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Personal Information

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❖ Current Position:

- Full-time Prof., Department of Food Materials and Process Design Engineering, Faculty of Food Sci. Tech., Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, IRAN
- Part-time Prof., Shandong Academy of Agricultural Sciences, Jinan, China
- Scientific Advisory Board Member, Campus Auga, University of Vigo, Spain
- Part-time Prof., Iran Food and Drug Administration, Halal Research Center, Tehran, IRAN

❖ Educational Background:

- ✓ **BSc:** Food Science and Technology (*with honors*), Urmia University, IRAN, **1993-1996**.
- ✓ **MSc:** Food Science and Technology (*with honors*), Ferdowsi University of Mashhad, IRAN, **1996-1998**.
- ✓ **PhD:** Food Process Engineering (*with honors*), University of Queensland, AUSTRALIA, **2003-2007**.

❖ Research Interests:

- Nano-encapsulation and spray drying of food ingredients,
- Production and stability of bioactive-loaded nano/emulsions and nanocarriers,
- Application of nanotechnology in the food industry,
- Extraction of nutraceuticals and formulation of functional foods,
- Food physical properties and process engineering.

Awards and Honors

1. One of the top 1% scientists in the world with the highest citations, reported by Clarivate Analytics, Essential Scientific Indicators (**2015-2024**) in the field of Biological Sciences.
2. One of the world's highly cited researchers (HCR), reported by Clarivate Analytics, Web of Science (**2018, 2019, 2020**).
3. Ranked No. 13 in the world list of top 100 scientists in the field of Food Science and Technology by Chinese Academy of Science (**2022**)
4. Top reviewer in the field of Agriculture and Biological Sciences (**2017, 2018, 2019**) for all International Journals, reported by Publons (Clarivate Analytics).
5. Top national researcher of IRAN (**2017**), selected by the Ministry of Science, Research, and Technology.
6. Editor of more than 40 International Books published by Elsevier, Springer, and Taylor and Francis.
7. Author of the most-cited articles in Int. J. Food Properties, Food Hydrocolloids, Int J. Biol. Macromolecules, Food Res. Int., Colloids Surfaces B, Food Chem., Adv. Colloid Interface Sci., Trends Food Sci. Tech., Drying Tech., and Comp. Rev Food Sci Food Safety (**2010-2024**).
8. Distinguished award by the University of Queensland for PhD thesis (**2007**).
9. Winner of a scholarship for final year of PhD degree from Australian Government (**2005**).
10. Winner of a scholarship to study abroad in PhD degree from Iranian Government (**2001**).

Editorial Board Member for JCR Journals

1. Editorial Member, *Advances in Colloid and Interface Science* (Elsevier), from **2021**.
2. Editorial Member, *Food Frontiers* (Wiley), **2021-2024**.
3. Associate Editor, *International Nano Letters* (Springer), **2010-2019**.
4. Guest Editor for a Special Issue (The biological fate of delivery systems and encapsulated bioactive compounds), *Advances in Colloid and Interface Sciences* (Elsevier), **2025**.
5. Guest Editor for a Special Issue (Emerging nanocarriers for the protection and controlled delivery of food bioactive compounds), *Food Chemistry* (Elsevier), **2023**.
6. Guest Editor for a Special Issue (Application of nano/biotechnology in the detection of food safety and spoilage), *Frontiers in Nutrition* (Frontiers), **2023**.
7. Guest Editor for a Special Issue (Bioactive ingredients in the food matrix), *Molecules* (MDPI), **2022**.
8. Guest Editor for a Special Issue (Extraction, processing, and encapsulation of food bioactive compounds), *Food Chemistry* (Elsevier), **2021**.
9. Guest Editor for a Special Issue (Spray drying for the retention of food bioactive compounds and nutraceuticals), *Drying Technology* (Taylor and Francis), **2021**.
10. Guest Editor for a Special Issue (Nano-emulsions: an emerging platform for biomedical applications, encapsulation and delivery of active ingredients), *Colloids and Surfaces B: Biointerfaces* (Elsevier), **2021**.

