James N Bemiller

List of Publications by Year
in descending order

44 papers	2,674 citations	209248 26 h-index	252701 43 g-index
44 all docs	44 docs citations	44 times ranked	2188 citing authors

#	Article	IF	Citations
1	Pasting, paste, and gel properties of starchâ€“hydrocolloid combinations. Carbohydrate Polymers, 2011, 86, 386-423.	10.5	474
2	Effects of food gums on viscosities of starch suspensions during pasting. Carbohydrate Polymers, 2002, 50, 7-18.	10.5	329
3	Preparation and physical characteristics of slowly digesting modified food starches. Carbohydrate Polymers, 2007, 67, 366-374.	10.5	232
4	Physical Modification of Food Starch Functionalities. Annual Review of Food Science and Technology, 2015, 6, 19-69.	10.3	224
5	Location of Sites of Reaction Within Starch Granules. Cereal Chemistry, 2001, 78, 173-180.	2.2	141
6	Detection of Proteins in Starch Granule Channels. Cereal Chemistry, 2005, 82, 351-355.	2.2	87
7	Effects of cellulose derivatives and carrageenans on the pasting, paste, and gel properties of rice starches. Carbohydrate Polymers, 2008, 73, 417-426.	10.5	86
8	Properties of Some Starch Blends. Cereal Chemistry, 1997, 74, 431-436.	2.2	75
9	Heterogeneity of starch granules and the effect of granule channelization on starch modification*. Cellulose, 2004, 11, 247-254.	5.1	73
10	Starch-Lipid Interactions in Common, Waxy, ae du, and ae su2 Maize Starches Examined by Differential Scanning Calorimetry. Cereal Chemistry, 1999, 76, 292-298.	2.2	66
11	Preparation and characterization of octenylsuccinylated plantain starch. International Journal of Biological Macromolecules, 2014, 70, 334-339.	7.7	61
12	Development and Utilization of Reflectance Confocal Laser Scanning Microscopy to Locate Reaction Sites in Modified Starch Granules. Cereal Chemistry, 2004, 81, 278-286.	2.2	59
13	One Hundred Years of Commercial Food Carbohydrates in the United States. Journal of Agricultural and Food Chemistry, 2009, 57, 8125-8129.	5.3	58
14	Increasing Slowly Digestible Starch Content of Normal and Waxy Maize Starches and Properties of Starch Products. Cereal Chemistry, 2008, 85, 738-745.	2.2	57
15	Effects of the amyloseâ€“amylopectin ratio on starchâ€“hydrocolloid interactions. Carbohydrate Polymers, 2013, 98, 1438-1448.	10.5	54
16	Effects of hydrocolloids on the pasting and paste properties of commercial pea starch. Carbohydrate Polymers, 2012, 88, 1164-1171.	10.5	52
17	Developments in Hydroxypropylation of Starch: A Review. Starch/Staerke, 2019, 71, 1800167.	2.2	50
18	Elucidation of maize endosperm starch granule channel proteins and evidence for plastoskeletal structures in maize endosperm amyloplasts. Journal of Cereal Science, 2010, 52, 22-29.	3.7	49

