Fred Stoddard

List of Publications by Year
in descending order

153 papers	5,505 citations	71102 41 h-index	98798 67 g-index
164 all docs	164 docs citations	164 times ranked	5114 citing authors

#	Article	IF	Citations
1	The future of lupin as a protein crop in Europe. Frontiers in Plant Science, 2015, 6, 705.	3.6	203
2	Screening techniques and sources of resistance to abiotic stresses in cool-season food legumes. Euphytica, 2006, 147, 167-186.	1.2	181
3	Integrated pest management in faba bean. Field Crops Research, 2010, 115, 308-318.	5.1	174
4	Effect of Varying Protein Content and Glutenin-to-Gliadin Ratio on the Functional Properties of Wheat Dough. Cereal Chemistry, 1999, 76, 389-394.	2.2	170
5	Faba bean breeding for drought-affected environments: A physiological and agronomic perspective. Field Crops Research, 2010, 115, 279-286.	5.1	160
6	Grain legume decline and potential recovery in European agriculture: a review. Agronomy for Sustainable Development, 2016, 36, 1.	5.3	146
7	The FIGS (Focused Identification of Germplasm Strategy) Approach Identifies Traits Related to Drought Adaptation in Vicia faba Genetic Resources. PLoS ONE, 2013, 8, e63107.	2.5	138
8	Survey of Starch Particle-Size Distribution in Wheat and Related Species. Cereal Chemistry, 1999, 76, 145-149.	2.2	126
9	A cropping system assessment frameworkâ€"Evaluating effects of introducing legumes into crop rotations. European Journal of Agronomy, 2016, 76, 186-197.	4.1	123
10	Short-term effects of biochar on soil properties and wheat yield formation with meat bone meal and inorganic fertiliser on a boreal loamy sand. Agriculture, Ecosystems and Environment, 2014, 191, 108-116.	5.3	122
11	The EUâ€™s dependency on soya bean import for the animal feed industry and potential for EU produced alternatives. OCL - Oilseeds and Fats, Crops and Lipids, 2014, 21, D407.	1.4	116
12	Biochar application to a fertile sandy clay loam in boreal conditions: effects on soil properties and yield formation of wheat, turnip rape and faba bean. Plant and Soil, 2014, 374, 89-107.	3.7	115
13	Evaluation of physiological traits for improving drought tolerance in faba bean (Vicia faba L.). Plant and Soil, 2007, 292, 205-217.	3.7	112
14	Trade-Offs between Economic and Environmental Impacts of Introducing Legumes into Cropping Systems. Frontiers in Plant Science, 2016, 7, 669.	3.6	111
15	Basic Rheology of Bread Dough with Modified Protein Content and Glutenin-to-Gliadin Ratios. Cereal Chemistry, 2000, 77, 744-749.	2.2	104
16	Winter hardiness in faba bean: Physiology and breeding. Field Crops Research, 2010, 115, 287-296.	5.1	104
17	A <scp>SNP</scp>â€based consensus genetic map for syntenyâ€based trait targeting in faba bean (<i>Vicia) Tj ETQq1 1 0.784314 rg	8.3	101
18	Faba bean flavour and technological property improvement by thermal pre-treatments. LWT - Food Science and Technology, 2016, 68, 295-305.	5.2	94

