kaoru kohyama

List of Publications by Year
in descending order

122 papers	5,449 citations	87843 38 h-index	88593 70 g-index
123 all docs	123 docs citations	123 times ranked	4215 citing authors

#	Article	IF	Citations
1	Three-dimensional probabilistic anatomical cranio-cerebral correlation via the international 10â€“20 system oriented for transcranial functional brain mapping. NeuroImage, 2004, 21, 99-111.	2.1	1,111
2	Dynamic viscoelastic study on the gelation of 7 S globulin from soybeans. Journal of Agricultural and Food Chemistry, 1992, 40, 941-944.	2.4	392
3	Effect of soluble sugars on gelatinization and retrogradation of sweet potato starch. Journal of Agricultural and Food Chemistry, 1991, 39, 1406-1410.	2.4	232
4	Multimodal assessment of cortical activation during apple peeling by NIRS and fMRI. NeuroImage, 2004, 21, 1275-1288.	2.1	203
5	Rheological studies on the gelation process of soybean 7 S and 11 S proteins in the presence of glucono-.delta.-lactone. Journal of Agricultural and Food Chemistry, 1993, 41, 8-14.	2.4	122
6	Parameters of Texture Profile Analysis. Food Science and Technology Research, 2013, 19, 519-521.	0.3	120
7	Solution properties of pullulan. Macromolecules, 1991, 24, 5590-5593.	2.2	117
8	Effects of sample hardness on human chewing force: a model study using silicone rubber. Archives of Oral Biology, 2004, 49, 805-816.	0.8	114
9	Influence of non-starch polysaccharides on the in vitro digestibility and viscosity of starch suspensions. Food Chemistry, 2012, 133, 1420-1426.	4.2	92
10	Gel-sol transition of methylcellulose. Macromolecular Chemistry and Physics, 1997, 198, 1217-1226.	1.1	89
11	A differential thermal analysis of the gelatinization and retrogradation of wheat starches with different amylopectin chain lengths. Carbohydrate Polymers, 2004, 58, 71-77.	5.1	87
12	A mixed system composed of different molecular weights konjac glucomannan and kappa carrageenan: large deformation and dynamic viscoelastic study. Food Hydrocolloids, 1993, 7, 213-226.	5.6	85
13	Effect of amylose content and rice type on dynamic viscoelasticity of a composite rice starch gel. Food Hydrocolloids, 2009, 23, 1712-1719.	5.6	85
14	Compression Test of Food Gels on Artificial Tongue and Its Comparison with Human Test. Journal of Texture Studies, 2013, 44, 104-114.	1.1	78
15	Texture design for products using food hydrocolloids. Food Hydrocolloids, 2012, 26, 412-420.	5.6	77
16	Effect of non-starch polysaccharides on the in vitro digestibility and rheological properties of rice starch gel. Food Chemistry, 2011, 127, 541-546.	4.2	75
17	Physicochemical characteristics of waxy rice starch influencing the in vitro digestibility of a starch gel. Food Chemistry, 2009, 116, 137-142.	4.2	73
18	Consensus on the terminologies and methodologies for masticatory assessment. Journal of Oral Rehabilitation, 2021, 48, 745-761.	1.3	68

