Mitsutoshi Nakajima

List of Publications by Year
in descending order

63	6,283	53660	133063
papers	citations	45 h-index	59 g-index

63	63	63	5070
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Interfacial Tension Driven Monodispersed Droplet Formation from Microfabricated Channel Array. Langmuir, 2001, 17, 5562-5566.	1.6	417
2	Î²-Carotene nanodispersions: preparation, characterization and stability evaluation. Food Chemistry, 2005, 92, 661-671.	4.2	309
3	Size control of calcium alginate beads containing living cells using micro-nozzle array. Biomaterials, 2005, 26, 3327-3331.	5.7	300
4	Production of uniform droplets using membrane, microchannel and microfluidic emulsification devices. Microfluidics and Nanofluidics, 2012, 13, 151-178.	1.0	297
5	Industrial lab-on-a-chip: Design, applications and scale-up for drug discovery and delivery. Advanced Drug Delivery Reviews, 2013, 65, 1626-1663.	6.6	250
6	Silicon array of elongated through-holes for monodisperse emulsion droplets. AICHE Journal, 2002, 48, 1639-1644.	1.8	223
7	FT-IR analysis of BSA fouled on ultrafiltration and microfiltration membranes. Journal of Membrane Science, 2001, 192, 201-207.	4.1	219
8	Preparation of Monodispersed Solid Lipid Microspheres Using a Microchannel Emulsification Technique. Journal of Colloid and Interface Science, 2000, 227, 95-103.	5.0	204
9	Microfluidics for food, agriculture and biosystems industries. Lab on A Chip, 2011, 11, 1574.	3.1	200
10	Characterization of Spontaneous Transformation-Based Droplet Formation during Microchannel Emulsification. Journal of Physical Chemistry B, 2002, 106, 9405-9409.	1.2	186
11	Performance of selected emulsifiers and their combinations in the preparation of Î²-carotene nanodispersions. Food Hydrocolloids, 2009, 23, 1617-1622.	5.6	168
12	The generation of highly monodisperse droplets through the breakup of hydrodynamically focused microthread in a microfluidic device. Applied Physics Letters, 2004, 85, 3726-3728.	1.5	159
13	Effects of surfactant and electrolyte concentrations on bubble formation and stabilization. Journal of Colloid and Interface Science, 2009, 332, 208-214.	5.0	156
14	Effect of Channel Structure on Microchannel Emulsification. Langmuir, 2002, 18, 5708-5712.	1.6	145
15	Preparation of nanodispersions containing Î²-carotene by solvent displacement method. Food Hydrocolloids, 2008, 22, 12-17.	5.6	145
16	Prediction of Droplet Diameter for Microchannel Emulsification. Langmuir, 2002, 18, 3854-3859.	1.6	134
17	The effect of the hydrophobicity of microchannels and components in water and oil phases on droplet formation in microchannel water-in-oil emulsification. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 179, 29-37.	2.3	130
18	Preparation of Proteinâ€Stabilized Î²â€Carotene Nanodispersions by Emulsificationâ€“Evaporation Method. JAOCS, Journal of the American Oil Chemists' Society, 2007, 84, 1053-1062.	0.8	122

