Kouki Hikosaka

List of Publications by Citations

144 papers	14,792 citations	46 h-index	121 g-index
155 ext. papers	17,247 ext. citations	4.8 avg, IF	6.41 L-index

#	Paper	IF	Citations
144	The worldwide leaf economics spectrum. *Nature*, **2004**, 428, 821-7	50.4	4915
143	Assessing the generality of global leaf trait relationships. *New Phytologist*, **2005**, 166, 485-96	9.8	1343
142	Modulation of leaf economic traits and trait relationships by climate. *Global Ecology and Biogeography*, **2005**, 14, 411-421	6.1	535
141	Temperature response of photosynthesis in C3, C4, and CAM plants: temperature acclimation and temperature adaptation. *Photosynthesis Research*, **2014**, 119, 101-17	3.7	508
140	A global meta-analysis of the relative extent of intraspecific trait variation in plant communities. *Ecology Letters*, **2015**, 18, 1406-19	10	485
139	Temperature acclimation of photosynthesis: mechanisms involved in the changes in temperature dependence of photosynthetic rate. *Journal of Experimental Botany*, **2006**, 57, 291-302	7	328
138	Photosynthesis or persistence: nitrogen allocation in leaves of evergreen and deciduous Quercus species. *Plant, Cell and Environment*, **2004**, 27, 1047-1054	8.4	316
137	A model of the acclimation of photosynthesis in the leaves of C3 plants to sun and shade with respect to nitrogen use. *Plant, Cell and Environment*, **1995**, 18, 605-618	8.4	305
136	Interspecific difference in the photosynthesis-nitrogen relationship: patterns, physiological causes, and ecological importance. *Journal of Plant Research*, **2004**, 117, 481-94	2.6	303
135	Comparative ecophysiology of leaf and canopy photosynthesis. *Plant, Cell and Environment*, **1995**, 18, 1111-1128	8.4	301
134	Optimal stomatal behaviour around the world. *Nature Climate Change*, **2015**, 5, 459-464	21.4	264
133	Does the photosynthetic light-acclimation need change in leaf anatomy?. *Plant, Cell and Environment*, **2003**, 26, 505-512	8.4	240
132	Physiological and structural tradeoffs underlying the leaf economics spectrum. *New Phytologist*, **2017**, 214, 1447-1463	9.8	222
131	Allocation of nitrogen to cell walls decreases photosynthetic nitrogen-use efficiency. *Functional Ecology*, **2004**, 18, 419-425	5.6	205
130	Leaf anatomy as a constraint for photosynthetic acclimation: differential responses in leaf anatomy to increasing growth irradiance among three deciduous trees. *Plant, Cell and Environment*, **2005**, 28, 916-927	8.4	198
129	Effects of leaf age, nitrogen nutrition and photon flux density on the distribution of nitrogen among leaves of a vine (Ipomoea tricolor Cav.) grown horizontally to avoid mutual shading of leaves. *Oecologia*, **1994**, 97, 451-457	2.9	196
128	Leaf canopy as a dynamic system: ecophysiology and optimality in leaf turnover. *Annals of Botany*, **2005**, 95, 521-33	4.1	191