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19	Evaluation of the 40 mg Swelling Test for Measuring Starch Functionality. Starch/Staerke, 2001, 53, 14-20.	2.1	89
20	Eliminating vicine and convicine, the main anti-nutritional factors restricting faba bean usage. Trends in Food Science and Technology, 2019, 91, 549-556.	15.1	84
21	Physiology of flowering and grain filling in faba bean. Field Crops Research, 2010, 115, 234-242.	5.1	83
22	Nutritive quality and protein production from grain legumes in a boreal climate. Journal of the Science of Food and Agriculture, 2015, 95, 2053-2064.	3.5	74
23	Effects of Gliadin Fractions on Functional Properties of Wheat Dough Depending on Molecular Size and Hydrophobicity. Cereal Chemistry, 2001, 78, 138-141.	2.2	69
24	Evaluation of preservation methods for improving biogas production and enzymatic conversion yields of annual crops. Biotechnology for Biofuels, 2011, 4, 20.	6.2	69
25	Photographic measurement of leaf angles in field crops. Agricultural and Forest Meteorology, 2014, 184, 137-146.	4.8	68
26	Effects of Incorporated Glutenins on Functional Properties of Wheat Dough. Cereal Chemistry, 2000, 77, 737-743.	2.2	64
27	Use of synteny to identify candidate genes underlying QTL controlling stomatal traits in faba bean (Vicia faba L.). Theoretical and Applied Genetics, 2014, 127, 2371-2385.	3.6	61
28	Lupin Flours as Additives: Dough Mixing, Breadmaking, Emulsifying, and Foaming. Cereal Chemistry, 2002, 79, 662-669.	2.2	60
29	The Pollination Requirements of the Faba Bean. Bee World, 1987, 68, 144-152.	0.8	59
30	Evaluation of annual bioenergy crops in the boreal zone for biogas and ethanol production. Biomass and Bioenergy, 2011, 35, 3071-3078.	5.7	57
31	Biomass yield and quality of bioenergy crops grown with synthetic and organic fertilizers. Biomass and Bioenergy, 2013, 59, 477-485.	5.7	57
32	Feedstock quality and growth of bioenergy crops fertilized with sewage sludge. Chemosphere, 2012, 89, 1211-1217.	8.2	56
33	Grain legume yields are as stable as other spring crops in long-term experiments across northern Europe. Agronomy for Sustainable Development, 2018, 38, 63.	5.3	55
34	Adaptation of spring faba bean types across European climates. Field Crops Research, 2013, 145, 1-9.	5.1	52
35	Response of canola to different heat stresses. Australian Journal of Agricultural Research, 2001, 52, 817.	1.5	51
36	Synergistic and Additive Effects of Three High Molecular Weight Glutenin Subunit Loci. II. Effects on Wheat Dough Functionality and End-Use Quality. Cereal Chemistry, 2002, 79, 301-307.	2.2	49

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37	Faba bean adaptation to autumn sowing under European climates. Agronomy for Sustainable Development, 2012, 32, 727-734.	5.3	49
38	Legumes in Finnish agriculture: history, present status and future prospects. Agricultural and Food Science, 2009, 18, 191.	0.9	49
39	Comparison of Methods for Colorimetric Amylose Determination in Cereal Grains. Starch/Staerke, 2007, 59, 357-365.	2.1	47
40	Variability in grain protein in Australian hexaploid wheats. Australian Journal of Agricultural Research, 1990, 41, 277.	1.5	46
41	Agro-economic prospects for expanding soybean production beyond its current northerly limit in Europe. European Journal of Agronomy, 2022, 133, 126415.	4.1	44
42	Synergistic and Additive Effects of Three High Molecular Weight Glutenin Subunit Loci. I. Effects on Wheat Dough Rheology. Cereal Chemistry, 2002, 79, 294-300.	2.2	42
43	Variation in Grain Mass, Grain Nitrogen, and Starch B-Granule Content Within Wheat Heads. Cereal Chemistry, 1999, 76, 139-144.	2.2	40
44	Improved sustainability of feedstock production with sludge and interacting mycorrhiza. Chemosphere, 2013, 91, 1236-1242.	8.2	40
45	Characterization of Starch in Aegilops Species. Cereal Chemistry, 2000, 77, 445-447.	2.2	39
46	Faba Bean. Handbook of Plant Breeding, 2015, , 141-178.	0.1	38
47	Recent advances in faba bean genetic and genomic tools for crop improvement. , 2021, 3, e75.		38
48	Histology of the development of the graft union in pea roots. Canadian Journal of Botany, 1979, 57, 1486-1501.	1.1	37
49	Survey of amylose content in Secale cereale, triticum monococcum, T. turgidum and T. tauschii. Journal of Cereal Science, 1998, 28, 273-280.	3.7	36
50	Effects of Nitrogen and Sulfur Fertilizer on Protein Composition, Mixing Requirements, and Dough Strength of Four Wheat Cultivars. Cereal Chemistry, 2000, 77, 798-807.	2.2	36
51	Achievements in breeding autumn-sown annual legumes for temperate regions with emphasis on the continental Balkans. Euphytica, 2011, 180, 57.	1.2	36
52	Determination of vicine and convicine from faba bean with an optimized high-performance liquid chromatographic method. Food Research International, 2015, 76, 168-177.	6.2	36
53	Flanking SNP markers for vicineâ€“convicine concentration in faba bean (Vicia faba L.). Molecular Breeding, 2015, 35, 1.	2.1	36
54	A baseline study of vicineâ€“convicine levels in faba bean (Vicia faba L.) germplasm. Plant Genetic Resources: Characterisation and Utilisation, 2013, 11, 250-257.	0.8	35

