Gareth J Norton

List of Publications by Year
in descending order

69 papers	6,244 citations	109321 35 h-index	102487 66 g-index
72 all docs	72 docs citations	72 times ranked	6240 citing authors

#	Article	IF	Citations
1	Genome-wide association mapping reveals a rich genetic architecture of complex traits in Oryza sativa. Nature Communications, 2011, 2, 467.	12.8	1,230
2	Assessing the influence of compost and biochar amendments on the mobility and toxicity of metals and arsenic in a naturally contaminated mine soil. Environmental Pollution, 2014, 186, 195-202.	7.5	369
3	Variation in Rice Cadmium Related to Human Exposure. Environmental Science & Technology, 2013, 47, 5613-5618.	10.0	365
4	Genetic mapping of the rice ionome in leaves and grain: identification of QTLs for 17 elements including arsenic, cadmium, iron and selenium. Plant and Soil, 2010, 329, 139-153.	3.7	275
5	Grain Unloading of Arsenic Species in Rice Â. Plant Physiology, 2009, 152, 309-319.	4.8	268
6	Genome Wide Association Mapping of Grain Arsenic, Copper, Molybdenum and Zinc in Rice (Oryza) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.5	228
7	Riceâ€“arsenate interactions in hydroponics: whole genome transcriptional analysis. Journal of Experimental Botany, 2008, 59, 2267-2276.	4.8	210
8	Organic Matterâ€”Solid Phase Interactions Are Critical for Predicting Arsenic Release and Plant Uptake in Bangladesh Paddy Soils. Environmental Science & Technology, 2011, 45, 6080-6087.	10.0	181
9	Roles for root iron plaque in sequestration and uptake of heavy metals and metalloids in aquatic and wetland plants. Metallomics, 2014, 6, 1789-1800.	2.4	177
10	Sulfur mediated reduction of arsenic toxicity involves efficient thiol metabolism and the antioxidant defense system in rice. Journal of Hazardous Materials, 2015, 298, 241-251.	12.4	173
11	Phloem transport of arsenic species from flag leaf to grain during grain filling. New Phytologist, 2011, 192, 87-98.	7.3	170
12	Identification of Low Inorganic and Total Grain Arsenic Rice Cultivars from Bangladesh. Environmental Science & Technology, 2009, 43, 6070-6075.	10.0	151
13	Environmental and Genetic Control of Arsenic Accumulation and Speciation in Rice Grain: Comparing a Range of Common Cultivars Grown in Contaminated Sites Across Bangladesh, China, and India. Environmental Science & Technology, 2009, 43, 8381-8386.	10.0	146
14	Variation in grain arsenic assessed in a diverse panel of rice (Oryza sativa) grown in multiple sites. New Phytologist, 2012, 193, 650-664.	7.3	126
15	Impact of alternate wetting and drying on rice physiology, grain production, and grain quality. Field Crops Research, 2017, 205, 1-13.	5.1	123
16	Inorganic arsenic contents in rice-based infant foods from Spain, UK, China and USA. Environmental Pollution, 2012, 163, 77-83.	7.5	121
17	A protective role for nitric oxide and salicylic acid for arsenite phytotoxicity in rice (Oryza sativa L.). Plant Physiology and Biochemistry, 2017, 115, 163-173.	5.8	118
18	Improved resolution in the position of drought-related QTLs in a single mapping population of rice by meta-analysis. BMC Genomics, 2009, 10, 276.	2.8	115