127	The excess light energy that is neither utilized in photosynthesis nor dissipated by photoprotective mechanisms determines the rate of photoinactivation in photosystem II. *Plant and Cell Physiology*, **2003**, 44, 318-25	4.9	140
126	Nitrogen Partitioning among Photosynthetic Components and its Consequence in Sun and Shade Plants. *Functional Ecology*, **1996**, 10, 335	5.6	133
125	Phenotypic plasticity in photosynthetic temperature acclimation among crop species with different cold tolerances. *Plant Physiology*, **2010**, 152, 388-99	6.6	129
124	Balancing carboxylation and regeneration of ribulose-1,5- bisphosphate in leaf photosynthesis: temperature acclimation of an evergreen tree, Quercus myrsinaefolia. *Plant, Cell and Environment*, **1999**, 22, 841-849	8.4	117
123	Photosynthetic nitrogen-use efficiency in leaves of woody and herbaceous species. *Functional Ecology*, **1998**, 12, 896-905	5.6	106
122	Acclimation and adaptation components of the temperature dependence of plant photosynthesis at the global scale. *New Phytologist*, **2019**, 222, 768-784	9.8	99
121	The role of Rubisco and cell walls in the interspecific variation in photosynthetic capacity. *Oecologia* , **2009**, 160, 443-51	2.9	94
120	A model of dynamics of leaves and nitrogen in a plant canopy: an integration of canopy photosynthesis, leaf life span, and nitrogen use efficiency. *American Naturalist*, **2003**, 162, 149-64	3.7	94
119	Leaf nitrogen distribution in relation to leaf age and photon flux density in dominant and subordinate plants in dense stands of a dicotyledonous herb. *Oecologia*, **1998**, 113, 314-324	2.9	92
118	Leaf angle as a strategy for light competition: Optimal and evolutionarily stable light-extinction coefficient within a leaf canopy. *Ecoscience*, **1997**, 4, 501-507	1.1	88
117	Light acquisition and use by individuals competing in a dense stand of an annual herb, Xanthium canadense. *Oecologia*, **1999**, 118, 388-396	2.9	87
116	Effects of leaf age, nitrogen nutrition and photon flux density on the organization of the photosynthetic apparatus in leaves of a vine (Ipomoea tricolor Cav.) grown horizontally to avoid mutual shading of leaves. *Planta*, **1996**, 198, 144	4.7	87
115	Seasonal change in the balance between capacities of RuBP carboxylation and RuBP regeneration affects CO2 response of photosynthesis in Polygonum cuspidatum. *Journal of Experimental Botany*, **2005**, 56, 755-63	7	81
114	Cold-tolerant crop species have greater temperature homeostasis of leaf respiration and photosynthesis than cold-sensitive species. *Plant and Cell Physiology*, **2009**, 50, 203-15	4.9	77
113	The balance between RuBP carboxylation and RuBP regeneration: a mechanism underlying the interspecific variation in acclimation of photosynthesis to seasonal change in temperature. *Functional Plant Biology*, **2005**, 32, 903-910	2.7	75
112	Global dependence of field-observed leaf area index in woody species on climate: a systematic review. *Global Ecology and Biogeography*, **2014**, 23, 274-285	6.1	70
111	Modelling Optimal Temperature Acclimation of the Photosynthetic Apparatus in C3Plants with Respect to Nitrogen Use. *Annals of Botany*, **1997**, 80, 721-730	4.1	70
110	Leaf anatomy and light acclimation in woody seedlings after gap formation in a cool-temperate deciduous forest. *Oecologia*, **2006**, 149, 571-82	2.9	68

109	Nitrogen partitioning in the photosynthetic apparatus of Plantago asiatica leaves grown under different temperature and light conditions: similarities and differences between temperature and light acclimation. *Plant and Cell Physiology*, **2005**, 46, 1283-90	4.9	62
108	Photosynthetic rates and partitioning of absorbed light energy in photoinhibited leaves. *Physiologia Plantarum*, **2004**, 121, 699-708	4.6	60
107	Light partitioning among species and species replacement in early successional grasslands. *Journal of Vegetation Science*, **2002**, 13, 615-626	3.1	55
106	Plants in a crowded stand regulate their height growth so as to maintain similar heights to neighbours even when they have potential advantages in height growth. *Annals of Botany*, **2011**, 108, 207-14	4.1	54
105	Photosynthesis□nitrogen relationships in species at different altitudes on Mount Kinabalu, Malaysia. *Ecological Research*, **2002**, 17, 305-313	1.9	54
104	Photosynthetic nitrogen-use efficiency in evergreen broad-leaved woody species coexisting in a warm-temperate forest. *Tree Physiology*, **2000**, 20, 1249-1254	4.2	53
103	Optimal nitrogen distribution within a leaf canopy under direct and diffuse light. *Plant, Cell and Environment*, **2014**, 37, 2077-85	8.4	52
102	Resource allocation to vegetative and reproductive growth in relation to mast seeding in Fagus crenata. *Forest Ecology and Management*, **2006**, 229, 228-233	3.9	52
101	Leaf-level nitrogen-use efficiency of canopy and understorey species in a beech forest. *Functional Ecology*, **2002**, 16, 826-834	5.6	48
100	Seasonal changes in temperature dependence of photosynthetic rate in rice under a free-air CO(2) enrichment. *Annals of Botany*, **2006**, 97, 549-57	4.1	47
99	Leaf lifespan and lifetime carbon balance of individual leaves in a stand of an annual herb, Xanthium canadense. *New Phytologist*, **2006**, 172, 104-16	9.8	47
98	A meta-analysis of leaf nitrogen distribution within plant canopies. *Annals of Botany*, **2016**, 118, 239-47	4.1	45
97	Seasonal changes in photosynthesis, nitrogen content and nitrogen partitioning in Lindera umbellata leaves grown in high or low irradiance. *Tree Physiology*, **2006**, 26, 1315-23	4.2	43
96	Seasonal changes in light and temperature affect the balance between light harvesting and light utilisation components of photosynthesis in an evergreen understory shrub. *Oecologia*, **2005**, 143, 501-8	2.9	42
95	Nitrogen uptake and use by competing individuals in a Xanthium canadense stand. *Oecologia*, **2001**, 126, 174-181	2.9	42
94	Leaf and canopy photosynthesis of C3 plants at elevated CO2 in relation to optimal partitioning of nitrogen among photosynthetic components: theoretical prediction. *Ecological Modelling*, **1998**, 106, 247-259	3	40
93	Seasonal changes in the temperature response of photosynthesis in canopy leaves of Quercus crispula in a cool-temperate forest. *Tree Physiology*, **2007**, 27, 1035-41	4.2	40
92	A Genome Scan for Genes Underlying Microgeographic-Scale Local Adaptation in a Wild Arabidopsis Species. *PLoS Genetics*, **2015**, 11, e1005361	6	38