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19	Novel Method for Obtaining Homogeneous Giant Vesicles from a Monodisperse Water-in-Oil Emulsion Prepared with a Microfluidic Device. Langmuir, 2008, 24, 4581-4588.	1.6	115
20	Novel Asymmetric Through-Hole Array Microfabricated on a Silicon Plate for Formulating Monodisperse Emulsions. Langmuir, 2005, 21, 7629-7632.	1.6	114
21	A comparative study of microbubble generation by mechanical agitation and sonication. Innovative Food Science and Emerging Technologies, 2008, 9, 489-494.	2.7	108
22	Effect of slot aspect ratio on droplet formation from silicon straight-through microchannels. Journal of Colloid and Interface Science, 2004, 279, 277-280.	5.0	106
23	Preparation and Characterization of Î²-Carotene Nanodispersions Prepared by Solvent Displacement Technique. Journal of Agricultural and Food Chemistry, 2007, 55, 6754-6760.	2.4	105
24	Preparation characteristics of water-in-oil-in-water multiple emulsions using microchannel emulsification. Journal of Colloid and Interface Science, 2004, 270, 221-228.	5.0	99
25	Microchannel emulsification using gelatin and surfactant-free coacervate microencapsulation. Journal of Colloid and Interface Science, 2004, 278, 198-205.	5.0	95
26	Effects of osmotic pressure and adsorption on ultrafiltration of ovalbumin. AICHE Journal, 1990, 36, 907-915.	1.8	92
27	Effect of viscosities of dispersed and continuous phases in microchannel oil-in-water emulsification. Microfluidics and Nanofluidics, 2010, 9, 77-85.	1.0	92
28	Microfabricated airflow nozzle for microencapsulation of living cells into 150 micrometer microcapsules. Biomedical Microdevices, 2007, 9, 91-99.	1.4	90
29	Production of Monodisperse Oil-in-Water Emulsions Using a Large Silicon Straight-Through Microchannel Plate. Industrial & Engineering Chemistry Research, 2005, 44, 5852-5856.	1.8	88
30	Mechanism of bovine serum albumin aggregation during ultrafiltration. Biotechnology and Bioengineering, 2001, 75, 233-238.	1.7	85
31	CFD Simulation and Analysis of Emulsion Droplet Formation from Straight-Through Microchannels. Langmuir, 2004, 20, 9868-9877.	1.6	85
32	Preliminary study into the factors modulating Î²-carotene micelle formation in dispersions using an in vitro digestion model. Food Hydrocolloids, 2012, 26, 427-433.	5.6	84
33	Straight-through microchannel devices for generating monodisperse emulsion droplets several microns in size. Microfluidics and Nanofluidics, 2008, 4, 167-177.	1.0	83
34	Shirasu Porous Glass membrane emulsification: Characterisation of membrane structure by high-resolution X-ray microtomography and microscopic observation of droplet formation in real time. Journal of Membrane Science, 2007, 302, 243-253.	4.1	78
35	Effects of Type and Physical Properties of Oil Phase on Oil-in-Water Emulsion Droplet Formation in Straight-Through Microchannel Emulsification, Experimental and CFD Studies. Langmuir, 2005, 21, 5722-5730.	1.6	76
36	Preparation Characteristics of Monodispersed Water-in-Oil Emulsions Using Microchannel Emulsification.. Journal of Chemical Engineering of Japan, 2001, 34, 757-765.	0.3	74

