Hong-Wei Xiao

List of Publications by Year
in descending order

134 papers	5,631 citations	61945 43 h-index	95218 68 g-index
135 all docs	135 docs citations	135 times ranked	2625 citing authors

#	Article	IF	Citations
1	Chemical and physical pretreatments of fruits and vegetables: Effects on drying characteristics and quality attributes â€“ a comprehensive review. Critical Reviews in Food Science and Nutrition, 2019, 59, 1408-1432.	5.4	264
2	Recent developments and trends in thermal blanching â€“ A comprehensive review. Information Processing in Agriculture, 2017, 4, 101-127.	2.9	226
3	Drying kinetics and quality of Monukka seedless grapes dried in an air-impingement jet dryer. Biosystems Engineering, 2010, 105, 233-240.	1.9	190
4	Pulsed vacuum drying enhances drying kinetics and quality of lemon slices. Journal of Food Engineering, 2018, 224, 129-138.	2.7	176
5	Red pepper (Capsicum annuum L.) drying: Effects of different drying methods on drying kinetics, physicochemical properties, antioxidant capacity, and microstructure. Drying Technology, 2018, 36, 893-907.	1.7	168
6	Effects of various blanching methods on weight loss, enzymes inactivation, phytochemical contents, antioxidant capacity, ultrastructure and drying kinetics of red bell pepper (Capsicum annuum L.). LWT - Food Science and Technology, 2017, 77, 337-347.	2.5	154
7	Novel high-humidity hot air impingement blanching (HHAIB) pretreatment enhances drying kinetics and color attributes of seedless grapes. Innovative Food Science and Emerging Technologies, 2013, 20, 230-237.	2.7	135
8	Effect of high-humidity hot air impingement blanching (HHAIB) on drying and quality of red pepper (Capsicum annuum L.). Food Chemistry, 2017, 220, 145-152.	4.2	132
9	Emerging chemical and physical disinfection technologies of fruits and vegetables: a comprehensive review. Critical Reviews in Food Science and Nutrition, 2020, 60, 2481-2508.	5.4	131
10	Cold plasma pretreatment enhances drying kinetics and quality attributes of chili pepper (Capsicum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.7	130
11	Color Change Kinetics of American Ginseng (Panax quinquefolium) Slices During Air Impingement Drying. Drying Technology, 2014, 32, 418-427.	1.7	127
12	EFFECT OF SSB (SUPERHEATED STEAM BLANCHING) TIME AND DRYING TEMPERATURE ON HOT AIR IMPINGEMENT DRYING KINETICS AND QUALITY ATTRIBUTES OF YAM SLICES. Journal of Food Process Engineering, 2012, 35, 370-390.	1.5	124
13	Far-infrared radiation heating assisted pulsed vacuum drying (FIR-PVD) of wolfberry (Lycium barbarum) Tj ETQq1 1 0.784314 rgBT /O 320-331.	1.8	121
14	High-humidity hot air impingement blanching (HHAIB) enhances drying quality of apricots by inactivating the enzymes, reducing drying time and altering cellular structure. Food Control, 2019, 96, 104-111.	2.8	99
15	The application of superheated steam impingement blanching (SSIB) in agricultural products processing â€“ A review. Journal of Food Engineering, 2014, 132, 39-47.	2.7	92
16	Drying characteristics and modeling of yam slices under different relative humidity conditions. Drying Technology, 2016, 34, 296-306.	1.7	89
17	High-humidity hot air impingement blanching alters texture, cell-wall polysaccharides, water status and distribution of seedless grape. Carbohydrate Polymers, 2018, 194, 9-17.	5.1	85
18	Effects of vacuum-steam pulsed blanching on drying kinetics, colour, phytochemical contents, antioxidant capacity of carrot and the mechanism of carrot quality changes revealed by texture, microstructure and ultrastructure. Food Chemistry, 2021, 338, 127799.	4.2	85

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19	High humidity hot air impingement blanching (HHAIB) enhances drying rate and softens texture of apricot via cell wall pectin polysaccharides degradation and ultrastructure modification. Food Chemistry, 2018, 261, 292-300.	4.2	84
20	Effects of postharvest ripening on physicochemical properties, microstructure, cell wall polysaccharides contents (pectin, hemicellulose, cellulose) and nanostructure of kiwifruit (Actinidia) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.6	81