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55	Development and validation of a robust, breeder-friendly molecular marker for the vc - locus in faba bean. Molecular Breeding, 2017, 37, 1.	2.1	35
56	VC1 catalyses a key step in the biosynthesis of vicine in faba bean. Nature Plants, 2021, 7, 923-931.	9.3	34
57	Link Between Mixing Requirements and Dough Strength. Cereal Chemistry, 1999, 76, 800-806.	2.2	33
58	Diversity in root growth responses to moisture deficit in young faba bean (Vicia faba L.) plants. PeerJ, 2018, 6, e4401.	2.0	33
59	Heterosis for yield and related characters in pea. Euphytica, 1994, 80, 39-48.	1.2	32
60	Re-designing organic grain legume cropping systems using systems agronomy. European Journal of Agronomy, 2020, 112, 125951.	4.1	32
61	Effects of Excision of Stock and Scion Organs on the Formation of the Graft Union in Coleus: A Histological Study. Botanical Gazette, 1980, 141, 401-412.	0.6	31
62	Starch Extraction and Amylose Analysis from Half Seeds. Starch/Staerke, 1999, 51, 62-66.	2.1	29
63	Pollination and fertilization in commercial crops of field beans (Vicia faba L.). Journal of Agricultural Science, 1986, 106, 89-97.	1.3	28
64	Do faba bean (Vicia faba L.) accessions from environments with contrasting seasonal moisture availabilities differ in stomatal characteristics and related traits?. Genetic Resources and Crop Evolution, 2013, 60, 2343-2357.	1.6	28
65	Physiological and Biochemical Basis of Faba Bean Breeding for Drought Adaptationâ€"A Review. Agronomy, 2020, 10, 1345.	3.0	28
66	Preparation and Characterization of Emulsion Gels from Whole Faba Bean Flour. Foods, 2020, 9, 755.	4.3	28
67	Responses of flavonoid profile and associated gene expression to solar blue and UV radiation in two accessions of Vicia faba L. from contrasting UV environments. Photochemical and Photobiological Sciences, 2019, 18, 434-447.	2.9	26
68	Variability of Ascochyta fabae in South Australia. Australian Journal of Agricultural Research, 1999, 50, 1475.	1.5	26
69	Screening of faba bean (Vicia fabaL.) accessions to acidity and aluminium stresses. PeerJ, 2017, 5, e2963.	2.0	26
70	Content of zinc, iron and their absorption inhibitors in Nicaraguan common beans (Phaseolus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	8.2	24
71	Retrieval of leaf chlorophyll content in field crops using narrow-band indices: effects of leaf area index and leaf mean tilt angle. International Journal of Remote Sensing, 2015, 36, 6031-6055.	2.9	23
72	Genetics of resistance to ascochyta blight in two populations of faba bean. Euphytica, 2000, 112, 101-107.	1.2	22