#	Article	IF	Citations
19	Effects of Salts on the Reaction of Normal Corn Starch with Propylene Oxide. Starch/Staerke, 2005, 57, 281-290.	2.2	43
20	Extraction of polysaccharides from a species of Chlorella. Carbohydrate Polymers, 2012, 90, 1-7.	10.5	41
21	An SECâ˜MALLS Study of Molecular Features of Waterâ€soluble Amylopectin and Amylose of Tef [Eragrostis tef (Zucc.) Trotter] Starches. Starch/Staerke, 2008, 60, 8-22.	2.2	40
22	The Ruff degradation: a review of previously proposed mechanisms with evidence that the reaction proceeds by a Hoferâ€“Moest-type reaction. Carbohydrate Research, 2007, 342, 407-418.	2.4	31
23	Effect of high-speed jet on flow behavior, retrogradation, and molecular weight of rice starch. Carbohydrate Polymers, 2015, 133, 61-66.	10.5	29
24	Effects of protein on crosslinking of normal maize, waxy maize, and potato starches. Carbohydrate Polymers, 2008, 73, 532-540.	10.5	28
25	Crosslinked and stabilized in-kernel heat-moisture-treated and temperature-cycled normal maize starch and effects of reaction conditions on starch properties. Carbohydrate Polymers, 2011, 86, 1461-1467.	10.5	28
26	Influence of high-speed jet on solubility, rheological properties, morphology and crystalline structure of rice starch. Starch/Staerke, 2015, 67, 595-603.	2.2	27
27	Aqueous Leaching of Derivatized Amylose from Hydroxypropylated Common Corn Starch Granules. Starch/Staerke, 2002, 54, 16-19.	2.2	25
28	Influence of reaction conditions on MS values and physical properties of waxy maize starch derivatized by reaction with propylene oxide. Carbohydrate Polymers, 2006, 64, 158-162.	10.5	25
29	Hydroxypropylated Starch: Granule Subpopulation Reactivity. Cereal Chemistry, 2003, 80, 550-552.	2.2	24
30	Relationship of the channels of normal maize starch to the properties of its modified products. Carbohydrate Polymers, 2013, 92, 894-904.	10.5	17
31	Lysophosphatidylcholine Identified as Channelâ€Associated Phospholipid of Maize Starch Granules. Cereal Chemistry, 2008, 85, 776-779.	2.2	14
32	Rate of Hydroxypropylation of Starches as a Function of Reaction Time. Starch/Staerke, 2005, 57, 395-404.	2.2	12
33	Preparation of Nonfragmented, Completely Amorphous, Pregelatinized Maize Starches and Determination of the Effects of Fragmentation on the Adhesiveness of Their Pastes. Starch/Staerke, 2009, 61, 696-701.	2.2	10
34	Methods for Determining Relative Average Number of Channels per Maize Starch Granule and Digestion of Raw Granules of Mutant Maize Cultivars by Amyloglucosidase. Cereal Chemistry, 2010, 87, 194-203.	2.2	10
35	Accessibility of Starch Granules to Fatty Acyl Amides. Cereal Chemistry, 2001, 78, 236-242.	2.2	7
36	Improved synthesis of 1,4-dideoxy-1,4-imino-d-galactitol, an inhibitor of E. coli K12 UDP-Gal mutase and mycobacterial galactan biosynthesis. Tetrahedron, 2003, 59, 9413-9417.	2.0	7

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37	Impact of reagent infiltration time on reaction patterns and pasting properties of modified maize and wheat starches. Carbohydrate Polymers, 2016, 151, 851-861.	10.5	7
38	Effects of the order of addition of reagents and alkali on modification of wheat starches. Carbohydrate Polymers, 2015, 125, 180-188.	10.5	5
39	Effect of hydrocolloids on waxy maize starch and its distarch phosphates. Food Hydrocolloids, 2020, 100, 105325.	10.9	4
40	The Architecture, Nature, and Mystery of Starch Granules. Part 2. Starch/Staerke, 2022, 74, .	2.2	4
41	O-(Hydroxypropyl)Sucrose. Journal of Carbohydrate Chemistry, 1994, 13, 991-1001.	0.9	3
42	Derivatization of Starch Granules as Influenced by the Presence of Channels and Reaction Conditions. ACS Symposium Series, 2006, , 165-184.	0.0	3
43	The Architecture, Nature, and Mystery of Starch Granules. Part 1: A Concise History of Early Investigations and Certain Granule Parts. Starch/Staerke, 2022, 74, .	2.2	3
44	Aldonamides as Potential Bulking Agents. Journal of Carbohydrate Chemistry, 1993, 12, 881-891.	0.9	0