Michael Gidley

List of Publications by Year in Descending Order

231 papers	13,307 citations	64 h-index	106 g-index
238 ext. papers	15,467 ext. citations	7.3 avg, IF	7 L-index

#	Paper	IF	Citations
231	Absolute abundance values reveal microbial shifts and co-occurrence patterns during gut microbiota fermentation of dietary fibres in vitro. *Food Hydrocolloids*, **2022**, 127, 107422	10.6	1
230	In vitro fermentation of onion cell walls and model polysaccharides using human faecal inoculum: Effects of molecular interactions and cell wall architecture. *Food Hydrocolloids*, **2022**, 124, 107257	10.6	1
229	Effect of processing on the solubility and molecular size of oat □glucan and consequences for starch digestibility of oat-fortified noodles. *Food Chemistry*, **2022**, 372, 131291	8.5	1
228	High-amylose wheat bread with reduced in vitro digestion rate and enhanced resistant starch content. *Food Hydrocolloids*, **2022**, 123, 107181	10.6	8
227	A preliminary study on the utilisation of near infrared spectroscopy to predict age and in vivo human metabolism. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2022**, 265, 120312	4.4	4
226	Starch structure and exchangeable protons contribute to reduced aging of high-amylose wheat bread.. *Food Chemistry*, **2022**, 385, 132673	8.5	0
225	Soluble fibre concentration effects during in vitro fermentation: Higher concentration leads to increased butyrate proportion. *Food Hydrocolloids*, **2022**, 107728	10.6	1
224	Integrating Effects of Human Physiology, Psychology, and Individual Variations on Satiety-An Exploratory Study.. *Frontiers in Nutrition*, **2022**, 9, 872169	6.2	1
223	Shedding light on human tissue (in vivo) to predict satiation, satiety, and food intake using near infrared reflectance spectroscopy: A preliminary study. *Innovative Food Science and Emerging Technologies*, **2022**, 78, 103033	6.8	1
222	Pasting properties of high-amylose wheat in conventional and high-temperature Rapid Visco Analyzer: Molecular contribution of starch and gluten proteins. *Food Hydrocolloids*, **2022**, 131, 107840	10.6	0
221	Interaction of cellulose and xyloglucan influences in vitro fermentation outcomes. *Carbohydrate Polymers*, **2021**, 258, 117698	10.3	3
220	Wheat-based food form has a greater effect than amylose content on fermentation outcomes and microbial community shifts in an in vitro fermentation model. *Food Hydrocolloids*, **2021**, 114, 106560	10.6	3
219	Towards personalised saliva spectral fingerprints: Comparison of mid infrared spectra of dried and whole saliva samples. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2021**, 253, 119569	4.4	4
218	Interplay between grain digestion and fibre in relation to gastro-small-intestinal passage rate and feed intake in pigs. *European Journal of Nutrition*, **2021**, 60, 4001-4017	5.2	2
217	Structural reasons for inhibitory effects of pectin on □amylase enzyme activity and in-vitro digestibility of starch. *Food Hydrocolloids*, **2021**, 114, 106581	10.6	5
216	Protein-starch matrix plays a key role in enzymic digestion of high-amylose wheat noodle. *Food Chemistry*, **2021**, 336, 127719	8.5	21
215	Pectin and mango pulp both reduce plasma cholesterol in pigs but have different effects on triglycerides and bile acids. *Food Hydrocolloids*, **2021**, 112, 106369	10.6	5

214	Depletion and bridging flocculation of oil droplets in the presence of β-glucan, arabinoxylan and pectin polymers: Effects on lipolysis. *Carbohydrate Polymers*, **2021**, 255, 117491	10.3	2
213	In vitro fermentation of legume cells and components: Effects of cell encapsulation and starch/protein interactions. *Food Hydrocolloids*, **2021**, 113, 106538	10.6	3