91	Does leaf photosynthesis adapt to CO2-enriched environments? An experiment on plants originating from three natural CO2 springs. *New Phytologist*, **2009**, 182, 698-709	9.8	37
90	Effects of virus infection and growth irradiance on fitness components and photosynthetic properties of Eupatorium makinoi (Compositae). *American Journal of Botany*, **1997**, 84, 823-829	2.7	35
89	Intraspecific variation in temperature dependence of gas exchange characteristics among Plantago asiatica ecotypes from different temperature regimes. *New Phytologist*, **2007**, 176, 356-364	9.8	35
88	Biomass allocation and leaf chemical defence in defoliated seedlings of Quercus serrata with respect to carbon-nitrogen balance. *Annals of Botany*, **2005**, 95, 1025-32	4.1	34
87	Mechanisms underlying interspecific variation in photosynthetic capacity across wild plant species. *Plant Biotechnology*, **2010**, 27, 223-229	1.3	33
86	Does leaf shedding increase the whole-plant carbon gain despite some nitrogen being lost with shedding?. *New Phytologist*, **2008**, 178, 617-24	9.8	33
85	Elevated CO2 concentration, nitrogen use, and seed production in annual plants. *Global Change Biology*, **2007**, 13, 2161-2170	11.4	32
84	Plant responses to elevated CO2 concentration at different scales: leaf, whole plant, canopy, and population. *Ecological Research*, **2005**, 20, 243-253	1.9	32
83	Habitat filtering determines the functional niche occupancy of plant communities worldwide. *Journal of Ecology*, **2018**, 106, 1001-1009	6	31
82	Contribution of photosynthetic electron transport, heat dissipation, and recovery of photoinactivated photosystem II to photoprotection at different temperatures in Chenopodium album leaves. *Plant and Cell Physiology*, **2003**, 44, 828-35	4.9	30
81	The leaf anatomy of a broad-leaved evergreen allows an increase in leaf nitrogen content in winter. *Physiologia Plantarum*, **2009**, 136, 299-309	4.6	29
80	Effects of elevated CO2 concentration on seed production in C3 annual plants. *Journal of Experimental Botany*, **2011**, 62, 1523-30	7	29
79	Nitrogen resorption and protein degradation during leaf senescence in Chenopodium album grown in different light and nitrogen conditions. *Functional Plant Biology*, **2007**, 34, 409-417	2.7	29
78	Light-acquisition and use of individuals as influenced by elevated CO2 in even-aged monospecific stands of Chenopodium album. *Functional Ecology*, **2003**, 17, 786-795	5.6	29
77	Effect of elevated CO2 levels on leaf starch, nitrogen and photosynthesis of plants growing at three natural CO2 springs in Japan. *Ecological Research*, **2007**, 22, 475-484	1.9	28
76	Nitrogen resorption from leaves under different growth irradiance in three deciduous woody species. *Plant Ecology*, **2005**, 178, 29-37	1.7	27
75	Optimal use of leaf nitrogen explains seasonal changes in leaf nitrogen content of an understorey evergreen shrub. *Annals of Botany*, **2011**, 108, 529-36	4.1	26
74	Light interception in species with different functional groups coexisting in moorland plant communities. *Oecologia*, **2010**, 164, 591-9	2.9	26

