James C R Stangoulis

List of Publications by Year
in descending order

88 papers	4,887 citations	101384 36 h-index	98622 67 g-index
89 all docs	89 docs citations	89 times ranked	4880 citing authors

#	Article	IF	Citations
1	Constitutive Overexpression of the OsNAS Gene Family Reveals Single-Gene Strategies for Effective Iron- and Zinc-Biofortification of Rice Endosperm. PLoS ONE, 2011, 6, e24476.	1.1	362
2	A critical analysis of the causes of boron toxicity in plants. Plant, Cell and Environment, 2004, 27, 1405-1414.	2.8	303
3	Biofortified indica rice attains iron and zinc nutrition dietary targets in the field. Scientific Reports, 2016, 6, 19792.	1.6	293
4	Nutrient composition of important fish species in Bangladesh and potential contribution to recommended nutrient intakes. Journal of Food Composition and Analysis, 2015, 42, 120-133.	1.9	223
5	Quantitative trait loci for phytate in rice grain and their relationship with grain micronutrient content. Euphytica, 2007, 154, 289-294.	0.6	219
6	Selenium concentration in wheat grain: Is there sufficient genotypic variation to use in breeding?. Plant and Soil, 2005, 269, 369-380.	1.8	175
7	Selenium increases seed production in Brassica. Plant and Soil, 2009, 318, 73-80.	1.8	175
8	High-selenium wheat: biofortification for better health. Nutrition Research Reviews, 2003, 16, 45.	2.1	169
9	Energy-dispersive X-ray fluorescence analysis of zinc and iron concentration in rice and pearl millet grain. Plant and Soil, 2012, 361, 251-260.	1.8	134
10	Energy-dispersive X-ray fluorescence spectrometry as a tool for zinc, iron and selenium analysis in whole grain wheat. Plant and Soil, 2012, 361, 261-269.	1.8	116
11	Genetic dissection of grain zinc concentration in spring wheat for mainstreaming biofortification in CIMMYT wheat breeding. Scientific Reports, 2018, 8, 13526.	1.6	109
12	Kinetic analysis of boron transport in Chara. Planta, 2001, 213, 142-146.	1.6	98
13	Genotypic variation in wheat grain fructan content revealed by a simplified HPLC method. Journal of Cereal Science, 2008, 48, 369-378.	1.8	95
14	Molecular mapping of quantitative trait loci for zinc, iron and protein content in the grains of hexaploid wheat. Euphytica, 2016, 207, 563-570.	0.6	93
15	Selenium in Australia: Selenium status and biofortification of wheat for better health. Journal of Trace Elements in Medicine and Biology, 2005, 19, 75-82.	1.5	90
16	Foliar Boron Application Improves Flower Fertility and Fruit Set of Olive. Hortscience: A Publication of the American Society for Hortcultural Science, 2001, 36, 714-716.	0.5	87
17	Iron and zinc concentration of native Andean potato cultivars from a human nutrition perspective. Journal of the Science of Food and Agriculture, 2007, 87, 668-675.	1.7	81
18	QTL Mapping of Grain Zn and Fe Concentrations in Two Hexaploid Wheat RIL Populations with Ample Transgressive Segregation. Frontiers in Plant Science, 2017, 8, 1800.	1.7	75

