

# Yaoqi Tian

## List of Publications by Year in descending order

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114  
papers

3,523  
citations

117453

34  
h-index

182168

51  
g-index

115  
all docs

115  
docs citations

115  
times ranked

2791  
citing authors

#	ARTICLE	IF	CITATIONS
1	Starch-based biodegradable packaging materials: A review of their preparation, characterization and diverse applications in the food industry. <i>Trends in Food Science and Technology</i> , 2021, 114, 70-82.	7.8	160
2	Effect of pullulan on the water distribution, microstructure and textural properties of rice starch gels during cold storage. <i>Food Chemistry</i> , 2017, 214, 702-709.	4.2	157
3	Recent advances in intelligent food packaging materials: Principles, preparation and applications. <i>Food Chemistry</i> , 2022, 375, 131738.	4.2	115
4	Measurement and characterization of external oil in the fried waxy maize starch granules using ATR-FTIR and XRD. <i>Food Chemistry</i> , 2018, 242, 131-138.	4.2	112
5	Starch retrogradation studied by thermogravimetric analysis (TGA). <i>Carbohydrate Polymers</i> , 2011, 84, 1165-1168.	5.1	104
6	Rapid, accurate, and simultaneous measurement of water and oil contents in the fried starchy system using low-field NMR. <i>Food Chemistry</i> , 2017, 233, 525-529.	4.2	97
7	Influence of $\beta$ -cyclodextrin on the short-term retrogradation of rice starch. <i>Food Chemistry</i> , 2009, 116, 54-58.	4.2	84
8	Effect of dietary fibers on the structure and digestibility of fried potato starch: A comparison of pullulan and pectin. <i>Carbohydrate Polymers</i> , 2019, 215, 47-57.	5.1	81
9	Inhibition of wheat starch retrogradation by tea derivatives. <i>Carbohydrate Polymers</i> , 2015, 134, 413-417.	5.1	75
10	Effect of high hydrostatic pressure (HHP) on slowly digestible properties of rice starches. <i>Food Chemistry</i> , 2014, 152, 225-229.	4.2	62
11	Highly branched corn starch: Preparation, encapsulation, and release of ascorbic acid. <i>Food Chemistry</i> , 2021, 343, 128485.	4.2	61
12	Linear dextrin as curcumin delivery system: Effect of degree of polymerization on the functional stability of curcumin. <i>Food Hydrocolloids</i> , 2018, 77, 911-920.	5.6	59
13	Simultaneous saccharification and fermentation of broken rice: an enzymatic extrusion liquefaction pretreatment for Chinese rice wine production. <i>Bioprocess and Biosystems Engineering</i> , 2013, 36, 1141-1148.	1.7	58
14	Polyphenols from blueberries modulate inflammation cytokines in LPS-induced RAW264.7 macrophages. <i>International Journal of Biological Macromolecules</i> , 2014, 69, 382-387.	3.6	58
15	Identification and releasing characteristics of high-amylose corn starch-cinnamaldehyde inclusion complex prepared using ultrasound treatment. <i>Carbohydrate Polymers</i> , 2013, 91, 586-589.	5.1	56
16	Surface Chemical Compositions and Dispersity of Starch Nanocrystals Formed by Sulfuric and Hydrochloric Acid Hydrolysis. <i>PLoS ONE</i> , 2014, 9, e86024.	1.1	52
17	Synthesis, characterization and hydrophobicity of silylated starch nanocrystal. <i>Carbohydrate Polymers</i> , 2016, 136, 1203-1208.	5.1	51
18	Impact of granule size on microstructural changes and oil absorption of potato starch during frying. <i>Food Hydrocolloids</i> , 2019, 94, 428-438.	5.6	51

