Hidemitsu Sakai

List of Publications by Year
in descending order

60	3,146	185998 28	155451 55
papers	citations	h-index	g-index

60	60	60	3320
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Winter nocturnal warming affects the freeze-thaw frequency, soil aggregate distribution, and the contents and decomposability of C and N in paddy fields. Science of the Total Environment, 2022, 802, 149870.	3.9	9
2	Short-term high nighttime temperatures pose an emerging risk to rice grain failure. Agricultural and Forest Meteorology, 2022, 314, 108779.	1.9	11
3	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.	2.6	2
4	Effect of foliar spray of kinetin on the enhancement of rice yield by elevated CO 2. Journal of Agronomy and Crop Science, 2021, 207, 535-543.	1.7	2
5	Five-year soil warming changes soil C and N dynamics in a single rice paddy field in Japan. Science of the Total Environment, 2021, 756, 143845.	3.9	16
6	Heat-Mitigation Effects of Irrigated Rice-Paddy Fields Under Changing Atmospheric Carbon Dioxide Based on a Coupled Atmosphere and Crop Energy-Balance Model. Boundary-Layer Meteorology, 2021, 179, 447-476.	1.2	2
7	Yield response of high-yielding rice cultivar Oonari to different environmental conditions. Plant Production Science, 2020, 23, 69-74.	0.9	4
8	Analysis of factors related to varietal differences in the yield of rice (Oryza sativa L.) under Free-Air CO₂ Enrichment (FACE) conditions. Plant Production Science, 2020, 23, 19-27.	0.9	12
9	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.	1.7	3
10	High mesophyll conductance in the high-yielding rice cultivar Takanari quantified with the combined gas exchange and chlorophyll fluorescence measurements under free-air CO₂ enrichment. Plant Production Science, 2019, 22, 395-406.	0.9	13
11	Yield responses to elevated CO2 concentration among Japanese rice cultivars released since 1882. Plant Production Science, 2019, 22, 352-366.	0.9	30
12	Effects of free-air CO₂ enrichment on heat-induced sterility and pollination in rice. Plant Production Science, 2019, 22, 374-381.	0.9	8
13	A High-Yielding Rice Cultivar â€œTakanariâ€•Shows No N Constraints on CO2 Fertilization. Frontiers in Plant Science, 2019, 10, 361.	1.7	31
14	How elevated CO2 affects our nutrition in rice, and how we can deal with it. PLoS ONE, 2019, 14, e0212840.	1.1	31
15	Oxalate contents in leaves of two rice cultivars grown at a free-air CO₂enrichment (FACE) site. Plant Production Science, 2019, 22, 407-411.	0.9	13
16	Effects of free-air CO₂ enrichment on flower opening time in rice. Plant Production Science, 2019, 22, 367-373.	0.9	9
17	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.	1.5	16
18	Increasing canopy photosynthesis in rice can be achieved without a large increase in water useâ€”A model based on freeâ€air <scp>CO</scp>₂ enrichment. Global Change Biology, 2018, 24, 1321-1341.	4.2	47

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19	Quantitative trait loci for large sink capacity enhance rice grain yield under free-air CO2 enrichment conditions. Scientific Reports, 2017, 7, 1827.	1.6	43
20	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.	1.8	5
21	Nitrogen Distribution in Leaf Canopies of Highâ€Yielding Rice Cultivar Takanari. Crop Science, 2017, 57, 2080-2088.	0.8	16
22	Rice Free-Air Carbon Dioxide Enrichment Studies to Improve Assessment of Climate Change Effects on Rice Agriculture. Advances in Agricultural Systems Modeling, 2016, , 45-68.	0.3	22
23	Rice grain yield and quality responses to freeâ€air CO₂ enrichment combined with soil and water warming. Global Change Biology, 2016, 22, 1256-1270.	4.2	86
24	Effect of Elevated CO₂ Concentration, Elevated Temperature and No Nitrogen Fertilization on Methanogenic Archaeal and Methane-Oxidizing Bacterial Community Structures in Paddy Soil. Microbes and Environments, 2016, 31, 349-356.	0.7	23
25	A meta-analysis of leaf nitrogen distribution within plant canopies. Annals of Botany, 2016, 118, 239-247.	1.4	66
26	Characterization of Leaf Blade- and Leaf Sheath-Associated Bacterial Communities and Assessment of Their Responses to Environmental Changes in CO₂, Temperature, and Nitrogen Levels under Field Conditions. Microbes and Environments, 2015, 30, 51-62.	0.7	24
27	Impacts of elevated atmospheric CO2 on nutrient content of important food crops. Scientific Data, 2015, 2, 150036.	2.4	66
28	Differential response of rice plants to high night temperatures imposed at varying developmental phases. Agricultural and Forest Meteorology, 2015, 209-210, 69-77.	1.9	38
29	Grain growth of different rice cultivars under elevated CO2 concentrations affects yield and quality. Field Crops Research, 2015, 179, 72-80.	2.3	45
30	Elevated atmospheric CO2 levels affect community structure of rice root-associated bacteria. Frontiers in Microbiology, 2015, 6, 136.	1.5	38
31	Response of soil, leaf endosphere and phyllosphere bacterial communities to elevated CO2 and soil temperature in a rice paddy. Plant and Soil, 2015, 392, 27-44.	1.8	58
32	Planting geometry as a preâ€screening technique for identifying <scp>CO₂</scp> responsive rice genotypes: a case study of panicle number. Physiologia Plantarum, 2014, 152, 520-528.	2.6	16
33	Soil and Water Warming Accelerates Phenology and Down-Regulation of Leaf Photosynthesis of Rice Plants Grown Under Free-Air CO2 Enrichment (FACE). Plant and Cell Physiology, 2014, 55, 370-380.	1.5	41
34	Do the Rich Always Become Richer? Characterizing the Leaf Physiological Response of the High-Yielding Rice Cultivar Takanari to Free-Air CO2 Enrichment. Plant and Cell Physiology, 2014, 55, 381-391.	1.5	57
35	Elevated temperature has stronger effects on the soil food web of a flooded paddy than does CO2. Soil Biology and Biochemistry, 2014, 70, 166-175.	4.2	20
36	Increasing CO2 threatens human nutrition. Nature, 2014, 510, 139-142.	13.7	1,024

