Ko Noguchi

List of Publications by Year
in descending order

101 papers	5,303 citations	61984 43 h-index	91884 69 g-index
104 all docs	104 docs citations	104 times ranked	5217 citing authors

#	Article	IF	Citations
1	Interaction between photosynthesis and respiration in illuminated leaves. Mitochondrion, 2008, 8, 87-99.	3.4	279
2	Temperature acclimation of photosynthesis in spinach leaves: analyses of photosynthetic components and temperature dependencies of photosynthetic partial reactions. Plant, Cell and Environment, 2005, 28, 536-547.	5.7	212
3	Roles of the Cyclic Electron Flow Around PSI (CEF-PSI) and O2-Dependent Alternative Pathways in Regulation of the Photosynthetic Electron Flow in Short-Term Fluctuating Light in Arabidopsis thaliana. Plant and Cell Physiology, 2014, 55, 990-1004.	3.1	204
4	Up-Regulation of Mitochondrial Alternative Oxidase Concomitant with Chloroplast Over-Reduction by Excess Light. Plant and Cell Physiology, 2007, 48, 606-614.	3.1	191
5	Effects of Rubisco kinetics and Rubisco activation state on the temperature dependence of the photosynthetic rate in spinach leaves from contrasting growth temperatures. Plant, Cell and Environment, 2006, 29, 1659-1670.	5.7	189
6	Overexpression of plasma membrane H ⁺ -ATPase in guard cells promotes light-induced stomatal opening and enhances plant growth. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 533-538.	7.1	179
7	Phenotypic Plasticity in Photosynthetic Temperature Acclimation among Crop Species with Different Cold Tolerances Â Â. Plant Physiology, 2009, 152, 388-399.	4.8	155
8	Nitrate Addition Alleviates Ammonium Toxicity Without Lessening Ammonium Accumulation, Organic Acid Depletion and Inorganic Cation Depletion in Arabidopsis thaliana Shoots. Plant and Cell Physiology, 2012, 53, 577-591.	3.1	151
9	Effects of Internal Conductance on the Temperature Dependence of the Photosynthetic Rate in Spinach Leaves from Contrasting Growth Temperatures. Plant and Cell Physiology, 2006, 47, 1069-1080.	3.1	145
10	The chloroplast avoidance response decreases internal conductance to CO₂ diffusion in Arabidopsis thaliana leaves. Plant, Cell and Environment, 2008, 31, 1688-1700.	5.7	144
11	The rice nuclear gene, VIRESCENT 2, is essential for chloroplast development and encodes a novel type of guanylate kinase targeted to plastids and mitochondria. Plant Journal, 2007, 52, 512-527.	5.7	126
12	The lack of alternative oxidase at low temperature leads to a disruption of the balance in carbon and nitrogen metabolism, and to an upâ€regulation of antioxidant defence systems in Arabidopsis thaliana leaves. Plant, Cell and Environment, 2008, 31, 1190-1202.	5.7	123
13	Distinct Roles of the Cytochrome Pathway and Alternative Oxidase in Leaf Photosynthesis. Plant and Cell Physiology, 2006, 47, 22-31.	3.1	112
14	Systematic Exploration of Thioredoxin Target Proteins in Plant Mitochondria. Plant and Cell Physiology, 2013, 54, 875-892.	3.1	111
15	Effects of Carbohydrate Accumulation on Photosynthesis Differ between Sink and Source Leaves of Phaseolus vulgaris L.. Plant and Cell Physiology, 2006, 47, 644-652.	3.1	96
16	Photosynthesis of Root Chloroplasts Developed in Arabidopsis Lines Overexpressing GOLDEN2-LIKE Transcription Factors. Plant and Cell Physiology, 2013, 54, 1365-1377.	3.1	94
17	Differential Gene Expression Profiles of the Mitochondrial Respiratory Components in Illuminated Arabidopsis Leaves. Plant and Cell Physiology, 2009, 50, 1449-1462.	3.1	91
18	Cold-Tolerant Crop Species Have Greater Temperature Homeostasis of Leaf Respiration and Photosynthesis Than Cold-Sensitive Species. Plant and Cell Physiology, 2009, 50, 203-215.	3.1	88