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19	Ultrasound assisted annealing production of resistant starches type 3 from fractionated debranched starch: Structural characterization and in-vitro digestibility. <i>Food Hydrocolloids</i> , 2021, 110, 106141.	5.6	50
20	Disruption and molecule degradation of waxy maize starch granules during high pressure homogenization process. <i>Food Chemistry</i> , 2018, 240, 165-173.	4.2	49
21	Evaluation of starch retrogradation by infrared spectroscopy. <i>Food Hydrocolloids</i> , 2021, 120, 106975.	5.6	48
22	Eco-friendly and superhydrophobic nano-starch based coatings for self-cleaning application and oil-water separation. <i>Carbohydrate Polymers</i> , 2021, 271, 118410.	5.1	46
23	Aqueous re-dispersibility of starch nanocrystal powder improved by sodium hypochlorite oxidation. <i>Food Hydrocolloids</i> , 2016, 52, 29-37.	5.6	45
24	Structural changes of chemically modified rice starch by one-step reactive extrusion. <i>Food Chemistry</i> , 2019, 288, 354-360.	4.2	44
25	Effect of reaction solvents on the multi-scale structure of potato starch during acid treatment. <i>International Journal of Biological Macromolecules</i> , 2017, 97, 67-75.	3.6	43
26	Mechanism of effect of endogenous/exogenous rice protein and its hydrolysates on rice starch digestibility. <i>International Journal of Biological Macromolecules</i> , 2021, 193, 311-318.	3.6	43
27	Preparation and characterization of carboxymethyl starch microgel with different crosslinking densities. <i>Carbohydrate Polymers</i> , 2015, 124, 245-253.	5.1	42
28	Amylose crystal seeds: Preparation and their effect on starch retrogradation. <i>Food Hydrocolloids</i> , 2020, 105, 105805.	5.6	41
29	A novel triple-wavelength colorimetric method for measuring amylose and amylopectin contents. <i>Starch/Staerke</i> , 2010, 62, 508-516.	1.1	40
30	Effect of Multiple Freezing/Thawing Cycles on the Structural and Functional Properties of Waxy Rice Starch. <i>PLoS ONE</i> , 2015, 10, e0127138.	1.1	40
31	Type III Resistant Starch Prepared from Debranched Starch: Structural Changes under Simulated Saliva, Gastric, and Intestinal Conditions and the Impact on Short-Chain Fatty Acid Production. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 2595-2602.	2.4	40
32	Effect of $\beta$ -cyclodextrin on the long-term retrogradation of rice starch. <i>European Food Research and Technology</i> , 2009, 228, 743-748.	1.6	38
33	Stabilization of starch-based microgel-lysozyme complexes using a layer-by-layer assembly technique. <i>Food Chemistry</i> , 2017, 214, 213-217.	4.2	37
34	Effects of fractionation and heat-moisture treatment on structural changes and digestibility of debranched waxy maize starch. <i>Food Hydrocolloids</i> , 2020, 101, 105488.	5.6	37
35	Nanostarch: Preparation, Modification, and Application in Pickering Emulsions. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 6929-6942.	2.4	37
36	Effect of amino acids composing rice protein on rice starch digestibility. <i>LWT - Food Science and Technology</i> , 2021, 146, 111417.	2.5	37

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37	Eco-Friendly and pH-Responsive Nano-Starch-Based Superhydrophobic Coatings for Liquid-Food Residue Reduction and Freshness Monitoring. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 10142-10153.	3.2	37
38	Thermal degradation behavior of hypochlorite-oxidized starch nanocrystals under different oxidized levels. <i>Carbohydrate Polymers</i> , 2015, 124, 124-130.	5.1	35
39	Preparation of the $\beta$ -cyclodextrin-vitamin C ( $\beta$ -CD-Vc) inclusion complex under high hydrostatic pressure (HHP). <i>Carbohydrate Polymers</i> , 2012, 90, 1193-1196.	5.1	34
40	Ionic liquids as novel solvents for biosynthesis of octenyl succinic anhydride-modified waxy maize starch. <i>International Journal of Biological Macromolecules</i> , 2016, 86, 119-125.	3.6	34
41	Impact of amylose content on structural changes and oil absorption of fried maize starches. <i>Food Chemistry</i> , 2019, 287, 28-37.	4.2	34
42	Structural modification and functional improvement of starch nanoparticles using vacuum cold plasma. <i>International Journal of Biological Macromolecules</i> , 2020, 145, 197-206.	3.6	33
43	Pasting, rheology, and fine structure of starch for waxy rice powder with high-temperature baking. <i>International Journal of Biological Macromolecules</i> , 2020, 146, 620-626.	3.6	33
44	Effect of pullulan on oil absorption and structural organization of native maize starch during frying. <i>Food Chemistry</i> , 2020, 309, 125681.	4.2	32
45	Resistant structure of extruded starch: Effects of fatty acids with different chain lengths and degree of unsaturation. <i>Food Chemistry</i> , 2022, 374, 131510.	4.2	30
46	The formation of starch-lipid complexes by microwave heating. <i>Food Chemistry</i> , 2022, 382, 132319.	4.2	30
47	Effect of temperature-cycled retrogradation on slow digestibility of waxy rice starch. <i>International Journal of Biological Macromolecules</i> , 2012, 51, 1024-1027.	3.6	28
48	Long-term annealing of C-type kudzu starch: Effect on crystalline type and other physicochemical properties. <i>Starch/Staerke</i> , 2015, 67, 577-584.	1.1	27
49	Interactions between rice amylose and aroma compounds and their effect on rice fragrance release. <i>Food Chemistry</i> , 2019, 289, 603-608.	4.2	27
50	Impact of phase separation of soy protein isolate/sodium alginate co-blending mixtures on gelation dynamics and gels properties. <i>Carbohydrate Polymers</i> , 2015, 125, 169-179.	5.1	26
51	Synthesis of pH- and ionic strength-responsive microgels and their interactions with lysozyme. <i>International Journal of Biological Macromolecules</i> , 2015, 79, 392-397.	3.6	26
52	Effect of acid-ethanol treatment and debranching on the structural characteristics and digestible properties of maize starches with different amylose contents. <i>Food Hydrocolloids</i> , 2017, 69, 229-235.	5.6	26
53	Facile Method for Fluorescent Labeling of Starch Nanocrystal. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 3751-3761.	3.2	26
54	A simple and green method for preparation of non-crystalline granular starch through controlled gelatinization. <i>Food Chemistry</i> , 2019, 274, 268-273.	4.2	26

