Satoru Ishikawa

List of Publications by Year
in descending order

41 papers	4,389 citations	186265 28 h-index	289244 40 g-index
42 all docs	42 docs citations	42 times ranked	3451 citing authors

#	Article	IF	Citations
1	Root-to-shoot Cd translocation via the xylem is the major process determining shoot and grain cadmium accumulation in rice. Journal of Experimental Botany, 2009, 60, 2677-2688.	4.8	542
2	The OsNRAMP1 iron transporter is involved in Cd accumulation in rice. Journal of Experimental Botany, 2011, 62, 4843-4850.	4.8	493
3	Characterizing the role of rice NRAMP5 in Manganese, Iron and Cadmium Transport. Scientific Reports, 2012, 2, 286.	3.3	424
4	Low-affinity cation transporter (<i>OsLCT1</i>) regulates cadmium transport into rice grains. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20959-20964.	7.1	409
5	Ion-beam irradiation, gene identification, and marker-assisted breeding in the development of low-cadmium rice. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19166-19171.	7.1	408
6	Heavy metal contamination of agricultural soil and countermeasures in Japan. Paddy and Water Environment, 2010, 8, 247-257.	1.8	201
7	Chromosomal regions with quantitative trait loci controlling cadmium concentration in brown rice (Oryza sativa). New Phytologist, 2005, 168, 345-350.	7.3	144
8	A major quantitative trait locus for increasing cadmium-specific concentration in rice grain is located on the short arm of chromosome 7. Journal of Experimental Botany, 2010, 61, 923-934.	4.8	138
9	Route and Regulation of Zinc, Cadmium, and Iron Transport in Rice Plants (Oryza sativa L.) during Vegetative Growth and Grain Filling: Metal Transporters, Metal Speciation, Grain Cd Reduction and Zn and Fe Biofortification. International Journal of Molecular Sciences, 2015, 16, 19111-19129.	4.1	135
10	Cadmium Contamination and Its Risk Management in Rice Ecosystems. Advances in Agronomy, 2013, , 183-273.	5.2	115
11	Possible chemical forms of cadmium and varietal differences in cadmium concentrations in the phloem sap of rice plants (<i>Oryza sativa</i>L.). Soil Science and Plant Nutrition, 2010, 56, 839-847.	1.9	104
12	Genetic improvement for root growth angle to enhance crop production. Breeding Science, 2015, 65, 111-119.	1.9	103
13	Role of the node in controlling traffic of cadmium, zinc, and manganese in rice. Journal of Experimental Botany, 2012, 63, 2729-2737.	4.8	99
14	Phytochelatin synthase Os<scp>PCS</scp>1 plays a crucial role in reducing arsenic levels in rice grains. Plant Journal, 2017, 91, 840-848.	5.7	94
15	Expressing ScACR3 in Rice Enhanced Arsenite Efflux and Reduced Arsenic Accumulation in Rice Grains. Plant and Cell Physiology, 2012, 53, 154-163.	3.1	91
16	Genotypic Variation in Shoot Cadmium Concentration in Rice and Soybean in Soils with Different Levels of Cadmium Contamination. Soil Science and Plant Nutrition, 2005, 51, 101-108.	1.9	86
17	Real-time imaging and analysis of differences in cadmium dynamics in rice cultivars (Oryza sativa) using positron-emitting107Cd tracer. BMC Plant Biology, 2011, 11, 172.	3.6	76
18	Genotypic Differences in Cadmium Concentration and Distribution of Soybean and Rice. Japan Agricultural Research Quarterly, 2006, 40, 21-30.	0.4	73