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19	Prefrontal activity during taste encoding: An fNIRS study. NeuroImage, 2006, 31, 796-806.	2.1	67
20	The Effect of Sucrose on the Thermo-Reversible Gel-Sol Transition in Agarose and Gelatin.. Polymer Journal, 1992, 24, 871-877.	1.3	66
21	Relationship between Flow Properties of Thickener Solutions and Their Velocity through the Pharynx Measured by the Ultrasonic Pulse Doppler Method. Food Science and Technology Research, 2009, 15, 203-210.	0.3	63
22	Textural Evaluation of Rice Cake by Chewing and Swallowing Measurements on Human Subjects. Bioscience, Biotechnology and Biochemistry, 2007, 71, 358-365.	0.6	61
23	Characterization of eating difficulty by sensory evaluation of hydrocolloid gels. Food Hydrocolloids, 2014, 38, 95-103.	5.6	61
24	Cellulose Derivatives Effects on Gelatinization and Retrogradation of Sweet Potato Starch. Journal of Food Science, 1992, 57, 128-131.	1.5	60
25	ELECTROMYOGRAPHY DURING ORAL PROCESSING IN RELATION TO MECHANICAL AND SENSORY PROPERTIES OF SOFT GELS. Journal of Texture Studies, 2011, 42, 254-267.	1.1	60
26	Mastication Effort Estimated by Electromyography for Cooked Rice of Differing Water Content. Bioscience, Biotechnology and Biochemistry, 2005, 69, 1669-1676.	0.6	59
27	Characterization of Food Physical Properties by the Mastication Parameters Measured by Electromyography of the Jaw-Closing Muscles and Mandibular Kinematics in Young Adults. Bioscience, Biotechnology and Biochemistry, 2008, 72, 1690-1695.	0.6	57
28	Classification of <scp>J</scp>apanese Texture Terms. Journal of Texture Studies, 2013, 44, 140-159.	1.1	56
29	Differential scanning calorimetry and a model calculation of starches annealed at 20 and 50Â°C. Carbohydrate Polymers, 2006, 63, 82-88.	5.1	48
30	Characterization of arenga starch in comparison with sago starch. Carbohydrate Polymers, 2013, 92, 2306-2313.	5.1	48
31	A mixed system composed of different molecular weights konjac glucomannan and Î²-carrageenan. II. Molecular weight dependence of viscoelasticity and thermal properties. Food Hydrocolloids, 1996, 10, 229-238.	5.6	47
32	Relationship between the Rheological Properties of Thickener Solutions and Their Velocity through the Pharynx as Measured by the Ultrasonic Pulse Doppler Method. Bioscience, Biotechnology and Biochemistry, 2010, 74, 1598-1605.	0.6	47
33	Effects of sugars and polyols on the gel-sol transition of agarose by differential scanning calorimetry. Thermochimica Acta, 1992, 206, 163-173.	1.2	45
34	Mastication efforts on block and finely cut foods studied by electromyography. Food Quality and Preference, 2007, 18, 313-320.	2.3	45
35	Mechanical and acoustic evaluation of potato chip crispness using a versatile texture analyzer. Journal of Food Engineering, 2012, 112, 268-273.	2.7	45
36	Oral Sensing of Food Properties. Journal of Texture Studies, 2015, 46, 138-151.	1.1	40

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37	Interactive relationship between the mechanical properties of food and the human response during the first bite. Archives of Oral Biology, 2007, 52, 455-464.	0.8	39
38	Rheological study on the rennet-induced gelation of casein micelles with different sizes. Polymer Gels and Networks, 1994, 2, 105-118.	0.6	38
39	Instrumental Uniaxial Compression Test of Gellan Gels of Various Mechanical Properties Using Artificial Tongue and Its Comparison with Human Oral Strategy for the First Size Reduction. Journal of Texture Studies, 2014, 45, 354-366.	1.1	38
40	Rheological study on gelation of soybean 11S protein by glucono-.delta.-lactone. Journal of Agricultural and Food Chemistry, 1992, 40, 740-744.	2.4	37
41	Pressure Distribution Measurement in Biting Surimi Gels with Molars Using a Multiple-point Sheet Sensor. Bioscience, Biotechnology and Biochemistry, 2001, 65, 2597-2603.	0.6	37
42	LEXICON FOR THE SENSORY DESCRIPTION OF FRENCH BREAD IN JAPAN. Journal of Sensory Studies, 2010, 25, 76-93.	0.8	32
43	Relations among mechanical properties, human bite parameters, and ease of chewing of solid foods with various textures. Journal of Food Engineering, 2009, 95, 400-409.	2.7	29
44	EFFECTS OF SAMPLE THICKNESS ON BITE FORCE FOR RAW CARROTS AND FISH GELS. Journal of Texture Studies, 2005, 36, 157-173.	1.1	28
45	Discrimination of cucumber cultivars using a multiple-point sheet sensor to measure biting force. Journal of the Science of Food and Agriculture, 2003, 83, 1320-1326.	1.7	27
46	Effect of water-soluble and insoluble non-starch polysaccharides isolated from wheat flour on the rheological properties of wheat starch gel. Carbohydrate Polymers, 2004, 57, 451-458.	5.1	27
47	Effect of fermentation metabolites on rheological and sensory properties of fermented rice noodles. Journal of the Science of Food and Agriculture, 2008, 88, 2134-2141.	1.7	27
48	Electromyography analysis of natural mastication behavior using varying mouthful quantities of two types of gels. Physiology and Behavior, 2016, 161, 174-182.	1.0	26
49	Mechanical properties of softened foodstuffs processed by freezeâ€“thaw infusion of macerating enzyme. Innovative Food Science and Emerging Technologies, 2012, 16, 267-276.	2.7	24
50	Texture Evaluation of Cooked Rice Prepared from Japanese Cultivars Using Twoâ€Bite Instrumental Test and Electromyography. Journal of Texture Studies, 2016, 47, 188-198.	1.1	24
51	Rheological Properties of Fermented Rice Flour Gel. Cereal Chemistry, 2007, 84, 620-625.	1.1	23
52	Characterization of spatiotemporal stress distribution during food fracture by image texture analysis methods. Journal of Food Engineering, 2007, 81, 429-436.	2.7	23
53	Linear and Nonlinear Rheology of Mixed Polysaccharide Gels. Pt. <scp>II</scp>. Extrusion, Compression, Puncture and Extension Tests and Correlation with Sensory Evaluation. Journal of Texture Studies, 2014, 45, 30-46.	1.1	22
54	Prefrontal activity during flavor difference test: Application of functional near-infrared spectroscopy to sensory evaluation studies. Appetite, 2006, 47, 220-232.	1.8	21

