Nan Fu

List of Publications by Year
in descending order

75 papers	1,904 citations	304743 22 h-index	276875 41 g-index
76 all docs	76 docs citations	76 times ranked	1804 citing authors

#	Article	IF	Citations
1	Towards a maximal cell survival in convective thermal drying processes. Food Research International, 2011, 44, 1127-1149.	6.2	251
2	A novel co-culture process with Zymomonas mobilis and Pichia stipitis for efficient ethanol production on glucose/xylose mixtures. Enzyme and Microbial Technology, 2009, 45, 210-217.	3.2	122
3	Effects of pulsed electric field treatments on some properties of tapioca starch. Carbohydrate Polymers, 2012, 89, 1012-1017.	10.2	104
4	Single Droplet Drying Technique to Study Drying Kinetics Measurement and Particle Functionality: A Review. Drying Technology, 2012, 30, 1771-1785.	3.1	91
5	Respirable liquid marble for the cultivation of microorganisms. Colloids and Surfaces B: Biointerfaces, 2013, 106, 187-190.	5.0	86
6	Reaction Engineering Approach (REA) to model the drying kinetics of droplets with different initial sizesâ€"experiments and analyses. Chemical Engineering Science, 2011, 66, 1738-1747.	3.8	78
7	Production of monodisperse epigallocatechin gallate (EGCG) microparticles by spray drying for high antioxidant activity retention. International Journal of Pharmaceutics, 2011, 413, 155-166.	5.2	67
8	Co-fermentation of a mixture of glucose and xylose to ethanol by Zymomonas mobilis and Pachysolen tannophilus. World Journal of Microbiology and Biotechnology, 2008, 24, 1091-1097.	3.6	64
9	Maltodextrin: A consummate carrier for spray-drying of xylooligosaccharides. Food Research International, 2018, 106, 383-393.	6.2	59
10	Colloidal transport phenomena of milk components during convective droplet drying. Colloids and Surfaces B: Biointerfaces, 2011, 87, 255-266.	5.0	44
11	Shrinkage behaviour of skim milk droplets during air drying. Journal of Food Engineering, 2013, 116, 37-44.	5.2	42
12	The mechanisms of the protective effects of reconstituted skim milk during convective droplet drying of lactic acid bacteria. Food Research International, 2015, 76, 478-488.	6.2	38
13	Spray drying of Lactobacillus rhamnosus GG with calcium-containing protectant for enhanced viability. Powder Technology, 2019, 358, 87-94.	4.2	37
14	Drying kinetics of skim milk with 50wt.% initial solids. Journal of Food Engineering, 2012, 109, 701-711.	5.2	33
15	Producing Powders Containing Active Dry Probiotics With the Aid of Spray Drying. Advances in Food and Nutrition Research, 2018, 85, 211-262.	3.0	33
16	Exploring the protective effects of calcium-containing carrier against drying-induced cellular injuries of probiotics using single droplet drying technique. Food Research International, 2016, 90, 226-234.	6.2	32
17	Co-encapsulation of coenzyme Q10 and vitamin E: A study of microcapsule formation and its relation to structure and functionalities using single droplet drying and micro-fluidic-jet spray drying. Journal of Food Engineering, 2019, 247, 45-55.	5.2	32
18	Ultrasonic degradation of aqueous dextran: Effect of initial molecular weight and concentration. Carbohydrate Polymers, 2012, 90, 447-451.	10.2	30

