James C R Stangoulis

List of Publications by Year in Descending Order

86 papers	3,596 citations	33 h-index	58 g-index
89 ext. papers	4,275 ext. citations	4.3 avg, IF	5.28 L-index

#	Paper	IF	Citations
86	Identification of genomic regions conferring rust resistance and enhanced mineral accumulation in a HarvestPlus Association Mapping Panel of wheat.. *Theoretical and Applied Genetics*, **2022**, 1	6	2
85	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	6.2	1
84	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,	3.2	3
83	EDXRF for screening micronutrients in lentil and sorghum biofortification breeding programs. *Plant and Soil*, **2021**, 463, 461	4.2	2
82	Calcium Biofortification of Crops-Challenges and Projected Benefits. *Frontiers in Plant Science*, **2021** , 12, 669053	6.2	5
81	Genomic selection can accelerate the biofortification of spring wheat. *Theoretical and Applied Genetics*, **2021**, 134, 3339-3350	6	3
80	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	4.9	0
79	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	5.3	31
78	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	2.6	17
77	Genetic mapping of QTL for agronomic traits and grain mineral elements in rice. *Crop Journal*, **2019**, 7, 560-572	4.6	35
76	Genotypic Variation in the Root and Shoot Metabolite Profiles of Wheat (L.) Indicate Sustained, Preferential Carbon Allocation as a Potential Mechanism in Phosphorus Efficiency. *Frontiers in Plant Science*, **2019**, 10, 995	6.2	17
75	Linoleic Acid:Dihomo-Linolenic Acid Ratio Predicts the Efficacy of Zn-Biofortified Wheat in Chicken (Gallus gallus). *Journal of Agricultural and Food Chemistry*, **2018**, 66, 1394-1400	5.7	18
74	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	3.8	13
73	Alterations in the Gut (Gallus gallus) Microbiota Following the Consumption of Zinc Biofortified Wheat (Triticum aestivum)-Based Diet. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 6291-6299	5.7	30
72	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,	5.6	8
71	Genetic dissection of grain zinc concentration in spring wheat for mainstreaming biofortification in CIMMYT wheat breeding. *Scientific Reports*, **2018**, 8, 13526	4.9	72
70	Effects of Dietary Fibre from the Traditional Indonesian Food, Green Cincau (Merr.) on Preneoplastic Lesions and Short Chain Fatty Acid Production in an Azoxymethane Rat Model of Colon Cancer. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	3

69	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	11.5	20
68	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,	6.7	10
67	An energy-dispersive X-ray fluorescence method for analyzing Fe and Zn in common bean, maize and cowpea biofortification programs. *Plant and Soil*, **2017**, 419, 457-466	4.2	24
66	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	3.3	16
65	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	6.2	44
64	The Linoleic Acid: Dihomo-Linolenic Acid Ratio (LA:DGLA)-An Emerging Biomarker of Zn Status. *Nutrients*, **2017**, 9,	6.7	28
63	High-throughput measurement methodologies for developing nutrient-dense crops. *African Journal of Food, Agriculture, Nutrition and Development*, **2017**, 17, 11941-11954	1.5	6
62	Molecular mapping of quantitative trait loci for zinc, iron and protein content in the grains of hexaploid wheat. *Euphytica*, **2016**, 207, 563-570	2.1	56
61	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	3.8	15
60	Measurement of haem and total iron in fish, shrimp and prawn using ICP-MS: Implications for dietary iron intake calculations. *Food Chemistry*, **2016**, 201, 222-9	8.5	23
59	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	6.2	4
58	Biofortified indica rice attains iron and zinc nutrition dietary targets in the field. *Scientific Reports*, **2016**, 6, 19792	4.9	181
57	Physiological and morphological responses to boron deficient chinese cabbage. *Horticulture Environment and Biotechnology*, **2016**, 57, 355-363	2	3
56	An initial evaluation of newly proposed biomarker of zinc status in humans - linoleic acid: dihomo-linolenic acid (LA:DGLA) ratio. *Clinical Nutrition ESPEN*, **2016**, 15, 85-92	1.3	25
55	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	4.1	139
54	Role of sulphur conferring differential tolerance to iron deficiency in Pisum sativum. *Biologia (Poland)*, **2015**, 70, 922-928	1.5	2
53	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	3.8	27
52	The effect of wheat prebiotics on the gut bacterial population and iron status of iron deficient broiler chickens. *Nutrition Journal*, **2014**, 13, 58	4.3	45