212	Wheat cell walls and constituent polysaccharides induce similar microbiota profiles upon fermentation despite different short chain fatty acid end-product levels. *Food and Function*, **2021**, 12, 1135-1146	6.1	3
211	Nutritional, anti-nutritional, antioxidant, physicochemical and functional characterization of Australian acacia seed: effect of species and regions. *Journal of the Science of Food and Agriculture*, **2021**, 101, 4681-4690	4.3	2
210	Isolated pectin (apple) and fruit pulp (mango) impact gastric emptying, passage rate and short chain fatty acid (SCFA) production differently along the pig gastrointestinal tract. *Food Hydrocolloids*, **2021**, 118, 106723	10.6	3
209	Exploring the relationships between oral sensory physiology and oral processing with mid infrared spectra of saliva. *Food Hydrocolloids*, **2021**, 120, 106896	10.6	2
208	Molecular-structure evolution during in vitro fermentation of granular high-amylose wheat starch is different to in vitro digestion. *Food Chemistry*, **2021**, 362, 130188	8.5	5
207	Fermentation outcomes of wheat cell wall related polysaccharides are driven by substrate effects as well as initial faecal inoculum. *Food Hydrocolloids*, **2021**, 120, 106978	10.6	0
206	Multiple length scale structure-property relationships of wheat starch oxidized by sodium hypochlorite or hydrogen peroxide. *Carbohydrate Polymer Technologies and Applications*, **2021**, 2, 100147	7.7	0
205	High amylose wheat starch structures display unique fermentability characteristics, microbial community shifts and enzyme degradation profiles. *Food and Function*, **2020**, 11, 5635-5646	6.1	19
204	High-amylose wheat starch: Structural basis for water absorption and pasting properties. *Carbohydrate Polymers*, **2020**, 245, 116557	10.3	26
203	Starch granular protein of high-amylose wheat gives innate resistance to amylolysis. *Food Chemistry* , **2020**, 330, 127328	8.5	10
202	High-amylose wheat and maize starches have distinctly different granule organization and annealing behaviour: A key role for chain mobility. *Food Hydrocolloids*, **2020**, 105, 105820	10.6	16
201	Intrinsic grain starch digestibility affects the concentration of faecal markers of colonic fermentation and bodyweight gain without affecting feed intake in pigs. *Animal Feed Science and Technology*, **2020**, 268, 114599	3	2
200	Cereal dietary fibres influence retention time of digesta solid and liquid phases along the gastrointestinal tract. *Food Hydrocolloids*, **2020**, 104, 105739	10.6	13
199	Independent fermentation and metabolism of dietary polyphenols associated with a plant cell wall model. *Food and Function*, **2020**, 11, 2218-2230	6.1	10
198	Barley β-glucan effects on emulsification and in vitro lipolysis of canola oil are modulated by molecular size, mixing method, and emulsifier type. *Food Hydrocolloids*, **2020**, 103, 105643	10.6	7
197	The contribution of β-glucan and starch fine structure to texture of oat-fortified wheat noodles. *Food Chemistry*, **2020**, 324, 126858	8.5	10

196	Functional Genomic Validation of the Roles of in Rice Endosperm. *Frontiers in Genetics*, **2020**, 11, 289	4.5	6
195	Cell wall architecture as well as chemical composition determines fermentation of wheat cell walls by a faecal inoculum. *Food Hydrocolloids*, **2020**, 107, 105858	10.6	13
194	Formation of Cellulose-Based Composites with Hemicelluloses and Pectins Using Komagataeibacter Fermentation. *Methods in Molecular Biology*, **2020**, 2149, 73-87	1.4	0
193	fermentation outcomes of arabinoxylan and galactoxyloglucan depend on fecal inoculum more than substrate chemistry. *Food and Function*, **2020**, 11, 7892-7904	6.1	10
