Oi-Ming Lai

List of Publications by Year
in descending order

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109 papers	2,877 citations	136740 32 h-index	223531 46 g-index
113 all docs	113 docs citations	113 times ranked	2637 citing authors

#	Article	IF	Citations
1	Diacylglycerol Oilâ€"Properties, Processes and Products: A Review. Food and Bioprocess Technology, 2008, 1, 223-233.	2.6	142
2	Production of a diacylglycerol-enriched palm olein using lipase-catalyzed partial hydrolysis: Optimization using response surface methodology. Food Chemistry, 2007, 105, 1614-1622.	4.2	99
3	A review: Modified agricultural by-products for the development and fortification of food products and nutraceuticals. Trends in Food Science and Technology, 2017, 59, 148-160.	7.8	88
4	Preparation and characterisation of water-soluble phytosterol nanodispersions. Food Chemistry, 2011, 129, 77-83.	4.2	78
5	Effects of temperature and NaCl on the formation of 3-MCPD esters and glycidyl esters in refined, bleached and deodorized palm olein during deep-fat frying of potato chips. Food Chemistry, 2017, 219, 126-130.	4.2	78
6	Crystallization kinetics of palm oil in blends with palm-based diacylglycerol. Food Research International, 2011, 44, 425-435.	2.9	73
7	Health Benefits, Enzymatic Production, and Application of Mediumâ€•and Longâ€Chain Triacylglycerol (MLCT) in Food Industries: A Review. Journal of Food Science, 2012, 77, R137-44.	1.5	65
8	Optimization of Palm Oil Physical Refining Process for Reduction of 3-Monochloropropane-1,2-diol (3-MCPD) Ester Formation. Journal of Agricultural and Food Chemistry, 2013, 61, 3341-3349.	2.4	63
9	The effects of physical refining on the formation of 3-monochloropropane-1,2-diol esters in relation to palm oil minor components. Food Chemistry, 2012, 135, 799-805.	4.2	62
10	Optimization of ultrasound extraction condition of phospholipids from palm-pressed fiber. Journal of Food Engineering, 2009, 92, 403-409.	2.7	60
11	Effective elicitation factors in Morinda elliptica cell suspension culture. Process Biochemistry, 2005, 40, 3397-3405.	1.8	59
12	Diacylglycerol in food industry: Synthesis methods, functionalities, health benefits, potential risks and drawbacks. Trends in Food Science and Technology, 2020, 97, 114-125.	7.8	59
13	Review on the Current State of Diacylglycerol Production Using Enzymatic Approach. Food and Bioprocess Technology, 2015, 8, 1169-1186.	2.6	57
14	Optimization of process parameters in preparation of tocotrienol-rich red palm oil-based nanoemulsion stabilized by Tween80-Span 80 using response surface methodology. PLoS ONE, 2018, 13, e0202771.	1.1	55
15	New functionalities of Maillard reaction products as emulsifiers and encapsulating agents, and the processing parameters: a brief review. Journal of the Science of Food and Agriculture, 2017, 97, 1379-1385.	1.7	54
16	Stability of a concentrated oil-in-water emulsion model prepared using palm olein-based diacylglycerol/virgin coconut oil blends: Effects of the rheological properties, droplet size distribution and microstructure. Food Research International, 2014, 64, 919-930.	2.9	50
17	Extraction of tocopherol-enriched oils from Kalahari melon and roselle seeds by supercritical fluid extraction (SFE-CO2). Food Chemistry, 2010, 119, 1278-1283.	4.2	47
18	Production, safety, health effects and applications of diacylglycerol functional oil in food systems: a review. Critical Reviews in Food Science and Nutrition, 2020, 60, 2509-2525.	5.4	47