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73	ILB 938, a valuable faba bean (Vicia faba L.) accession. Plant Genetic Resources: Characterisation and Utilisation, 2018, 16, 478-482.	0.8	22
74	Evaluation of yield, yield stability, and yieldâ€“protein relationship in 17 commercial faba bean cultivars. , 2020, 2, e39.		22
75	Floral Viability and Pollen Tube Growth in Vicia faba L.. Journal of Plant Physiology, 1986, 123, 249-262.	3.5	21
76	Evaluating faba beans for rust resistance using detached leaves. Euphytica, 2001, 117, 47-57.	1.2	21
77	Palindromic sequence-targeted (PST) PCR: a rapid and efficient method for high-throughput gene characterization and genome walking. Scientific Reports, 2019, 9, 17707.	3.3	21
78	Variability in grain protein concentration of peas and lentils grown in Australia. Australian Journal of Agricultural Research, 1993, 44, 1415.	1.5	19
79	Interaction of heatâ€“moisture conditions and physical properties in oat processing: II. Flake quality. Journal of Cereal Science, 2008, 48, 288-293.	3.7	19
80	Genetics of starch granule size distribution in tetraploid and hexaploid wheats. Australian Journal of Agricultural Research, 2003, 54, 637.	1.5	18
81	Winter turnip rape as a soil N scavenging catch crop in a cool humid climate. Agronomy for Sustainable Development, 2015, 35, 359-366.	5.3	18
82	Screening of Chickpeas for Adaptation to Autumn Sowing. Journal of Agronomy and Crop Science, 2001, 186, 193-207.	3.5	17
83	Optimized Methods for Incorporating Glutenin Subunits into Wheat Dough for Extension and Baking Studies. Cereal Chemistry, 2000, 77, 731-736.	2.2	16
84	A multi-parent faba bean (Vicia faba L.) population for future genomic studies. Plant Genetic Resources: Characterisation and Utilisation, 2018, 16, 419-423.	0.8	16
85	Effects of Nitrogen and Sulfur Fertilization on Commercial-Scale Wheat Quality and Mixing Requirements. Cereal Chemistry, 2000, 77, 791-797.	2.2	15
86	Nitrous oxide emissions from perennial grassâ€“legume intercrop for bioenergy use. Nutrient Cycling in Agroecosystems, 2015, 101, 211-222.	2.2	15
87	Association of Shoot and Root Responses to Water Deficit in Young Faba Bean (Vicia faba L.) Plants. Frontiers in Plant Science, 2019, 10, 1063.	3.6	15
88	Developmental Regulation of Mannan, Arabinogalactanâ€Protein, and Pectic Epitopes in Pistils of Vicia faba (Faba Bean). International Journal of Plant Sciences, 2006, 167, 919-932.	1.3	14
89	Mutual Legume Intercropping for Forage Production in Temperate Regions. Sustainable Agriculture Reviews, 2011, , 347-365.	1.1	14
90	Evaluating faba beans for resistance to ascochyta blight using detached organs. Australian Journal of Experimental Agriculture, 2000, 40, 707.	1.0	14

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91	Pollen vectors and pollination of faba beans in southern Australia. Australian Journal of Agricultural Research, 1991, 42, 1173.	1.5	13
92	Limits to Retention of Fertilized Flowers in Faba Beans (Vicia faba L.). Journal of Agronomy and Crop Science, 1993, 171, 251-259.	3.5	13
93	Genetic analysis reveals a novel locus in Vicia faba decoupling pigmentation in the flower from that in the extra-floral nectaries. Molecular Breeding, 2014, 34, 1507-1513.	2.1	13
94	Progress towards flowering of faba bean (<scp>V</scp>icia fabaÂ<scp>L</scp>.) is more than photothermal. Journal of Agronomy and Crop Science, 2017, 203, 385-396.	3.5	13
95	Genetics of wheat starch B-granule content. Euphytica, 2000, 112, 23-31.	1.2	12
96	Interaction of heat-moisture conditions and physical properties in oat processing: I. Mechanical properties of steamed oat groats. Journal of Cereal Science, 2008, 47, 239-244.	3.7	12
97	Perennial crop growth in oil-contaminated soil in a boreal climate. Science of the Total Environment, 2015, 532, 752-761.	8.0	12
98	Proposal for C-Hordein as Reference Material in Gluten Quantification. Journal of Agricultural and Food Chemistry, 2017, 65, 2155-2161.	5.2	12
99	Oxidation of proline decreases immunoreactivity and alters structure of barley prolamin. Food Chemistry, 2017, 214, 597-605.	8.2	12
100	Plant species and growing season weather influence the efficiency of selenium biofortification. Nutrient Cycling in Agroecosystems, 2019, 114, 111-124.	2.2	12
101	Pollination, fertilization and seed development in winter stocks of faba beans (Vicia faba L.). Euphytica, 1986, 35, 925-934.	1.2	11
102	Derivation of superior F5 lines from heterotic hybrids in pea. Euphytica, 1994, 73, 265-272.	1.2	11
103	Variation in Faba Bean Amylose Content. Starch/Staerke, 1999, 51, 259-262.	2.1	11
104	Genetic analysis of partial rust resistance in faba beans. Australian Journal of Agricultural Research, 2001, 52, 73.	1.5	11
105	Genetic analysis of quantitative traits in rice (Oryza sativa L.) exposed to salinity. Australian Journal of Agricultural Research, 2004, 55, 1173.	1.5	11
106	Pre-crop effects on the nutrient composition and utilization efficiency of faba bean (Vicia faba L.) and narrow-leafed lupin (Lupinus angustifolius L.). Nutrient Cycling in Agroecosystems, 2015, 103, 311-327.	2.2	10
107	Rust resistance in faba bean (Vicia faba L.): status and strategies for improvement. Australasian Plant Pathology, 2018, 47, 71-81.	1.0	10
108	Genomic-based root plasticity to enhance abiotic stress adaptation and edible yield in grain crops. Plant Science, 2020, 295, 110365.	3.6	10