192	Purified plant cell walls with adsorbed polyphenols alter porcine faecal bacterial communities during in vitro fermentation. *Food and Function*, **2020**, 11, 834-845	6.1	8
191	In Vitro Digestion of Apple Tissue Using a Dynamic Stomach Model: Grinding and Crushing Effects on Polyphenol Bioaccessibility. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 574-583	5.7	9
190	Wood hemicelluloses exert distinct biomechanical contributions to cellulose fibrillar networks. *Nature Communications*, **2020**, 11, 4692	17.4	43
189	Starch branching enzymes contributing to amylose and amylopectin fine structure in wheat. *Carbohydrate Polymers*, **2019**, 224, 115185	10.3	20
188	A more general approach to fitting digestion kinetics of starch in food. *Carbohydrate Polymers*, **2019**, 225, 115244	10.3	29
187	Location and interactions of starches in planta: Effects on food and nutritional functionality. *Trends in Food Science and Technology*, **2019**, 93, 158-166	15.3	42
186	Altering starch branching enzymes in wheat generates high-amylose starch with novel molecular structure and functional properties. *Food Hydrocolloids*, **2019**, 92, 51-59	10.6	53
185	High-Amylose Starches to Bridge the "Fiber Gap": Development, Structure, and Nutritional Functionality. *Comprehensive Reviews in Food Science and Food Safety*, **2019**, 18, 362-379	16.4	99
184	Mechanism of binding interactions between young apple polyphenols and porcine pancreatic □amylase. *Food Chemistry*, **2019**, 283, 468-474	8.5	28
183	Review: Effects of fibre, grain starch digestion rate and the ileal brake on voluntary feed intake in pigs. *Animal*, **2019**, 13, 2745-2754	3.1	18
182	"Dietary fibre": moving beyond the "soluble/insoluble" classification for monogastric nutrition, with an emphasis on humans and pigs. *Journal of Animal Science and Biotechnology*, **2019**, 10, 45	6	57
181	Interactions of arabinogalactans with bacterial cellulose during its synthesis: Structure and physical properties. *Food Hydrocolloids*, **2019**, 96, 644-652	10.6	2
180	Cellular barriers in apple tissue regulate polyphenol release under different food processing and in vitro digestion conditions. *Food and Function*, **2019**, 10, 3008-3017	6.1	11
179	Microbial enzymatic degradation of tamarind galactoxyloglucan and wheat arabinoxylan by a porcine faecal inoculum. *Bioactive Carbohydrates and Dietary Fibre*, **2019**, 18, 100183	3.4	1

178	Natural products for glycaemic control: Polyphenols as inhibitors of alpha-amylase. *Trends in Food Science and Technology*, **2019**, 91, 262-273	15.3	64
177	Wheat bran and oat hulls have dose-dependent effects on ad-libitum feed intake in pigs related to digesta hydration and colonic fermentation. *Food and Function*, **2019**, 10, 8298-8308	6.1	5
176	Functional categorisation of dietary fibre in foods: Beyond 'soluble' vs 'insoluble'. *Trends in Food Science and Technology*, **2019**, 86, 563-568	15.3	56
175	Wall porosity in isolated cells from food plants: Implications for nutritional functionality. *Food Chemistry*, **2019**, 279, 416-425	8.5	32
174	The role of thermostable proteinaceous α-amylase inhibitors in slowing starch digestion in pasta. *Food Hydrocolloids*, **2019**, 90, 241-247	10.6	27
173	Partial replacement of meat by sugar cane fibre: cooking characteristics, sensory properties of beef burgers and in vitro fermentation of sugar cane fibre. *International Journal of Food Science and Technology*, **2019**, 54, 1760-1768	3.8	8
172	Probing adhesion between nanoscale cellulose fibres using AFM lateral force spectroscopy: The effect of hemicelluloses on hydrogen bonding. *Carbohydrate Polymers*, **2019**, 208, 97-107	10.3	10