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19	Heat stability of Lactobacillus rhamnosus GG and its cellular membrane during droplet drying and heat treatment. Food Research International, 2018, 112, 56-65.	6.2	25
20	Interplaying Effects of Wall and Core Materials on the Property and Functionality of Microparticles for Co-Encapsulation of Vitamin E with Coenzyme Q10. Food and Bioprocess Technology, 2020, 13, 705-721.	4.7	25
21	Thermotolerance, Survival, and Stability of Lactic Acid Bacteria After Spray Drying as Affected by the Increase of Growth Temperature. Food and Bioprocess Technology, 2021, 14, 120-132.	4.7	25
22	Inactivation of Lactococcus lactis ssp. cremoris cells in a droplet during convective drying. Biochemical Engineering Journal, 2013, 79, 46-56.	3.6	24
23	Isolation and Characterization of Corncob Cellulose Fibers using Microwave-Assisted Chemical Treatments. International Journal of Food Engineering, 2014, 10, 427-436.	1.5	24
24	Maillard conjugates of whey protein isolateâ€“xylooligosaccharides for the microencapsulation of Lactobacillus rhamnosus: protective effects and stability during spray drying, storage and gastrointestinal digestion. Food and Function, 2021, 12, 4034-4045.	4.6	24
25	Microcrystallization of lactose during droplet drying and its effect on the property of the dried particle. Chemical Engineering Research and Design, 2012, 90, 138-149.	5.6	23
26	A study on the structure formation and properties of noni juice microencapsulated with maltodextrin and gum acacia using single droplet drying. Food Hydrocolloids, 2019, 88, 199-209.	10.7	23
27	Exploring the drying behaviour and particle formation of high solids milk protein concentrate. Journal of Food Engineering, 2014, 143, 186-194.	5.2	22
28	Effects of Co-spray Drying of Surfactants with High Solids Milk on Milk Powder Wettability. Food and Bioprocess Technology, 2014, 7, 3121-3135.	4.7	22
29	Effects of ionic and nonionic surfactants on milk shell wettability during co-spray-drying of whole milk particles. Journal of Dairy Science, 2014, 97, 5303-5314.	3.4	21
30	Calcium-Aggregated Milk: a Potential New Option for Improving the Viability of Lactic Acid Bacteria Under Heat Stress. Food and Bioprocess Technology, 2014, 7, 3147-3155.	4.7	20
31	Microwave pretreatment enhances the formation of cabbage sulforaphane and its bioaccessibility as shown by a novel dynamic soft rat stomach model. Journal of Functional Foods, 2018, 43, 186-195.	3.4	20
32	Enhanced thermal stability of lactic acid bacteria during spray drying by intracellular accumulation of calcium. Journal of Food Engineering, 2020, 279, 109975.	5.2	20
33	Thermal Aggregation of Calcium-Fortified Skim Milk Enhances Probiotic Protection during Convective Droplet Drying. Journal of Agricultural and Food Chemistry, 2016, 64, 6003-6010.	5.2	18
34	The compositional effects of high solids model emulsions on drying behaviour and particle formation processes. Journal of Food Engineering, 2015, 157, 33-40.	5.2	16
35	Effects of different pretreatment methods on the drying characteristics and quality of potatoes. Food Science and Nutrition, 2020, 8, 5767-5775.	3.4	16
36	Storage stability and in vitro digestion of microencapsulated powder containing fermented noni juice and probiotics. Food Bioscience, 2020, 37, 100740.	4.4	16

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37	Skin layer stratification in drying droplets of dairy colloids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 620, 126560.	4.7	16
38	Exploring the drying behaviors of microencapsulated noni juice using reaction engineering approach (REA) mathematical modelling. Journal of Food Engineering, 2019, 248, 53-61.	5.2	15
39	Precipitating smooth amorphous or pollen structured lactose microparticles. Chemical Engineering Journal, 2013, 226, 312-318.	12.7	14
40	Unraveling the droplet drying characteristics of crystallizationâ€prone mannitol â€“ experiments and modeling. AICHE Journal, 2017, 63, 1839-1852.	3.6	14
41	Formation process of coreâ€shell microparticles by solute migration during drying of homogenous composite droplets. AICHE Journal, 2017, 63, 3297-3310.	3.6	14
42	In situ observation on particle formation process via single droplet drying apparatus: Effects of precursor composition on particle morphology. Drying Technology, 2016, 34, 1700-1708.	3.1	13
43	The extent and mechanism of the effect of protectant material in the production of active lactic acid bacteria powder using spray drying: a review. Current Opinion in Food Science, 2022, 44, 100807.	8.0	13
44	Unveiling the Mechanism of in situ Crystallization in the Spray Drying of Sugars. Industrial & Engineering Chemistry Research, 2012, 51, 11791-11802.	3.7	12
45	Drying kinetics and particle formation of potato powder during spray drying probed by microrheology and single droplet drying. Food Research International, 2019, 116, 483-491.	6.2	12
46	Uniform Amorphous Lactose Microspheres Formed in Simultaneous Convective and Dehydration Antisolvent Precipitation under Atmospheric Conditions. Langmuir, 2012, 28, 13772-13776.	3.5	11
47	Capturing the effect of initial concentrations on the drying kinetics of high solids milk using reaction engineering approach. Dairy Science and Technology, 2013, 93, 415-430.	2.2	11
48	Physical and Viscoelastic Properties of Different Moisture Content Highland Barley Kernels. International Journal of Food Engineering, 2017, 13, .	1.5	11
49	Effect of culturing lactic acid bacteria with varying skim milk concentration on bacteria survival during heat treatment. Journal of Food Engineering, 2021, 294, 110396.	5.2	10
50	Convective drying of highly shrinkable vegetables: New method on obtaining the parameters of the reaction engineering approach (REA) framework. Journal of Food Engineering, 2021, 305, 110613.	5.2	9
51	Evaporation of Pure Droplets in the Convective Regime Under High Mass Flux. Drying Technology, 2011, 29, 1628-1637.	3.1	8
52	Surface formation phenomena of DHA-containing emulsion during convective droplet drying. Journal of Food Engineering, 2015, 150, 50-61.	5.2	8
53	In situ crystallization kinetics and behavior of mannitol during droplet drying. Chemical Engineering Journal, 2018, 354, 314-326.	12.7	8
54	Exploring the interactions between Lactobacillus rhamnosus GG and whey protein isolate for preservation of the viability of bacteria through spray drying. Food and Function, 2021, 12, 2995-3008.	4.6	8