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109	Amylose Content in Segregating Populations of Einkorn, Emmer, and Rye. Starch/Staerke, 1999, 51, 66-73.	2.1	9
110	A rapid antibody-based test for Sec-2, a marker for the short arm of chromosome 2 of rye (2RS). Genome, 1996, 39, 1006-1012.	2.0	8
111	Conversion of Carbohydrates in Herbaceous Crops during Anaerobic Digestion. Journal of Agricultural and Food Chemistry, 2012, 60, 7934-7940.	5.2	8
112	Genetic analysis of photosynthesisâ€related traits in faba bean (Vicia faba) for crop improvement. Plant Breeding, 2019, 138, 761-769.	1.9	8
113	Ion beam irradiation mutagenesis in rye (Secale cereale L.), linseed (Linum usitatissimum L.) and faba bean (Vicia faba L.). Agricultural and Food Science, 2018, 27, .	0.9	8
114	Effects of irrigation, plant density and genotype on pollination, fertilization and seed development in spring field beans (Vicia faba L.). Journal of Agricultural Science, 1986, 107, 347-355.	1.3	7
115	Genetic distance and its association with heterosis in peas. Euphytica, 1994, 73, 255-264.	1.2	7
116	Revitalizing the winter turnip rape crop in the northern latitudes. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2011, 61, 195-201.	0.6	7
117	Response of Soil Bacterial Community Diversity and Composition to Time, Fertilization, and Plant Species in a Sub-Boreal Climate. Frontiers in Microbiology, 2020, 11, 1780.	3.5	7
118	Fertilizer and intercropped legumes as nitrogen source for Jerusalem artichoke (Helianthus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Tc	0.9	7
119	Pollination, Fertilization and Seed Development in Inbred Lines and F1 Hybrids of Spring Faba Beans (Vicia faba L.). Plant Breeding, 1986, 97, 210-221.	1.9	6
120	Earthworm communities under boreal grass and legume bioenergy crops in pure stands and mixtures. Pedobiologia, 2015, 58, 49-54.	1.2	6
121	The transgenerational effects of solar short-UV radiation differed in two accessions of Vicia faba L. from contrasting UV environments. Journal of Plant Physiology, 2020, 248, 153145.	3.5	6
122	Efficient and sustainable production of faba bean. Burleigh Dodds Series in Agricultural Science, 2018, , 269-296.	0.2	6
123	Genomic regions associated with chocolate spot (Botrytis fabae Sard.) resistance in faba bean (Vicia) Tj ETQq1 1 0.784314 rgBT /Ove	2.1	6
124	Starch characterisation and variability in GBSS loci of synthetic hexaploid wheats and their durum and Aegilops tauschii parents. Euphytica, 2009, 167, 203-216.	1.2	5
125	Grain legumes: an overview.. , 2017, , 70-87.		5
126	Effects of Break Crops on Yield and Grain Protein Concentration of Barley in a Boreal Climate. PLoS ONE, 2015, 10, e0130765.	2.5	5