171	Molecular brewing: Molecular structural effects involved in barley malting and mashing. *Carbohydrate Polymers*, **2019**, 206, 583-592	10.3	26
170	Adsorption isotherm studies on the interaction between polyphenols and apple cell walls: Effects of variety, heating and drying. *Food Chemistry*, **2019**, 282, 58-66	8.5	23
169	Rheological characterisation of cell walls from wheat flour and endosperm: Effects of diferulate crosslink hydrolysis. *Food Hydrocolloids*, **2019**, 88, 265-271	10.6	3
168	Intact cellular structure in cereal endosperm limits starch digestion in vitro. *Food Hydrocolloids*, **2018**, 81, 139-148	10.6	46
167	Mechanical properties of bacterial cellulose synthesised by diverse strains of the genus Komagataeibacter. *Food Hydrocolloids*, **2018**, 81, 87-95	10.6	52
166	Mucin gel assembly is controlled by a collective action of non-mucin proteins, disulfide bridges, Ca-mediated links, and hydrogen bonding. *Scientific Reports*, **2018**, 8, 5802	4.9	45
165	Accounting for the effect of degree of milling on rice protein extraction in an industrial setting. *Food Chemistry*, **2018**, 253, 221-226	8.5	8
164	Dietary pectin and mango pulp effects on small intestinal enzyme activity levels and macronutrient digestion in grower pigs. *Food and Function*, **2018**, 9, 991-999	6.1	12
163	Modelling of Thermal Sterilisation of High-Moisture Snack Foods: Feasibility Analysis and Optimization. *Food and Bioprocess Technology*, **2018**, 11, 979-990	5.1	1
162	Viscoelastic properties of pectin/cellulose composites studied by QCM-D and oscillatory shear rheology. *Food Hydrocolloids*, **2018**, 79, 13-19	10.6	16
161	In vitro fermentation gas kinetics and end-products of soluble and insoluble cereal flour dietary fibres are similar. *Food and Function*, **2018**, 9, 898-905	6.1	17

160	Tea polyphenols enhance binding of porcine pancreatic □amylase with starch granules but reduce catalytic activity. *Food Chemistry*, **2018**, 258, 164-173	8.5	33
159	Mechanisms of utilisation of arabinoxylans by a porcine faecal inoculum: competition and co-operation. *Scientific Reports*, **2018**, 8, 4546	4.9	18
158	Microstructural properties of potato chips. *Food Structure*, **2018**, 16, 17-26	4.3	13
157	Protection of □amylase from proteolysis by adsorption to feed components in vitro and in the porcine small intestine. *Animal Production Science*, **2018**, 58, 640	1.4	1
156	Dietary fibre for glycaemia control: Towards a mechanistic understanding. *Bioactive Carbohydrates and Dietary Fibre*, **2018**, 14, 39-53	3.4	61
155	Cell wall biomechanics: a tractable challenge in manipulating plant cell walls 'fit for purpose'!. *Current Opinion in Biotechnology*, **2018**, 49, 163-171	11.4	23
154	The adsorption of □amylase on barley proteins affects the in vitro digestion of starch in barley flour. *Food Chemistry*, **2018**, 241, 493-501	8.5	72
153	Male grower pigs fed cereal soluble dietary fibres display biphasic glucose response and delayed glycaemic response after an oral glucose tolerance test. *PLoS ONE*, **2018**, 13, e0193137	3.7	4
152	Soluble polysaccharides reduce binding and inhibitory activity of tea polyphenols against porcine pancreatic □amylase. *Food Hydrocolloids*, **2018**, 79, 63-70	10.6	28
151	Extracellular depolymerisation triggers fermentation of tamarind xyloglucan and wheat arabinoxylan by a porcine faecal inoculum. *Carbohydrate Polymers*, **2018**, 201, 575-582	10.3	19
150	Quantitative structural organisation model for wheat endosperm cell walls: Cellulose as an important constituent. *Carbohydrate Polymers*, **2018**, 196, 199-208	10.3	41
149	Food Starch Structure Impacts Gut Microbiome Composition. *MSphere*, **2018**, 3,	5	72