21	Process-Based Drying Temperature and Humidity Integration Control Enhances Drying Kinetics of Apricot Halves. Drying Technology, 2015, 33, 365-376.	1.7	78
22	Pulsed vacuum drying of Thompson seedless grape: Effects of berry ripeness on physicochemical properties and drying characteristic. Food and Bioproducts Processing, 2017, 106, 117-126.	1.8	77
23	Thin-layer air impingement drying enhances drying rate of American ginseng (Panax quinquefolium L.) slices with quality attributes considered. Food and Bioproducts Processing, 2015, 94, 581-591.	1.8	75
24	Evolution and modeling of colour changes of red pepper (CapsicumÂannuum L.) during hot air drying. Journal of Food Engineering, 2018, 231, 101-108.	2.7	74
25	Effects of ripening stage on physicochemical properties, drying kinetics, pectin polysaccharides contents and nanostructure of apricots. Carbohydrate Polymers, 2019, 222, 114980.	5.1	73
26	Ultrasound Pretreatment to Enhance Drying Kinetics of Kiwifruit (Actinidia deliciosa) Slices: Pros and Cons. Food and Bioprocess Technology, 2019, 12, 865-876.	2.6	73
27	Effects of high-humidity hot air impingement blanching (HHAIB) pretreatment on the change of antioxidant capacity, the degradation kinetics of red pigment, ascorbic acid in dehydrated red peppers during storage. Food Chemistry, 2018, 259, 65-72.	4.2	70
28	Cold plasma enhances drying and color, rehydration ratio and polyphenols of wolfberry via microstructure and ultrastructure alteration. LWT - Food Science and Technology, 2020, 134, 110173.	2.5	66
29	Effect of high-humidity hot air impingement blanching (HHAIB) and drying parameters on drying characteristics and quality of broccoli florets. Drying Technology, 2019, 37, 1251-1264.	1.7	65
30	Pulsed vacuum drying of Chinese ginger (Zingiber officinale Roscoe) slices: Effects on drying characteristics, rehydration ratio, water holding capacity, and microstructure. Drying Technology, 2019, 37, 301-311.	1.7	63
31	Recent advances in non-thermal decontamination technologies for microorganisms and mycotoxins in low-moisture foods. Trends in Food Science and Technology, 2020, 106, 104-112.	7.8	62
32	Polyphenol oxidase inactivation and vitamin <scp>C</scp> degradation kinetics of <scp>F</scp>uji apple quarters by high humidity air impingement blanching. International Journal of Food Science and Technology, 2013, 48, 1135-1141.	1.3	56
33	Effect of drying air temperature on drying kinetics, color, carotenoid content, antioxidant capacity and oxidation of fat for lotus pollen. Drying Technology, 2020, 38, 1151-1164.	1.7	56
34	State diagram for freeze-dried mango: Freezing curve, glass transition line and maximal-freeze-concentration condition. Journal of Food Engineering, 2015, 157, 49-56.	2.7	55
35	Drying kinetics and evolution of the sample's core temperature and moisture distribution of yam slices (Dioscorea alataL.) during convective hot-air drying. Drying Technology, 2016, 34, 1297-1306.	1.7	55
36	Effects of different drying methods on drying kinetics, physicochemical properties, microstructure, and energy consumption of potato (Solanum tuberosum L.) cubes. Drying Technology, 2021, 39, 418-431.	1.7	55

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37	Energy efficient improvements in hot air drying by controlling relative humidity based on Weibull and Bi-Di models. Food and Bioproducts Processing, 2018, 111, 20-29.	1.8	54
38	Review of recent applications and research progress in hybrid and combined microwave-assisted drying of food products: Quality properties. Critical Reviews in Food Science and Nutrition, 2020, 60, 2212-2264.	5.4	54
39	Osmotic dehydration pretreatment for improving the quality attributes of frozen mango: effects of different osmotic solutes and concentrations on the samples. International Journal of Food Science and Technology, 2014, 49, 960-968.	1.3	53
40	Hot air impingement drying kinetics and quality attributes of orange peel. Journal of Food Processing and Preservation, 2020, 44, e14294.	0.9	51
