Moo-Yeol Baik

List of Publications by Citations

99 papers	1,896 citations	24 h-index	39 g-index
101 ext. papers	2,189 ext. citations	4.7 avg, IF	4.71 L-index

#	Paper	IF	Citations
99	Moisture Redistribution and Phase Transitions During Bread Staling. *Cereal Chemistry*, **2000**, 77, 484-488	2.4	149
98	Knockout of a starch synthase gene OsSSIIIa/Flo5 causes white-core floury endosperm in rice (Oryza sativa L.). *Plant Cell Reports*, **2007**, 26, 1083-95	5.1	120
97	Formation, characterization, and glucose response in mice to rice starch with low digestibility produced by citric acid treatment. *Journal of Cereal Science*, **2007**, 45, 24-33	3.8	99
96	Recrystallization Kinetics and Glass Transition of Rice Starch Gel System. *Journal of Agricultural and Food Chemistry*, **1997**, 45, 4242-4248	5.7	94
95	Enzymatic synthesis of salicin glycosides through transglycosylation catalyzed by amylosucrases from Deinococcus geothermalis and Neisseria polysaccharea. *Carbohydrate Research*, **2009**, 344, 1612-9	2.9	61
94	Application of ultra high pressure (UHP) in starch chemistry. *Critical Reviews in Food Science and Nutrition*, **2012**, 52, 123-41	11.5	60
93	Molecular mobility in model dough systems studied by time-domain nuclear magnetic resonance spectroscopy. *Journal of Cereal Science*, **2007**, 45, 257-262	3.8	60
92	Effects of glycerol and moisture gradient on thermomechanical properties of white bread. *Journal of Agricultural and Food Chemistry*, **2001**, 49, 4031-8	5.7	60
91	Stabilization of orange oil-in-water emulsions: A new role for ester gum as an Ostwald ripening inhibitor. *Food Chemistry*, **2011**, 128, 1023-1028	8.5	57
90	Ultra high pressure (UHP)-assisted acetylation of corn starch. *Carbohydrate Polymers*, **2009**, 78, 862-868	10.3	56
89	Solid-State 13C CP/MAS NMR studies on aging of starch in white bread. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 1242-8	5.7	51
88	Production and characterization of digestion-resistant starch by the reaction of Neisseria polysaccharea amylosucrase. *Starch/Staerke*, **2010**, 62, 221-228	2.3	45
87	Glycosylation of genistin into soluble inclusion complex form of cyclic glucans by enzymatic modification. *Journal of Agricultural and Food Chemistry*, **2005**, 53, 6516-24	5.7	43
86	Physicochemical properties of granular and non-granular cationic starches prepared under ultra high pressure. *Carbohydrate Polymers*, **2014**, 99, 385-93	10.3	38
85	Physicochemical properties and antioxidant capacity of raw, roasted and puffed cacao beans. *Food Chemistry*, **2016**, 194, 1089-94	8.5	36
84	Chemical conversion of ginsenosides in puffed red ginseng. *LWT - Food Science and Technology*, **2011**, 44, 370-374	5.4	34
83	Water dynamics and retrogradation of ultrahigh pressurized wheat starch. *Journal of Agricultural and Food Chemistry*, **2006**, 54, 6719-24	5.7	34