International Positions and Joint Research Projects

1. Scientific Advisory Board Member, Campus Auga, University of Vigo, Spain (**2021-2025**)
2. Part-time Prof. and Talent Research Partner, Shandong Academy of Agricultural Sciences, Jinan, China (**2025-2027**)
3. Part-time Prof. and Director, International Iberian Agri-Food Research Center, University of Vigo, SPAIN (**2021-2023**)
4. Visiting Prof., Hebei Agricultural University, "Belt and Road" Innovative Talent Exchange Foreign Expert Project (Grant Number DL2023003001L), Chinese Ministry of Science and Technology, CHINA (**2022-2024**)
5. Visiting Prof., Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO), "Belt and Road" Innovative Talent Exchange Foreign Expert Project (Grant Number DL2021014003L), Chinese Ministry of Science and Technology, CHINA (**2021-2022**)
6. Visiting Prof., Erasmus Program Staff Mobility for Teaching, Usak University, Usak, TURKEY (**2022**)
7. Visiting Prof., Huazhong Agricultural University, Wuhan, CHINA (**2022**)
8. Joint director of a research project on "Development and characterization of a smart packaging for *in-situ* authentication of saffron based on silver nanoparticles-decorated nanocellulose", funded by Iranian Ministry of Science, Research and Technology and Istanbul Technical University), Tubitak, TURKEY (**2021-2023**)
9. Director of a research project funded by MBG Development Co., on nanoencapsulation of functional biomolecules, USA (**2020-2021**)
10. Visiting Prof., Warsaw University of Life Sciences, Polish National Academy for Academic Exchange (Grant Number BPN/ULM/2021/1/00105/DEC/1), POLAND (**2022**)
11. Scientific advisor of AKAITO Company for saffron processing, JAPAN (**2020-2022**)
12. Director of a research project funded by UNESCO, on extraction and encapsulation of saffron bioactive compounds, ITALY (**2015**)

National Research Projects

1. Director of many joint research projects with Iranian private companies and food industries including Kamnoush Tomato Paste Co., Bahraman Saffron Co., Behpak Oil Processing Co., Iran Can Manufacturing Co., AmirKabir Borna Date Processing Co., ArenaNan Bread Co., Manizan Dairy Products (**2009-2023**).
2. Director of some National research projects on the strategic management of bread industries, wheat storage companies, flour processing centers, and general food industries of Iran (**2010-2017**).