41	Multistage relative humidity control strategy enhances energy and exergy efficiency of convective drying of carrot cubes. International Journal of Heat and Mass Transfer, 2020, 149, 119231.	2.5	50
42	Pulsed vacuum drying of rhizoma dioscoreae slices. LWT - Food Science and Technology, 2017, 80, 237-249.	2.5	49
43	Pulsed vacuum drying (PVD) of wolfberry: Drying kinetics and quality attributes. Drying Technology, 2018, 36, 1501-1514.	1.7	49
44	Importance of drying in support of human welfare. Drying Technology, 2020, 38, 1542-1543.	1.7	49
45	Prediction of energy and exergy of mushroom slices drying in hot air impingement dryer by artificial neural network. Drying Technology, 2020, 38, 1959-1970.	1.7	48
46	Improvement of drying efficiency and quality attributes of blueberries using innovative far-infrared radiation heating assisted pulsed vacuum drying (FIR-PVD). Innovative Food Science and Emerging Technologies, 2022, 77, 102948.	2.7	48
47	Pulsed vacuum drying of wolfberry: Effects of infrared radiation heating and electronic panel contact heating methods on drying kinetics, color profile, and volatile compounds. Drying Technology, 2017, 35, 1312-1326.	1.7	42
48	Artificial Neural Network Modeling of Drying Kinetics and Color Changes of Ginkgo Biloba Seeds during Microwave Drying Process. Journal of Food Quality, 2018, 2018, 1-8.	1.4	41
49	Effects of Different Pretreatments on Drying Kinetics and Quality of Sweet Potato Bars Undergoing Air Impingement Drying. International Journal of Food Engineering, 2009, 5, .	0.7	38
50	Hot-air Drying Kinetics of Yam Slices under Step Change in Relative Humidity. International Journal of Food Engineering, 2016, 12, 783-792.	0.7	37
51	AIR IMPINGEMENT DRYING CHARACTERISTICS AND QUALITY OF CARROT CUBES. Journal of Food Process Engineering, 2010, 33, 899-918.	1.5	35
52	Pulsed vacuum drying enhances drying of blueberry by altering micro-, ultrastructure and water status and distribution. LWT - Food Science and Technology, 2021, 142, 111013.	2.5	35
53	Pulsed vacuum drying (PVD) technology improves drying efficiency and quality of Poria cubes. Drying Technology, 2018, 36, 908-921.	1.7	33
54	Changes in the vitamin C content of mango with water state and ice crystals under state/phase transitions during frozen storage. Journal of Food Engineering, 2018, 222, 49-53.	2.7	33

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55	Color prediction of mushroom slices during drying using Bayesian extreme learning machine. Drying Technology, 2020, 38, 1869-1881.	1.7	33
56	High-humidity hot air impingement blanching (HHAIB) efficiently inactivates enzymes, enhances extraction of phytochemicals and mitigates brown actions of chili pepper. Food Control, 2020, 111, 107050.	2.8	33
57	Combined Hot Air and Microwave-Vacuum Drying of Cranberries: Effects of Pretreatments and Pulsed Vacuum Osmotic Dehydration on Drying Kinetics and Physicochemical Properties. Food and Bioprocess Technology, 2020, 13, 1848-1856.	2.6	32
58	Step-down relative humidity convective air drying strategy to enhance drying kinetics, efficiency, and quality of American ginseng root (Panax quinquefolium). Drying Technology, 2020, 38, 903-916.	1.7	31
59	Postharvest Processing and Storage Methods for Camellia oleifera Seeds. Food Reviews International, 2020, 36, 319-339.	4.3	31
60	Effects of state/phase transitions on the quality attributes of mango (Mangifera indica L.) during frozen storage. International Journal of Food Science and Technology, 2017, 52, 239-246.	1.3	29
61	Pulsed vacuum drying of kiwifruit slices and drying process optimization based on artificial neural network. Drying Technology, 2021, 39, 405-417.	1.7	28
62	Effect of drying method and cultivar on sensory attributes, textural profiles, and volatile characteristics of grape raisins. Drying Technology, 2021, 39, 495-506.	1.7	28
63	Enhanced mass transfer of osmotic dehydration and changes in microstructure of pickled salted egg under pulsed pressure. Journal of Food Engineering, 2013, 117, 141-150.	2.7	27