#	Article	IF	Citations
19	Rice MPR25 encodes a pentatricopeptide repeat protein and is essential for RNA editing of nad5 transcripts in mitochondria. Plant Journal, 2012, 72, 450-460.	5.7	86
20	The cause of PSI photoinhibition at low temperatures in leaves of Cucumis sativus , a chilling-sensitive plant. Physiologia Plantarum, 1998, 103, 295-303.	5.2	81
21	Response of mitochondria to light intensity in the leaves of sun and shade species. Plant, Cell and Environment, 2005, 28, 760-771.	5.7	79
22	Apoplastic mesophyll signals induce rapid stomatal responses to <scp>CO</scp>₂ in <scp>C</scp>ommelina communis. New Phytologist, 2013, 199, 395-406.	7.3	77
23	Effects of growth light and nitrogen nutrition on the organization of the photosynthetic apparatus in leaves of a C4 plant, Amaranthus cruentus. Plant, Cell and Environment, 2006, 29, 691-700.	5.7	76
24	Effects of Elevated CO2 on Levels of Primary Metabolites and Transcripts of Genes Encoding Respiratory Enzymes and Their Diurnal Patterns in Arabidopsis thaliana: Possible Relationships with Respiratory Rates. Plant and Cell Physiology, 2014, 55, 341-357.	3.1	75
25	Responses of spinach leaf mitochondria to low N availability. Plant, Cell and Environment, 2006, 29, 710-719.	5.7	68
26	Relationships Between Quantum Yield for CO2 Assimilation, Activity of Key Enzymes and CO2 Leakiness in Amaranthus cruentus, a C4 Dicot, Grown in High or Low Light. Plant and Cell Physiology, 2008, 49, 19-29.	3.1	68
27	High CO2 Triggers Preferential Root Growth of Arabidopsis thaliana Via Two Distinct Systems Under Low pH and Low N Stresses. Plant and Cell Physiology, 2014, 55, 269-280.	3.1	68
28	Effect of respiratory homeostasis on plant growth in cultivars of wheat and rice. Plant, Cell and Environment, 2004, 27, 853-862.	5.7	67
29	Influence of Chloroplastic Photo-Oxidative Stress on Mitochondrial Alternative Oxidase Capacity and Respiratory Properties: A Case Study with Arabidopsis yellow variegated 2. Plant and Cell Physiology, 2008, 49, 592-603.	3.1	66
30	Distinct responses of the mitochondrial respiratory chain to longâ€•and shortâ€•term highâ€•light environments in Arabidopsis thaliana. Plant, Cell and Environment, 2011, 34, 618-628.	5.7	65
31	Effects of polyploidy on photosynthetic properties and anatomy in leaves of Phlox drummondii. Functional Plant Biology, 2007, 34, 673.	2.1	63
32	Distinct light responses of the adaxial and abaxial stomata in intact leaves of Helianthus annuus L.. Plant, Cell and Environment, 2008, 31, 1307-1316.	5.7	60
33	Different regulation of leaf respiration between Spinacia oleracea, a sun species, and Alocasia odora, a shade species. Physiologia Plantarum, 1997, 101, 1-7.	5.2	57
34	The Role of Electron Transport in Determining the Temperature Dependence of the Photosynthetic Rate in Spinach Leaves Grown at Contrasting Temperatures. Plant and Cell Physiology, 2008, 49, 583-591.	3.1	56
35	Mesophyll conductance decreases in the wild type but not in an <scp>ABA</scp>â€•deficient mutant (<scp>aba1</scp>) of <scp>N</scp>icotiana plumbaginifolia under drought conditions. Plant, Cell and Environment, 2015, 38, 388-398.	5.7	55
36	Effects of AOX1a Deficiency on Plant Growth, Gene Expression of Respiratory Components and Metabolic Profile Under Low-Nitrogen Stress in Arabidopsis thaliana. Plant and Cell Physiology, 2010, 51, 810-822.	3.1	53

#	Article	IF	Citations
37	Physiological impact of mitochondrial alternative oxidase on photosynthesis and growth in Arabidopsis thaliana. Plant, Cell and Environment, 2011, 34, 1890-1899.	5.7	53
38	NDH-Mediated Cyclic Electron Flow Around Photosystem I is Crucial for C₄Photosynthesis. Plant and Cell Physiology, 2016, 57, 2020-2028.	3.1	53