Published Papers in International JCR Journals

Research Papers

1. Narmani, A., S. Ganji, M. Amirishoar, F. Hajikarimi, A. Mazandarani, M. Karimi, A. Mohammadinejad, A. Azadpour, R. Jahedi, E. Assadpour and **S. M. Jafari** (2025). "Dual targeting of breast cancer by chitosan/poly lactic-co-glycolic acid nanodelivery systems: Surface activation with folic acid/aptamers, and co-encapsulated with Sorafenib and quercetin." *Carbohydrate Polymer Technologies and Applications* **9**: 100695.
2. Rajabi, H., S. Sedaghati, H. Farajnezhad and **S. M. Jafari** (2025). "Spray drying of saffron extract-loaded coacervates by carboxymethyl cellulose/maltodextrin/saffron petal anthocyanins." *Carbohydrate Polymer Technologies and Applications* **9**: 100690.
3. Blinov, A., A. Nagdalian, A. Serov, A. Blinova, Z. Rekhman, A. Gvozdenko, A. Golik, A. Askerova, M. Pirogov, M. Kolodkin and **S. M. Jafari** (2025). "Selenium nanoparticles stabilized with Tween 80: Synthesis, characterization, and application in fortified milk and fermented dairy products." *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **706**: 135822.
4. Mottaki, M., **S. M. Jafari**, S. M. Hosseini, A. Sadeghi and F. Heydari-Delfard (2025). "Pickering emulsions stabilized by chitosan nanoparticles and loaded with clove essential oil as a green biopesticide: A case study on controlling fungal growth in oranges." *Postharvest Biology and Technology* **219**: 113234.
5. Akbarbaglu, Z., A. Ramezani, A. Rafati, N. Mazloomi, **S. M. Jafari**, M. A. Hesarinejad, F. Khaleghi and K. Sarabandi (2025). "Bio-functional, antibacterial, ACE and DPP-IV inhibitory activities of thyme, flax and apple pollen-peptides by controlled enzymolysis." *Journal of Agriculture and Food Research* **19**: 101617.
6. Mahyian, A., E. Mahdian, E. Ataye-Salehi and **S. M. Jafari** (2025). "Formulation and characterization of low-fat breakfast cream using conjugated whey protein and modified starch." *International Journal of Biological Macromolecules* **289**: 138810.
7. Abedi-Firoozjah, R., S. Azimi-Salim, A. Afrah, M. H. Moradian, E. Assadpour, Z. Sarlak, M. Azizi-Lalabadi, D. Dehnad and **S. M. Jafari** (2025). "Comparison of the pH- and NH₃-sensitivity of chitosan/polyvinyl alcohol smart films containing anthocyanins or betacyanins for monitoring fish freshness." *Carbohydrate Polymer Technologies and Applications* **9**: 100639.
8. Mokhtari, Z., **S. M. Jafari**, A. M. Ziaifar and I. Cacciotti (2025). "Development and characterization of caffeine-loaded nanoliposomes decorated by cationic amylose and cationic amylose- menthol inclusion complex coatings; a novel oral co-delivery system." *Food Chemistry* **463**: 141350.
9. Parandi, E., M. Mousavi, H. Kiani, S. Nasirijoonaghani, M. Rouhi, H. Rashidi Nodeh, E. Assadpour, F. Zhang and **S. M. Jafari** (2024). "Controlled and rapid microreactor-assisted hydrolysis of sesame protein by a novel nanobiocatalyst; immobilized alcalase over activated sol-gel magnetic nanosupport." *Chemical Engineering Journal* **496**: 153900.
10. Rajabi, H. and **S. M. Jafari** (2024). "Synthesis and characterization of three-dimensional graphene oxide-chitosan/ glutaraldehyde nanocomposites: Towards adsorption of crocin from saffron." *International Journal of Biological Macromolecules* **281**: 136672.
11. Rezaei, A., E. Sadeghi, E. Assadpour, M. h. Moradian, S. Khaledian, N. Rezaei, D. Dehnad, F. Zhang, M. Azizi-lalabadi and **S. M. Jafari** (2024). "Preparation and characterization of gelatin/Kappa-carrageenan halochromic films containing curcumin for active and smart food packaging." *Food Bioscience* **62**: 105304.
12. Dehnad, D., B. Emadzadeh, B. Ghorani, G. Rajabzadeh and **S. M. Jafari** (2024). "Assembly of niosomal nanodelivery system for iron: introducing a green-hybrid method to enhance encapsulation efficiency." *Journal of Food Measurement and Characterization* **18**(12): 9793-9804.
13. Abedi-Firoozjah, R., S. Azimi-Salim, A. Afrah, R. Yekta, E. Assadpour, M. Azizi-Lalabadi and **S. M. Jafari** (2024). "Freshness/spoilage monitoring of protein-rich foods by betacyanin-loaded gelatin/carboxymethyl cellulose halochromic labels." *Future Foods* **10**: 100458.