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19	Effect of selenium fertilization on the accumulation of cadmium and lead in rice plants. Plant and Soil, 2014, 384, 131-140.	3.7	105
20	The dynamics of arsenic in four paddy fields in the Bengal delta. Environmental Pollution, 2011, 159, 947-953.	7.5	95
21	Grain Accumulation of Selenium Species in Rice (Oryza sativa L.). Environmental Science & Technology, 2012, 46, 5557-5564.	10.0	82
22	Effect of organic matter amendment, arsenic amendment and water management regime on rice grain arsenic species. Environmental Pollution, 2013, 177, 38-47.	7.5	82
23	Lead in rice: Analysis of baseline lead levels in market and field collected rice grains. Science of the Total Environment, 2014, 485-486, 428-434.	8.0	78
24	Assessing the Labile Arsenic Pool in Contaminated Paddy Soils by Isotopic Dilution Techniques and Simple Extractions. Environmental Science & Technology, 2011, 45, 4262-4269.	10.0	75
25	Alternate wetting and drying irrigation for rice in Bangladesh: Is it sustainable and has plant breeding something to offer?. Food and Energy Security, 2013, 2, 120-129.	4.3	74
26	Assessing the genetic diversity of rice originating from Bangladesh, Assam and West Bengal. Rice, 2015, 8, 35.	4.0	63
27	Rice Grain Cadmium Concentrations in the Global Supply-Chain. Exposure and Health, 2020, 12, 869-876.	4.9	63
28	Identification of tetramethylarsonium in rice grains with elevated arsenic content. Journal of Environmental Monitoring, 2011, 13, 32-34.	2.1	56
29	Cadmium and lead in vegetable and fruit produce selected from specific regional areas of the UK. Science of the Total Environment, 2015, 533, 520-527.	8.0	55
30	Arsenic Shoot-Grain Relationships in Field Grown Rice Cultivars. Environmental Science & Technology, 2010, 44, 1471-1477.	10.0	54
31	Identification of quantitative trait loci for rice grain element composition on an arsenic impacted soil: Influence of flowering time on genetic loci. Annals of Applied Biology, 2012, 161, 46-56.	2.5	49
32	Biomass and elemental concentrations of 22 rice cultivars grown under alternate wetting and drying conditions at three field sites in Bangladesh. Food and Energy Security, 2017, 6, 98-112.	4.3	49
33	Arsenic affects essential and non-essential amino acids differentially in rice grains: Inadequacy of amino acids in rice based diet. Environment International, 2012, 46, 16-22.	10.0	44
34	Genome Wide Association Mapping of Grain and Straw Biomass Traits in the Rice Bengal and Assam Aus Panel (BAAP) Grown Under Alternate Wetting and Drying and Permanently Flooded Irrigation. Frontiers in Plant Science, 2018, 9, 1223.	3.6	41
35	A bioinformatic and transcriptomic approach to identifying positional candidate genes without fine mapping: an example using rice root-growth QTLs. Genomics, 2008, 92, 344-352.	2.9	39
36	Essential and toxic elements in infant foods from Spain, UK, China and USA. Journal of Environmental Monitoring, 2012, 14, 2447.	2.1	39

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37	Riceâ€“arsenate interactions in hydroponics: a three-gene model for tolerance. Journal of Experimental Botany, 2008, 59, 2277-2284.	4.8	34
38	Mapping of quantitative trait loci for seminal root morphology and gravitropic response in rice. Euphytica, 2009, 166, 229-237.	1.2	32
39	Spatial Heterogeneity and Kinetic Regulation of Arsenic Dynamics in Mangrove Sediments: The Sundarbans, Bangladesh. Environmental Science & Technology, 2012, 46, 8645-8652.	10.0	31
40	Poisoning from lead gunshot: still a threat to wild waterbirds in Britain. European Journal of Wildlife Research, 2013, 59, 195-204.	1.4	30
41	Simultaneous stimulation of arsenic methylation and inhibition of cadmium bioaccumulation in rice grain using zero valent iron and alternate wetting and drying water management. Science of the Total Environment, 2020, 711, 134696.	8.0	30
42	Physiological responses and transcriptome analyses of upland rice following exposure to arsenite and arsenate. Environmental and Experimental Botany, 2021, 183, 104366.	4.2	30
43	Arsenic Influence on Genetic Variation in Grain Trace-Element Nutrient Content in Bengal Delta Grown Rice. Environmental Science & Technology, 2010, 44, 8284-8288.	10.0	29
44	Arsenic Speciation and Localization in Horticultural Produce Grown in a Historically Impacted Mining Region. Environmental Science & Technology, 2013, 47, 6164-6172.	10.0	29
45	Genetic loci regulating arsenic content in rice grains when grown flooded or under alternative wetting and drying irrigation. Rice, 2019, 12, 54.	4.0	28
46	Interaction between contrasting rice genotypes and soil physical conditions induced by hydraulic stresses typical of alternate wetting and drying irrigation of soil. Plant and Soil, 2018, 430, 233-243.	3.7	27
47	Arsenic in Bangladeshi soils related to physiographic region, paddy management, and mirco- and macro-elemental status. Science of the Total Environment, 2017, 590-591, 406-415.	8.0	26
48	Alternate wetting and drying in Bangladesh: Waterâ€saving farming practice and the socioeconomic barriers to its adoption. Food and Energy Security, 2018, 7, e00149.	4.3	25
49	Characterisation of recombinant Hevea brasiliensis allene oxide synthase: Effects of cycloxygenase inhibitors, lipoxygenase inhibitors and salicylates on enzyme activity. Plant Physiology and Biochemistry, 2007, 45, 129-138.	5.8	23
50	Genome-Wide Association Mapping for Salt Tolerance of Rice Seedlings Grown in Hydroponic and Soil Systems Using the Bengal and Assam Aus Panel. Frontiers in Plant Science, 2020, 11, 576479.	3.6	21
51	Biallelic and Genome Wide Association Mapping of Germanium Tolerant Loci in Rice (Oryza sativa L.). PLoS ONE, 2015, 10, e0137577.	2.5	19
52	Physiographical variability in arsenic dynamics in Bangladeshi soils. Science of the Total Environment, 2018, 612, 1365-1372.	8.0	18
53	High throughput screening of rooting depth in rice using buried herbicide. Annals of Applied Biology, 2014, 165, 96-107.	2.5	15
54	Arsenic in Rice Grown in Low-Arsenic Environments in Bangladesh. Water Quality, Exposure, and Health, 2012, 4, 197-208.	1.5	13