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127	The legume manifesto: (Net)workers on Fabaceae, unite!. Ratarstvo I Povrtarstvo, 2011, 48, 253-258.	0.5	5
128	The effects of a permanently elevated water table in an acid sulphate soil on reed canary grass for combustion. Plant and Soil, 2014, 375, 149-158.	3.7	4
129	Genetic variability in the physiological responses of Andean lupin to drought stress. Suomen Maataloustieteellisen Seuran Tiedote, 2010, , 1-5.	0.0	4
130	Termination of flowering in â€˜indeterminateâ€™ faba beans (Vicia faba). Journal of Agricultural Science, 1993, 120, 79-87.	1.3	3
131	In silico evaluation of plant genetic resources to search for traits for adaptation to climate change. Climatic Change, 2016, 134, 667-680.	3.6	3
132	Genotypic variation in leaf epicuticular wax quantity in a large faba bean (Vicia faba L.) germplasm collection. Plant Genetic Resources: Characterisation and Utilisation, 2019, 17, 298-300.	0.8	3
133	Fusarium-suppressive effects of green manure of turnip rape. European Journal of Soil Biology, 2015, 69, 41-51.	3.2	2
134	David Bond and Jean Picard: Two pivotal breeders of faba bean in the 20th century. Plant Genetic Resources: Characterisation and Utilisation, 2018, 16, 483-487.	0.8	2
135	Cultivating forage maize for biomass and bioenergy in a sub-boreal climate. Agricultural and Food Science, 2018, 27, .	0.9	2
136	Botrytis four species are associated with chocolate spot disease of faba bean in Latvia. Zemdirbyste, 2021, 108, 297-302.	0.8	2
137	The distribution of immature thrips among flowers of faba beans in commercial crops and experimental plots. Annals of Applied Biology, 1986, 109, 61-69.	2.5	1
138	The Incidence of Ovule Fertilization in Faba Bean Flowers from Commercial Crops and from Experimental Plots of Contrasting Genotypes. , 1984, , 247-254.		1
139	New sources of earliness for Finnish faba bean breeding. Suomen Maataloustieteellisen Seuran Tiedote, 2012, , 1-4.	0.0	1
140	WHEAT STARCH GRANULE SIZE. , 2005, , 461-465.		1
141	New annual legume crops for Finnish conditions. Suomen Maataloustieteellisen Seuran Tiedote, 2010, , 1-4.	0.0	1
142	SEWAGE SLUDGE AS NUTRIENT SOURCE FOR BIOENERGY CROPS. Suomen Maataloustieteellisen Seuran Tiedote, 2010, , 1-5.	0.0	1
143	Increasing the range of legume crops for Finnish crop rotations. Suomen Maataloustieteellisen Seuran Tiedote, 2012, , 1-4.	0.0	1
144	Evaluation of colour transparency films for photomicrography of fluorescent structures. Histochemistry, 1981, 73, 121-129.	1.9	0

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145	Words for traditional Eurasian grain legumes in Uralic languages. Dialectologia Et Geolinguistica, 2013, 21, 123-131.	0.1	0
146	Kasvibiomassan laadullinen soveltuvuus bioenergian raaka-aineeksi. Suomen Maataloustieteellisen Seuran Tiedote, 2010, , 1-6.	0.0	0
147	Kasvien fytoremediaatiopotentiaali CCA:lla saastuneen maan puhdistuksessa. Suomen Maataloustieteellisen Seuran Tiedote, 2010, , .	0.0	0
148	High moisture acid sulphate soil effects on reed canary grass. Suomen Maataloustieteellisen Seuran Tiedote, 2012, , 1-6.	0.0	0
149	Pilaantuneiden maa-alueiden puhdistus bioenergiakasvien avulla. Suomen Maataloustieteellisen Seuran Tiedote, 2012, , 1-4.	0.0	0
150	Extractability and size distribution studies on wheat proteins using flow-field flow fractionation. Special Publication - Royal Society of Chemistry, 0, , 149-153.	0.0	0
151	Quantity of quality? addressing the protein paradox of flour functionality. Special Publication - Royal Society of Chemistry, 0, , 396-399.	0.0	0
152	Methods for incorporating added glutenin subunits into the gluten matrix for extension and baking tests. Special Publication - Royal Society of Chemistry, 0, , 417-420.	0.0	0
153	Starch Extraction and Amylose Analysis from Half Seeds. Starch/Staerke, 1999, 51, 62-66.	2.1	0