64	Thermal Decontamination Technologies for Microorganisms and Mycotoxins in Low-Moisture Foods. Annual Review of Food Science and Technology, 2021, 12, 287-305.	5.1	27
65	Effect of ventilated solar-geothermal drying on 3E (exergy, energy, and economic analysis), and quality attributes of tomato paste. Energy, 2022, 243, 122764.	4.5	27
66	Vacuum-steam pulsed blanching (VSPB) softens texture and enhances drying rate of carrot by altering cellular structure, pectin polysaccharides and water state. Innovative Food Science and Emerging Technologies, 2021, 74, 102801.	2.7	26
67	Design and performance evaluation of a pilot-scale pulsed vacuum infrared drying (PVID) system for drying of berries. Drying Technology, 2020, 38, 1340-1355.	1.7	25
68	Effects of various storage conditions on total phenolic, carotenoids, antioxidant capacity, and color of dried apricots. Food Control, 2022, 136, 108846.	2.8	24
69	Effects of different osmoâ€dehydrofreezing treatments on the volatile compounds, phenolic compounds and physicochemical properties in mango (Mangifera indica L.). International Journal of Food Science and Technology, 2016, 51, 1441-1448.	1.3	23
70	Effect of high-humidity hot air impingement blanching and pulsed vacuum drying on phytochemicals content, antioxidant capacity, rehydration kinetics and ultrastructure of Thompson seedless grape. Drying Technology, 2022, 40, 1013-1026.	1.7	23
71	Effects of postharvest ripening on water status and distribution, drying characteristics, volatile profiles, phytochemical contents, antioxidant capacity and microstructure of kiwifruit (Actinidia) Tj ETQq1 1 0.784314 rgBT /Overlock	2.4	23
72	Microwave-vacuum-assisted drying of pretreated cranberries: Drying kinetics, bioactive compounds and antioxidant activity. LWT - Food Science and Technology, 2021, 146, 111464.	2.5	21

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73	Moisturizing strategy for enhanced convective drying of mushroom slices. Renewable Energy, 2021, 172, 728-739.	4.3	21
74	Drying characteristics and modeling of apple slices during microwave intermittent drying. Journal of Food Process Engineering, 2019, 42, e13212.	1.5	19
75	Air-impingement De-shelling of Chestnuts (C. mollisima): Process Parameter Optimization. International Journal of Food Engineering, 2008, 4, .	0.7	18
76	Glass transition and state diagram for freeze-dried Lentinus edodes mushroom. Thermochimica Acta, 2016, 637, 82-89.	1.2	18
77	Effect of osmotic dehydration pretreatment and glassy state storage on the quality attributes of frozen mangoes under long-term storage. Journal of Food Science and Technology, 2017, 54, 1527-1537.	1.4	18
78	Pesticide residue elimination for fruits and vegetables: the mechanisms, applications, and future trends of thermal and non-thermal technologies. Journal of Future Foods, 2022, 2, 223-240.	2.0	18
79	Effect of pulsed vacuum drying on drying kinetics and quality of roots of Panax notoginseng (Burk.) F. H. Chen (Araliaceae). Drying Technology, 2021, 39, 2234-2251.	1.7	17
80	Effects of high-humidity hot air impingement steaming on Gastrodia elata: steaming degree, weight loss, texture, drying kinetics, microstructure and active components. Food and Bioproducts Processing, 2021, 127, 255-265.	1.8	17
81	The influence mechanism and control strategy of relative humidity on hot air drying of fruits and vegetables: a review. Drying Technology, 2022, 40, 2217-2234.	1.7	17
82	Vacuum-steam pulsed blanching (VSPB) enhances drying quality, shortens the drying time of gingers by inactivating enzymes, altering texture, microstructure and ultrastructure. LWT - Food Science and Technology, 2022, 154, 112714.	2.5	17
83	Pulsed pressure pickling enhances acetic acid transfer, thiosulfinates degradation, color and ultrastructure changes of â€œLabaâ€•garlic. Innovative Food Science and Emerging Technologies, 2020, 65, 102438.	2.7	16