14. Karimi, A., A. p. Ghandehari Yazdi, M. Barzegar, M. Rahmati, N. Bazsefidpar, A. Soltani and **S. M. Jafari** (2024). "Utilizing pistachio green hull extract to produce sugar-free muffins with antioxidant and antidiabetic potential." *Applied Food Research* **4**(2): 100510.
15. Parhizkary, M., **S. M. Jafari**, E. Assadpour, A. Enayati and M. Kashiri (2024). "Pea protein-coated nanoliposomal encapsulation of jujube phenolic extract with different stabilizers; characterization and in vitro release." *Food Chemistry: X* **23**: 101771.
16. Razghandi, E., A.-H. Elhami-Rad, **S. M. Jafari**, M.-R. Saiedi-Asl and H. Bakhshabadi (2024). "Combined pulsed electric field-ultrasound assisted extraction of yarrow phenolic-rich ingredients and their nanoliposomal encapsulation for improving the oxidative stability of sesame oil." *Ultrasonics Sonochemistry* **110**: 107042.
17. Alkhatib, H., F. Mohamed, M. Alfatama, E. Assadpour, M. S. Kharazmi, **S. M. Jafari**, M. Z. Islam Sarker, K. Kumar Sadasivuni, A. S. Mohmad Sabere and A. A. Doolaanea (2024). "Pilot scale manufacturing of black seed oil-loaded alginate beads; process development, and stability of thymoquinone." *Heliyon* **10**(19): e37630.
18. Ben Menni, D., N. Belyagoubi-Benhammou, I. Abdelli, S. Bekkal Brikci, A. Benmahieddine, H. Ben Menni, O. Boutrif, A. Gismond, G. Di Marco, A. D'Agostino, A. Canini, H. Benamar, M. Saeed Kharazmi, M. A. Prieto Lage and **S. M. Jafari** (2024). "Enzyme inhibitory, antioxidant and anti-inflammatory activities of Anabasis articulata phenolic-rich extract; in vitro, in vivo, and in silico studies." *Plant Biosystems - An International Journal Dealing with all Aspects of Plant Biology* **158**(4): 836-851.
19. Gharehbeglou, P., K. Sarabandi, Z. Akbarbaglu and **S. M. Jafari** (2024). "Predictive modeling of oleuropein release from double nanoemulsions: An analytical study comparing intelligent models and Monte Carlo simulation." *Journal of Agriculture and Food Research* **17**: 101261.
20. Razghandi, E., A. H. Elhami Rad, **S. M. Jafari**, M. R. Saiedi Asl and H. Bakhshabadi (2024). "Application of Pulsed Electric Field-Ultrasound Technique for Antioxidant Extraction from Yarrow: ANFIS Modeling and Evaluation of Antioxidant Activity." *Journal of Food Processing and Preservation* **2024**(1): 2951718.
21. Naderi, M., A. M. Ziaifar, L. Rashidi and **S. M. Jafari** (2024). "Rapeseed oleogels based on monoacylglycerols and methylcellulose hybrid oleogelators: Physicochemical and rheological properties." *Food Chemistry: X* **23**: 101520.
22. Zarali, M., A. Sadeghi, M. Ebrahimi, **S. M. Jafari** and A. S. Mahoonak (2024). "Techno-nutritional capabilities of sprouted clover seeds sourdough as a potent bio-preservative against sorbate-resistant fungus in fortified clean-label wheat bread." *Journal of Food Measurement and Characterization* **18**(7): 5577-5589.
23. Ziaee rizi, A., A. Sadeghi, **S. M. Jafari**, H. Feizi and H. Purabdollah (2024). "Controlled fermented sprouted mung bean containing ginger extract as a novel bakery bio-preservative for clean-label enriched wheat bread." *Journal of Agriculture and Food Research* **16**: 101218.
24. Dehnad, D., B. Emadzadeh, B. Ghorani, G. Rajabzadeh, M. Sarabi-Jamab and **S. M. Jafari** (2024). "Immobilization of iron-loaded niosomes within electrospun nanofibers of soy protein isolate: A novel dual encapsulation technique." *Food Hydrocolloids* **155**: 110165.
25. Hashemi, B., M. Varidi, N. Malekjani and **S. M. Jafari** (2024). "Whey protein-based bigels for co-encapsulation of curcumin and gallic acid: Characterization, stability and release kinetics." *Future Foods* **10**: 100495.
26. Akbarbaglu, Z., N. Mazloomi, K. Sarabandi, A. Ramezani, F. Khaleghi, A. R. Hamzehkollaei, **S. M. Jafari** and M. A. Hesarinejad (2024). "Stabilization of antioxidant thyme-leaves extract (Thymus vulgaris) within biopolymers and its application in functional bread formulation." *Future Foods* **9**: 100356.