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55	The role of protein and its hydrolysates in regulating the digestive properties of starch: A review. <i>Trends in Food Science and Technology</i> , 2022, 125, 54-65.	7.8	26
56	Effect of annealing and heat-moisture pretreatments on the oil absorption of normal maize starch during frying. <i>Food Chemistry</i> , 2021, 353, 129468.	4.2	25
57	Effects of starchy seed crystals on the retrogradation of rice starch. <i>Food Chemistry</i> , 2020, 318, 126487.	4.2	23
58	Characterization of Different Substituted Carboxymethyl Starch Microgels and Their Interactions with Lysozyme. <i>PLoS ONE</i> , 2014, 9, e114634.	1.1	23
59	High-pressure homogenization induced degradation of amylopectin in a gelatinized state. <i>Starch/Staerke</i> , 2016, 68, 734-741.	1.1	21
60	Impact of cooling rates on the flavor of cooked rice during storage. <i>Food Bioscience</i> , 2020, 35, 100563.	2.0	21
61	Structure and properties of soft rice starch. <i>International Journal of Biological Macromolecules</i> , 2020, 157, 10-16.	3.6	21
62	Super Anti-Wetting Colorimetric Starch-Based Film Modified with Poly(dimethylsiloxane) and Micro-/Nano-Starch for Aquatic-Product Freshness Monitoring. <i>Biomacromolecules</i> , 2021, 22, 3769-3779.	2.6	21
63	Highly branched dextrin prepared from high-amylose maize starch using waxy rice branching enzyme (WRBE). <i>Food Chemistry</i> , 2016, 203, 530-535.	4.2	20
64	Modelling and optimisation of enzymatic extrusion pretreatment of broken rice for rice wine manufacture. <i>Food Chemistry</i> , 2014, 150, 94-98.	4.2	19
65	Sol-gel encapsulation of pullulanase in the presence of hybrid magnetic (Fe <sub>3</sub> O <sub>4</sub> @chitosan) nanoparticles improves thermal and operational stability. <i>Bioprocess and Biosystems Engineering</i> , 2017, 40, 821-831.	1.7	19
66	High-efficiency production of $\beta$ -cyclodextrin using $\alpha$ -cyclodextrin as the donor raw material by cyclodextrin opening reactions using recombinant cyclodextrin glycosyltransferase. <i>Carbohydrate Polymers</i> , 2018, 182, 75-80.	5.1	19
67	Analysis of porous structure of potato starch granules by low-field NMR cryoporometry and AFM. <i>International Journal of Biological Macromolecules</i> , 2021, 173, 307-314.	3.6	19
68	Preparation, characterization, and in vitro release of carboxymethyl starch/ $\beta$ -cyclodextrin microgel-ascorbic acid inclusion complexes. <i>RSC Advances</i> , 2015, 5, 61815-61820.	1.7	18
69	Superhydrophobic/superoleophilic starch-based cryogels coated by silylated porous starch/Fe <sub>3</sub> O <sub>4</sub> hybrid micro/nanoparticles for removing discrete oil patches from water. <i>Separation and Purification Technology</i> , 2022, 291, 120872.	3.9	17
70	A novel molecular simulation method for evaluating the endothermic transition of amylose recrystallite. <i>European Food Research and Technology</i> , 2009, 229, 853-858.	1.6	16
71	Interaction between amylose and 1-butanol during 1-butanol-hydrochloric acid hydrolysis of normal rice starch. <i>International Journal of Biological Macromolecules</i> , 2013, 61, 329-332.	3.6	16
72	Starch sodium dodecyl succinate prepared by one-step extrusion and its properties. <i>Carbohydrate Polymers</i> , 2015, 133, 90-93.	5.1	16

