Kentaro Hayashi

List of Publications by Citations

73 papers	1,316 citations	22 h-index	33 g-index
74 ext. papers	1,577 ext. citations	4.4 avg, IF	4.27 L-index

#	Paper	IF	Citations
73	Ammonia volatilization from a paddy field following applications of urea: rice plants are both an absorber and an emitter for atmospheric ammonia. *Science of the Total Environment*, **2008**, 390, 485-94	10.2	88
72	Atmospheric NH3 and NO2 concentration and nitrogen deposition in an agricultural catchment of Eastern China. *Science of the Total Environment*, **2010**, 408, 4624-32	10.2	73
71	Ammonia volatilization from the surface of a Japanese paddy field during rice cultivation. *Soil Science and Plant Nutrition*, **2006**, 52, 545-555	1.6	72
70	Nitrogen footprints: Regional realities and options to reduce nitrogen loss to the environment. *Ambio*, **2017**, 46, 129-142	6.5	70
69	Trace gas and particle emissions from open burning of three cereal crop residues: Increase in residue moistness enhances emissions of carbon monoxide, methane, and particulate organic carbon. *Atmospheric Environment*, **2014**, 95, 36-44	5.3	57
68	Deposition velocity of PM2.5 sulfate in the summer above a deciduous forest in central Japan. *Atmospheric Environment*, **2010**, 44, 4582-4587	5.3	55
67	Regional characteristics of dry deposition of sulfur and nitrogen compounds at EANET sites in Japan from 2003 to 2008. *Atmospheric Environment*, **2011**, 45, 1259-1267	5.3	53
66	Re-estimating NH3 Emissions from Chinese Cropland by a New Nonlinear Model. *Environmental Science & Technology*, **2016**, 50, 564-72	10.3	45
65	Radiocesium and radioiodine in soil particles agitated by agricultural practices: field observation after the Fukushima nuclear accident. *Science of the Total Environment*, **2012**, 425, 128-34	10.2	40
64	Chemical characterization and oxidative potential of particles emitted from open burning of cereal straws and rice husk under flaming and smoldering conditions. *Atmospheric Environment*, **2017**, 163, 118-127	5.3	39
63	Effects of elevated carbon dioxide, elevated temperature, and rice growth stage on the community structure of rice root-associated bacteria. *Microbes and Environments*, **2014**, 29, 184-90	2.6	35
62	Canopy-scale relationships between stomatal conductance and photosynthesis in irrigated rice. *Global Change Biology*, **2013**, 19, 2209-20	11.4	32
61	Isotopomer analysis of production, consumption and soil-to-atmosphere emission processes of N2O at the beginning of paddy field irrigation. *Soil Biology and Biochemistry*, **2014**, 70, 66-78	7.5	29
60	Airborne nitrogen load in Japanese and Chinese agroecosystems. *Soil Science and Plant Nutrition*, **2010**, 56, 2-18	1.6	29
59	Cropland soil–plant systems control production and consumption of methane and nitrous oxide and their emissions to the atmosphere. *Soil Science and Plant Nutrition*, **2015**, 61, 2-33	1.6	27
58	Measurement of ammonia volatilization from flooded paddy fields in Vietnam. *Soil Science and Plant Nutrition*, **2009**, 55, 793-799	1.6	27
57	Importance of subsurface fluxes of water, nitrogen and phosphorus from rice paddy fields relative to surface runoff. *Agricultural Water Management*, **2019**, 213, 627-635	5.9	27