73	Costs and benefits of photosynthetic light acclimation by tree seedlings in response to gap formation. *Oecologia*, **2008**, 155, 665-75	2.9	25
72	Increase in leaf mass per area benefits plant growth at elevated CO2 concentration. *Annals of Botany*, **2003**, 91, 905-14	4.1	25
71	Photoinactivation and recovery of photosystem II in Chenopodium album leaves grown at different levels of irradiance and nitrogen availability. *Functional Plant Biology*, **2002**, 29, 787-795	2.7	25
70	A paradox of leaf-trait convergence: why is leaf nitrogen concentration higher in species with higher photosynthetic capacity?. *Journal of Plant Research*, **2009**, 122, 245-51	2.6	24
69	Optimality of nitrogen distribution among leaves in plant canopies. *Journal of Plant Research*, **2016**, 129, 299-311	2.6	24
68	Vulnerability of moorland plant communities to environmental change: consequences of realistic species loss on functional diversity. *Journal of Applied Ecology*, **2014**, 51, 299-308	5.8	23
67	Reproductive allocation of an annual, Xanthium canadense, at an elevated carbon dioxide concentration. *Oecologia*, **2003**, 137, 1-9	2.9	23
66	Physiological validation of photochemical reflectance index (PRI) as a photosynthetic parameter using Arabidopsis thaliana mutants. *Biochemical and Biophysical Research Communications*, **2018**, 498, 52-57	3.4	21
65	Effects of seasonal change and experimental warming on the temperature dependence of photosynthesis in the canopy leaves of Quercus serrata. *Tree Physiology*, **2016**, 36, 1283-1295	4.2	21
64	Modeling Canopy Photosynthesis. *Advances in Photosynthesis and Respiration*, **2016**, 239-268	1.7	20
63	Phenotypic and genetic differences in a perennial herb across a natural gradient of CO2 concentration. *Oecologia*, **2011**, 165, 809-18	2.9	20
62	An evolutionary game of leaf dynamics and its consequences for canopy structure. *Functional Ecology*, **2012**, 26, 1024-1032	5.6	19
61	Not only light quality but also mechanical stimuli are involved in height convergence in crowded Chenopodium album stands. *New Phytologist*, **2012**, 195, 803-811	9.8	19
60	Effects of atmospheric CO2 concentration, irradiance, and soil nitrogen availability on leaf photosynthetic traits of Polygonum sachalinense around natural CO2 springs in northern Japan. *Oecologia*, **2010**, 164, 41-52	2.9	19
59	Relationships between photosynthetic activity and silica accumulation with ages of leaf in Sasa veitchii (Poaceae, Bambusoideae). *Annals of Botany*, **2008**, 101, 463-8	4.1	19
58	Leaf discs floated on water are different from intact leaves in photosynthesis and photoinhibition. *Photosynthesis Research*, **2002**, 72, 65-70	3.7	19
57	Dynamics of leaf area and nitrogen in the canopy of an annual herb, Xanthium canadense. *Oecologia*, **2005**, 143, 517-26	2.9	19
56	A simple formulation of interaction between individuals competing for light in a monospecific stand. *Functional Ecology*, **2001**, 15, 642-646	5.6	19