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73	Superhydrophobic starch-based nanocomposite cryogel for oil removal underwater and magnetically guided oil slick cleanup. <i>Carbohydrate Polymers</i> , 2022, 287, 119297.	5.1	16
74	Comparison tests of hydroxypropyl $\beta$ -cyclodextrin (HP $\beta$ -CD) and $\beta$ -cyclodextrin ( $\beta$ -CD) on retrogradation of rice amylose. <i>LWT - Food Science and Technology</i> , 2010, 43, 488-491.	2.5	15
75	Effects of cooling rate on retrograded nucleation of different rice starch-aromatic molecule complexes. <i>Food Chemistry</i> , 2019, 294, 179-186.	4.2	15
76	Preparation and characterization of zwitterionic functionalized starch nanoparticles. <i>International Journal of Biological Macromolecules</i> , 2020, 142, 395-403.	3.6	15
77	Contribution of starch to the flavor of rice-based instant foods. <i>Critical Reviews in Food Science and Nutrition</i> , 2022, 62, 8577-8588.	5.4	15
78	Superhydrophobic modular cryogel with variable magnetic-actuated motion direction for discrete small-scale oil spill cleanup. <i>Journal of Hazardous Materials</i> , 2022, 430, 128448.	6.5	15
79	Fabrication of superhydrophobic/oleophilic starch cryogel via a simple sol-gel immersion process for removing oil from water. <i>Industrial Crops and Products</i> , 2022, 184, 115010.	2.5	14
80	Characterization and mechanism of action of <i>Microbacterium imperiale</i> glucan 1,4- $\alpha$ -maltotriohydrolase. <i>Carbohydrate Research</i> , 2014, 384, 46-50.	1.1	13
81	Acrylated Composite Hydrogel Preparation and Adsorption Kinetics of Methylene Blue. <i>Molecules</i> , 2017, 22, 1824.	1.7	13
82	Comparison of encapsulation properties of major garlic oil components by hydroxypropyl $\beta$ -cyclodextrin. <i>European Food Research and Technology</i> , 2010, 231, 519-524.	1.6	12
83	A glycogen branching enzyme from <i>Thermomonospora curvata</i> : Characterization and its action on maize starch. <i>Starch/Staerke</i> , 2016, 68, 355-364.	1.1	12
84	Effects of structure and physical chemistry of resistant starch on short-term satiety. <i>Food Hydrocolloids</i> , 2022, 132, 107828.	5.6	12
85	A study on the inhibition mechanism of $\beta$ -cyclodextrin on pullulanase. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2011, 70, 161-165.	1.6	11
86	Use of the resistance effect between retrograded starch and iodine for evaluating retrogradation properties of rice starch. <i>Food Chemistry</i> , 2011, 125, 1291-1293.	4.2	11
87	Interactions between recrystallized rice starch and flavor molecules. <i>Food Hydrocolloids</i> , 2022, 124, 107271.	5.6	11
88	The inhibitory mechanism of amylase inhibitors and research progress in nanoparticle-based inhibitors. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 12126-12135.	5.4	11
89	Effects of $\alpha$ -maltotriohydrolase hydrolysis prior to debranching on the structure and digestibility of normal maize starch. <i>Starch/Staerke</i> , 2017, 69, 1600078.	1.1	10
90	Effect of Drying Processes on the Fine Structure of A, B, and C-type Starches. <i>Starch/Staerke</i> , 2018, 70, 1700218.	1.1	10