39	Photosynthesis-Dependent and -Independent Responses of Stomata to Blue, Red and Green Monochromatic Light: Differences Between the Normally Oriented and Inverted Leaves of Sunflower. Plant and Cell Physiology, 2011, 52, 479-489.	3.1	52
40	Evidence for a nitrate-independent function of the nitrate sensor NRT1.1 in Arabidopsis thaliana. Journal of Plant Research, 2011, 124, 425-430.	2.4	51
41	Acclimation of Respiratory Properties of Leaves of Spinacia oleracea L., a Sun Species, and of Alocasia macrorrhiza (L.) G. Don., a Shade Species, to Changes in Growth Irradiance. Plant and Cell Physiology, 1996, 37, 377-384.	3.1	50
42	Acclimation of leaf respiratory properties in Alocasia odora following reciprocal transfers of plants between high- and low-light environments. Plant, Cell and Environment, 2001, 24, 831-839.	5.7	50
43	Increase in respiratory cost at high growth temperature is attributed to high protein turnover cost in Petuniaï¿½×hybrida petals. Plant, Cell and Environment, 2007, 30, 1269-1283.	5.7	50
44	Ammoniumâ€dependent respiratory increase is dependent on the cytochrome pathway in Arabidopsis thaliana shoots. Plant, Cell and Environment, 2010, 33, 1888-1897.	5.7	47
45	Effect of nitrogen nutrition on the carbohydrate repression of photosynthesis in leaves of Phaseolus vulgaris L.. Journal of Plant Research, 2010, 123, 371-379.	2.4	46
46	Maintenance of Growth Rate at Low Temperature in Rice and Wheat Cultivars with a High Degree of Respiratory Homeostasis is Associated with a High Efficiency of Respiratory ATP Production. Plant and Cell Physiology, 2004, 45, 1015-1022.	3.1	45
47	Mitochondrial Alternative Pathway-Associated Photoprotection of Photosystem II is Related to the Photorespiratory Pathway. Plant and Cell Physiology, 2016, 57, pcw036.	3.1	40
48	Tolerant mechanisms to O2 deficiency under submergence conditions in plants. Journal of Plant Research, 2020, 133, 343-371.	2.4	40
49	Simultaneous Determination of In Vivo Plastoquinone and Ubiquinone Redox States by HPLC-Based Analysis. Plant and Cell Physiology, 2010, 51, 836-841.	3.1	39
50	Two CLE genes are induced by phosphate in roots of Lotus japonicus. Journal of Plant Research, 2011, 124, 155-163.	2.4	39
51	Cost and benefit of the repair of photodamaged photosystem II in spinach leaves: roles of acclimation to growth light. Photosynthesis Research, 2012, 113, 165-180.	2.9	38
52	Optimum leaf size predicted by a novel leaf energy balance model incorporating dependencies of photosynthesis on light and temperature. Ecological Research, 2012, 27, 333-346.	1.5	37
53	Phosphorus toxicity disrupts Rubisco activation and reactive oxygen species defence systems by phytic acid accumulation in leaves. Plant, Cell and Environment, 2020, 43, 2033-2053.	5.7	32
54	Manipulation of light and CO₂ environments of the primary leaves of bean (Phaseolus) Tj ETQq0 0 0 rgBT /Overlock 10 T of systemic regulation. Plant, Cell and Environment, 2008, 31, 50-61.	5.7	30

#	Article	IF	Citations
55	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.	7.3	27
56	Comparison of the response to phosphorus deficiency in two lupin species, <scp>L</scp>upinus albus and <scp>L</scp>.â€‰angustifolius, with contrasting root morphology. Plant, Cell and Environment, 2015, 38, 399-410.	5.7	27
57	Integrative response of plant mitochondrial electron transport chain to nitrogen source. Plant Cell Reports, 2011, 30, 195-204.	5.6	26
58	Effects of Elevated Atmospheric CO₂on Primary Metabolite Levels inArabidopsis thalianaCol-0 Leaves: An Examination of Metabolome Data. Plant and Cell Physiology, 2015, 56, pcv125.	3.1	26