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19	Optimization of supercritical CO2 extraction of phytosterol-enriched oil from Kalahari melon seeds. Food and Bioprocess Technology, 2011, 4, 1432-1441.	2.6	46
20	Natural Organochlorines as Precursors of 3-Monochloropropanediol Esters in Vegetable Oils. Journal of Agricultural and Food Chemistry, 2018, 66, 999-1007.	2.4	44
21	Effect of diacylglycerol interfacial crystallization on the physical stability of water-in-oil emulsions. Food Chemistry, 2020, 327, 127014.	4.2	41
22	Fingerprinting of Phospholipid Molecular Species from Human Milk and Infant Formula Using HILIC-ESI-IT-TOF-MS and Discriminatory Analysis by Principal Component Analysis. Journal of Agricultural and Food Chemistry, 2018, 66, 7131-7138.	2.4	40
23	Medium chain triglyceride and medium-and long chain triglyceride: metabolism, production, health impacts and its applications â€“ a review. Critical Reviews in Food Science and Nutrition, 2022, 62, 4169-4185.	5.4	40
24	Enzymeâ€Assisted Aqueous Extraction of Kalahari Melon Seed Oil: Optimization Using Response Surface Methodology. JAOCS, Journal of the American Oil Chemists' Society, 2009, 86, 1235-1240.	0.8	39
25	Effects of sonication on the extraction of free-amino acids from moromi and application to the laboratory scale rapid fermentation of soy sauce. Food Chemistry, 2017, 215, 200-208.	4.2	38
26	Melting and Solidification Properties of Palm-Based Diacylglycerol, Palm Kernel Olein, and Sunflower Oil in the Preparation of Palm-Based Diacylglycerol-Enriched Soft Tub Margarine. Food and Bioprocess Technology, 2012, 5, 1674-1685.	2.6	37
27	Antioxidant synergism between ethanolic Centella asiatica extracts and Î±-tocopherol in model systems. Food Chemistry, 2013, 138, 1215-1219.	4.2	37
28	Lipase-catalysed production and chemical composition of diacylglycerols from soybean oil deodoriser distillate. European Journal of Lipid Science and Technology, 2004, 106, 218-224.	1.0	36
29	Effects of storage and yogurt matrix on the stability of tocotrienols encapsulated in chitosan-alginate microcapsules. Food Chemistry, 2018, 241, 79-85.	4.2	36
30	Physical properties and stability evaluation of fish oil-in-water emulsions stabilized using thiol-modified Î²-lactoglobulin fibrils-chitosan complex. Food Research International, 2018, 105, 482-491.	2.9	36
31	Electrochemical Biosensing of Chilled Seafood Freshness by Xanthine Oxidase Immobilized on Copper-Based Metalâ€“Organic Framework Nanofiber Film. Food Analytical Methods, 2019, 12, 1715-1724.	1.3	36
32	Production of a Solvent, Detergent, and Thermotolerant Lipase by a Newly IsolatedAcinetobactersp. in Submerged and Solid-State Fermentations. Journal of Biomedicine and Biotechnology, 2011, 2011, 1-12.	3.0	34
33	Phospholipidâ€“Protein Structured Membrane for Microencapsulation of DHA Oil and Evaluation of Its In Vitro Digestibility: Inspired by Milk Fat Globule Membrane. Journal of Agricultural and Food Chemistry, 2020, 68, 6190-6201.	2.4	33
34	Kinetic study on partial hydrolysis of palm oil catalyzed by Rhizomucor miehei lipase. Journal of Molecular Catalysis B: Enzymatic, 2012, 78, 91-97.	1.8	31
35	Non-aqueous foams formed by whipping diacylglycerol stabilized oleogel. Food Chemistry, 2020, 312, 126047.	4.2	31
36	Curcumin-loaded liposomes prepared from bovine milk and krill phospholipids: Effects of chemical composition on storage stability, in-vitro digestibility and anti-hyperglycemic properties. Food Research International, 2020, 136, 109301.	2.9	31