51	Metabolite profiling of wheat (Triticum aestivum L.) phloem exudate. *Plant Methods*, **2014**, 10, 27	5.8	24
50	Nutrient variability in phloem: examining changes in K, Mg, Zn and Fe concentration during grain loading in common wheat (Triticum aestivum). *Physiologia Plantarum*, **2014**, 152, 729-37	4.6	9
49	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	3.4	18
48	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	3.8	54
47	Metabolomics of capsicum ripening reveals modification of the ethylene related-pathway and carbon metabolism. *Postharvest Biology and Technology*, **2014**, 89, 19-31	6.2	30
46	Zinc-deficiency resistance and biofortification in plants. *Journal of Plant Nutrition and Soil Science*, **2014**, 177, 311-319	2.3	40
45	Measuring Genotypic Variation in Wheat Seed Iron First Requires Stringent Protocols to Minimize Soil Iron Contamination. *Crop Science*, **2014**, 54, 255-264	2.4	13
44	Improved techniques for measurement of nanolitre volumes of phloem exudate from aphid stylectomy. *Plant Methods*, **2013**, 9, 18	5.8	8
43	Proteomic analysis during capsicum ripening reveals differential expression of ACC oxidase isoform 4 and other candidates. *Functional Plant Biology*, **2013**, 40, 1115-1128	2.7	15
42	Characterisation of ethylene pathway components in non-climacteric capsicum. *BMC Plant Biology*, **2013**, 13, 191	5.3	21
41	Maternal Investment in Diamond FiretailsStagonopleura guttata: Female Spot Numbers Predict Egg Volume and Yolk Lutein Content. *Acta Ornithologica*, **2013**, 48, 253-261	0.9	3
40	Mechanisms associated with Fe-deficiency tolerance and signaling in shoots of Pisum sativum. *Physiologia Plantarum*, **2013**, 147, 381-95	4.6	41
39	Clusters of genes encoding fructan biosynthesizing enzymes in wheat and barley. *Plant Molecular Biology*, **2012**, 80, 299-314	4.6	23
38	Wheat grain quality under increasing atmospheric CO2 concentrations in a semi-arid cropping system. *Journal of Cereal Science*, **2012**, 56, 684-690	3.8	34
37	Energy-dispersive X-ray fluorescence analysis of zinc and iron concentration in rice and pearl millet grain. *Plant and Soil*, **2012**, 361, 251-260	4.2	109
36	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	4.2	91
35	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, 1409-19	4.7	50
34	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	3.7	260

