Mario Jekle

List of Publications by Year in descending order

89 papers	2,568 citations	172386 29 h-index	214721 47 g-index
89 all docs	89 docs citations	89 times ranked	2189 citing authors

#	Article	IF	Citations
1	Physicochemical and morphological characterization of different starches with variable amylose/amylopectin ratio. Food Hydrocolloids, 2013, 32, 52-63.	5.6	194
2	Starchâ€“gluten interactions during gelatinization and its functionality in dough like model systems. Food Hydrocolloids, 2016, 54, 196-201.	5.6	137
3	Starch gelatinization and its complexity for analysis. Starch/Staerke, 2015, 67, 30-41.	1.1	132
4	Dough microstructure: Novel analysis by quantification using confocal laser scanning microscopy. Food Research International, 2011, 44, 984-991.	2.9	124
5	Volume and texture improvement of gluten-free bread using quinoa white flour. Journal of Cereal Science, 2014, 59, 41-47.	1.8	103
6	Protein network analysis â€" A new approach for quantifying wheat dough microstructure. Food Research International, 2016, 89, 812-819.	2.9	97
7	Impact of sodium chloride on wheat flour dough for yeastâ€leavened products. I. Rheological attributes. Journal of the Science of Food and Agriculture, 2012, 92, 585-592.	1.7	91
8	Wheat Dough Microstructure: The Relation Between Visual Structure and Mechanical Behavior. Critical Reviews in Food Science and Nutrition, 2015, 55, 369-382.	5.4	70
9	Starch reâ€crystallization kinetics as a function of various cations. Starch/Staerke, 2011, 63, 792-800.	1.1	60
10	The contribution of glutathione to the destabilizing effect of yeast on wheat dough. Food Chemistry, 2015, 173, 243-249.	4.2	58
11	Impact of quinoa bran on gluten-free dough and bread characteristics. European Food Research and Technology, 2014, 239, 767-775.	1.6	55
12	Physicochemical interactions of polydextrose for sucrose replacement in pound cake. Food Research International, 2012, 48, 291-298.	2.9	51
13	Impact of arabinoxylan addition on protein microstructure formation in wheat and rye dough. Journal of Food Engineering, 2015, 154, 10-16.	2.7	51
14	Isolation of quinoa protein by milling fractionation and solvent extraction. Food and Bioproducts Processing, 2015, 96, 20-26.	1.8	48
15	Fibres of milling and fruit processing by-products in gluten-free bread making: A review of hydration properties, dough formation and quality-improving strategies. Food Chemistry, 2020, 306, 125451.	4.2	47
16	Rheological properties and baking performance of rye dough as affected by transglutaminase. Journal of Cereal Science, 2011, 54, 29-36.	1.8	46
17	Effect of high temperature drying on gluten-free pasta properties. LWT - Food Science and Technology, 2015, 63, 391-399.	2.5	44
18	Classification of starch-gluten networks into a viscoelastic liquid or solid, based on rheological aspects â€" A review. International Journal of Biological Macromolecules, 2019, 136, 1018-1025.	3.6	42

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19	Effects of Saccharomyces cerevisiae on the structural kinetics of wheat dough during fermentation. LWT - Food Science and Technology, 2014, 58, 194-202.	2.5	40
20	3D printing and additive manufacturing of cereal-based materials: Quality analysis of starch-based systems using a camera-based morphological approach. Innovative Food Science and Emerging Technologies, 2020, 63, 102384.	2.7	39
21	Effects of Acidification, Sodium Chloride, and Moisture Levels on Wheat Dough: I. Modeling of Rheological and Microstructural Properties. Food Biophysics, 2012, 7, 190-199.	1.4	38
22	Impact of sodium chloride on wheat flour dough for yeastâ€leavened products. II. Baking quality parameters and their relationship. Journal of the Science of Food and Agriculture, 2012, 92, 299-306.	1.7	38
23	Impact of gas formation kinetics on dough development and bread quality. Food Research International, 2015, 76, 860-866.	2.9	38
24	The response of rice grain quality to ozone exposure during growth depends on ozone level and genotype. Environmental Pollution, 2012, 163, 199-206.	3.7	37
25	Opportunities for upcycling cereal byproducts with special focus on Distiller's grains. Trends in Food Science and Technology, 2019, 91, 282-293.	7.8	37
26	Effects of selected lactic acid bacteria on the characteristics of amaranth sourdough. Journal of the Science of Food and Agriculture, 2010, 90, 2326-2332.	1.7	36
27	Mechanical wheat flour modification and its effect on protein network structure and dough rheology. Food Chemistry, 2018, 248, 296-303.	4.2	36
28	Strategies for the aeration of gluten-free bread â€“ A review. Trends in Food Science and Technology, 2015, 46, 75-84.	7.8	33
29	Structural, textural and sensory impact of sodium reduction on long fermented pizza. Food Chemistry, 2017, 234, 398-407.	4.2	31
30	Sensory design in food 3D printing â€“ Structuring, texture modulation, taste localization, and thermal stabilization. Innovative Food Science and Emerging Technologies, 2021, 72, 102743.	2.7	30
31	Fundamental characterization of wheat gluten. European Food Research and Technology, 2021, 247, 985-997.	1.6	29
32	Gluten Polymer Networksâ€”A Microstructural Classification in Complex Systems. Polymers, 2018, 10, 617.	2.0	26
33	Effect of mechanically modified wheat flour on dough fermentation properties and bread quality. European Food Research and Technology, 2017, 243, 287-296.	1.6	24
34	Abrasive milling of quinoa: Study on the distribution of selected nutrients and proteins within the quinoa seed kernel. Journal of Cereal Science, 2019, 86, 132-138.	1.8	23
35	Definition of network types â€“ Prediction of dough mechanical behaviour under shear by gluten microstructure. Scientific Reports, 2019, 9, 4700.	1.6	23
36	Technological and Analytical Methods for Arabinoxylan Quantification from Cereals. Critical Reviews in Food Science and Nutrition, 2016, 56, 999-1011.	5.4	22