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55	Genotypic differences in shoot silicon concentration and the impact on grain arsenic concentration in rice. Journal of Plant Nutrition and Soil Science, 2019, 182, 265-276.	1.9	13
56	Arsenic dynamics in paddy soil under traditional manuring practices in Bangladesh. Environmental Pollution, 2021, 268, 115821.	7.5	12
57	Superior Haplotypes for Early Root Vigor Traits in Rice Under Dry Direct Seeded Low Nitrogen Condition Through Genome Wide Association Mapping. Frontiers in Plant Science, 0, 13, .	3.6	10
58	Genome-wide association mapping of sodium and potassium concentration in rice grains and shoots under alternate wetting and drying and continuously flooded irrigation. Theoretical and Applied Genetics, 2021, 134, 2315-2334.	3.6	8
59	Genetic loci regulating cadmium content in rice grains. Euphytica, 2021, 217, 35.	1.2	7
60	Traitâ€directed de novo population transcriptome dissects genetic regulation of a balanced polymorphism in phosphorus nutrition/arsenate tolerance in a wild grass, H olcus lanatus. New Phytologist, 2014, 201, 144-154.	7.3	6
61	Genomic Prediction of Arsenic Tolerance and Grain Yield in Rice: Contribution of Trait-Specific Markers and Multi-Environment Models. Rice Science, 2021, 28, 268-278.	3.9	6
62	Identification of genomic loci regulating grain iron content in aus rice under two irrigation management systems. Food and Energy Security, 2022, 11, e329.	4.3	6
63	Higher zero valent iron soil amendments dosages markedly inhibit accumulation of As in Faya and Kilombero cultivars compared to Cd. Science of the Total Environment, 2021, 794, 148735.	8.0	5
64	The Impacts of Applying Metal(loid) Enriched Wood Ash to Soils on the Growth and Elemental Accumulation of Rice. Exposure and Health, 2019, 11, 311-324.	4.9	4
65	A balanced polymorphism in biomass resource allocation controlled by phosphate in grasses screened through arsenate tolerance. Environmental and Experimental Botany, 2013, 96, 43-51.	4.2	3
66	Genome-wide association mapping for grain manganese in rice (Oryza sativa L.) using a multi-experiment approach. Heredity, 2021, 126, 505-520.	2.6	3
67	Geochemical variability in the soils of Bangladesh as affected by sources of irrigation water and inundation land types. SN Applied Sciences, 2021, 3, 1.	2.9	3
68	Rice minerals and heavy metal(oid)s. , 2019, , 169-194.		1
69	Editorial: Natural Variations and Genetic Constraints on Plant Nutrition. Frontiers in Genetics, 0, 13, .	2.3	0