Marilyn D Rayner

List of Publications by Citations

71 papers	2,488 citations	27 h-index	49 g-index
72 ext. papers	2,913 ext. citations	5.9 avg, IF	5.46 L-index

#	Paper	IF	Citations
71	Biomass-based particles for the formulation of Pickering type emulsions in food and topical applications. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2014**, 458, 48-62	5.1	247
70	Characterization of starch Pickering emulsions for potential applications in topical formulations. *International Journal of Pharmaceutics*, **2012**, 428, 1-7	6.5	181
69	Quinoa starch granules: a candidate for stabilising food-grade Pickering emulsions. *Journal of the Science of Food and Agriculture*, **2012**, 92, 1841-7	4.3	174
68	Starch particles for food based Pickering emulsions. *Procedia Food Science*, **2011**, 1, 95-103		138
67	Emulsion stabilizing capacity of intact starch granules modified by heat treatment or octenyl succinic anhydride. *Food Science and Nutrition*, **2013**, 1, 157-71	3.2	133
66	Quinoa starch granules as stabilizing particles for production of Pickering emulsions. *Faraday Discussions*, **2012**, 158, 139-55; discussion 239-66	3.6	111
65	Storage and digestion stability of encapsulated curcumin in emulsions based on starch granule Pickering stabilization. *Food Hydrocolloids*, **2017**, 63, 309-320	10.6	105
64	Preparation and encapsulation properties of double Pickering emulsions stabilized by quinoa starch granules. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2013**, 423, 147-153	5.1	93
63	Chemical composition, digestibility and emulsification properties of octenyl succinic esters of various starches. *Food Research International*, **2015**, 75, 41-49	7	86
62	Barrier properties of heat treated starch Pickering emulsions. *Journal of Colloid and Interface Science*, **2015**, 450, 182-188	9.3	74
61	Freezing and freeze-drying of Pickering emulsions stabilized by starch granules. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2013**, 436, 512-520	5.1	71
60	Fabrication of encapsulated oil powders from starch granule stabilized W/O/W Pickering emulsions by freeze-drying. *Food Hydrocolloids*, **2015**, 51, 261-271	10.6	68
59	Using the Surface Evolver to model droplet formation processes in membrane emulsification. *Journal of Colloid and Interface Science*, **2004**, 279, 175-85	9.3	63
58	Production of starch nanoparticles by dissolution and non-solvent precipitation for use in food-grade Pickering emulsions. *Carbohydrate Polymers*, **2017**, 157, 558-566	10.3	58
57	O/W emulsions stabilized by OSA-modified starch granules versus non-ionic surfactant: Stability, rheological behaviour and resveratrol encapsulation. *Journal of Food Engineering*, **2018**, 222, 207-217	6	58
56	Preparation and Characterization of Starch Particles for Use in Pickering Emulsions. *Cereal Chemistry*, **2016**, 93, 116-124	2.4	54
55	The impact of mass transfer and interfacial expansion rate on droplet size in membrane emulsification processes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2005**, 266, 1-17	5.1	47