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37	Effects of Acidification, Sodium Chloride, and Moisture Levels on Wheat Dough: II. Modeling of Bread Texture and Staling Kinetics. Food Biophysics, 2012, 7, 200-208.	1.4	21
38	Sodium chloride â€“ sensory, preserving and technological impact on yeastâ€leavened products. International Journal of Food Science and Technology, 2012, 47, 1798-1807.	1.3	21
39	Characterization of Key Aroma Compounds in Distillerâ€™s Grains from Wheat as a Basis for Utilization in the Food Industry. Journal of Agricultural and Food Chemistry, 2014, 62, 10873-10880.	2.4	21
40	Impact of air humidity in industrial heating processes on selected quality attributes of bread rolls. Journal of Food Engineering, 2011, 105, 647-655.	2.7	20
41	Staining methods for dough systems â€“ Impact on microstructure and functionality. LWT - Food Science and Technology, 2018, 88, 139-145.	2.5	20
42	A normalized texture profile analysis approach to evaluate firming kinetics of bread crumbs independent from its initial texture. Journal of Cereal Science, 2018, 81, 147-152.	1.8	18
43	Impact of altered starch functionality on wheat dough microstructure and its elongation behaviour. Food Chemistry, 2019, 290, 64-71.	4.2	18
44	Impact of Storing Condition on Staling and Microbial Spoilage Behavior of Bread and Their Contribution to Prevent Food Waste. Foods, 2021, 10, 76.	1.9	18
45	Mechanisms Behind Distillerâ€™s Grains Impact on Wheat Dough and Bread Quality. Food and Bioprocess Technology, 2016, 9, 274-284.	2.6	17
46	Compositional Changes and Baking Performance of Rye Dough As Affected by Microbial Transglutaminase and Xylanase. Journal of Agricultural and Food Chemistry, 2016, 64, 5751-5758.	2.4	16
47	Wheat dough imitating artificial dough system based on hydrocolloids and glass beads. Journal of Food Engineering, 2018, 223, 144-151.	2.7	16
48	Possibilities to derive empirical dough characteristics from fundamental rheology. Trends in Food Science and Technology, 2016, 57, 1-10.	7.8	15
49	On the assessments of arabinoxylan localization and enzymatic modifications for enhanced protein networking and its structural impact on rye dough and bread. Food Chemistry, 2017, 229, 178-187.	4.2	15
50	Microscopic investigation of the formation of a thermoset wheat gluten network in a model system relevant for bread making. International Journal of Food Science and Technology, 2020, 55, 891-898.	1.3	15
51	Quantification in starch microstructure as a function of baking time. Procedia Food Science, 2011, 1, 145-152.	0.6	14
52	Development of fibre-enriched wheat breads: impact of recovered agroindustrial by-products on physicochemical properties of dough and bread characteristics. European Food Research and Technology, 2017, 243, 1973-1988.	1.6	14
53	Thermally induced gluten modification observed with rheology and spectroscopies. International Journal of Biological Macromolecules, 2021, 173, 26-33.	3.6	14
54	Changes in aroma composition and sensory properties provided by distillerâ€™s grains addition to bakery products. Journal of Cereal Science, 2016, 72, 75-83.	1.8	13