82	Biotransformation of Korean Panax ginseng by Pectinex. *Biological and Pharmaceutical Bulletin*, **2006**, 29, 2472-8	2.3	34
81	Ultra high pressure extraction (UHPE) of ginsenosides from Korean Panax ginseng powder. *Food Science and Biotechnology*, **2010**, 19, 743-748	3	32
80	Characterization of acetylated corn starch prepared under ultrahigh pressure (UHP). *Journal of Agricultural and Food Chemistry*, **2010**, 58, 3573-9	5.7	30
79	Cross-linking of corn starch with phosphorus oxychloride under ultra high pressure. *Food Chemistry*, **2012**, 130, 977-980	8.5	29
78	Physicochemical Properties of Non-thermally Cross-linked Corn Starch with Phosphorus Oxychloride using Ultra High Pressure (UHP). *Starch/Staerke*, **2009**, 61, 438-447	2.3	27
77	Chemical structure and physical properties of mung bean starches isolated from 5 domestic cultivars. *Journal of Food Science*, **2007**, 72, C471-7	3.4	27
76	Effects of Glycerol and Moisture Redistribution on Mechanical Properties of White Bread. *Cereal Chemistry*, **2002**, 79, 376-382	2.4	25
75	Ultra high pressure (UHP)-assisted hydroxypropylation of corn starch. *Carbohydrate Polymers*, **2011**, 83, 755-761	10.3	22
74	Change of Ginsenoside Profiles in Processed Ginseng by Drying, Steaming, and Puffing. *Journal of Microbiology and Biotechnology*, **2019**, 29, 222-229	3.3	22
73	Gelatinization and retrogradation of 6-year-old korean ginseng starches studied by DSC. *LWT - Food Science and Technology*, **2005**, 38, 59-65	5.4	21
72	Effect of maturity stage at harvest on antioxidant capacity and total phenolics in kiwifruits (Actinidia spp.) grown in Korea. *Horticulture Environment and Biotechnology*, **2015**, 56, 841-848	2	20
71	Nonthermal starch hydrolysis using ultra high pressure: I. Effects of acids and starch concentrations. *LWT - Food Science and Technology*, **2006**, 39, 1125-1132	5.4	20
70	Effects of Ultra High Pressure, Pressing Time and HCl Concentration on Non-thermal Starch Hydrolysis Using Ultra High Pressure. *Starch/Staerke*, **2009**, 61, 334-343	2.3	18
69	Enzymatic characterization of a maltogenic amylase from Lactobacillus gasseri ATCC 33323 expressed in Escherichia coli. *FEMS Microbiology Letters*, **2005**, 252, 175-81	2.9	18
68	Physicochemical and retrogradation properties of modified chestnut starches. *Food Science and Biotechnology*, **2019**, 28, 1723-1731	3	17
67	Puffing, a novel coffee bean processing technique for the enhancement of extract yield and antioxidant capacity. *Food Chemistry*, **2018**, 240, 594-600	8.5	17
66	Effects of freeze-drying on antioxidant and anticholinesterase activities in various cultivars of kiwifruit (spp.). *Food Science and Biotechnology*, **2017**, 26, 221-228	3	16
65	In vitro Digestibility of Hydroxypropylated and Cross-linked Waxy and Non-waxy Rice Starches. *Starch/Staerke*, **2009**, 61, 20-27	2.3	16

64	Physicochemical characteristics of 6-year-old Korean ginseng starches. *LWT - Food Science and Technology*, **2005**, 38, 801-807	5.4	16
63	Amelioration of obesity in high-fat diet-fed mice by chestnut starch modified by amylosucrase from Deinococcus geothermalis. *Food Hydrocolloids*, **2018**, 75, 22-32	10.6	14
62	Effect of short-chain fatty acids on the formation of amylose microparticles by amylosucrase. *Carbohydrate Polymers*, **2016**, 151, 606-613	10.3	14
61	Preparation and characterization of amorphous granular potato starches (AGPS) and cross-linked amorphous granular potato starches (CLAGPS). *Carbohydrate Polymers*, **2017**, 178, 41-47	10.3	14
60	Characterization of a protease from over-matured fruits and development of a tenderizer using an optimization technique. *Food Science and Biotechnology*, **2011**, 20, 485-490	3	14
59	Puffing as a Novel Process to Enhance the Antioxidant and Anti-Inflammatory Properties of L. (Turmeric). *Antioxidants*, **2019**, 8,	7.1	13
58	Comparison of physicochemical properties of starches and parenchyma cells isolated from potatoes cultivated in Korea. *Food Science and Biotechnology*, **2015**, 24, 955-963	3	13
57	Infusion of catechin into native corn starch granules for drug and nutrient delivery systems. *Food Science and Biotechnology*, **2015**, 24, 2035-2040	3	13
56	Characterization of amorphous granular starches prepared by high hydrostatic pressure (HHP). *Food Science and Biotechnology*, **2017**, 26, 671-678	3	12
55	Characteristics of granular cold-water-soluble potato starch treated with alcohol and alkali. *Food Science and Biotechnology*, **2017**, 26, 1263-1270	3	12
54	Optimization of Makgeolli Manufacture Using Several Sweet Potatoes. *The Korean Journal of Food and Nutrition*, **2013**, 26, 29-34		12
53	Retrogradation kinetics of cross-linked and acetylated corn starches under high hydrostatic pressure. *Food Science and Biotechnology*, **2015**, 24, 85-90	3	11
52	Water Self-Diffusion Coefficient and Staling of White Bread as Affected by Glycerol. *Cereal Chemistry*, **2003**, 80, 740-744	2.4	11
51	Puffing of enhances anti-oxidant capacity and down-regulates IL-6 production in RAW 264.7 cells. *Food Science and Biotechnology*, **2019**, 28, 1235-1240	3	10
50	Freeze-thaw stability, glass transition, and retrogradation of high hydrostatic pressure-assisted hydroxypropylated corn starch. *Food Science and Biotechnology*, **2015**, 24, 1327-1333	3	10
49	Total phenolic contents and antioxidant activities of Korean domestic honey from different floral sources. *Food Science and Biotechnology*, **2015**, 24, 1453-1457	3	10
48	Impact of starch granule-associated surface and channel proteins on physicochemical properties of corn and rice starches. *Carbohydrate Polymers*, **2020**, 250, 116908	10.3	10
47	Efficiency of high hydrostatic pressure in preparing amorphous granular starches. *Starch/Staerke*, **2015**, 67, 790-801	2.3	9