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37	Physicochemical, Textural and Viscoelastic Properties of Palm Diacylglycerol Bakery Margarine During Storage. JAOCS, Journal of the American Oil Chemists' Society, 2009, 86, 723-731.	0.8	30
38	Physicochemical properties and crystallisation behaviour of bakery shortening produced from stearin fraction of palm-based diacyglycerol blended with various vegetable oils. Food Chemistry, 2013, 141, 3938-3946.	4.2	29
39	Palm-based medium-and-long-chain triacylglycerol (P-MLCT): production via enzymatic interesterification and optimization using response surface methodology (RSM). Journal of Food Science and Technology, 2015, 52, 685-696.	1.4	29
40	Diacylglycerol and Triacylglycerol as Responses in a Dual Response Surface-Optimized Process for Diacylglycerol Production by Lipase-Catalyzed Esterification in a Pilot Packed-Bed Enzyme Reactor. Journal of Agricultural and Food Chemistry, 2007, 55, 5595-5603.	2.4	28
41	Physicochemical properties of Kalahari melon seed oil following extractions using solvent and aqueous enzymatic methods. International Journal of Food Science and Technology, 2009, 44, 694-701.	1.3	28
42	Optimization of Processing Parameters for the Preparation of Phytosterol Microemulsions by the Solvent Displacement Method. Journal of Agricultural and Food Chemistry, 2009, 57, 8426-8433.	2.4	28
43	Effect of sucrose fatty acid esters on the particle characteristics and flow properties of phytosterol nanodispersions. Journal of Food Engineering, 2011, 104, 63-69.	2.7	28
44	New Insights on Degumming and Bleaching Process Parameters on The Formation of 3-Monochloropropane-1,2-Diol Esters and Glycidyl Esters in Refined, Bleached, Deodorized Palm Oil. Journal of Oleo Science, 2018, 67, 397-406.	0.6	28
45	Factors Impacting the Formation of 3â€MCPD Esters and Glycidyl Esters During Deep Fat Frying of Chicken Breast Meat. JAOCS, Journal of the American Oil Chemists' Society, 2017, 94, 759-765.	0.8	27
46	Selective antibacterial activities and storage stability of curcumin-loaded nanoliposomes prepared from bovine milk phospholipid and cholesterol. Food Chemistry, 2022, 367, 130700.	4.2	26
47	W/O high internal phase emulsion featuring by interfacial crystallization of diacylglycerol and different internal compositions. Food Chemistry, 2022, 372, 131305.	4.2	26
48	Lipase-catalyzed production of medium-chain triacylglycerols from palm kernel oil distillate: Optimization using response surface methodology. European Journal of Lipid Science and Technology, 2007, 109, 107-119.	1.0	25
49	Revising degumming and bleaching processes of palm oil refining for the mitigation of 3-monochloropropane-1,2-diol esters (3-MCPDE) and glycidyl esters (GE) contents in refined palm oil. Food Chemistry, 2020, 307, 125545.	4.2	25
50	Improvement of Medium Chain Fatty Acid Content and Antimicrobial Activity of Coconut Oil via Solid-State Fermentation Using a MalaysianGeotrichum candidum. BioMed Research International, 2013, 2013, 1-9.	0.9	24
51	Optimal Binary Solvent Extraction System for Phenolic Antioxidants from Mengkudu (Morinda) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.7	24
52	Physicochemical, textural and viscoelastic properties of palm diacylglycerol bakery shortening during storage. Journal of the Science of Food and Agriculture, 2010, 90, 2310-2317.	1.7	23
53	Oxidation and Polymerization of Triacylglycerols: In-Depth Investigations towards the Impact of Heating Profiles. Foods, 2019, 8, 475.	1.9	23
54	Comparison assessment between SIM and MRM mode in the analysis of 3-MCPD ester, 2-MCPD ester and glycidyl ester. Food Research International, 2019, 121, 553-560.	2.9	23

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55	Compositional and thermal characteristics of palm olein-based diacylglycerol in blends with palm super olein. Food Research International, 2014, 55, 62-69.	2.9	22
56	Structural difference of palm based Medium- and Long-Chain Triacylglycerol (MLCT) further reduces body fat accumulation in DIO C57BL/6J mice when consumed in low fat diet for a mid-term period. Food Research International, 2018, 103, 200-207.	2.9	22
57	Rapid assessment of total MCPD esters in palm-based cooking oil using ATR-FTIR application and chemometric analysis. Talanta, 2019, 198, 215-223.	2.9	19
58	Baking performance of palm diacylglycerol bakery fats and sensory evaluation of baked products. European Journal of Lipid Science and Technology, 2011, 113, 253-261.	1.0	17
59	Thermostable lipase from a newly isolated Staphylococcus xylosus strain; process optimization and characterization using RSM and ANN. Electronic Journal of Biotechnology, 2010, 13, 0-0.	1.2	16
60	Physicochemical Properties and Sensory Attributes of Medium- and Long-Chain Triacylglycerols (MLCT)-Enriched Bakery Shortening. Food and Bioprocess Technology, 2011, 4, 587-596.	2.6	16
61	Production of Î³-cyclodextrin by Bacillus cereus cyclodextrin glycosyltransferase using extractive bioconversion in polymer-salt aqueous two-phase system. Journal of Bioscience and Bioengineering, 2016, 121, 692-696.	1.1	16
62	Changes in 3-MCPD esters, glycidyl esters, bioactive compounds and oxidation indexes during kenaf seed oil refining. Food Science and Biotechnology, 2018, 27, 905-914.	1.2	16
63	Mitigation of 3-MCPD esters and glycidyl esters during the physical refining process of palm oil by micro and macro laboratory scale refining. Food Chemistry, 2020, 328, 127147.	4.2	16
64	Effect of Purification Methods on the Physicochemical and Thermodynamic Properties and Crystallization Kinetics of Medium-Chain, Mediumâ€“Long-Chain, and Long-Chain Diacylglycerols. Journal of Agricultural and Food Chemistry, 2020, 68, 8391-8403.	2.4	16
65	Effects of shortening and baking temperature on quality, MCPD ester and glycidyl ester content of conventional baked cake. LWT - Food Science and Technology, 2019, 116, 108553.	2.5	15
66	Enzymatic and Mechanical Extraction of Virgin Coconut Oil. European Journal of Lipid Science and Technology, 2020, 122, 1900220.	1.0	15
67	Production of Structured Triacylglycerol via Enzymatic Interesterification of Mediumâ€Chain Triacylglycerol and Soybean Oil Using a Pilotâ€Scale Solventâ€Free Packed Bed Reactor. JAOCS, Journal of the American Oil Chemists' Society, 2020, 97, 271-280.	0.8	14
68	Fabrication of Concentrated Palm Olein-Based Diacylglycerol Oilâ€“Soybean Oil Blend Oil-In-Water Emulsion: In-Depth Study of the Rheological Properties and Storage Stability. Foods, 2020, 9, 877.	1.9	14
69	Oxidative stability of palmâ€•and soybeanâ€based mediumâ€•and longâ€•chain triacylglycerol (MLCT) oil blends. Journal of the Science of Food and Agriculture, 2009, 89, 455-462.	1.7	13
70	Rheological properties, oxidative stability and sensory evaluation of enzymatically synthesized medium- and long-chain triacylglycerol-based salad dressings. European Journal of Lipid Science and Technology, 2008, 110, 1116-1126.	1.0	12
71	Palm-based diacylglycerol fat dry fractionation: effect of crystallisation temperature, cooling rate and agitation speed on physical and chemical properties of fractions. PeerJ, 2013, 1, e72.	0.9	12
72	Mitigation of 3-monochloropropane-1,2-diol esters and glycidyl esters in refined palm oil: A new and optimized approach. LWT - Food Science and Technology, 2021, 139, 110612.	2.5	12