56	Elevated atmospheric CO2 levels affect community structure of rice root-associated bacteria. *Frontiers in Microbiology*, **2015**, 6, 136	5.7	26
55	Limited ammonia volatilization loss from upland fields of Andosols following fertilizer applications. *Agriculture, Ecosystems and Environment*, **2011**, 140, 534-538	5.7	25
54	Origin, distributions, and environmental significance of ubiquitous humic-like fluorophores in Antarctic lakes and streams. *Water Research*, **2019**, 163, 114901	12.5	24
53	Development of damage function of acidification for terrestrial ecosystems based on the effect of aluminum toxicity on net primary production. *International Journal of Life Cycle Assessment*, **2004**, 9, 13-22	4.6	24
52	Overcoming the difficulties in collecting apoplastic fluid from rice leaves by the infiltration-centrifugation method. *Plant and Cell Physiology*, **2012**, 53, 1659-68	4.9	23
51	A High-Yielding Rice Cultivar "Takanari" Shows No N Constraints on CO Fertilization. *Frontiers in Plant Science*, **2019**, 10, 361	6.2	20
50	Expanded Damage Function of Stratospheric Ozone Depletion to Cover Major Endpoints Regarding Life Cycle Impact Assessment (12 pp). *International Journal of Life Cycle Assessment*, **2006**, 11, 150-161	4.6	20
49	Atmospheric Deposition of Reactive Nitrogen on Turf Grassland in Central Japan: Comparison of the Contribution of Wet and Dry Deposition. *Water, Air and Soil Pollution*, **2007**, 7, 119-129		19
48	A fine-scale phylogenetic analysis of free-living Burkholderia species in sugarcane field soil. *Microbes and Environments*, **2014**, 29, 434-7	2.6	18
47	Ammonia exchange between rice leaf blades and the atmosphere: Effect of broadcast urea and changes in xylem sap and leaf apoplastic ammonium concentrations. *Soil Science and Plant Nutrition* , **2008**, 54, 807-818	1.6	18
46	Characterization of leaf blade- and leaf sheath-associated bacterial communities and assessment of their responses to environmental changes in CO□temperature, and nitrogen levels under field conditions. *Microbes and Environments*, **2015**, 30, 51-62	2.6	17
45	Coupling atmospheric ammonia exchange process over a rice paddy field with a multi-layer atmosphere□soil□vegetation model. *Agricultural and Forest Meteorology*, **2013**, 180, 1-21	5.8	17
44	Effects of field-applied composted cattle manure and chemical fertilizer on ammonia and particulate ammonium exchanges at an upland field. *Atmospheric Environment*, **2009**, 43, 5702-5707	5.3	17
43	Validation of the DNDC-Rice model to discover problems in evaluating the nitrogen balance at a paddy-field scale for single-cropping of rice. *Nutrient Cycling in Agroecosystems*, **2013**, 95, 255-268	3.3	16
42	Insecticide-degrading Burkholderia symbionts of the stinkbug naturally occupy various environments of sugarcane fields in a Southeast island of Japan. *Microbes and Environments*, **2015**, 30, 29-36	2.6	16
41	Improved Jayaweera-Mikkelsen model to quantify ammonia volatilization from rice paddy fields in China. *Environmental Science and Pollution Research*, **2019**, 26, 8136-8147	5.1	13
40	Fully automated, high-throughput instrumentation for measuring the □13C value of methane and application of the instrumentation to rice paddy samples. *Rapid Communications in Mass Spectrometry*, **2014**, 28, 2315-24	2.2	12
39	Reducing nitrogen footprints of consumer-level food loss and protein overconsumption in Japan, considering gender and age differences. *Environmental Research Letters*, **2018**, 13, 124027	6.2	12

38	Mapping the relative risk of surface water acidification based on cumulative acid deposition over the past 25 years in Japan. *Journal of Forest Research*, **2016**, 21, 115-124	1.4	11
37	Characteristics of ammonia oxidation potentials and ammonia oxidizers in mineral soil under Salix polaris–moss vegetation in Ny-Ålesund, Svalbard. *Polar Biology*, **2016**, 39, 725-741	2	11
36	Atmosphere-rice paddy exchanges of inorganic particles and relevant gases during a week in winter and a week in summer. *J Agricultural Meteorology*, **2012**, 68, 55-68	1.1	11
35	Alkalinization and acidification of stream water with changes in atmospheric deposition in a tropical dry evergreen forest of northeastern Thailand. *Hydrological Processes*, **2017**, 31, 836-846	3.3	9
34	Differences in CO2 and N2O emission rates following crop residue incorporation with or without field burning: A case study of adzuki bean residue and wheat straw. *Soil Science and Plant Nutrition*, **2016**, 62, 52-56	1.6	9
33	Potential of Svalbard reindeer winter droppings for emission/absorption of methane and nitrous oxide during summer. *Polar Science*, **2014**, 8, 196-206	2.3	9
32	Elevated CO2 decreases the Photorespiratory NH3 production but does not decrease the NH3 compensation point in rice leaves. *Plant and Cell Physiology*, **2014**, 55, 1582-91	4.9	8
31	Optimal Thermolysis Conditions for Soil Carbon Storage on Plant Residue Burning: Modeling the Trade-Off between Thermal Decomposition and Subsequent Biodegradation. *Journal of Environmental Quality*, **2015**, 44, 228-35	3.4	8
30	Ammonia exchange on grasslands in an intensive dairying region in central Japan. *Soil Science and Plant Nutrition*, **2010**, 56, 503-511	1.6	8
29	Amelioration of the reactive nitrogen flux calculation by a day/night separation in weekly mean air concentration measurements. *Atmospheric Environment*, **2013**, 79, 462-471	5.3	7
28	Potential ammonia emission from flag leaves of paddy rice (Oryza sativa L. cv. Koshihikari). *Agriculture, Ecosystems and Environment*, **2011**, 144, 117-123	5.7	7
27	Ammonia Emission from a Young Larch Ecosystem Afforested after Clear-Cutting of a Pristine Forest in Northernmost Japan. *Water, Air, and Soil Pollution*, **2009**, 200, 33-46	2.6	7
26	Effect of volcanic fumes from Mt. Oyama, Miyakejima Island, on atmospheric deposition, soil solution, and soil properties in Kumagaya, central Japan. *Soil Science and Plant Nutrition*, **2002**, 48, 401-411	1.6	7
25	Nitrogen budgets in Japan from 2000 to 2015: Decreasing trend of nitrogen loss to the environment and the challenge to further reduce nitrogen waste. *Environmental Pollution*, **2021**, 286, 117559	9.3	7
24	Free-air CO2 enrichment (FACE) net nitrogen fixation experiment at a paddy soil surface under submerged conditions. *Nutrient Cycling in Agroecosystems*, **2014**, 98, 57-69	3.3	6
23	Measurement of ammonia volatilization loss using a dynamic chamber technique: A case study of surface-incorporated manure and ammonium sulfate in an upland field of light-colored Andosol. *Soil Science and Plant Nutrition*, **2009**, 55, 571-581	1.6	6
22	Temporal Trends of Non-sea Salt Sulfate and Nitrate in Wet Deposition in Japan. *Water, Air and Soil Pollution*, **2007**, 7, 67-75		6
21	Ammonia Oxidation Potentials and Ammonia Oxidizers of Lichen-Moss Vegetated Soils at Two Ice-free Areas in East Antarctica. *Microbes and Environments*, **2020**, 35,	2.6	5