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19	Selenium Distribution in Wheat Grain, and the Effect of Postharvest Processing on Wheat Selenium Content. Biological Trace Element Research, 2005, 103, 155-168.	1.9	74
20	Tolerance of wheat (Triticum aestivum L.) to high soil and solution selenium levels. Plant and Soil, 2005, 270, 179-188.	1.8	72
21	Localization of iron in rice grain using synchrotron X-ray fluorescence microscopy and high resolution secondary ion mass spectrometry. Journal of Cereal Science, 2014, 59, 173-180.	1.8	65
22	Natural variation for Fe-efficiency is associated with upregulation of Strategy I mechanisms and enhanced citrate and ethylene synthesis in Pisum sativum L.. Planta, 2012, 235, 1409-1419.	1.6	64
23	The effect of wheat prebiotics on the gut bacterial population and iron status of iron deficient broiler chickens. Nutrition Journal, 2014, 13, 58.	1.5	63
24	The mechanism of boron tolerance for maintenance of root growth in barley (Hordeum vulgare L.). Plant, Cell and Environment, 2007, 30, 984-993.	2.8	58
25	Genetic mapping of QTL for agronomic traits and grain mineral elements in rice. Crop Journal, 2019, 7, 560-572.	2.3	57
26	Temporal dynamics in wheat grain zinc distribution: is sink limitation the key?. Annals of Botany, 2011, 107, 927-937.	1.4	56
27	Genetic dissection of zinc, iron, copper, manganese and phosphorus in wheat (Triticum aestivum L.) grain and rachis at two developmental stages. Plant Science, 2020, 291, 110338.	1.7	55
28	Quantitative trait loci for grain fructan concentration in wheat (Triticum aestivum L.). Theoretical and Applied Genetics, 2008, 117, 701-709.	1.8	54
29	Mechanisms associated with <scp>Fe</scp>â€deficiency tolerance and signaling in shoots of <i>Pisum sativum</i>. Physiologia Plantarum, 2013, 147, 381-395.	2.6	53
30	Alterations in the Gut (<i>Gallus gallus</i>) Microbiota Following the Consumption of Zinc Biofortified Wheat (<i>Triticum aestivum</i>)-Based Diet. Journal of Agricultural and Food Chemistry, 2018, 66, 6291-6299.	2.4	53
31	Zincâ€deficiency resistance and biofortification in plants. Journal of Plant Nutrition and Soil Science, 2014, 177, 311-319.	1.1	47
32	Trace Element Uptake and Distribution in Plants. Journal of Nutrition, 2003, 133, 1502S-1505S.	1.3	46
33	The Mechanism of Boron Mobility in Wheat and Canola Phloem Â Â. Plant Physiology, 2010, 153, 876-881.	2.3	46
34	Wheat grain quality under increasing atmospheric CO2 concentrations in a semi-arid cropping system. Journal of Cereal Science, 2012, 56, 684-690.	1.8	46
35	Semi-quantitative analysis for selecting Fe- and Zn-dense genotypes of staple food crops. Journal of Food Composition and Analysis, 2007, 20, 496-505.	1.9	40
36	Metabolomics of capsicum ripening reveals modification of the ethylene related-pathway and carbon metabolism. Postharvest Biology and Technology, 2014, 89, 19-31.	2.9	40