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73	Optimization of conditions for the single step IMAC purification of miraculin from Synsepalum dulcificum. Food Chemistry, 2015, 181, 19-24.	4.2	11
74	Rheological properties, textural properties, and storage stability of palm kernel-based diacylglycerol-enriched mayonnaise. European Journal of Lipid Science and Technology, 2016, 118, 185-194.	1.0	11
75	Stabilization mechanism of water-in-oil emulsions by medium- and long-chain diacylglycerol: Post-crystallization vs. pre-crystallization. LWT - Food Science and Technology, 2021, 146, 111649.	2.5	11
76	Effect of absorbent in solidâ€phase extraction on quantification of phospholipids in palmâ€pressed fiber. European Journal of Lipid Science and Technology, 2008, 110, 334-340.	1.0	10
77	Entrapment of Palm-Based Medium- and Long-Chain Triacylglycerol via Maillard Reaction Products. Food and Bioprocess Technology, 2015, 8, 1571-1582.	2.6	10
78	Response surface modeling of 1-stearoyl-3(2)-oleoyl glycerol production in a pilot packed-bed immobilized Rhizomucor miehei lipase reactor. Journal of Molecular Catalysis B: Enzymatic, 2009, 57, 136-144.	1.8	9
79	Mycelium-Bound Lipase from a Locally Isolated Strain of Geotrichum candidum. Molecules, 2014, 19, 8556-8570.	1.7	9
80	In-depth characterization of palm-based diacylglycerol-virgin coconut oil blends with enhanced techno-functional properties. LWT - Food Science and Technology, 2021, 145, 111327.	2.5	9
81	Modeling and Optimization of Lipase-Catalyzed Partial Hydrolysis for Diacylglycerol Production in Packed Bed Reactor. International Journal of Food Engineering, 2016, 12, 681-689.	0.7	8
82	Changes in 3-, 2-Monochloropropandiol and Glycidyl Esters during a Conventional Baking System with Addition of Antioxidants. Foods, 2020, 9, 739.	1.9	8
83	Tailored rigidity of W/O Pickering emulsions using diacylglycerol-based surface-active solid lipid nanoparticles. Food and Function, 2021, 12, 11732-11746.	2.1	8
84	Suppression of visceral adipose tissue by palm kernel and soy-canola diacylglycerol in C57BL/6N mice. European Journal of Lipid Science and Technology, 2013, 115, 1266-1273.	1.0	6
85	Interesterified palm olein lowers postprandial glucose-dependent insulinotropic polypeptide response in type 2 diabetes. European Journal of Nutrition, 2019, 58, 1873-1885.	1.8	6
86	Lipase/Esterase: Properties and Industrial Applications. , 2019, , 158-167.		6
87	Evaluation of quality parameters for fresh, used and recycled palm olein. Journal of the Science of Food and Agriculture, 2019, 99, 6989-6997.	1.7	6
88	Biomimetic self-assembly of lipase-zeolitic imidazolate frameworks with enhanced biosensing of protox inhibiting herbicides. Analytical Methods, 2021, 13, 4974-4984.	1.3	6
89	Effects of dairy processing on phospholipidome, in-vitro digestion and Caco-2 cellular uptake of bovine milk. Food Chemistry, 2021, 364, 130426.	4.2	6
90	Determination of iodine value of palm olein mixtures using differential scanning calorimetry. European Journal of Lipid Science and Technology, 2002, 104, 472-482.	1.0	5