55	Functional differentiation in UV-B-induced DNA damage and growth inhibition between highland and lowland ecotypes of two Arabidopsis species. *Environmental and Experimental Botany*, **2016**, 131, 110-119	5.9	19
54	Is UV-induced DNA damage greater at higher elevation?. *American Journal of Botany*, **2014**, 101, 796-802	2.7	17
53	Nestedness and niche-based species loss in moorland plant communities. *Oikos*, **2012**, 121, 1783-1790	4	17
52	Homeostasis of the temperature sensitivity of respiration over a range of growth temperatures indicated by a modified Arrhenius model. *New Phytologist*, **2015**, 207, 34-42	9.8	17
51	Modeling Leaf Gas Exchange. *Advances in Photosynthesis and Respiration*, **2016**, 61-100	1.7	16
50	Dividing the pie: A quantitative review on plant density responses. *Plant, Cell and Environment*, **2021**, 44, 1072-1094	8.4	16
49	The effect of interspecific variation in photosynthetic plasticity on 4-year growth rate and 8-year survival of understorey tree seedlings in response to gap formations in a cool-temperate deciduous forest. *Tree Physiology*, **2017**, 37, 1113-1127	4.2	15
48	Cost?benefit relationships in fronds emerging at different times in a deciduous fern, Pteridium aquilinum. *Canadian Journal of Botany*, **2004**, 82, 521-527		15
47	Effects of elevated CO2 on the size structure in even-aged monospecific stands of Chenopodium album. *Global Change Biology*, **2003**, 9, 619-629	11.4	15
46	Variations in leaf economics spectrum traits for an evergreen coniferous species: Tree size dominates over environment factors. *Functional Ecology*, **2020**, 34, 458-467	5.6	15
45	Nitrogen Distribution in Leaf Canopies of High-Yielding Rice Cultivar Takanari. *Crop Science*, **2017**, 57, 2080-2088	2.4	14
44	Diversity partitioning of moorland plant communities across hierarchical spatial scales. *Biodiversity and Conservation*, **2012**, 21, 1577-1588	3.4	14
43	Needle traits of an evergreen, coniferous shrub growing at wind-exposed and protected sites in a mountain region: does Pinus pumila produce needles with greater mass per area under wind-stress conditions?. *Plant Biology*, **2009**, 11 Suppl 1, 94-100	3.7	14
42	Reproductive yield of individuals competing for light in a dense stand of an annual, Xanthium canadense. *Oecologia*, **2008**, 157, 185-95	2.9	14
41	Ultraviolet-B-induced DNA damage and ultraviolet-B tolerance mechanisms in species with different functional groups coexisting in subalpine moorlands. *Oecologia*, **2016**, 181, 1069-82	2.9	13
40	Leaf-trait responses to environmental gradients in moorland communities: contribution of intraspecific variation, species replacement and functional group replacement. *Ecological Research*, **2014**, 29, 607-617	1.9	12
39	Interactions between elevated CO2 and N2-fixation determine soybean yield□ test using a non-nodulated mutant. *Plant and Soil*, **2010**, 330, 163-172	4.2	11
38	Variations in Species Composition of Moorland Plant Communities Along Environmental Gradients Within a Subalpine Zone in Northern Japan. *Wetlands*, **2013**, 33, 269-277	1.7	10

37	Modeling leaf CO assimilation and Photosystem II photochemistry from chlorophyll fluorescence and the photochemical reflectance index. *Plant, Cell and Environment*, **2019**, 42, 730-739	8.4	10
36	Which plant trait explains the variations in relative growth rate and its response to elevated carbon dioxide concentration among Arabidopsis thaliana ecotypes derived from a variety of habitats?. *Oecologia*, **2016**, 180, 865-76	2.9	9
35	Polygonum sachalinense alters the balance between capacities of regeneration and carboxylation of ribulose-1,5-bisphosphate in response to growth CO2 increment but not the nitrogen allocation within the photosynthetic apparatus. *Physiologia Plantarum*, **2012**, 146, 404-12	4.6	9
34	Environmental dependence of population dynamics and height growth of a subalpine conifer across its vertical distribution: an approach using high-resolution aerial photographs. *Global Change Biology*, **2011**, 17, 3431-3438	11.4	9
33	Effects of elevated CO2 on leaf area dynamics in nodulating and non-nodulating soybean stands. *Plant and Soil*, **2013**, 373, 627-639	4.2	8
32	Why does Viola hondoensis (Violaceae) shed its winter leaves in spring?. *American Journal of Botany* , **2010**, 97, 1944-50	2.7	8
31	Seasonal change in light partitioning among coexisting species of different functional groups along elevation gradient in subalpine moorlands. *New Phytologist*, **2014**, 204, 913-23	9.8	7
30	Limitation in the Photosynthetic Acclimation to High Temperature in Canopy Leaves of Quercus serrata. *Frontiers in Forests and Global Change*, **2019**, 2,	3.7	6
29	Carbon balance in a monospecific stand of an annual herb Chenopodium album at an elevated CO2 concentration. *Plant Ecology*, **2009**, 203, 33-44	1.7	6
28	Photosynthesis, chlorophyll fluorescence and photochemical reflectance index in photoinhibited leaves. *Functional Plant Biology*, **2021**, 48, 815-826	2.7	6
27	Pinus pumila Photosynthesis Is Suppressed by Water Stress in a Wind-Exposed Mountain Site. *Arctic, Antarctic, and Alpine Research*, **2013**, 45, 229-237	1.8	5
26	Respiration and reproductive effort in Xanthium canadense. *Annals of Botany*, **2005**, 96, 81-9	4.1	5
25	Linking remote sensing parameters to CO assimilation rates at a leaf scale. *Journal of Plant Research*, **2021**, 134, 695-711	2.6	5
24	Nitrogen resorption in senescing leaf blades of rice exposed to free-air CO2 enrichment (FACE) under different N fertilization levels. *Plant and Soil*, **2017**, 418, 231-240	4.2	4
23	Plasticity of functional traits and optimality of biomass allocation in elevational ecotypes of Arabidopsis halleri grown at different soil nutrient availabilities. *Journal of Plant Research*, **2019**, 132, 237-249	2.6	4
22	Mutant selection in the self-incompatible plant radish (L.) using two-step TILLING. *Breeding Science* , **2017**, 67, 268-276	2	4
21	Light partitioning among species and species replacement in early successional grasslands **2002**, 13, 615		4
20	Corrected photochemical reflectance index (PRI) is an effective tool for detecting environmental stresses in agricultural crops under light conditions. *Journal of Plant Research*, **2021**, 134, 683-694	2.6	4

