 and O3. Nature, 2002, 420, 403-407.	27.8	275
97	Ascorbate transport from the apoplast to the symplast in intact leaves. Physiologia Plantarum, 2001, 113, 377-383.	5.2	25
98	Effects of long-term open-field ozone exposure on leaf phenolics of European silver birch (Betula) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	1.8	83
99	Responses of two birch (Betula pendula Roth) clones to different ozone profiles with similar AOT40 exposure. Atmospheric Environment, 2001, 35, 5245-5254.	4.1	38
100	Differences of Betula origins in ozone sensitivity based on open-field experiment over two growing seasons. Canadian Journal of Forest Research, 2001, 31, 804-811.	1.7	29
101	Physiological, stomatal and ultrastructural ozone responses in birch (Betula pendula Roth.) are modified by water stress. Plant, Cell and Environment, 1998, 21, 671-684.	5.7	123
102	Influence of nitrogen supply on the response of clones of birch (Betula pendula Roth.) to ozone. New Phytologist, 1995, 129, 595-603.	7.3	86
103	Ageing-related Anatomical and Ultrastructural Changes in Leaves of Birch (Betula pendula Roth.) Clones as Affected by Low Ozone Exposure. Annals of Botany, 1995, 75, 285-294.	2.9	76
104	Luonnon monimuotoisuus ja vihreÃ elvytys. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	2
105	Keskeiset keinot luontokadon pysÃyttÃmiseksi. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	1
106	Soiden ennallistamisen suoluonto-, vesistÃ¶- ja ilmastovaikutukset. Luontopaneelin yhteenveto ja suositukset luontopolitiikan suunnittelun ja pÃÃtÃ¶ksenteon tueksi.. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	1
107	MetsÃluonnon turvaava suojelun kohdentaminen Suomessa. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	2
108	MetsÃluonnon turvaava suojelun kohdentaminen Suomessa. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	0

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109	Jatkuvapeitteisen metsÃnkÃsittelyn ympÃristÃ¶- ja talousvaikutukset: Raportin yhteenveto. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	0
110	Jatkuvapeitteisen metsÃnkÃsittelyn vaikutukset luonnon monimuotoisuuteen, vesistÃ¶ihin, ilmastoon, virkistyskÃyttÃ¶Ã¶n ja metsÃtuhoriskeihin. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	2