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37	The Linoleic Acid: Dihomo-Î³-Linolenic Acid Ratio (LA:DGLA)â€"An Emerging Biomarker of Zn Status. Nutrients, 2017, 9, 825.	1.7	39
38	Biofortification of major crop plants with iron and zinc - achievements and future directions. Plant and Soil, 2022, 474, 57-76.	1.8	37
39	Title is missing!. Plant and Soil, 2000, 225, 243-251.	1.8	36
40	New perspectives on the regulation of iron absorption via cellular zinc concentrations in humans. Critical Reviews in Food Science and Nutrition, 2017, 57, 2128-2143.	5.4	35
41	Variation in root system architecture and morphology of two wheat genotypes is a predictor of their tolerance to phosphorus deficiency. Acta Physiologiae Plantarum, 2019, 41, 1.	1.0	35
42	Increased grain yield and micronutrient concentration in transgenic winter wheat by ectopic expression of a barley sucrose transporter. Journal of Cereal Science, 2014, 60, 75-81.	1.8	33
43	Trends in selenium status of South Australians. Medical Journal of Australia, 2004, 180, 383-386.	0.8	32
44	An initial evaluation of newly proposed biomarker of zinc status in humans - linoleic acid: dihomo-Î³-linolenic acid (LA:DGLA) ratio. Clinical Nutrition ESPEN, 2016, 15, 85-92.	0.5	32
45	Measurement of haem and total iron in fish, shrimp and prawn using ICP-MS: Implications for dietary iron intake calculations. Food Chemistry, 2016, 201, 222-229.	4.2	32
46	Genotypic Variation in the Root and Shoot Metabolite Profiles of Wheat (Triticum aestivum L.) Indicate Sustained, Preferential Carbon Allocation as a Potential Mechanism in Phosphorus Efficiency. Frontiers in Plant Science, 2019, 10, 995.	1.7	32
47	Boron efficiency in oilseed rape: II. Development of a rapid lab-based screening technique. Plant and Soil, 2000, 225, 253-261.	1.8	31
48	Identification of Quantitative Trait Loci for Grain Arabinoxylan Concentration in Bread Wheat. Crop Science, 2011, 51, 1143-1150.	0.8	31
49	Metabolite profiling of wheat (Triticum aestivum L.) phloem exudate. Plant Methods, 2014, 10, 27.	1.9	31
50	Clusters of genes encoding fructan biosynthesizing enzymes in wheat and barley. Plant Molecular Biology, 2012, 80, 299-314.	2.0	29
51	Characterisation of ethylene pathway components in non-climacteric capsicum. BMC Plant Biology, 2013, 13, 191.	1.6	29
52	Changes in the content of fructans and arabinoxylans during baking processes of leavened and unleavened breads. European Food Research and Technology, 2014, 239, 803-811.	1.6	28
53	Whole plant response of crop and weed species to high subsoil boron. Australian Journal of Agricultural Research, 2006, 57, 761.	1.5	27
54	An energy-dispersive X-ray fluorescence method for analysing Fe and Zn in common bean, maize and cowpea biofortification programs. Plant and Soil, 2017, 419, 457-466.	1.8	27

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55	The efficiency of boron utilisation in canola. Functional Plant Biology, 2001, 28, 1109.	1.1	27
56	Zinc efficiency of oilseed rape (t Brassica napus and t B. juncea) genotypes. Plant and Soil, 1997, 191, 123-132.	1.8	25
57	Growth and physiological responses of Chinese cabbage and radish to long-term exposure to elevated carbon dioxide and temperature. Horticulture Environment and Biotechnology, 2011, 52, 376-386.	0.7	25
58	The influence of food consumption and socio-economic factors on the relationship between zinc and iron intake and status in a healthy population. Public Health Nutrition, 2017, 20, 2486-2498.	1.1	25
59	Linoleic Acid:Dihomo-Î³-Linolenic Acid Ratio Predicts the Efficacy of Zn-Biofortified Wheat in Chicken (<i>Gallus gallus</i>). Journal of Agricultural and Food Chemistry, 2018, 66, 1394-1400.	2.4	23
60	The impact of foliar applied zinc fertilizer on zinc and phytate accumulation in dorsal and ventral grain sections of four thai rice varieties with different grain zinc. Journal of Cereal Science, 2018, 79, 6-12.	1.8	22
61	Exploiting Micronutrient Interaction to Optimize Biofortification Programs: The Case for Inclusion of Selenium and Iodine in the<I> HarvestPlus</I> Program. Nutrition Reviews, 2004, 62, 247-252.	2.6	22
62	Zincâ€boron interaction effects in oilseed rape. Journal of Plant Nutrition, 1998, 21, 2231-2243.	0.9	20
63	Boron Toxicity in Plants and Animals. , 2002, , 227-240.		19
64	Chlorosis correction and agronomic biofortification in field peas through foliar application of iron fertilizers under Fe deficiency. Journal of Plant Interactions, 2016, 11, 1-4.	1.0	19
65	High-resolution genome-wide association study pinpoints metal transporter and chelator genes involved in the genetic control of element levels in maize grain. G3: Genes, Genomes, Genetics, 2021, 11, .	0.8	18
66	Proteomic analysis during capsicum ripening reveals differential expression of ACC oxidase isoform 4 and other candidates. Functional Plant Biology, 2013, 40, 1115.	1.1	16
67	Measuring Genotypic Variation in Wheat Seed Iron First Requires Stringent Protocols to Minimize Soil Iron Contamination. Crop Science, 2014, 54, 255-264.	0.8	16
68	Nutrient variability in phloem: examining changes in K, Mg, Zn and Fe concentration during grain loading in common wheat (<i>Triticum aestivum</i>). Physiologia Plantarum, 2014, 152, 729-737.	2.6	14
69	Analysis of the Anti-Cancer Effects of Cincau Extract (Premna oblongifolia Merr) and Other Types of Non-Digestible Fibre Using Faecal Fermentation Supernatants and Caco-2 Cells as a Model of the Human Colon. Nutrients, 2017, 9, 355.	1.7	12
70	EDXRF for screening micronutrients in lentil and sorghum biofortification breeding programs. Plant and Soil, 2021, 463, 461-469.	1.8	12
71	Genomic selection can accelerate the biofortification of spring wheat. Theoretical and Applied Genetics, 2021, 134, 3339-3350.	1.8	11
72	Improved techniques for measurement of nanolitre volumes of phloem exudate from aphid stylectomy. Plant Methods, 2013, 9, 18.	1.9	10