19	The role of biomass allocation between lamina and petioles in a game of light competition in a dense stand of an annual plant. *Annals of Botany*, **2018**, 121, 1055-1064	4.1	3
18	Dependence of functional traits related to growth rates and their CO response on multiple habitat climate factors across Arabidopsis thaliana populations. *Journal of Plant Research*, **2018**, 131, 987-999	2.6	3
17	Plant responses to elevated CO2 concentration at different scales: leaf, whole plant, canopy, and population **2005**, 3-13		3
16	The latitudinal and altitudinal variations in the biochemical mechanisms of temperature dependence of photosynthesis within Fallopia japonica. *Environmental and Experimental Botany*, **2021**, 181, 104248	5.9	3
15	Intraspecific variations in leaf traits, productivity and resource use efficiencies in the dominant species of subalpine evergreen coniferous and deciduous broad-leaved forests along the altitudinal gradient. *Journal of Ecology*, **2021**, 109, 1804-1818	6	3
14	Decades-long effects of high CO2 concentration on soil nitrogen dynamics at a natural CO2 spring. *Ecological Research*, **2017**, 32, 215-225	1.9	2
13	Plant-plant interactions mediate the plastic and genotypic response of Plantago asiatica to CO2: an experiment with plant populations from naturally high CO2 areas. *Annals of Botany*, **2016**, 117, 1197-207	4.1	2
12	Temperature-related cline in the root mass fraction in East Asian wild radish along the Japanese archipelago. *Breeding Science*, **2020**, 70, 321-330	2	2
11	Estimating leaf photosynthesis of C plants grown under different environments from pigment index, photochemical reflectance index, and chlorophyll fluorescence. *Photosynthesis Research*, **2021**, 148, 33-46	3.7	2
10	Functional shifts in leaves of woody invaders of deciduous forests between their home and away ranges. *Tree Physiology*, **2019**, 39, 1551-1560	4.2	1
9	Terrestrial Ecosystems in Monsoon Asia: Scaling up from Shoot Module to Watershed **2007**, 285-296		1
8	Influences of Climate Change on the Distribution and Population Dynamics of Subalpine Coniferous Forest in the Hakkoda Mountains, Northern Japan. *Structure and Function of Mountain Ecosystems in Japan*, **2016**, 1-15	0.1	1
7	Plant size, environmental factors and functional traits jointly shape the stem radius growth rate in an evergreen coniferous species across ontogenetic stages. *Journal of Plant Ecology*, **2021**, 14, 257-269	1.7	1
6	Potential extinction debt due to habitat loss and fragmentation in subalpine moorland ecosystems. *Plant Ecology*, **2021**, 222, 445-457	1.7	1
5	Photosynthetic and Photosynthesis-Related Responses of Japanese Native Trees to CO2: Results from Phytotrons, Open-Top Chambers, Natural CO2 Springs, and Free-Air CO2 Enrichment. *Advances in Photosynthesis and Respiration*, **2018**, 425-449	1.7	1
4	Leaf density and chemical composition explain variation in leaf mass area with spectral composition among 11 widespread forbs in a common garden. *Physiologia Plantarum*, **2021**, 173, 698-708	4.6	0
3	Enhanced growth rate under elevated CO conditions was observed for transgenic lines of genes identified by intraspecific variation analyses in Arabidopsis thaliana.. *Plant Molecular Biology*, **2022**, 1	4.6	0
2	Resource Allocation and Trade-Offs in Carbon Gain of Leaves Under Changing Environment. *Plant Ecophysiology*, **2014**, 1-24		

1 Trait-Based Approaches for Understanding Species Niche, Coexistence, and Functional Diversity in Subalpine Moorlands. *Structure and Function of Mountain Ecosystems in Japan*, **2016**, 17-40 0.1