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37	Heat-tolerant rice cultivars retain grain appearance quality under free-air CO2 enrichment. Rice, 2014, 7, 6.	1.7	50
38	Effects of Elevated Carbon Dioxide, Elevated Temperature, and Rice Growth Stage on the Community Structure of Rice Rootâ€“Associated Bacteria. Microbes and Environments, 2014, 29, 184-190.	0.7	41
39	Effects of elevated [CO2] on stem and root lodging among rice cultivars. Science Bulletin, 2013, 58, 1787-1794.	1.7	16
40	Vulnerability of lodging risk to elevated CO2 and increased soil temperature differs between rice cultivars. European Journal of Agronomy, 2013, 46, 20-24.	1.9	22
41	Rice cultivar responses to elevated CO2 at two free-air CO2 enrichment (FACE) sites in Japan. Functional Plant Biology, 2013, 40, 148.	1.1	213
42	The effects of free-air CO2 enrichment (FACE) on carbon and nitrogen accumulation in grains of rice (Oryza sativa L.). Journal of Experimental Botany, 2013, 64, 3179-3188.	2.4	49
43	Interactive Effects of Elevated Atmospheric CO₂ and Waterlogging on Vegetative Growth of Soybean (Glycine max (L.) Merr.). Plant Production Science, 2012, 15, 238-245.	0.9	16
44	Performance of the enlarged Rice-FACE system using pure CO2 installed in Tsukuba, Japan. J Agricultural Meteorology, 2012, 68, 15-23.	0.8	47
45	Varietal Difference in the Occurrence of Milky White Kernels in Response to Assimilate Supply in Rice Plants (Oryza sativa L.). Plant Production Science, 2011, 14, 111-117.	0.9	14
46	The lowland paddy weed Monochoria vaginalis emits N2O but not CH4. Agriculture, Ecosystems and Environment, 2010, 137, 219-221.	2.5	7
47	Response of the floating aquatic fern Azolla filiculoides to elevated CO2, temperature, and phosphorus levels. Hydrobiologia, 2010, 656, 5-14.	1.0	39
48	Combined effects of elevated [CO2] and high night temperature on carbon assimilation, nitrogen absorption, and the allocations of C and N by rice (Oryza sativa L.). Agricultural and Forest Meteorology, 2010, 150, 1174-1181.	1.9	91
49	Rice plant response to long term CO2 enrichment: Gene expression profiling. Plant Science, 2009, 177, 203-210.	1.7	41
50	Interactions of elevated [CO2] and night temperature on rice growth and yield. Agricultural and Forest Meteorology, 2009, 149, 51-58.	1.9	179
51	Increased night temperature reduces the stimulatory effect of elevated carbon dioxide concentration on methane emission from rice paddy soil. Global Change Biology, 2008, 14, 644-656.	4.2	42
52	CH₄ emission with differences in atmospheric CO₂ enrichment and rice cultivars in a Japanese paddy soil. Global Change Biology, 2008, 14, 2678-2687.	4.2	51
53	Effects of Elevated Atmospheric CO2 Concentrations on CH4 and N2O Emission from Rice Soil: An Experiment in Controlled-environment Chambers. Biogeochemistry, 2006, 77, 351-373.	1.7	83
54	Effect of CO2Enrichment on the Translocation and Partitioning of Carbon at the Early Grain-filling Stage in Rice (Oryza sativaL.). Plant Production Science, 2005, 8, 8-15.	0.9	19

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55	Influence of elevated concentrations of atmospheric CO2 on CH4 and CO2 entrapped in rice-paddy soil. Chemical Geology, 2005, 218, 15-24.	1.4	27
56	Changes in concentration and Î´13C value of dissolved CH4, CO2 and organic carbon in rice paddies under ambient and elevated concentrations of atmospheric CO2. Organic Geochemistry, 2005, 36, 813-823.	0.9	13
57	Effects of Elevated CO2Concentration on Photosynthetic Carbon Metabolism in Flag-Leaf Blades of Rice before and after Heading. Plant Production Science, 2003, 6, 52-58.	0.9	12
58	Effects of elevated carbon dioxide concentration on biological nitrogen fixation, nitrogen mineralization and carbon decomposition in submerged rice soil. Biology and Fertility of Soils, 2001, 34, 7-13.	2.3	56
59	Rice carbon balance under elevated CO2. New Phytologist, 2001, 150, 241-249.	3.5	69
60	Fertilizer-derived nitrogen use of two varieties of single-crop paddy rice: a free-air carbon dioxide enrichment study using polymer-coated 15N-labeled urea. Soil Science and Plant Nutrition, 0, , 1-12.	0.8	2