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55	Modeling the Total Residence Time in a Rotary Dryer. International Journal of Food Engineering, 2015, 11, 405-410.	1.5	7
56	In Situ Observation of Taurine Crystallization via Single Droplet Drying. Drying Technology, 2013, 31, 1553-1561.	3.1	6
57	Influence of Moisture Content on Physicomechanical Properties, Starch-Protein Microstructure and Fractal Parameter of Oat Groats. International Journal of Food Engineering, 2018, 14, .	1.5	6
58	Mechanical Properties of Hulless Barley Stem with Different Moisture Contents. International Journal of Food Engineering, 2019, 15, .	1.5	6
59	Physical Properties of Naked Oat Seeds (Avena nuda L.). International Journal of Food Engineering, 2014, 10, 339-345.	1.5	5
60	Characterization of Pyrolysis Products Obtained from Desmodesmus sp. Cultivated in Anaerobic Digested Effluents (DADE). International Journal of Food Engineering, 2015, 11, 825-832.	1.5	5
61	A differential shrinkage approach for evaluating particle formation behavior during drying of sucrose, lactose, mannitol, skim milk, and other solid-containing droplets. Drying Technology, 2019, 37, 941-949.	3.1	5
62	Exploring the integrity of cellular membrane and resistance to digestive juices of dehydrated lactic acid bacteria as influenced by drying kinetics. Food Research International, 2022, 157, 111395.	6.2	5
63	Temperature-Oriented Pyrolysis on the Decomposition Characteristics of Chlorella pyrenoidosa. International Journal of Food Engineering, 2016, 12, 295-301.	1.5	4
64	Evolution of important glucosinolates in three common Brassica vegetables during their processing into vegetable powder and in vitro gastric digestion. Food and Function, 2020, 11, 211-220.	4.6	4
65	Vaporization and particle formation during drying of multisolvent droplet without and with antisolvent-vapor infusion. Chemical Engineering Science, 2020, 219, 115617.	3.8	3
66	Effects of particle formation behavior on the properties of fish oil microcapsules fabricated using a micro-fluidic jet spray dryer. International Journal of Food Engineering, 2021, 17, 27-36.	1.5	3
67	Modeling and Simulation of a Co-current Rotary Dryer. International Journal of Food Engineering, 2016, 12, 189-194.	1.5	2
68	Study on Mechanical Properties for Shearing Breakage of Oat Kernel. International Journal of Food Engineering, 2018, 14, .	1.5	2
69	Numerical probing of suspended lactose droplet drying experiment. Journal of Food Engineering, 2019, 254, 51-63.	5.2	2
70	Understanding the formation of ultrafine maltodextrin particles under simultaneous convective drying and antisolvent vapour precipitation. Advanced Powder Technology, 2022, 33, 103440.	4.1	2
71	Predicting Storage Conditions for Rice Seed with Thermodynamic Analysis. International Journal of Food Engineering, 2017, 13, .	1.5	1
72	A Comparative Study on Fouling and Cleaning Characteristics of Soy Protein Isolate (SPI). International Journal of Food Engineering, 2018, 14, .	1.5	1

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73	In vitro digestion using dynamic rat stomach-duodenum model as an alternative means to assess bioaccessibility of glucosinolates in dietary fiber powder from cabbage. LWT - Food Science and Technology, 2021, 151, 112243.	5.2	1
74	Understanding the impact of convective ethanol humidity on the precipitation behaviour of dissolved lactose in a water droplet. Chemical Engineering Science, 2022, 254, 117616.	3.8	0
75	Obtaining Model Parameters of Drying Kinetics for Highly Shrinkable Materials without Knowing the Surface Area a priori. AICHE Journal, 0, , .	3.6	0