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	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
2	Micro-Scale Shear Kneadingâ€"Gluten Network Development under Multiple Stressâ€"Relaxation Steps and Evaluation via Multiwave Rheology. Polymers, 2022, 14, 846.	2.0	7
3	Glutenâ€"starch interface characteristics and wheat dough rheologyâ€"Insights from hybrid artificial systems. Journal of Food Science, 2022, 87, 1375-1385.	1.5	4
4	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
5	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
6	Contact area determination between structured surfaces and viscoelastic food materials. LWT - Food Science and Technology, 2022, 164, 113664.	2.5	1
7	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
8	Fundamental characterization of wheat gluten. European Food Research and Technology, 2021, 247, 985-997.	1.6	29
9	Surface Energy of Food Contact Materials and Its Relation to Wheat Dough Adhesion. Food and Bioprocess Technology, 2021, 14, 1142-1154.	2.6	13
10	Thermally induced gluten modification observed with rheology and spectroscopies. International Journal of Biological Macromolecules, 2021, 173, 26-33.	3.6	14
11	Texture design of gluten-free bread by mixing under controlled headspace atmosphere. European Food Research and Technology, 2021, 247, 2333-2343.	1.6	4
12	Controlling glass bead surface functionality - Impact on network formation in natural edible polymer systems. Composites Science and Technology, 2021, 211, 108864.	3.8	4
13	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
14	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
15	The Self-Enforcing Starchâ€"Gluten Systemâ€"Strainâ€"Dependent Effects of Yeast Metabolites on the Polymeric Matrix. Polymers, 2021, 13, 30.	2.0	13
16	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
17	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
18	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

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19	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
20	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
21	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
22	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
23	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
24	Mechanically and Thermally Induced Degradation and Modification of Cereal Biopolymers during Grinding. Polymers, 2019, 11, 448.	2.0	9
25	Impact of altered starch functionality on wheat dough microstructure and its elongation behaviour. Food Chemistry, 2019, 290, 64-71.	4.2	18
26	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
27	Time-dependent adhesion behavior between dough and contact surfaces in bakeries. Journal of Food Engineering, 2019, 255, 24-31.	2.7	7
28	Definition of network types â€" Prediction of dough mechanical behaviour under shear by gluten microstructure. Scientific Reports, 2019, 9, 4700.	1.6	23
29	Concentration dependent rate constants of sodium substitute functionalities during wheat dough development. Food Research International, 2019, 116, 346-353.	2.9	11
30	Advances in the development of wheat dough and bread by means of shearing. Journal of Food Engineering, 2019, 247, 136-143.	2.7	8
31	Maltose formation in wheat dough depending on mechanical starch modification and dough hydration. Carbohydrate Polymers, 2018, 185, 153-158.	5.1	8
32	Wheat dough imitating artificial dough system based on hydrocolloids and glass beads. Journal of Food Engineering, 2018, 223, 144-151.	2.7	16
33	Direct link between specific structural levels of starch and hydration properties. Carbohydrate Polymers, 2018, 181, 159-166.	5.1	11
34	Staining methods for dough systems â€" Impact on microstructure and functionality. LWT - Food Science and Technology, 2018, 88, 139-145.	2.5	20
35	Mechanical wheat flour modification and its effect on protein network structure and dough rheology. Food Chemistry, 2018, 248, 296-303.	4.2	36
36	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

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37	High-Pressure Treatment of Non-Hydrated Flour Affects Structural Characteristics and Hydration. Foods, 2018, 7, 78.	1.9	8
38	Gluten Polymer Networksâ€"A Microstructural Classification in Complex Systems. Polymers, 2018, 10, 617.	2.0	26
39	Foam stabilization during processing of starch-based dough systems. Innovative Food Science and Emerging Technologies, 2017, 39, 267-274.	2.7	10
40	Development of wheat dough by means of shearing. Journal of Food Engineering, 2017, 201, 1-8.	2.7	8
41	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
42	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
43	Structure stabilization in starch-quinoa bran doughs: The role of water availability and gelatinization. Carbohydrate Polymers, 2017, 174, 1018-1025.	5.1	13
44	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
45	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
46	Structural, textural and sensory impact of sodium reduction on long fermented pizza. Food Chemistry, 2017, 234, 398-407.	4.2	31
47	Interrelation between mechanical and biological aeration in starch-based gluten-free dough systems. Journal of Cereal Science, 2017, 76, 28-34.	1.8	6
48	Destabilization of wheat dough: Interrelation between CO 2 and glutathione. Innovative Food Science and Emerging Technologies, 2016, 34, 320-325.	2.7	12
49	Possibilities to derive empirical dough characteristics from fundamental rheology. Trends in Food Science and Technology, 2016, 57, 1-10.	7.8	15
50	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
51	Protein network analysis â€" A new approach for quantifying wheat dough microstructure. Food Research International, 2016, 89, 812-819.	2.9	97
52	Der intelligente GÃrschrank - Implementierung einer OnlineÃ¼berwachung des Fermentationsprozesses mittels digitaler Bildverarbeitung. Chemie-Ingenieur-Technik, 2016, 88, 1326-1326.	0.4	0
53	Der intelligente GÃrschrank - Einfluss der Herstellungsparameter auf die ProduktqualitÃt. Chemie-Ingenieur-Technik, 2016, 88, 1327-1327.	0.4	0
54	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