54	Thylakoids promote release of the satiety hormone cholecystokinin while reducing insulin in healthy humans. *Scandinavian Journal of Gastroenterology*, **2009**, 44, 712-9	2.4	46
53	Development of High-Moisture Meat Analogues with Hemp and Soy Protein Using Extrusion Cooking. *Foods*, **2020**, 9,	4.9	44
52	Current status on novel ways for stabilizing food dispersions by oleosins, particles and microgels. *Current Opinion in Food Science*, **2015**, 3, 94-109	9.8	42
51	Pickering emulsifiers based on hydrophobically modified small granular starches - Part I: Manufacturing and physico-chemical characterization. *Carbohydrate Polymers*, **2017**, 175, 473-483	10.3	42
50	Combined emulsifying capacity of polysaccharide particles of different size and shape. *Carbohydrate Polymers*, **2017**, 169, 127-138	10.3	33
49	Comparative Emulsifying Properties of Octenyl Succinic Anhydride (OSA)-Modified Starch: Granular Form vs Dissolved State. *PLoS ONE*, **2016**, 11, e0160140	3.7	32
48	Pickering emulsifiers based on hydrophobically modified small granular starches Part II - Effects of modification on emulsifying capacity. *Carbohydrate Polymers*, **2018**, 201, 416-424	10.3	31
47	Chemical methods and techniques to monitor early Maillard reaction in milk products; A review. *Critical Reviews in Food Science and Nutrition*, **2019**, 59, 1829-1839	11.5	28
46	Membrane emulsification modelling: how can we get from characterisation to design?. *Desalination*, **2002**, 145, 165-172	10.3	27
45	The Effects of Oil Extraction Methods on Recovery Yield and Emulsifying Properties of Proteins from Rapeseed Meal and Press Cake. *Foods*, **2019**, 9,	4.9	27
44	The influence of emulsion parameters on physical stability and rheological properties of Pickering emulsions stabilized by hordein nanoparticles. *Food Hydrocolloids*, **2020**, 101, 105520	10.6	24
43	The use of micro- and nanoparticles in the stabilisation of pickering-type emulsions for topical delivery. *Current Pharmaceutical Biotechnology*, **2013**, 14, 1222-34	2.6	22
42	Chloroplast thylakoids reduce glucose uptake and decrease intestinal macromolecular permeability. *British Journal of Nutrition*, **2011**, 106, 836-44	3.6	21
41	Comparison of Three Methods to Determine the Degree of Substitution of Quinoa and Rice Starch Acetates, Propionates, and Butyrates: Direct Stoichiometry, FTIR, and H-NMR. *Foods*, **2020**, 9,	4.9	19
40	Starch granule stabilized Pickering emulsions: an 8-year stability study. *Journal of the Science of Food and Agriculture*, **2020**, 100, 2807-2811	4.3	18
39	Liquid droplet-like behaviour of whole casein aggregates adsorbed on graphite studied by nanoindentation with AFM. *Food Hydrocolloids*, **2007**, 21, 726-738	10.6	18
38	Chloroplast thylakoid membrane-stabilised emulsions. *Journal of the Science of Food and Agriculture*, **2011**, 91, 315-21	4.3	17
37	Storage stability of freeze-dried, spray-dried and drum-dried skim milk powders evaluated by available lysine. *LWT - Food Science and Technology*, **2016**, 73, 675-682	5.4	16

36	Production of vegetable oil in milk emulsions using membrane emulsification. *Desalination*, **2009**, 245, 631-638	10.3	14
35	Application of a dye-binding method for the determination of available lysine in skim milk powders. *Food Chemistry*, **2016**, 196, 815-20	8.5	12
34	General Principles of Nanoemulsion Formation by High-Energy Mechanical Methods **2018**, 103-139		12
33	The effect of heat treatment of thylakoids on their ability to inhibit in vitro lipase/co-lipase activity. *Food and Function*, **2014**, 5, 2157-65	6.1	12
32	The Impact of Different Drying Techniques and Controlled Storage on the Development of Advanced Glycation End Products in Skim Milk Powders Using Isotope Dilution ESI-LC-MS/MS. *Food and Bioprocess Technology*, **2017**, 10, 1704-1714	5.1	12
31	A comparison of emulsion stability for different OSA-modified waxy maize emulsifiers: Granules, dissolved starch, and non-solvent precipitates. *PLoS ONE*, **2019**, 14, e0210690	3.7	11
30	Early and advanced stages of Maillard reaction in infant formulas: Analysis of available lysine and carboxymethyl-lysine. *PLoS ONE*, **2019**, 14, e0220138	3.7	11
29	Synthesis of Starch Nanoparticles and Their Applications for Bioactive Compound Encapsulation. *Applied Sciences (Switzerland)*, **2021**, 11, 4547	2.6	11
28	Dosimetric Response to Gamma-rays and Neutrons of a Tissue-equivalent Microstrip Gas Counter. *Radiation Protection Dosimetry*, **2000**, 91, 391-401	0.9	10
27	Protein Recovery from Rapeseed Press Cake: Varietal and Processing Condition Effects on Yield, Emulsifying Capacity and Antioxidant Activity of the Protein Rich Extract. *Foods*, **2019**, 8,	4.9	10
26	Effects of starch granules differing in size and morphology from different botanical sources and their mixtures on the characteristics of Pickering emulsions. *Food Hydrocolloids*, **2019**, 89, 844-855	10.6	10
25	Heat-induced aggregation of thylakoid membranes affect their interfacial properties. *Food and Function*, **2015**, 6, 1310-8	6.1	9
24	In vitro intestinal lipolysis of emulsions based on starch granule Pickering stabilization. *Food Hydrocolloids*, **2019**, 95, 468-475	10.6	8
23	Emulsifying and Anti-Oxidative Properties of Proteins Extracted from Industrially Cold-Pressed Rapeseed Press-Cake. *Foods*, **2020**, 9,	4.9	8
22	Pickering emulsions based on CaCl2-gelatinized oat starch. *Food Hydrocolloids*, **2018**, 82, 288-295	10.6	8
21	Skim milk powder with high content of Maillard reaction products affect weight gain, organ development and intestinal inflammation in early life in rats. *Food and Chemical Toxicology*, **2019**, 125, 78-84	4.7	8
20	Rice Starch Particle Interactions at Air/Aqueous Interfaces-Effect of Particle Hydrophobicity and Solution Ionic Strength. *Frontiers in Chemistry*, **2018**, 6, 139	5	7
19	Kinetics of available lysine in stored commercial skim milk powder at moderate temperatures. *International Journal of Food Science and Technology*, **2018**, 53, 2159-2165	3.8	6