#	Article	IF	Citations
19	Genetic diversity of arsenic accumulation in rice and QTL analysis of methylated arsenic in rice grains. Rice, 2013, 6, 3.	4.0	71
20	Is<i>Brassica juncea</i>a suitable plant for phytoremediation of cadmium in soils with moderately low cadmium contamination? â€" Possibility of using other plant species for Cd-phytoextraction. Soil Science and Plant Nutrition, 2006, 52, 32-42.	1.9	67
21	Arsenic biotransformation by <scp><i>S</i></scp><i>treptomyces</i>â€…<scp>sp</scp>. isolated from rice rhizosphere. Environmental Microbiology, 2015, 17, 1897-1909.	3.8	64
22	Nitrate facilitates cadmium uptake, transport and accumulation in the hyperaccumulator Sedum plumbizincicola. Environmental Science and Pollution Research, 2013, 20, 6306-6316.	5.3	54
23	Detection of QTLs to reduce cadmium content in rice grains using LAC23/Koshihikari chromosome segment substitution lines. Breeding Science, 2013, 63, 284-291.	1.9	53
24	Simultaneous decrease of arsenic and cadmium in rice (<i>Oryza sativa</i> L.) plants cultivated under submerged field conditions by the application of iron-bearing materials. Soil Science and Plant Nutrition, 2016, 62, 340-348.	1.9	50
25	Detection of a QTL for accumulating Cd in rice that enables efficient Cd phytoextraction from soil. Breeding Science, 2011, 61, 43-51.	1.9	45
26	Arsenic accumulation and speciation in Japanese paddy rice cultivars. Soil Science and Plant Nutrition, 2011, 57, 248-258.	1.9	43
27	Low-cadmium rice (<i>Oryza sativa</i> L.) cultivar can simultaneously reduce arsenic and cadmium concentrations in rice grains. Soil Science and Plant Nutrition, 2016, 62, 327-339.	1.9	43
28	Difference in cesium accumulation among rice cultivars grown in the paddy field in Fukushima Prefecture in 2011 and 2012. Journal of Plant Research, 2014, 127, 57-66.	2.4	34
29	Low-cesium rice: mutation in OsSOS2 reduces radiocesium in rice grains. Scientific Reports, 2017, 7, 2432.	3.3	26
30	Mechanisms of cadmium accumulation in rice grains and molecular breeding for its reduction. Soil Science and Plant Nutrition, 2020, 66, 28-33.	1.9	21
31	Arsinothricin, a novel organoarsenic species produced by a rice rhizosphere bacterium. Environmental Chemistry, 2016, 13, 723.	1.5	19
32	Breeding of a practical rice line â€˜JTT8â€™ for phytoextraction of cadmium contamination in paddy fields. Soil Science and Plant Nutrition, 2017, 63, 388-395.	1.9	14
33	â€œKoshihikari Kan No. 1â€; a new rice variety with nearly cadmium-free in grains. Ikushugaku Kenkyu, 2017, 19, 109-115.	0.3	9
34	Domain exchange between Oryza sativa phytochelatin synthases reveals a region that determines responsiveness to arsenic and heavy metals. Biochemical and Biophysical Research Communications, 2020, 523, 548-553.	2.1	9
35	Deficiency in alcohol dehydrogenase 2 reduces arsenic in rice grains by suppressing silicate transporters. Plant Physiology, 2021, 186, 611-623.	4.8	9
36	A weak allele of <i>OsNRAMP5</i> confers moderate cadmium uptake while avoiding manganese deficiency in rice. Journal of Experimental Botany, 2022, 73, 6475-6489.	4.8	9

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37	Agronomic Strategies for Reducing Arsenic Risk in Rice. Current Topics in Environmental Health and Preventive Medicine, 2019, , 181-198.	0.1	6
38	Tonoplast-Localized OsMOT1;2 Participates in Interorgan Molybdate Distribution in Rice. Plant and Cell Physiology, 2021, 62, 913-921.	3.1	4
39	Development of Low-Cadmium-Accumulating Rice. Current Topics in Environmental Health and Preventive Medicine, 2019, , 139-150.	0.1	3
40	Distribution dynamics of arsenic and silicon in different parts of rice grown under field conditions. Soil Science and Plant Nutrition, 2020, 66, 784-792.	1.9	1
41	Amelioration in manganese uptake by a low-cadmium rice cultivar with application of several manganese fertilizers. Soil Science and Plant Nutrition, 0, , 1-9.	1.9	0