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73	Changes in the Elemental and Metabolite Profile of Wheat Phloem Sap during Grain Filling Indicate a Dynamic between Plant Maturity and Time of Day. Metabolites, 2018, 8, 53.	1.3	10
74	Calcium Biofortification of Cropsâ€"Challenges and Projected Benefits. Frontiers in Plant Science, 2021, 12, 669053.	1.7	9
75	A high-resolution genome-wide association study of the grain ionome and agronomic traits in rice Oryza sativa subsp. indica. Scientific Reports, 2021, 11, 19230.	1.6	9
76	Genomic prediction of zinc-biofortification potential in rice gene bank accessions. Theoretical and Applied Genetics, 2022, 135, 2265-2278.	1.8	9
77	THE EFFECT OF FOLIAR-APPLIED CA AND SI ON THE SEVERITY OF POWDERY MILDEW IN TWO STRAWBERRY CULTIVARS. Acta Horticulturae, 2006, , 135-140.	0.1	8
78	High-throughput measurement methodologies for developing nutrient-dense crops. African Journal of Food, Agriculture, Nutrition and Development, 2017, 17, 11941-11954.	0.1	8
79	Effects of Dietary Fibre from the Traditional Indonesian Food, Green Cincau (Premna oblongifolia) Tj ETQq1 1 0.784314 rgBT /Overloc of Colon Cancer. International Journal of Molecular Sciences, 2018, 19, 2593.	1.8	7
80	Non-matrix Matched Glass Disk Calibration Standards Improve XRF Micronutrient Analysis of Wheat Grain across Five Laboratories in India. Frontiers in Plant Science, 2016, 7, 784.	1.7	6
81	Physiological and morphological responses to boron deficient chinese cabbage. Horticulture Environment and Biotechnology, 2016, 57, 355-363.	0.7	5
82	Identification of genomic regions conferring rust resistance and enhanced mineral accumulation in a HarvestPlus Association Mapping Panel ofÂwheat. Theoretical and Applied Genetics, 2022, 135, 865-882.	1.8	4
83	Higher Photochemical Quenching and Better Maintenance of Carbon Dioxide Fixation Are Key Traits for Phosphorus Use Efficiency in the Wheat Breeding Line, RAC875. Frontiers in Plant Science, 2021, 12, 816211.	1.7	4
84	Maternal Investment in Diamond FiretailsStagonopleura guttata: Female Spot Numbers Predict Egg Volume and Yolk Lutein Content. Acta Ornithologica, 2013, 48, 253-261.	0.1	3
85	Dietary Zn deficiency, the current situation, and potential solutions. Nutrition Research Reviews, 0, , 1-44.	2.1	3
86	Role of sulphur conferring differential tolerance to iron deficiency in Pisum sativum. Biologia (Poland), 2015, 70, 922-928.	0.8	2
87	Screening Ca concentration in staple food crops with energy dispersive x-ray fluorescence (EDXRF). Plant and Soil, 0, , 1.	1.8	2
88	Trace Element Uptake and Distribution in Plants. ChemInform, 2003, 34, no.	0.1	0