46	Starch nanoparticles prepared by enzymatic hydrolysis and self-assembly of short-chain glucans. *Food Science and Biotechnology*, **2020**, 29, 585-598	3	9
45	Enzymatic extraction of starch from broken rice using freeze-thaw infusion with food-grade protease. *Starch/Staerke*, **2018**, 70, 1700007	2.3	9
44	A brief history and spectroscopic analysis of soy isoflavones. *Food Science and Biotechnology*, **2020**, 29, 1605-1617	3	9
43	Effect of high hydrostatic pressure treatment on conventional hydroxypropylation of maize starch. *Carbohydrate Polymers*, **2016**, 146, 328-36	10.3	9
42	Isolation and characterization of starches from chestnuts cultivated in three regions of Korea. *Starch/Staerke*, **2015**, 67, 585-594	2.3	8
41	Optimization of hot water extraction and ultra high pressure extraction for deer antler. *Food Science and Biotechnology*, **2015**, 24, 507-512	3	7
40	Blending of different domestic grape wines using mixture design and optimization technique. *Food Science and Biotechnology*, **2010**, 19, 1011-1018	3	7
39	Optimization of ultra high pressure extraction (UHPE) condition for puffed ginseng using response surface methodology. *Food Science and Biotechnology*, **2014**, 23, 1151-1157	3	6
38	DEVELOPMENT AND OPTIMIZATION OF A DRINK UTILIZING CITRUS (CITRUS UNSHIU) PEEL EXTRACT. *Journal of Food Process Engineering*, **2012**, 35, 557-571	2.4	6
37	Rheological properties of native maize, waxy maize, and acetylated maize starches, and applications in the development of food products **2013**, 56, 63-68		6
36	Infusion efficiency of sodium fluorescein into various starches. *Food Science and Biotechnology*, **2019**, 28, 99-102	3	6
35	Enhancement of Minor Ginsenosides Contents and Antioxidant Capacity of American and Canadian Ginsengs () by Puffing. *Antioxidants*, **2019**, 8,	7.1	5
34	Retrogradation kinetics of chestnut starches cultivated in three regions of Korea. *Food Science and Biotechnology*, **2017**, 26, 663-670	3	5
33	Characterization of cationic dextrin prepared by ultra high pressure (UHP)-assisted cationization reaction. *Carbohydrate Polymers*, **2013**, 97, 130-7	10.3	5
32	Standardization of ginseng processing for maximizing the phytonutrients of ginseng. *Food Science and Biotechnology*, **2013**, 22, 221-226	3	5
31	Extraction of -carotene produced from yeast Rhodosporidium sp. and its heat stability. *Food Science and Biotechnology*, **2010**, 19, 263-266	3	5
30	Physicochemical Properties of Waxy Rice, Waxy Rice Flour and Waxy Rice Starch During Steeping. *Journal of Applied Biological Chemistry*, **2008**, 51, 277-284	0.7	5
29	Enhanced Antioxidant Capacity of Puffed Turmeric (L.) by High Hydrostatic Pressure Extraction (HHPE) of Bioactive Compounds. *Foods*, **2020**, 9,	4.9	5