59	Maintenance mechanisms of the pipe model relationship and Leonardo da Vinciâ€™s rule in the branching architecture of Acer rufinerve trees. Journal of Plant Research, 2009, 122, 41-52.	2.4	24
60	How and why does mitochondrial respiratory chain respond to light?. Plant Signaling and Behavior, 2011, 6, 864-866.	2.4	24
61	Effects of instantaneous and growth CO 2 levels and abscisic acid on stomatal and mesophyll conductances. Plant, Cell and Environment, 2019, 42, 1257-1269.	5.7	23
62	Effects of Light Intensity and Carbohydrate Status on Leaf and Root Respiration. , 2005, , 63-83.		21
63	Mitochondrial AOX Supports Redox Balance of Photosynthetic Electron Transport, Primary Metabolite Balance, and Growth in Arabidopsis thaliana under High Light. International Journal of Molecular Sciences, 2019, 20, 3067.	4.1	21
64	The Mitochondrial Respiratory Chain Maintains the Photosynthetic Electron Flow in Arabidopsis thaliana Leaves under High-Light Stress. Plant and Cell Physiology, 2020, 61, 283-295.	3.1	21
65	Costs of protein turnover and carbohydrate export in leaves of sun and shade species. Functional Plant Biology, 2001, 28, 37.	2.1	20
66	Activities of the cyanide-resistant respiratory pathway in leaves of sun and shade species. Functional Plant Biology, 2001, 28, 27.	2.1	20
67	Impaired Cyclic Electron Flow around Photosystem I Disturbs High-Light Respiratory Metabolism. Plant Physiology, 2016, 172, 2176-2189.	4.8	20
68	Dependency of branch diameter growth in young Acer trees on light availability and shoot elongation. Tree Physiology, 2005, 25, 39-48.	3.1	18
69	Modeling Leaf Gas Exchange. Advances in Photosynthesis and Respiration, 2016, , 61-100.	1.0	17
70	Confirmation of mesophyll signals controlling stomatal responses by a newly devised transplanting method. Functional Plant Biology, 2019, 46, 467.	2.1	17
71	Mutation of NRT1.1 enhances ammonium/low pH-tolerance in Arabiopsis thaliana. Plant Signaling and Behavior, 2011, 6, 706-708.	2.4	16
72	Influence of a Modified Atmosphere on the Induction and Activity of Respiratory Enzymes in Broccoli Florets during the Early Stage of Postharvest Storage. Journal of Agricultural and Food Chemistry, 2017, 65, 8538-8543.	5.2	16

#	Article	IF	Citations
73	Effects of Elevated Atmospheric CO2 on Respiratory Rates in Mature Leaves of Two Rice Cultivars Grown at a Free-Air CO2 Enrichment Site and Analyses of the Underlying Mechanisms. Plant and Cell Physiology, 2018, 59, 637-649.	3.1	16
74	P700 oxidation suppresses the production of reactive oxygen species in photosystem I. Advances in Botanical Research, 2020, 96, 151-176.	1.1	15
75	Local Anesthetics and Antipsychotic Phenothiazines Interact Nonspecifically with Membranes and Inhibit Hexose Transporters in Yeast. Genetics, 2016, 202, 997-1012.	2.9	14
76	Interaction Between Chloroplasts and Mitochondria: Activity, Function, and Regulation of the Mitochondrial Respiratory System during Photosynthesis. , 2011, , 383-409.		13
77	Oxalate contents in leaves of two rice cultivars grown at a free-air CO₂enrichment (FACE) site. Plant Production Science, 2019, 22, 407-411.	2.0	13
78	Photochemistry of Photosystems II and I in Rice Plants Grown under Different N Levels at Normal and High Temperature. Plant and Cell Physiology, 2021, 62, 1121-1130.	3.1	13
79	Mechanical and ecophysiological significance of the form of a young Acer rufinerve tree: vertical gradient in branch mechanical properties. Tree Physiology, 2006, 26, 1549-1558.	3.1	12
80	Effects of root morphology, respiration and carboxylate exudation on carbon economy in two nonâ€mycorrhizal lupines under phosphorus deficiency. Plant, Cell and Environment, 2021, 44, 598-612.	5.7	12