148	Anti-staling of high-moisture starchy food: Effect of hydrocolloids, emulsifiers and enzymes on mechanics of steamed-rice cakes. *Food Hydrocolloids*, **2018**, 83, 454-464	10.6	28
147	Apparent amylase diffusion rates in milled cereal grains determined in vitro: potential relevance to digestion in the small intestine of pigs. *Journal of Cereal Science*, **2018**, 82, 42-48	3.8	8
146	Complexity and health functionality of plant cell wall fibers from fruits and vegetables. *Critical Reviews in Food Science and Nutrition*, **2017**, 57, 59-81	11.5	121
145	Mechanisms of starch digestion by □amylase-Structural basis for kinetic properties. *Critical Reviews in Food Science and Nutrition*, **2017**, 57, 875-892	11.5	210
144	Characterisation of bacterial cellulose from diverse Komagataeibacter strains and their application to construct plant cell wall analogues. *Cellulose*, **2017**, 24, 1211-1226	5.5	17
143	In vitro digestion of pectin- and mango-enriched diets using a dynamic rat stomach-duodenum model. *Journal of Food Engineering*, **2017**, 202, 65-78	6	41

142	Cellulose-pectin composite hydrogels: Intermolecular interactions and material properties depend on order of assembly. *Carbohydrate Polymers*, **2017**, 162, 71-81	10.3	36
141	Isolation of wheat endosperm cell walls: Effects of non-endosperm flour components on structural analyses. *Journal of Cereal Science*, **2017**, 74, 165-173	3.8	18
140	Binding selectivity of dietary polyphenols to different plant cell wall components: Quantification and mechanism. *Food Chemistry*, **2017**, 233, 216-227	8.5	66
139	The mechanism of interactions between tea polyphenols and porcine pancreatic alpha-amylase: Analysis by inhibition kinetics, fluorescence quenching, differential scanning calorimetry and isothermal titration calorimetry. *Molecular Nutrition and Food Research*, **2017**, 61, 1700324	5.9	52
138	Digestion of isolated legume cells in a stomach-duodenum model: three mechanisms limit starch and protein hydrolysis. *Food and Function*, **2017**, 8, 2573-2582	6.1	81
137	Opportunities and Challenges in Processing of By-product of Rice Milling Protein as a Food Ingredient. *Cereal Chemistry*, **2017**, 94, 369-376	2.4	4
136	Gut Fermentation of Dietary Fibres: Physico-Chemistry of Plant Cell Walls and Implications for Health. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	97
135	Multi-scale characterisation of deuterated cellulose composite hydrogels reveals evidence for different interaction mechanisms with arabinoxylan, mixed-linkage glucan and xyloglucan. *Polymer*, **2017**, 124, 1-11	3.9	18
134	Hydrogen bonds and twist in cellulose microfibrils. *Carbohydrate Polymers*, **2017**, 175, 433-439	10.3	35
133	Structure of cellulose microfibrils in mature cotton fibres. *Carbohydrate Polymers*, **2017**, 175, 450-463	10.3	44
132	Dietary polyphenols bind to potato cells and cellular components. *Journal of Functional Foods*, **2017** , 37, 283-292	5.1	20
131	Mucoadhesive functionality of cell wall structures from fruits and grains: Electrostatic and polymer network interactions mediated by soluble dietary polysaccharides. *Scientific Reports*, **2017**, 7, 15794	4.9	18
130	Regrinding large particles from milled grains improves growth performance of pigs. *Animal Feed Science and Technology*, **2017**, 233, 53-63	3	7
129	Relationships between protein content, starch molecular structure and grain size in barley. *Carbohydrate Polymers*, **2017**, 155, 271-279	10.3	64
128	Adsorption behaviour of polyphenols on cellulose is affected by processing history. *Food Hydrocolloids*, **2017**, 63, 496-507	10.6	38
127	Addition of arabinoxylan and mixed linkage glucans in porcine diets affects the large intestinal bacterial populations. *European Journal of Nutrition*, **2017**, 56, 2193-2206	5.2	18