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91	Improved Catalytic Properties of Thermomyces lanuginosus Lipase Immobilized onto Newly Fabricated Polydopamine-Functionalized Magnetic Fe <sub>3</sub> O <sub>4</sub> Nanoparticles. Processes, 2020, 8, 629.	1.3	10
92	Preparative fractionation of dextrin by polyethylene glycol: Effects of initial dextrin concentration and pH. Journal of Chromatography A, 2017, 1530, 226-231.	1.8	9
93	In Vitro Digestibility and Predicted Glycemic Index of Chemically Modified Rice Starch by One-Step Reactive Extrusion. Starch/Staerke, 2020, 72, 1900012.	1.1	9
94	Facile fabrication of thermostable and colorimetric starch-based waterproof coating with edible organic materials. Food Chemistry, 2022, 382, 132269.	4.2	9
95	Photoirradiation surface molecularly imprinted polymers for the separation of maltosyl- $\beta$ -cyclodextrin. Journal of Separation Science, 2017, 40, 4653-4660.	1.3	8
96	1-Butanol-Hydrochloric Acid Hydrolysis of High-Amylose Maize Starch. Starch/Staerke, 2018, 70, 1700359.	1.1	8
97	Superhydrophobic starch-based adsorbent with honeycomb coral-like surface fabricated via facile immersion process for removing oil from water. International Journal of Biological Macromolecules, 2022, 207, 549-558.	3.6	8
98	Molecular characterization and in vitro digestibility of normal maize starch hydrolyzed by maltotriohydrolase. International Journal of Biological Macromolecules, 2015, 74, 283-288.	3.6	7
99	Fractionation of dextrin by gradient polyethylene glycol precipitation. Journal of Chromatography A, 2016, 1434, 81-90.	1.8	7
100	Thermal and crystalline properties of slowly digestible starch prepared from the starches physically modified by $\beta$ -cyclodextrins. Starch/Staerke, 2017, 69, 1500370.	1.1	7
101	Dextrin-uricase conjugate: Preparation, characterization, and enzymatic properties. International Journal of Biological Macromolecules, 2018, 111, 28-32.	3.6	7
102	Highly Efficient Regioselective Decanoylation of Hyperoside Using Nanobiocatalyst of Fe <sub>3</sub> O <sub>4</sub> @PDA-Thermomyces lanuginosus Lipase: Insights of Kinetics and Stability Evaluation. Frontiers in Bioengineering and Biotechnology, 2020, 8, 485.	2.0	7
103	Preparation and characterization of non-crystalline granular starch with low processing viscosity. International Journal of Biological Macromolecules, 2022, 195, 483-491.	3.6	7
104	Identification and releasing characteristics of $\beta$ -cyclodextrin-phenylethanoid glycosides inclusion complex. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2014, 79, 437-442.	0.9	6
105	Effect of cooling rate on long-term recrystallized crystal of rice starch in the presence of flavor compounds. Food Chemistry, 2021, 345, 128763.	4.2	6
106	Rheological characterization of pH-responsive carboxymethyl starch/ $\beta$ -cyclodextrin microgels. Starch/Staerke, 2016, 68, 29-36.	1.1	4
107	Designing Lipase-Compatible Ionic Liquids as Novel Solvents for Starch Ester Biosynthesis. Starch/Staerke, 2020, 72, 1900120.	1.1	4
108	Pasting and Rheological Properties of Non-Crystalline Granular Starch. Starch/Staerke, 2019, 71, 1800338.	1.1	3

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109	Physicochemical properties of rice bran after ball milling. <i>Journal of Food Processing and Preservation</i> , 2021, 45, e15785.	0.9	3
110	Superhydrophobic starch-based cryogels modified with silylated magnetic nanoparticles for oil spill cleanup. <i>Journal of Cleaner Production</i> , 2022, 363, 132492.	4.6	3
111	Debranched starch: Preparation and hydrophobic cavity characterization using carbon nanotubes. <i>LWT - Food Science and Technology</i> , 2022, 153, 112548.	2.5	2
112	Multi-wavelength colorimetric determination of large-ring cyclodextrin content for the cyclization activity of 4- $\alpha$ -glucanotransferase. <i>Carbohydrate Polymers</i> , 2015, 122, 329-335.	5.1	1
113	Preparative fractionation of dextrin by gradient alcohol precipitation. <i>Separation Science and Technology</i> , 2017, , 1-11.	1.3	1
114	Applications in Pharmaceuticals. , 2018, , 109-142.		0