84	Pulsed Vacuum Drying of Pepper (Capsicum annuum L.): Effect of High-Humidity Hot Air Impingement Blanching Pretreatment on Drying Kinetics and Quality Attributes. Foods, 2022, 11, 318.	1.9	16
85	Structural Morphology and Rheological Properties of Pectin Fractions Extracted from Okra Pods Subjected to Cold Plasma Treatment. Food and Bioprocess Technology, 2022, 15, 1168-1181.	2.6	16
86	Grape Drying: Current Status and Future Trends. , 0, , .		15
87	Effect of osmotic dehydration on desorption isotherms and glass transition temperatures of mango. International Journal of Food Science and Technology, 2018, 53, 2602-2609.	1.3	15
88	Prediction of size and mass of pistachio kernels using random Forest machine learning. Journal of Food Process Engineering, 2020, 43, e13473.	1.5	15
89	Short- and Medium-Wave Infrared Drying of Cantaloupe (Cucumis melon L.) Slices: Drying Kinetics and Process Parameter Optimization. Processes, 2022, 10, 114.	1.3	15
90	Pulsed vacuum drying of banana: Effects of ripeness on drying kinetics and physicochemical properties and related mechanism. LWT - Food Science and Technology, 2022, 161, 113362.	2.5	14

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91	Experimental and simulation studies of heat transfer in high-humidity hot air impingement blanching (HHAIB) of carrot. Food and Bioproducts Processing, 2019, 114, 196-204.	1.8	13
92	Vacuum-steam pulsed blanching (VSPB): An emerging blanching technology for beetroot. LWT - Food Science and Technology, 2021, 147, 111532.	2.5	13
93	Superheated steam processing: An emerging technology to improve food quality and safety. Critical Reviews in Food Science and Nutrition, 2023, 63, 8720-8736.	5.4	13
94	Improvement of Pacific White Shrimp (Litopenaeus vannamei) Drying Characteristics and Quality Attributes by a Combination of Salting Pretreatment and Microwave. Foods, 2022, 11, 2066.	1.9	13
95	The Application of Scanning Electron Microscope (SEM) to Study the Microstructure Changes in the Field of Agricultural Products Drying. , 0, , .		12
96	Classification of first quality fancy cashew kernels using four deep convolutional neural network models. Journal of Food Process Engineering, 2020, 43, e13552.	1.5	12
97	Effects of drying temperature on the drying characteristics and volatile profiles of Citrus reticulata Blanco peels under two stages of maturity. Drying Technology, 2022, 40, 2456-2469.	1.7	12
98	Guest Editorial: Some Mitigation Strategies for Climate Change. Drying Technology, 2015, 33, 1679-1680.	1.7	11
99	Evaluation of storage stability of dried cranberry powders based on the moisture sorption isotherms and glass transition temperatures. Drying Technology, 2020, , 1-11.	1.7	11
100	Effect of vacuum-steam pulsed blanching (VSPB) on drying characteristics and quality properties of garlic slices. Drying Technology, 2022, 40, 1232-1246.	1.7	11
101	Peanut drying: Effects of various drying methods on drying kinetic models, physicochemical properties, germination characteristics, and microstructure. Information Processing in Agriculture, 2023, 10, 447-458.	2.9	11
102	Microwave-assisted hot air convective drying of whole cranberries subjected to various initial treatments. LWT - Food Science and Technology, 2020, 133, 109906.	2.5	10
103	Pulsed pressure enhances osmotic dehydration and subsequent hot air drying kinetics and quality attributes of red beetroot. Drying Technology, 2023, 41, 262-276.	1.7	10
104	Characterization of volatile compounds and microstructure in different tissues of â€˜Eurekaâ€™ lemon () Tj ETQq0 0 0 rgBT /Overlock 1	1.3	10
105	Modification of the cell wall polysaccharides and phytochemicals of okra pods by cold plasma treatment. Food Hydrocolloids, 2022, 131, 107763.	5.6	10
106	International Council for Science responds. Nature, 2015, 517, 145-145.	13.7	8
107	The effect of high humidity hot air impingement blanching on the changes in molecular and rheological characteristics of pectin fractions extracted from okra pods. Food Hydrocolloids, 2022, 123, 107199.	5.6	8