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37	Monodispersed microbubble formation using microchannel technique. AICHE Journal, 2004, 50, 3227-3233.	1.8	74
38	Effect of chitosan on the stability and properties of modified lecithin stabilized oil-in-water monodisperse emulsion prepared by microchannel emulsification. Food Hydrocolloids, 2009, 23, 600-610.	5.6	72
39	Tubular gel fabrication and cell encapsulation in laminar flow stream formed by microfabricated nozzle array. Lab on A Chip, 2008, 8, 1255.	3.1	71
40	Surfactant-Modified lipase for the catalysis of the interesterification of triglycerides and fatty acids. Biotechnology and Bioengineering, 1995, 45, 187-195.	1.7	70
41	Visualization and characterization of SPG membrane emulsification. Journal of Membrane Science, 2002, 210, 29-37.	4.1	70
42	Effect of interfacial tension on the dynamic behavior of droplet formation during microchannel emulsification. Journal of Colloid and Interface Science, 2004, 269, 178-185.	5.0	69
43	Differential permeation of oil constituents in nonporous denser polymeric membranes. Journal of Membrane Science, 2001, 187, 57-69.	4.1	55
44	New method of producing mono-sized polymer gel particles using microchannel emulsification and UV irradiation. Colloid and Polymer Science, 2005, 283, 1149-1153.	1.0	52
45	Controlled Generation of Monodisperse Discoid Droplets Using Microchannel Arrays. Langmuir, 2006, 22, 10893-10897.	1.6	47
46	Immobilization of Rhizopus japonicus lipase on celite and its application for enrichment of docosahexaenoic acid in soybean oil. Food Chemistry, 2000, 68, 153-157.	4.2	41
47	Fucoxanthin-Loaded Oil-in-Water Emulsion-Based Delivery Systems: Effects of Natural Emulsifiers on the Formulation, Stability, and Bioaccessibility. ACS Omega, 2019, 4, 10502-10509.	1.6	41
48	Recovery of Oligosaccharides from Steamed Soybean Waste Water inTofuProcessing by Reverse Osmosis and Nanofiltration Membranes. Bioscience, Biotechnology and Biochemistry, 1996, 60, 421-428.	0.6	40
49	Membrane process for premium quality expeller-pressed vegetable oils. Food Research International, 1998, 31, 587-593.	2.9	39
50	Formulation and characterisation of O/W emulsions stabilised with modified seaweed polysaccharides. International Journal of Food Science and Technology, 2020, 55, 211-221.	1.3	32
51	Potential of bagasse obtained using hydrothermal liquefaction preâ€treatment as a natural emulsifier. International Journal of Food Science and Technology, 2020, 55, 1485-1496.	1.3	13
52	Effects of waterâ€soluble soybean polysaccharide on rheological properties, stability and lipid digestibility of oilâ€inâ€water emulsion during in vitro gastrointestinal digestion. International Journal of Food Science and Technology, 2020, 55, 1437-1447.	1.3	12
53	In vitro bioaccessibility of ergocalciferol in nanoemulsionâ€based delivery system: the influence of foodâ€grade emulsifiers with different stabilising mechanisms. International Journal of Food Science and Technology, 2018, 53, 430-440.	1.3	12
54	Formulation and characterization of oil-in-water emulsions stabilized by gelatinized kudzu starch. International Journal of Food Properties, 0, , 1-13.	1.3	8

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55	Preparation of monodisperse W/O emulsions using a stainless-steel microchannel emulsification chip. Particulate Science and Technology, 2019, 37, 68-73.	1.1	5
56	Asymmetric straight-through microchannel arrays made of aluminum for producing monodisperse O/W emulsions. Particulate Science and Technology, 2020, 38, 747-755.	1.1	5
57	Effects of surfactants and oil-in-water emulsions on reverse osmosis membrane performance. Euro-Mediterranean Journal for Environmental Integration, 2021, 6, 1.	0.6	5
58	Dewatering of microalgae suspensions by cake filtration with filter cloths. Journal of Applied Phycology, 2021, 33, 1977-1985.	1.5	5
59	Emulsifying Performance of Crude Surface-Active Extracts from Liquorice Root (Glycyrrhiza Glabra). ACS Food Science & Technology, 2021, 1, 1472-1480.	1.3	4
60	Elaboration and Properties of an Oil-in-Water Nanoemulsion Loaded with a Terpene-Enriched Oil Mixture Obtained Biotechnologically. ACS Agricultural Science and Technology, 0, , .	1.0	4
61	Comprehensive study of Î±-terpineol-loaded oil-in-water (O/W) nanoemulsion: interfacial property, formulation, physical and chemical stability. Npj Science of Food, 2021, 5, 31.	2.5	4
62	Formulation and stability evaluation of water-in-fat and water-in-oil emulsions loaded with short-chain fatty acid. Particulate Science and Technology, 2020, 38, 647-651.	1.1	0
63	Conversion of aqueous extracts from thermochemical treatment of bagasse into functional emulsifiers. International Journal of Food Science and Technology, 2021, 56, 6697-6706.	1.3	0