126	Tribology of swollen starch granule suspensions from maize and potato. *Carbohydrate Polymers*, **2017**, 155, 128-135	10.3	34
125	A Genome Wide Association Study of arabinoxylan content in 2-row spring barley grain. *PLoS ONE*, **2017**, 12, e0182537	3.7	14

124	Reduction in circulating bile acid and restricted diffusion across the intestinal epithelium are associated with a decrease in blood cholesterol in the presence of oat β-glucan. *FASEB Journal*, **2016**, 30, 4227-4238	0.9	57
123	Composition and structure of tuber cell walls affect in vitro digestibility of potato (Solanum tuberosum L.). *Food and Function*, **2016**, 7, 4202-4212	6.1	15
122	Circulating triglycerides and bile acids are reduced by a soluble wheat arabinoxylan via modulation of bile concentration and lipid digestion rates in a pig model. *Molecular Nutrition and Food Research*, **2016**, 60, 642-51	5.9	38
121	Compact structure and proteins of pasta retard in vitro digestive evolution of branched starch molecular structure. *Carbohydrate Polymers*, **2016**, 152, 441-449	10.3	51
120	Interactions among macronutrients in wheat flour determine their enzymic susceptibility. *Food Hydrocolloids*, **2016**, 61, 415-425	10.6	62
119	Intactness of cell wall structure controls the in vitro digestion of starch in legumes. *Food and Function*, **2016**, 7, 1367-79	6.1	135
118	Soluble arabinoxylan enhances large intestinal microbial health biomarkers in pigs fed a red meat-containing diet. *Nutrition*, **2016**, 32, 491-7	4.8	23
117	Structural properties and digestion of green banana flour as a functional ingredient in pasta. *Food and Function*, **2016**, 7, 771-80	6.1	21
116	Hierarchical architecture of bacterial cellulose and composite plant cell wall polysaccharide hydrogels using small angle neutron scattering. *Soft Matter*, **2016**, 12, 1534-49	3.6	42
115	Mapping nano-scale mechanical heterogeneity of primary plant cell walls. *Journal of Experimental Botany*, **2016**, 67, 2799-816	7	28
114	Molecular interactions of a model bile salt and porcine bile with (1,3:1,4)-β-glucans and arabinoxylans probed by (13)C NMR and SAXS. *Food Chemistry*, **2016**, 197, 676-85	8.5	28
113	Infrared spectroscopy as a tool to characterise starch ordered structure--a joint FTIR-ATR, NMR, XRD and DSC study. *Carbohydrate Polymers*, **2016**, 139, 35-42	10.3	294
112	Visualization of microbe-dietary remnant interactions in digesta from pigs, by fluorescence in situ hybridization and staining methods; effects of a dietary arabinoxylan-rich wheat fraction. *Food Hydrocolloids*, **2016**, 52, 952-962	10.6	8
111	Interactions of pectins with cellulose during its synthesis in the absence of calcium. *Food Hydrocolloids*, **2016**, 52, 57-68	10.6	53
110	Micromechanical model of biphasic biomaterials with internal adhesion: Application to nanocellulose hydrogel composites. *Acta Biomaterialia*, **2016**, 29, 149-160	10.8	25
109	Effects of diverse food processing conditions on the structure and solubility of wheat, barley and rye endosperm dietary fibre. *Journal of Food Engineering*, **2016**, 169, 228-237	6	32
108	Effects of cereal soluble dietary fibres on hydrolysis of p-nitrophenyl laurate by pancreatin. *Food and Function*, **2016**, 7, 3382-9	6.1	9
107	Investigation of the micro- and nano-scale architecture of cellulose hydrogels with plant cell wall polysaccharides: A combined USANS/SANS study. *Polymer*, **2016**, 105, 449-460	3.9	24

106	Re-evaluation of the mechanisms of dietary fibre and implications for macronutrient bioaccessibility, digestion and postprandial metabolism. *British Journal of Nutrition*, **2016**, 116, 816-33	3.6	179