81	Effect of growth temperature and total nonâ€structural carbohydrate accumulation on growth coefficient in Petuniaâ€ƒÃ—â€ƒhybrida petals. Physiologia Plantarum, 2008, 134, 293-302.	5.2	11
82	Inhibition of mitochondrial complex I by the novel compound FSL0260 enhances high salinity-stress tolerance in Arabidopsis thaliana. Scientific Reports, 2020, 10, 8691.	3.3	11
83	Temperature-dependent fasciation mutants provide a link between mitochondrial RNA processing and lateral root morphogenesis. ELife, 2021, 10, .	6.0	11
84	Arabidopsis Phosphatidic Acid Phosphohydrolases Are Essential for Growth under Nitrogen-Depleted Conditions. Frontiers in Plant Science, 2017, 8, 1847.	3.6	10
85	Distinct responses of growth and respiration to growth temperatures in two mangrove species. Annals of Botany, 2022, 129, 15-28.	2.9	9
86	Theoretical analysis of a temperatureâ€dependent model of respiratory O₂ consumption using the kinetics of the cytochrome and alternative pathways. New Phytologist, 2021, 229, 1810-1821.	7.3	8
87	Patterns of photoassimilate translocation to reproductive shoots from adjacent shoots in Camellia sasanqua by manipulation of sink-source balance between the shoots. Journal of Plant Research, 2011, 124, 131-136.	2.4	7
88	Functional linkage between N acquisition strategies and aeration capacities of hydrophytes for efficient oxygen consumption in roots. Physiologia Plantarum, 2013, 147, 135-146.	5.2	7
89	Tetracaine, a local anesthetic, preferentially induces translational inhibition with processing body formation rather than phosphorylation of eIF2Î± in yeast. Current Genetics, 2015, 61, 43-53.	1.7	6
90	Manganese toxicity disrupts indole acetic acid homeostasis and suppresses the CO2 assimilation reaction in rice leaves. Scientific Reports, 2021, 11, 20922.	3.3	6

#	Article	IF	Citations
91	Rare Neurologic Disease-Associated Mutations of AIMP1 Are Related with Inhibitory Neuronal Differentiation Which Is Reversed by Ibuprofen. Medicines (Basel, Switzerland), 2020, 7, 25.	1.4	5
92	Different regulation of leaf respiration between Spinacia oleracea, a sun species, and Alocasia odora, a shade species. Physiologia Plantarum, 1997, 101, 1-7.	5.2	5
93	Induction of Terminal Oxidases of Electron Transport Chain in Broccoli Heads under Controlled Atmosphere Storage. Foods, 2020, 9, 380.	4.3	4
94	Atmospheric CO2 Concentration and N Availability Affect the Balance of the Two Photosystems in Mature Leaves of Rice Plants Grown at a Free-Air CO2 Enrichment Site. Frontiers in Plant Science, 2020, 11, 786.	3.6	3
95	Differential Analyses of the Effects of the Light Environment on Development of Deciduous Trees: Basic Studies for Tree Growth Modeling. Ecological Studies, 2002, , 187-200.	1.2	2
96	Growth temperature affects O 2 consumption rates and plasticity of respiratory flux to support shoot growth at various growth temperatures. Plant, Cell and Environment, 2021, , .	5.7	2
97	Low N level increases the susceptibility of <scp>PSI</scp> to photoinhibition induced by short repetitive flashes in leaves of different rice varieties. Physiologia Plantarum, 2022, 174, e13644.	5.2	2
98	Phosphorus toxicity disrupts Rubisco activation and reactive oxygen species defence systems by phytic acid accumulation in leaves. Plant, Cell and Environment, 2020, 43, i.	5.7	0
99	Editorial: O2 and ROS Metabolisms in Photosynthetic Organisms. Frontiers in Plant Science, 2020, 11, 618550.	3.6	0
100	Functional Analysis of Mitochondrial Respiratory Chain as a Dissipation System of Excess Light Energy. , 2008, , 1071-1074.		0
101	Light Dependences Of The Co2 Leakiness, Quantum Yield Of Co2 Fixation And Activation State Of Key Enzymes In A C4 Plant, Amaranthus Cruentus, Grown In High- And Low-Light. , 2008, , 841-844.		0