108	An emerging pretreatment technology for reducing postharvest loss of vegetables-a case study of red pepper (Capsicum annuum L.) drying. Drying Technology, 2022, 40, 1620-1628.	1.7	8

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109	Pollution: Uncouple from economy boom. Nature, 2015, 517, 145-145.	13.7	7
110	Effects of solar drying operation equipped with a finned and double-pass heat collector on energy utilization, essential oil extraction and bio-active compounds of peppermint (Mentha Piperita) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		
111	Quality changes of frozen mango with regard to water mobility and ice crystals during frozen storage. Journal of Food Process Engineering, 2020, 43, e13508.	1.5	7
112	Energy, environmental, economic, and color analysis of geo-exchange energy assisted-insulated north wall solar dryer for onion slices under relatively cloudy and rainy conditions. Solar Energy, 2022, 236, 1-16.	2.9	7
113	Conventional and novel peeling methods for fruits and vegetables: A review. Innovative Food Science and Emerging Technologies, 2022, 77, 102961.	2.7	7
114	Pulsed vacuum pickling (PVP) of garlic cloves: Mass transfer kinetics and quality attributes. Drying Technology, 2020, 38, 712-723.	1.7	6
115	Quantitative characterization and effective inactivation of biological hazards in struvite recovered from digested poultry slurry. Water Research, 2021, 204, 117659.	5.3	6
116	High-humidity hot air impingement blanching (HHAIB): An emerging technology for tomato peeling. Innovative Food Science and Emerging Technologies, 2022, 77, 102987.	2.7	6
117	Effect of hot air impingement drying on drying behavior, volatile components profile, shell burst ratio, flavonoid contents, microstructure of Amomum villosum fruits. Drying Technology, 2023, 41, 107-121.	1.7	6
118	Innovative and Emerging Drying Technologies for Enhancing Food Quality. Journal of Food Quality, 2018, 2018, 1-2.	1.4	5
119	Hot-air impingement roast drying of beef jerky: Effect of relative humidity on quality attributes. Drying Technology, 2023, 41, 277-289.	1.7	5
120	Role of expert reviews in guiding future drying R&D. Drying Technology, 2017, 35, 525-526.	1.7	4
121	Effects of dielectric barrier discharge (DBD) plasma on the drying kinetics, color, phenolic compounds, energy consumption and microstructure of lotus pollen. Drying Technology, 2022, 40, 3100-3114.	1.7	4
122	Comparison of the Thermal Transitions of Spray-Dried and Freeze-Dried Egg Whites by Differential Scanning Calorimetry. Food and Bioprocess Technology, 2020, 13, 1329-1343.	2.6	3
123	Deep learnt grading of almond kernels. Journal of Food Process Engineering, 2021, 44, e13662.	1.5	3
124	Realâ€time detection system for moisture content and color change in jujube slices during drying process. Journal of Food Processing and Preservation, 2021, 45, e15539.	0.9	3
125	Effects of different drying methods on drying characteristics, microstructure, quality, and energy consumption of Panax Notoginseng roots (Araliaceae). Drying Technology, 2022, 40, 1247-1261.	1.7	3
126	Nanotechnology for Food Safety and Security: A Comprehensive Review. Food Reviews International, 2023, 39, 3858-3878.	4.3	3

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127	Mining shell waste will not be easy. Nature, 2015, 525, 321-321.	13.7	2
128	Mathematical modeling and polysaccharide content of Ganoderma lucidum by hot air impingement drying. , 2013, , .		1
129	Sustainable drying research in China. Drying Technology, 2020, 38, 1958-1958.	1.7	1
130	Air Impingement Drying Model of Chestnut. , 2012, , .		0
131	Role of peer-review system in quality assurance of archival publications. Drying Technology, 2016, 34, 1901-1903.	1.7	0
132	Blooming drying research in China. Drying Technology, 2017, 35, 1290-1290.	1.7	0
133	Special issue for the 9th Asia-Pacific drying conference (ADC 2017). Drying Technology, 2019, 37, 270-270.	1.7	0
134	<i>Effect of drying and high-humidity hot air impingement blanching (HHAIB) parameters on drying characteristics and quality of apple slices</i>. , 2019, , .		0