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55	Technological and Analytical Methods for Arabinoxylan Quantification from Cereals. Critical Reviews in Food Science and Nutrition, 2016, 56, 999-1011.	5.4	22
56	Mechanisms Behind Distillerâ€™s Grains Impact on Wheat Dough and Bread Quality. Food and Bioprocess Technology, 2016, 9, 274-284.	2.6	17
57	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
58	Starchâ€“gluten interactions during gelatinization and its functionality in dough like model systems. Food Hydrocolloids, 2016, 54, 196-201.	5.6	137
59	Impact of arabinoxylan addition on protein microstructure formation in wheat and rye dough. Journal of Food Engineering, 2015, 154, 10-16.	2.7	51
60	Starch gelatinization and its complexity for analysis. Starch/Staerke, 2015, 67, 30-41.	1.1	132
61	Strategies for the aeration of gluten-free bread â€“ A review. Trends in Food Science and Technology, 2015, 46, 75-84.	7.8	33
62	Isolation of quinoa protein by milling fractionation and solvent extraction. Food and Bioproducts Processing, 2015, 96, 20-26.	1.8	48
63	Effect of high temperature drying on gluten-free pasta properties. LWT - Food Science and Technology, 2015, 63, 391-399.	2.5	44
64	Impact of gas formation kinetics on dough development and bread quality. Food Research International, 2015, 76, 860-866.	2.9	38
65	The contribution of glutathione to the destabilizing effect of yeast on wheat dough. Food Chemistry, 2015, 173, 243-249.	4.2	58
66	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
67	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
68	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
69	Impact of quinoa bran on gluten-free dough and bread characteristics. European Food Research and Technology, 2014, 239, 767-775.	1.6	55
70	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
71	Volume and texture improvement of gluten-free bread using quinoa white flour. Journal of Cereal Science, 2014, 59, 41-47.	1.8	103
72	Physicochemical and morphological characterization of different starches with variable amylose/amylopectin ratio. Food Hydrocolloids, 2013, 32, 52-63.	5.6	194

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73	Physicochemical interactions of polydextrose for sucrose replacement in pound cake. Food Research International, 2012, 48, 291-298.	2.9	51
74	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
75	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
76	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
77	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
78	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
79	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
80	Physicochemical and morphological characterization of different starches with variable amylose/amylopectin content. CFW Plexus, 2012, , .	0.0	0
81	Quantification in starch microstructure as a function of baking time. Procedia Food Science, 2011, 1, 145-152.	0.6	14
82	Implementation of a novel tool to quantify dough microstructure. Procedia Food Science, 2011, 1, 1-6.	0.6	9
83	Dough microstructure: Novel analysis by quantification using confocal laser scanning microscopy. Food Research International, 2011, 44, 984-991.	2.9	124
84	Rheological properties and baking performance of rye dough as affected by transglutaminase. Journal of Cereal Science, 2011, 54, 29-36.	1.8	46
85	Starch reâ€crystallization kinetics as a function of various cations. Starch/Staerke, 2011, 63, 792-800.	1.1	60
86	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
87	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
88	Betrachtung von Strukturbildungsreaktionen bei thermischer Behandlung von Getreideprodukten. Chemie-Ingenieur-Technik, 2009, 81, 1172-1172.	0.4	1
89	Novel materials and surface investigations for optimizing dough carrier interactions. European Food Research and Technology, 2009, 229, 183-189.	1.6	11