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55	Visual illusion in mass estimation of cut food. Appetite, 2007, 49, 183-190.	1.8	21
56	Phenomenological viscoelasticity of some rice starch gels. Food Hydrocolloids, 2010, 24, 512-517.	5.6	21
57	Modulation of biting procedures induced by the sensory evaluation of cheese hardness with different definitions. Appetite, 2008, 50, 158-166.	1.8	20
58	Ultrasound Analysis of the Effects of Food Bolus Volume on Tongue Movement at the Initiation of Swallowing. Journal of Texture Studies, 2013, 44, 387-396.	1.1	20
59	Gelation Properties of Soymilk and Soybean 11S Globulin from Japanese-grown Soybeans. Bioscience, Biotechnology and Biochemistry, 1992, 56, 725-728.	0.6	19
60	The effect of glucono-Î´-lactone on the gelation time of soybean 11S protein: concentration dependence. Food Hydrocolloids, 1992, 6, 263-274.	5.6	19
61	Effects of Cross-sectional Area on Human Bite Studied with Raw Carrot andSurimiGel. Bioscience, Biotechnology and Biochemistry, 2004, 68, 2104-2110.	0.6	19
62	Electromyographic texture characterization of hydrocolloid gels as model foods with varying mastication and swallowing difficulties. Food Hydrocolloids, 2015, 43, 146-152.	5.6	19
63	Sucrose release from agar gels and sensory perceived sweetness. Food Hydrocolloids, 2016, 60, 405-414.	5.6	19
64	A comparison of the effects of heat moisture treatment (HMT) on rheological properties and amylopectin structure in sago (Metroxylon sago) and arenga (Arenga pinnata) starches. Journal of Food Science and Technology, 2017, 54, 3404-3410.	1.4	19
65	Polysaccharide-protein interaction: A rheological study of the gel-sol transition of a gelatin-methylcellulose-water system. Biorheology, 1993, 30, 243-252.	1.2	18
66	First bite for hardness judgment as haptic exploratory procedure. Physiology and Behavior, 2007, 92, 601-610.	1.0	18
67	Visualization of planar stress distributions in cucumber cultivars using a multiple-point sheet sensor. Journal of the Science of Food and Agriculture, 2004, 84, 1091-1096.	1.7	17
68	Statistical Laws for Food Fragmentation by Human Mastication. Journal of the Physical Society of Japan, 2006, 75, 083001.	0.7	17
69	Comparison of human-bite and instrument puncture tests of cucumber texture. Postharvest Biology and Technology, 2009, 52, 243-246.	2.9	17
70	Electromyographic Measurement of Eating Behaviors for Buckwheat Noodles. Bioscience, Biotechnology and Biochemistry, 2010, 74, 56-62.	0.6	17
71	Natural eating behavior of two types of hydrocolloid gels as measured by electromyography: Quantitative analysis of mouthful size effects. Food Hydrocolloids, 2016, 52, 243-252.	5.6	17
72	Relationships Between Mechanical Properties Obtained from Compression Test and Electromyography Variables During Natural Oral Processing of Gellan Gum Gels. Journal of Texture Studies, 2017, 48, 66-75.	1.1	17