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91	Response Surface Modeling of Processing Parameters for the Preparation of Phytosterol Nanodispersions Using an Emulsificationâ€“Evaporation Technique. JAOCS, Journal of the American Oil Chemists' Society, 2011, 88, 717-725.	0.8	5
92	Enzymatic and Chemical Modification of Palm Oil, Palm Kernel Oil, and Its Fractions. , 2012, , 527-543.		5
93	Short term and dosage influences of palm based medium- and long-chain triacylglycerols on body fat and blood parameters in C57BL/6J mice. Food and Function, 2014, 5, 57-64.	2.1	5
94	Effects of Environmental Stresses and in Vitro Digestion on the Release of Tocotrienols Encapsulated Within Chitosan-Alginate Microcapsules. Journal of Agricultural and Food Chemistry, 2017, 65, 10651-10657.	2.4	5
95	Palm oil supply chain factors impacting chlorinated precursors of 3-MCPD esters. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2021, 38, 2012-2025.	1.1	5
96	Phospholipidomics of bovine milk subjected to homogenization, thermal treatment and cold storage. Food Chemistry, 2022, 381, 132288.	4.2	5
97	Stability of Silicaâ€•and Enzymeâ€Treated Palm Oil Under Deep Frying Conditions. Journal of Food Science, 2015, 80, C2678-85.	1.5	4
98	Effect of palm-based tocotrienols and tocopherol mixture supplementation on platelet aggregation in subjects with metabolic syndrome: a randomised controlled trial. Scientific Reports, 2017, 7, 11542.	1.6	4
99	Extractive Bioconversion of Gamma-Cyclodextrin and Recycling of Cyclodextrin Glycosyltransferase in Liquid Biphasic System Using Thermo-Separating Polymer. Frontiers in Chemistry, 2018, 6, 448.	1.8	4
100	Stabilization and Release of Palm Tocotrienol Emulsion Fabricated Using pH-Sensitive Calcium Carbonate. Foods, 2021, 10, 358.	1.9	4
101	Pickering emulsionâ€templated ionotropic gelation of tocotrienol microcapsules: effects of alginate and chitosan concentrations and gelation process parameters. Journal of the Science of Food and Agriculture, 2021, 101, 5963-5971.	1.7	4
102	Fatty acid profile, minor bioactive constituents and physicochemical properties of insect-based oils: A comprehensive review. Critical Reviews in Food Science and Nutrition, 2023, 63, 5231-5246.	5.4	4
103	In-vitro and in-vivo evaluations of tocotrienol-rich nanoemulsified system on skin wound healing. PLoS ONE, 2022, 17, e0267381.	1.1	4
104	Similar physical characteristics but distinguishablesn-2 palmitic acid content and reduced solid fat content of chemically interesterified palm olein compared with native palm olein by dry fractionation: A lab-scale study. European Journal of Lipid Science and Technology, 2016, 118, 1389-1398.	1.0	3
105	Quality profile determination of palm olein: potential markers for the detection of recycled cooking oils. International Journal of Food Properties, 2019, 22, 1172-1182.	1.3	3
106	In Situ Bioconversion of Coconut Oil via Coconut Solid State Fermentation by Geotrichum candidum ATCC 34614. Food and Bioprocess Technology, 2014, 7, 784-794.	2.6	2
107	Enzymatic coupled mechanical defibrillation process for the production of corn (Zea mays) cob nanofibrillated cellulose: preparation, characterization and evaluation as Pickering emulsifier for oil-in-water emulsion. Cellulose, 2022, 29, 6339-6360.	2.4	2
108	Improved Thermal Properties and Flow Behavior of Palm Olein-Based Diacylglycerol: Impact of Sucrose Stearate Incorporation. Processes, 2021, 9, 604.	1.3	1

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109	Medium-and Long-Chain Triacylglycerol: Production, Health Effects and Applications. , 2022, , 265-284.		1