105	Interactions between polyphenols in thinned young apples and porcine pancreatic □amylase: Inhibition, detailed kinetics and fluorescence quenching. *Food Chemistry*, **2016**, 208, 51-60	8.5	96
104	Microbial biotransformation of polyphenols during in vitro colonic fermentation of masticated mango and banana. *Food Chemistry*, **2016**, 207, 214-22	8.5	16
103	Multi-scale model for the hierarchical architecture of native cellulose hydrogels. *Carbohydrate Polymers*, **2016**, 147, 542-555	10.3	36
102	Rheological and microstructural properties of porcine gastric digesta and diets containing pectin or mango powder. *Carbohydrate Polymers*, **2016**, 148, 216-26	10.3	32
101	Microstructure and mechanical properties of arabinoxylan and (1,3;1,4)-□glucan gels produced by cryo-gelation. *Carbohydrate Polymers*, **2016**, 151, 862-870	10.3	17
100	3 or 3?-Galloyl substitution plays an important role in association of catechins and theaflavins with porcine pancreatic □amylase: The kinetics of inhibition of □amylase by tea polyphenols. *Journal of Functional Foods*, **2016**, 26, 144-156	5.1	84
99	Pectin impacts cellulose fibre architecture and hydrogel mechanics in the absence of calcium. *Carbohydrate Polymers*, **2016**, 153, 236-245	10.3	26
98	Polyphenol□cellulose interactions: effects of pH, temperature and salt. *International Journal of Food Science and Technology*, **2016**, 51, 203-211	3.8	29
97	Effect of surfactant treatment on swelling behaviour of normal and waxy cereal starches. *Carbohydrate Polymers*, **2015**, 125, 265-71	10.3	6
96	Application of X-ray and neutron small angle scattering techniques to study the hierarchical structure of plant cell walls: a review. *Carbohydrate Polymers*, **2015**, 125, 120-34	10.3	70
95	Soluble arabinoxylan alters digesta flow and protein digestion of red meat-containing diets in pigs. *Nutrition*, **2015**, 31, 1141-7	4.8	20
94	Densely packed matrices as rate determining features in starch hydrolysis. *Trends in Food Science and Technology*, **2015**, 43, 18-31	15.3	94
93	Diffusion of macromolecules in self-assembled cellulose/hemicellulose hydrogels. *Soft Matter*, **2015**, 11, 4002-10	3.6	29
92	Interactions of arabinoxylan and (1,3)(1,4)-□glucan with cellulose networks. *Biomacromolecules*, **2015**, 16, 1232-9	6.9	50
91	Binding of arabinan or galactan during cellulose synthesis is extensive and reversible. *Carbohydrate Polymers*, **2015**, 126, 108-21	10.3	34
90	Evidence for differential interaction mechanism of plant cell wall matrix polysaccharides in hierarchically-structured bacterial cellulose. *Cellulose*, **2015**, 22, 1541-1563	5.5	52
89	Unique aspects of the structure and dynamics of elementary I□cellulose microfibrils revealed by computational simulations. *Plant Physiology*, **2015**, 168, 3-17	6.6	63

88	Extrusion induced low-order starch matrices: Enzymic hydrolysis and structure. *Carbohydrate Polymers*, **2015**, 134, 485-96	10.3	43
87	Rheology and microstructure characterisation of small intestinal digesta from pigs fed a red meat-containing Western-style diet. *Food Hydrocolloids*, **2015**, 44, 300-308	10.6	27
86	Mastication effects on carotenoid bioaccessibility from mango fruit tissue. *Food Research International*, **2015**, 67, 238-246	7	33
85	Rice starch granule amylolysis--differentiating effects of particle size, morphology, thermal properties and crystalline polymorph. *Carbohydrate Polymers*, **2015**, 115, 305-16	10.3	76
84	The interplay of □amylase and amyloglucosidase activities on the digestion of starch in in vitro enzymic systems. *Carbohydrate Polymers*, **2015**, 117, 192-200	10.3	82