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73	Dielectric, viscoelastic and broad-line NMR study of konjac glucomannan films. Carbohydrate Polymers, 1992, 17, 59-63.	5.1	16
74	Effects of Milling Ratio and Waterâ€toâ€Rice Ratio on Mastication Effort for Cooked Rice Measured by Electromyography. Journal of Texture Studies, 2014, 45, 477-486.	1.1	16
75	A trial of human electromyography to evaluate texture of softened foodstuffs prepared with freeze-thaw impregnation of macerating enzymes. Innovative Food Science and Emerging Technologies, 2014, 21, 188-194.	2.7	16
76	Tensile Test of Cabbage Leaves for Quality Evaluation of Shredded Cabbage. Food Science and Technology Research, 2008, 14, 337-344.	0.3	15
77	Molecular Structure and Physicochemical Properties of Acid-Methanol-Treated Chickpea Starch. International Journal of Food Properties, 2013, 16, 125-138.	1.3	15
78	Compression Test of Soft Food Gels Using a Soft Machine with an Artificial Tongue. Foods, 2019, 8, 182.	1.9	15
79	Effect of acidâ€“methanol treatment on the molecular structure and physicochemical properties of lentil (Lens culinaris Medik) starch. Food Hydrocolloids, 2009, 23, 2219-2225.	5.6	14
80	Fragmentation of a Viscoelastic Food by Human Mastication. Journal of the Physical Society of Japan, 2010, 79, 044801.	0.7	14
81	Rheological Properties of Starch Gels from Wheat Mutants with Reduced Amylose Content. Cereal Chemistry, 2007, 84, 102-107.	1.1	13
82	Time-intensity Analysis of Sourness of Commercially Produced Gummy Jellies Available in Japan. Food Science and Technology Research, 2009, 15, 75-82.	0.3	13
83	A Pilot Study on Ultrasound Elastography for Evaluation of Mechanical Characteristics and Oral Strategy of Gels. Journal of Texture Studies, 2016, 47, 152-160.	1.1	13
84	Measurement of bite force variables related to human discrimination of leftâ€“right hardness differences of silicone rubber samples placed between the incisors. Archives of Oral Biology, 2005, 50, 517-526.	0.8	12
85	Research Survey of Japanese Consumers on Texture Vocabulary (Studies on Japanese texture terms Part) Tj ETQq1 1 0.784314 rgBT /Ov	0.1	12
86	Bite-speed Effects in Two-bite Texture Analysis. Journal of the Japanese Society for Food Science and Technology, 2012, 59, 96-103.	0.1	12
87	Influence of Starch and Gluten Characteristics on Rheological Properties of Wheat Flour Gel at Small and Large Deformation. Cereal Chemistry, 2008, 85, 329-334.	1.1	11
88	Elucidation of Fermentation Effect on Rice Noodles Using Combined Dynamic Viscoelasticity and Thermal Analyses. Cereal Chemistry, 2009, 86, 70-75.	1.1	11
89	Texture of Sliced Cucumbers Measured by Subjective Human-Bite and Objective Instrumental Tests. Journal of Texture Studies, 2013, 44, 1-11.	1.1	11
90	Globin protein gelation: the effect of pH and temperature. Food Hydrocolloids, 1990, 4, 87-93.	5.6	10