18	Scales and Forces in Emulsification. *Contemporary Food Engineering*, **2015**, 3-32		6
17	Application of Natural Polymers in Food **2016**, 115-161		5
16	Daily Intake of Milk Powder and Risk of Celiac Disease in Early Childhood: A Nested Case-Control Study. *Nutrients*, **2018**, 10,	6.7	4
15	Development and Characterization of Extrudates Based on Rapeseed and Pea Protein Blends Using High-Moisture Extrusion Cooking. *Foods*, **2021**, 10,	4.9	4
14	Development and characterization of medium and high internal phase novel multiple Pickering emulsions stabilized by hordein nanoparticles. *Food Chemistry*, **2022**, 372, 131354	8.5	4
13	Effects of Storage Conditions on Degradation of Chlorophyll and Emulsifying Capacity of Thylakoid Powders Produced by Different Drying Methods. *Foods*, **2020**, 9,	4.9	3
12	Characteristics and functionality of appetite-reducing thylakoid powders produced by three different drying processes. *Journal of the Science of Food and Agriculture*, **2018**, 98, 1554-1565	4.3	3
11	Protein extraction from cold-pressed hempseed press cake: From laboratory to pilot scale.. *Journal of Food Science*, **2021**,	3.4	3
10	A novel emulsifier from spinach with appetite regulation abilities. *Procedia Food Science*, **2011**, 1, 1431-1438		2
9	Concentration of citrus fruit juices in membrane pouches with solar energy Part 1: How solar drying setup and juice pretreatment determine the drying flux. *Journal of Food Process Engineering*, **2020**, 43, e13335	2.4	2
8	Concentration of citrus fruit juices in membrane pouches with solar energy Part 2: How solar drying setup and juice pretreatment determine the microbiological quality. *Journal of Food Process Engineering*, **2020**, 43, e13377	2.4	1
7	Method to assess the drying performance of water vapour-permeable membrane pouches for fruit juice preservation. *Chemical Engineering Research and Design*, **2019**, 152, 433-446	5.5	1
6	Formulation of Emulsions. *Contemporary Food Engineering*, **2015**, 51-100		1
5	Particle-stabilized Emulsions. *Contemporary Food Engineering*, **2015**, 101-122		1
4	Encapsulation of Antioxidants Using Double Emulsions. *Food Bioactive Ingredients*, **2020**, 249-286	0.2	
3	Quinoa Starch Granules as Emulsion Stabilizers **2021**, 283-323		
2	Combined solar and membrane drying technologies for sustainable fruit preservation in low-income countries prototype development, modelling, and testing. *Solar Energy Advances*, **2021**, 1, 100006		
1	Pilot-Scale Protein Recovery from Cold-Pressed Rapeseed Press Cake: Influence of Solids Recirculation. *Processes*, **2022**, 10, 557	2.9	