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55	Structure stabilization in starch-quinoa bran doughs: The role of water availability and gelatinization. Carbohydrate Polymers, 2017, 174, 1018-1025.	5.1	13
56	Surface Energy of Food Contact Materials and Its Relation to Wheat Dough Adhesion. Food and Bioprocess Technology, 2021, 14, 1142-1154.	2.6	13
57	The Self-Enforcing Starchâ€“Gluten Systemâ€”Strainâ€“Dependent Effects of Yeast Metabolites on the Polymeric Matrix. Polymers, 2021, 13, 30.	2.0	13
58	Destabilization of wheat dough: Interrelation between CO 2 and glutathione. Innovative Food Science and Emerging Technologies, 2016, 34, 320-325.	2.7	12
59	Novel materials and surface investigations for optimizing dough carrier interactions. European Food Research and Technology, 2009, 229, 183-189.	1.6	11
60	Direct link between specific structural levels of starch and hydration properties. Carbohydrate Polymers, 2018, 181, 159-166.	5.1	11
61	Concentration dependent rate constants of sodium substitute functionalities during wheat dough development. Food Research International, 2019, 116, 346-353.	2.9	11
62	Foam stabilization during processing of starch-based dough systems. Innovative Food Science and Emerging Technologies, 2017, 39, 267-274.	2.7	10
63	Characterizing the impact of starch and gluten-induced alterations on gelatinization behavior of physically modified model dough. Food Chemistry, 2019, 301, 125276.	4.2	10
64	Implementation of a novel tool to quantify dough microstructure. Procedia Food Science, 2011, 1, 1-6.	0.6	9
65	In situ monitoring of starch gelatinization with limited water content using confocal laser scanning microscopy. European Food Research and Technology, 2014, 239, 247-257.	1.6	9
66	Mechanically and Thermally Induced Degradation and Modification of Cereal Biopolymers during Grinding. Polymers, 2019, 11, 448.	2.0	9
67	Hardness targeted design and modulation of food textures in the elastic-regime using 3D printing of closed-cell foams in point lattice systems. Journal of Food Engineering, 2022, 320, 110942.	2.7	9
68	Development of wheat dough by means of shearing. Journal of Food Engineering, 2017, 201, 1-8.	2.7	8
69	Maltose formation in wheat dough depending on mechanical starch modification and dough hydration. Carbohydrate Polymers, 2018, 185, 153-158.	5.1	8
70	High-Pressure Treatment of Non-Hydrated Flour Affects Structural Characteristics and Hydration. Foods, 2018, 7, 78.	1.9	8
71	Advances in the development of wheat dough and bread by means of shearing. Journal of Food Engineering, 2019, 247, 136-143.	2.7	8
72	Reconstitution baking tests with defatted wheat flour are suitable for determining the functional effects of lipase-treated wheat lipids. Food Chemistry, 2016, 200, 175-182.	4.2	7

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73	Time-dependent adhesion behavior between dough and contact surfaces in bakeries. Journal of Food Engineering, 2019, 255, 24-31.	2.7	7
74	Micro-Scale Shear Kneadingâ€"Gluten Network Development under Multiple Stressâ€"Relaxation Steps and Evaluation via Multiwave Rheology. Polymers, 2022, 14, 846.	2.0	7
75	A review: Reverse approach to analyze the impact of starch modification on the inflation and gas holding properties of wheat-based matrices. Trends in Food Science and Technology, 2019, 91, 231-239.	7.8	6
76	Interrelation between mechanical and biological aeration in starch-based gluten-free dough systems. Journal of Cereal Science, 2017, 76, 28-34.	1.8	6
77	Texture design of gluten-free bread by mixing under controlled headspace atmosphere. European Food Research and Technology, 2021, 247, 2333-2343.	1.6	4
78	Controlling glass bead surface functionality - Impact on network formation in natural edible polymer systems. Composites Science and Technology, 2021, 211, 108864.	3.8	4
79	Glutenâ€"starch interface characteristics and wheat dough rheologyâ€"Insights from hybrid artificial systems. Journal of Food Science, 2022, 87, 1375-1385.	1.5	4
80	Application of Two-Dimensional Fluorescence Spectroscopy for the On-Line Monitoring of Teff-Based Substrate Fermentation Inoculated with Certain Probiotic Bacteria. Foods, 2022, 11, 1171.	1.9	4
81	Novel approach to investigate the mechanical properties of crumb matrix during storage â€" Re-engineering of gas-free crumb pellets. Food Chemistry, 2019, 288, 333-340.	4.2	3
82	Relation between polymer transitions and the extensional viscosity of dough systems during thermal stabilization assessed by lubricated squeezing flow. Food Chemistry, 2022, 389, 133048.	4.2	3
83	Impact of the particle-polymer interface on small- and large-scale deformation response in protein- and carbohydrate-based food matrices. International Journal of Biological Macromolecules, 2021, 191, 51-59.	3.6	2
84	Betrachtung von Strukturbildungsreaktionen bei thermischer Behandlung von Getreideprodukten. Chemie-Ingenieur-Technik, 2009, 81, 1172-1172.	0.4	1
85	Effect of Rye Bran Particles on Structure Formation Properties of Rye Dough and Bread. Journal of Food Processing and Preservation, 2017, 41, e12998.	0.9	1
86	Contact area determination between structured surfaces and viscoelastic food materials. LWT - Food Science and Technology, 2022, 164, 113664.	2.5	1
87	Der intelligente GÃrschrank - Implementierung einer OnlineÃ¼berwachung des Fermentationsprozesses mittels digitaler Bildverarbeitung. Chemie-Ingenieur-Technik, 2016, 88, 1326-1326.	0.4	0
88	Der intelligente GÃrschrank - Einfluss der Herstellungsparameter auf die ProduktqualitÃt. Chemie-Ingenieur-Technik, 2016, 88, 1327-1327.	0.4	0
89	Physicochemical and morphological characterization of different starches with variable amylose/amylopectin content. CFW Plexus, 2012, , .	0.0	0