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91	Mechanical stress distributions in cross-sections of cucumber cultivars during the fracture process. Journal of the Science of Food and Agriculture, 2006, 86, 26-34.	1.7	10
92	Effects of Sprouting on Texture of Cooked Buckwheat (Fagopyrum esculentumMoench) Noodles. Plant Production Science, 2009, 12, 492-496.	0.9	10
93	Acoustic Analysis of the Swallowing Sounds of Food with Different Physical Properties Using the Cervical Auscultation Method. Journal of Texture Studies, 2013, 44, 169-175.	1.1	10
94	Texture Evaluation of Soft Gels with Different Fracture Strains using an Artificial Tongue. Journal of Texture Studies, 2016, 47, 496-503.	1.1	10
95	Fracture phenomena of soft gellan gum gels during compression with artificial tongues. Food Hydrocolloids, 2021, 112, 106283.	5.6	10
96	Characterization of mechanical stress distributions in a cross section of cucumber fruits: bisector reference line represents tissue anatomy. Journal of the Science of Food and Agriculture, 2005, 85, 785-790.	1.7	9
97	Fast Fourier transform analysis of sounds made while swallowing various foods. Journal of the Acoustical Society of America, 2012, 132, 2478-2482.	0.5	9
98	Effects of Rice Flour Blends on Bread Texture and Staling. Cereal Chemistry, 2014, 91, 146-151.	1.1	9
99	Recognition of Japanese Texture Descriptive Terms According to Gender, Age and Region (Studies on) Tj ETQq1 1 0.784314 rgBT /Ove 54, 488-502.	0.1	8
100	Ultrasound Pulsed Wave <scp>D</scp>oppler Imaging of the Esophagus Illustrates the Effects of Water Volume on Bolus Kinematics. Journal of Texture Studies, 2014, 45, 335-343.	1.1	8
101	Mouthful Size Effects on Mastication Effort of Various Hydrocolloid Gels Used as Food Models. Food Science and Technology Research, 2014, 20, 1121-1130.	0.3	7
102	Compression test of soft gellan gels using a soft machine equipped with a transparent artificial tongue. Journal of Texture Studies, 2020, 51, 612-621.	1.1	7
103	Conditions of viscosity measurement for detecting irradiated peppers. Radiation Physics and Chemistry, 1995, 45, 665-669.	1.4	6
104	Collection and Analysis of Foods Associated with Japanese Texture Terms. Journal of the Japanese Society for Food Science and Technology, 2011, 58, 359-374.	0.1	6
105	Physical Properties and Texture of Japanese White Salted Noodles Mixed with Tapioca Starch. Journal of the Japanese Society for Food Science and Technology, 2012, 59, 268-278.	0.1	5
106	Variation in Firmness of Whole Beans, Embryos, and Testas of Cooked Soybean (Glycine max) Cultivars. Cereal Chemistry, 2014, 91, 419-424.	1.1	5
107	Effects of Head Density of Cabbages (Brassica oleracea var. Capitata) on Mechanical Properties. Food Science and Technology Research, 2009, 15, 11-18.	0.3	4
108	Electromyography Study of Mastication of Pickles by Young and Elderly People. Journal of the Japanese Society for Food Science and Technology, 2009, 56, 14-19.	0.1	4

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109	Scaling Laws for Shapes of Food Fragments by Human Mastication. Journal of the Physical Society of Japan, 2007, 76, 044002.	0.7	3
110	Effects of Fish Collagen Peptides on Physical Properties of Mixed Gels Containing Konjac Glucomannan and Kappa-Carrageenan. Journal of the Japanese Society for Food Science and Technology, 2011, 58, 252-258.	0.1	3
111	Characterization of Waxy Rice Cakes (Mochi) with Rapid Hardening Quality by Instrumental and Sensory Methods. Cereal Chemistry, 2013, 90, 101-106.	1.1	3
112	Sensory Comparison of Several Manufactured Shao-mai (steamed Chinese-style meat dumplings). Journal of the Japanese Society for Food Science and Technology, 2009, 56, 85-94.	0.1	2
113	Effects of Mechanical Properties of Food on Tongue Movement at the Initiation of Swallowing Measured by Ultrasound Imaging. Journal of the Japanese Society for Food Science and Technology, 2012, 59, 604-610.	0.1	2
114	Application of a balloonâ€type pressure sensor in texture evaluation of tongueâ€crushable foods. Journal of Texture Studies, 2022, , .	1.1	2
115	Gelation process of amyloseâ€DMSOâ€water system. Makromolekulare Chemie Macromolecular Symposia, 1993, 76, 83-88.	0.6	1
116	Rheological study on gelation of soybean 11S protein by glucono-.delta.-lactone. [Erratum to document cited in CA116:234084]. Journal of Agricultural and Food Chemistry, 1994, 42, 2076-2076.	2.4	1
117	Extraction of Alpha Activities from an EEG Obtained During Gum Chewing. IEEJ Transactions on Electrical and Electronic Engineering, 2008, 3, 324-333.	0.8	1
118	The Influence of Skin Processing on Mechanical and Mastication Properties of Takuan (Pickled Radish). Journal of the Japanese Society for Food Science and Technology, 2010, 57, 232-237.	0.1	1
119	Supporting young researchers in food texture studies. Journal of Texture Studies, 2018, 49, 150-159.	1.1	1
120	Rheological Study on the Effect of the A5Subunit on the Gelation Characteristics of Soybean Proteins. Agricultural and Biological Chemistry, 1991, 55, 351-355.	0.3	0
121	Food Fragmentation by Human Mastication. AIP Conference Proceedings, 2006, , .	0.3	0
122	Mechanical Modeling of Foods Including Fracture and Simulation of Food Compression. AIP Conference Proceedings, 2008, , .	0.3	0