28	Physicochemical properties of partially -glucan-coated normal corn starch formed by amylosucrase from Neisseria polysaccharea. *International Journal of Biological Macromolecules*, **2019**, 133, 1102-1106	7.9	4
27	Optimization of thermal processing conditions for brown rice noodles. *Applied Biological Chemistry*, **2016**, 59, 517-524	2.9	4
26	Manufacture and quality evaluation of purple sweet potato Makgeolli vinegar using a 2-stage fermentation. *Food Science and Biotechnology*, **2014**, 23, 1145-1149	3	4
25	MANUFACTURE OF THE FUNCTIONAL DRINK USING HYDROLYSATE FROM OYSTER AND OTHER EXTRACTS. *Journal of Food Quality*, **2010**, 33, 1-13	2.7	4
24	Derivatization of Rice Wine Meal Using Commercial Proteases and Characterization of Its Hydrolysates. *Korean Journal of Food Science and Technology*, **2011**, 43, 729-734		4
23	Enzymatically elongated rice starches by amylosucrase from Deinococcus geothermalis lead to slow down the glucose generation rate at the mammalian -glucosidase level. *International Journal of Biological Macromolecules*, **2020**, 149, 767-772	7.9	3
22	Effect of drying and storage on the rheological characteristics of mozzarella cheese. *Food Science and Biotechnology*, **2015**, 24, 2041-2044	3	3
21	High Hydrostatic Pressure (HHP)-assisted Starch Modification: Acid Hydrolysis, Hydroxypropylation, Acetylation, Cross-linking and Cationization. *Journal of Applied Glycoscience (1999)*, **2014**, 61, 31-34	1	3
20	Antioxidant and phytoestrogenic activities of puffed black soybeans (Glycine max). *LWT - Food Science and Technology*, **2020**, 118, 108780	5.4	3
19	Puffing of Turmeric (L.) Enhances its Anti-Inflammatory Effects by Upregulating Macrophage Oxidative Phosphorylation. *Antioxidants*, **2020**, 9,	7.1	3
18	Preparation and characterization of self-assembled short-chain glucan aggregates (SCGAs) derived from various starches. *Food Hydrocolloids*, **2021**, 114, 106517	10.6	3
17	Enzymatic modification of potato starch by amylosucrase according to reaction temperature: Effect of branch-chain length on structural, physicochemical, and digestive properties. *Food Hydrocolloids*, **2022**, 122, 107086	10.6	3
16	Effects of moisture content and puffing pressure on extraction yield and antioxidant activity of puffed 21-year-old Platycodon grandiflorum roots. *Food Science and Biotechnology*, **2015**, 24, 1293-1299	3	2
15	Optimization of processing conditions and evaluation of shelf-life for jeonbokjang products. *Food Science and Biotechnology*, **2011**, 20, 1419-1424	3	2
14	Impact of starch granule-associated channel protein on characteristic of and -carrageenan entrapment within wheat starch granules. *International Journal of Biological Macromolecules*, **2021**, 174, 440-448	7.9	2
13	Rheological properties of rice flour treated with mild solutions of citric acid. *Food Science and Biotechnology*, **2017**, 26, 129-134	3	1
12	Changes in the rheological properties of cheddar cheese at different storage temperatures. *Food Science and Biotechnology*, **2015**, 24, 1349-1353	3	1
11	Starch Retrogradation in Rice Cake: Influences of Sucrose Stearate and Glycerol. *Foods*, **2020**, 9,	4.9	1

10	Effect of hydrothermal treatment on physicochemical properties of amorphous granular potato starch (AGPS). *International Journal of Biological Macromolecules*, **2021**, 168, 816-822	7.9	1
9	Infusion efficiency of fluorescein derivatives of different molecular sizes into various starches under atmospheric and high hydrostatic pressures. *Food Science and Biotechnology*, **2021**, 30, 1339-1346	3	1
8	Applicable Plant Proteins and Dietary Fibers for Simulate Plant-Based Yogurts. *Foods*, **2021**, 10,	4.9	1
7	Manufacture and characterization of optimized red ginseng drinks containing herbal medicine extracts. *Food Science and Biotechnology*, **2019**, 28, 1433-1438	3	0
6	Broad substrate specificity of a hyperthermophilic □-glucosidase from. *Food Science and Biotechnology*, **2016**, 25, 1665-1669	3	0
5	Effects of stirring during gelatinization and shaking during hydrolysis on the characteristics of short-chain glucan aggregates (SCGA). *Food Hydrocolloids*, **2022**, 123, 107174	10.6	0
4	Pressure moisture treatment and hydro-thermal treatment of starch.. *Food Science and Biotechnology*, **2022**, 31, 261-274	3	0
3	Sericulture and the edible-insect industry can help humanity survive: insects are more than just bugs, food, or feed. *Food Science and Biotechnology*,1	3	0
2	S3-1 Ultra high pressure (UHP)-assisted starch modification; acid hydrolysis, hydroxypropylation, acetylation, cross-linking and cationization(Overseas Invited Presentation). *Bulletin of Applied Glycoscience*, **2013**, 3, B51	0.1	
1	Infusion of fluorescein into corn and waxy rice starches and its controlled release.. *Food Science and Biotechnology*, **2022**, 31, 561-570	3	