83	Binding of dietary polyphenols to cellulose: structural and nutritional aspects. *Food Chemistry*, **2015** , 171, 388-96	8.5	92
82	Combined techniques for characterising pasta structure reveals how the gluten network slows enzymic digestion rate. *Food Chemistry*, **2015**, 188, 559-68	8.5	125
81	Sequence diversity and differential expression of major phenylpropanoid-flavonoid biosynthetic genes among three mango varieties. *BMC Genomics*, **2015**, 16, 561	4.5	14
80	Gaining insight into cell wall cellulose macrofibril organisation by simulating microfibril adsorption. *Cellulose*, **2015**, 22, 3501-3520	5.5	39
79	Molecular, mesoscopic and microscopic structure evolution during amylase digestion of extruded maize and high amylose maize starches. *Carbohydrate Polymers*, **2015**, 118, 224-34	10.3	29
78	Inhibition of □amylase activity by cellulose: Kinetic analysis and nutritional implications. *Carbohydrate Polymers*, **2015**, 123, 305-12	10.3	137
77	Characteristics of starch-based films with different amylose contents plasticised by 1-ethyl-3-methylimidazolium acetate. *Carbohydrate Polymers*, **2015**, 122, 160-8	10.3	39
76	Poroelastic mechanical effects of hemicelluloses on cellulosic hydrogels under compression. *PLoS ONE*, **2015**, 10, e0122132	3.7	38
75	Characterisation of soluble and insoluble cell wall fractions from rye, wheat and hull-less barley endosperm flours. *Food Hydrocolloids*, **2014**, 41, 219-226	10.6	28
74	Micromechanics and poroelasticity of hydrated cellulose networks. *Biomacromolecules*, **2014**, 15, 2274-84	6.9	45
73	Mechanism for starch granule ghost formation deduced from structural and enzyme digestion properties. *Journal of Agricultural and Food Chemistry*, **2014**, 62, 760-71	5.7	87
72	Enzymatic hydrolysis of starch in the presence of cereal soluble fibre polysaccharides. *Food and Function*, **2014**, 5, 579-86	6.1	52
71	Amylase binding to starch granules under hydrolysing and non-hydrolysing conditions. *Carbohydrate Polymers*, **2014**, 113, 97-107	10.3	41

70	Freeze-drying changes the structure and digestibility of B-polymorphic starches. *Journal of Agricultural and Food Chemistry*, **2014**, 62, 1482-91	5.7	82
69	Characteristics of starch-based films plasticised by glycerol and by the ionic liquid 1-ethyl-3-methylimidazolium acetate: a comparative study. *Carbohydrate Polymers*, **2014**, 111, 841-8	10.3	53
68	Influence of hydration and starch digestion on the transient rheology of an aqueous suspension of comminuted potato snack food. *Food and Function*, **2014**, 5, 2775-82	6.1	12
67	Separation and purification of soluble polymers and cell wall fractions from wheat, rye and hull less barley endosperm flours for structure-nutrition studies. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 12111-22	5.7	56
66	Lack of release of bound anthocyanins and phenolic acids from carrot plant cell walls and model composites during simulated gastric and small intestinal digestion. *Food and Function*, **2013**, 4, 906-16	6.1	76
65	Hydrocolloids in the digestive tract and related health implications. *Current Opinion in Colloid and Interface Science*, **2013**, 18, 371-378	7.6	112
64	Heterogeneity in maize starch granule internal architecture deduced from diffusion of fluorescent dextran probes. *Carbohydrate Polymers*, **2013**, 93, 365-73	10.3	21
63	Synergistic and antagonistic effects of α-Amylase and amyloglucosidase on starch digestion. *Biomacromolecules*, **2013**, 14, 1945-54	6.9	119
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61	Molecular, mesoscopic and microscopic structure evolution during amylase digestion of maize starch granules. *Carbohydrate Polymers*, **2012**, 90, 23-33	10.3	94
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