33	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	2	21
32	Temporal dynamics in wheat grain zinc distribution: is sink limitation the key?. *Annals of Botany*, **2011**, 107, 927-37	4.1	48
31	Identification of Quantitative Trait Loci for Grain Arabinoxylan Concentration in Bread Wheat. *Crop Science*, **2011**, 51, 1143-1150	2.4	24
30	The mechanism of boron mobility in wheat and canola phloem. *Plant Physiology*, **2010**, 153, 876-81	6.6	37
29	Selenium increases seed production in Brassica. *Plant and Soil*, **2009**, 318, 73-80	4.2	138
28	Genotypic variation in wheat grain fructan content revealed by a simplified HPLC method. *Journal of Cereal Science*, **2008**, 48, 369-378	3.8	84
27	Quantitative trait loci for grain fructan concentration in wheat (Triticum aestivum L.). *Theoretical and Applied Genetics*, **2008**, 117, 701-9	6	49
26	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	4.3	63
25	Semi-quantitative analysis for selecting Fe- and Zn-dense genotypes of staple food crops. *Journal of Food Composition and Analysis*, **2007**, 20, 496-505	4.1	34
24	The mechanism of boron tolerance for maintenance of root growth in barley (Hordeum vulgare L.). *Plant, Cell and Environment*, **2007**, 30, 984-93	8.4	50
23	Quantitative trait loci for phytate in rice grain and their relationship with grain micronutrient content. *Euphytica*, **2007**, 154, 289-294	2.1	174
22	Whole plant response of crop and weed species to high subsoil boron. *Australian Journal of Agricultural Research*, **2006**, 57, 761		24
21	THE EFFECT OF FOLIAR-APPLIED CA AND SI ON THE SEVERITY OF POWDERY MILDEW IN TWO STRAWBERRY CULTIVARS. *Acta Horticulturae*, **2006**, 135-140	0.3	4
20	Selenium distribution in wheat grain, and the effect of postharvest processing on wheat selenium content. *Biological Trace Element Research*, **2005**, 103, 155-68	4.5	61
19	Selenium in Australia: selenium status and biofortification of wheat for better health. *Journal of Trace Elements in Medicine and Biology*, **2005**, 19, 75-82	4.1	71
18	Selenium concentration in wheat grain: Is there sufficient genotypic variation to use in breeding?. *Plant and Soil*, **2005**, 269, 369-380	4.2	147
17	Tolerance of wheat (Triticum aestivum L.) to high soil and solution selenium levels. *Plant and Soil*, **2005**, 270, 179-188	4.2	67
16	Trends in selenium status of South Australians. *Medical Journal of Australia*, **2004**, 180, 383-6	4	30

15	A critical analysis of the causes of boron toxicity in plants. *Plant, Cell and Environment*, **2004**, 27, 1405-1414	3.4	238
14	Exploiting micronutrient interaction to optimize biofortification programs: the case for inclusion of selenium and iodine in the HarvestPlus program. *Nutrition Reviews*, **2004**, 62, 247-52	6.4	18
13	Trace element uptake and distribution in plants. *Journal of Nutrition*, **2003**, 133, 1502S-5S	4.1	35
12	High-selenium wheat: biofortification for better health. *Nutrition Research Reviews*, **2003**, 16, 45-60	7	142
11	Boron Toxicity in Plants and Animals **2002**, 227-240		19
10	Kinetic analysis of boron transport in Chara. *Planta*, **2001**, 213, 142-6	4.7	87
9	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	2.4	65
8	The efficiency of boron utilisation in canola. *Functional Plant Biology*, **2001**, 28, 1109	2.7	11
7	Boron efficiency in oilseed rape: I. Genotypic variation demonstrated in field and pot grown Brassica napus L. and Brassica juncea L.. *Plant and Soil*, **2000**, 225, 243-251	4.2	30
6	Boron efficiency in oilseed rape: II. Development of a rapid lab-based screening technique. *Plant and Soil*, **2000**, 225, 253-261	4.2	18
5	Zinc-boron interaction effects in oilseed rape. *Journal of Plant Nutrition*, **1998**, 21, 2231-2243	2.3	13
4	Zinc efficiency of oilseed rape (t Brassica napus and t B. juncea) genotypes. *Plant and Soil*, **1997**, 191, 123-132	4.2	18
3	Screening Ca concentration in staple food crops with energy dispersive x-ray fluorescence (EDXRF). *Plant and Soil*,1	4.2	1
2	Dietary Zn deficiency, the current situation, and potential solutions. *Nutrition Research Reviews*,1-44	7	0
1	Biofortification of major crop plants with iron and zinc - achievements and future directions. *Plant and Soil*,1	4.2	4