20	Four-year monitoring of atmospheric ammonia using passive samplers at a single-crop rice paddy field in central Japan. *J Agricultural Meteorology*, **2013**, 69, 229-241	1.1	5
19	Nitrogen burden from atmospheric deposition in East Asian oceans in 2010 based on high-resolution regional numerical modeling. *Environmental Pollution*, **2021**, 286, 117309	9.3	4
18	Temporal Trends of Non-sea Salt Sulfate and Nitrate in Wet Deposition in Japan **2007**, 67-75		4
17	Concealed nitrogen footprint in protein-free foods: an empirical example using oil palm products. *Environmental Research Letters*, **2020**, 15, 035006	6.2	3
16	Effect of volcanic fumes from Mt. Oyama, Miyakejima Island, on atmospheric deposition, soil solution, and soil properties in Kumagaya, Central Japan. *Soil Science and Plant Nutrition*, **2003**, 49, 503-511	1.6	3
15	Acid Deposition and Critical Load Map of Tokyo. *Water, Air, and Soil Pollution*, **2001**, 130, 1211-1216	2.6	3
14	Seabird-affected taluses are denitrification hotspots and potential NO emitters in the High Arctic. *Scientific Reports*, **2018**, 8, 17261	4.9	3
13	Dissolved Organic Matter Processing in Pristine Antarctic Streams. *Environmental Science & Technology*, **2021**, 55, 10175-10185	10.3	3
12	Characteristics of Atmosphere-rice Paddy Exchange of Gaseous and Particulate Reactive Nitrogen in Terms of Nitrogen Input to a Single-cropping Rice Paddy Area in Central Japan. *Asian Journal of Atmospheric Environment*, **2017**, 11, 202-216	1.3	2
11	Atmosphere-forest Exchange of Ammoniacal Nitrogen in a Subalpine Deciduous Forest in Central Japan during a Summer Week. *Asian Journal of Atmospheric Environment*, **2011**, 5, 134-143	1.3	2
10	Relationships between the High Aluminum Concentration and Other Components in Soil Solution of Acidic Soil in Kumagaya, Central Japan. *Soil Science and Plant Nutrition*, **2005**, 51, 655-658	1.6	1
9	Nitrogen Aspects of the Free-Air CO2 Enrichment (FACE) Study for Paddy Rice Ecosystems **2020**, 331-340		1
8	The INI East Asia Regional Nitrogen Centre: Balancing Food Production and Environment Nitrogen-Related Research and Management in East Asia **2020**, 481-487		1
7	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*,1-12	1.6	1
6	Atmospheric Deposition of Reactive Nitrogen on Turf Grassland in Central Japan: Comparison of the Contribution of Wet and Dry Deposition **2007**, 119-129		1
5	Nitrogen Embedded in Global Food Trade **2019**, 105-109		0
4	Sustainability of Vertical Farming in Comparison with Conventional Farming: A Case Study in Miyagi Prefecture, Japan, on Nitrogen and Phosphorus Footprint. *Sustainability*, **2022**, 14, 1042	3.6	0
3	Comparison of food supply system in China and Japan based on food nitrogen footprints estimated by a top-down method. *Environmental Research Letters*, **2021**, 16, 045003	6.2	0

2	Current Status of Nitrogen Management Research in East Asia. *Journal of Life Cycle Assessment Japan*, **2018**, 14, 141-145	0.1
1	Contrasting Considerations among Agricultural Stakeholders in Japan on Sustainable Nitrogen Management. *Sustainability*, **2021**, 13, 4866	3.6