27. Raftani Amiri, Z., S. Rezaei Erami, **S. M. Jafari** and S. Ahmadian (2024). "Physicochemical properties of yogurt enriched with nanoliposomes containing bitter melon extract." *LWT* **198**: 116091.
28. Fasamanesh, M., E. Assadpour, H. Rostamabadi, F. Zhang and **S. M. Jafari** (2024). "Encapsulation of iron within whey protein-pectin nanocomplexes: Fabrication, characterization, and optimization." *Food Chemistry* **451**: 139290.
29. Zhang, F., Y. Li, **S. M. Jafari**, Y. Liu, Y. Sang, S. Wang and X. Wang (2024). "Microfluidic-oriented green synthesis of pepsin-doped gold nanoparticles for colorimetric and photothermal dual-readout detection of food hazards." *Food Chemistry* **450**: 139311.
30. Belyagoubi-Benhammou, N., L. Belyagoubi, A. Benmahieddine, D. Ben Menni, A. El Zerey-Belaskri, G. Di Marco, A. Canini, E. Assadpour, A. Gismondi, K. Sarabandi and **S. M. Jafari** (2024). "Atlas pistachio (*Pistacia atlantica*) unripe fruit extract as a source of phytochemicals with anti-tyrosinase, antioxidant, and antibacterial properties." *Biocatalysis and Agricultural Biotechnology* **57**: 103143.
31. Bohlool, Z., S. R. Hashemi, A. Sadeghi, M. Heidari, J. Seifdavati and **S. M. Jafari** (2024). "Loading *Levi Lactobacillus brevis* into chitosan-coated alginate microcapsules and their effect on the testicular tissue redox system in roosters of hen's broiler breeders." *Carbohydrate Polymer Technologies and Applications* **7**: 100494.
32. Sarabandi, K., A. Dashipour, Z. Akbarbaglu, S. H. Peighambaroust, A. Ayaseh, H. S. Kafil, **S. M. Jafari** and A. Mousavi Khaneghah (2024). "Incorporation of spray-dried encapsulated bioactive peptides from coconut (*Cocos nucifera* L.) meal by-product in bread formulation." *Food Science & Nutrition* **12**(7): 4723-4734.
33. Ghaderi, F., A. Shakerian, Z. Mashak, E. Rahimi and **S. M. Jafari** (2024). "Potential of gelatin/chitosan nanocomposite films loaded with *L. nobilis* nanoemulsions for preservation of refrigerated ostrich meat-based hamburgers." *Journal of Food Measurement and Characterization* **18**(5): 3474-3491.
34. Mohammadi, A., M. Ghorbani, A. Sadeghi Mahoonak and **S. M. Jafari** (2024). "Improving the oxidative stability of purslane seed oil via emulsions stabilized by whey protein isolate-inulin mixtures and conjugates." *Innovative Food Technologies* **11**(3): 226-248.
35. Raftani Amiri, Z., S. Rezaei Erami, **S. M. Jafari** and S. Ahmadian (2024). "Stability and release kinetics of nanoliposomes containing bitter melon fruit extract at different temperatures and pH values, and in simulated gastrointestinal conditions." *LWT* **212**: 116996.
36. Bazefidpar, N., H. Ahmadi Gavligi, A. P. Ghandehari Yazdi and **S. M. Jafari** (2024). "Optimization of protein extraction from brewer's spent grain and production of bioactive peptides." *Biomass Conversion and Biorefinery* **14**(15): 17455-17465.
37. Gharehbeglou, P., A. Homayouni-Rad, **S. M. Jafari**, K. Sarabandi and Z. Akbarbaglu (2024). "Stabilization of *Chlorella* Bioactive Hydrolysates Within Biopolymeric Carriers: Techno-functional, Structural, and Biological Properties." *Journal of Polymers and the Environment* **32**(2): 763-779.
38. Mokhtari, Z. and **S. M. Jafari** (2024). "Exploring cationic amylose inclusion complexes as a pioneering carrier for aroma molecules; fabrication, and characterization." *Carbohydrate Polymer Technologies and Applications* **8**: 100615.
39. Mehrabi-Khozani, Z., **S. M. Jafari**, K. Sarabandi, A. Rezaei and Y. Maghsoudlou (2024). "Stabilization of caffeine-loaded nanoliposomes via chitosan coating and spray drying for application in food products." *Carbohydrate Polymer Technologies and Applications* **8**: 100617.
40. Zolqadri, R., Z. Akbarbaglu, K. Sarabandi, S. H. Peighambaroust, **S. M. Jafari** and A. Mousavi Khaneghah (2024). "Techno-functional, antioxidant, and amino acid characterization of hydrolyzed bioactive peptides from coconut (*Cocos nucifera* L.) meal protein." *Food & Function* **15**(22): 11266-11279.
41. Parandi, E., M. Mousavi, E. Assadpour, H. Kiani and **S. M. Jafari** (2024). "Sesame protein hydrolysate-gum Arabic Maillard conjugates for loading natural anthocyanins: Characterization, in vitro gastrointestinal digestion and storage stability." *Food Hydrocolloids* **148**: 109490.
42. Mokhtari, Z., **S. M. Jafari**, A. M. Ziaifar and I. Cacciotti (2024). "Extraction, purification and characterization of amylose from sago and corn: Morphological, structural and molecular comparison." *International Journal of Biological Macromolecules* **255**: 128237.
43. Dorofte, A. L., C. Dima, I. Bleoanca, I. Aprodu, P. Alexe, M. S. Kharazmi, **S. M. Jafari**, Ş. Dima and D. Borda (2024). "Mechanism of β -cyclodextrin - thyme nanocomplex formation and release: In silico behavior, structural and functional properties." *Carbohydrate Polymer Technologies and Applications* **7**: 100422.
44. Sarabandi, K., Z. Karami, Z. Akbarbaglu, K. Duangmal and **S. M. Jafari** (2024). "Spray-drying stabilization of oleaster-seed bioactive peptides within biopolymers: Pan-bread formulation and bitterness-masking." *Food Bioscience* **58**: 103837.
45. Taheri-Yeganeh, A., H. Ahari, Z. Mashak and **S. M. Jafari** (2024). "Monitor the freshness of shrimp by smart halochromic films based on gelatin/pectin loaded with pistachio peel anthocyanin nanoemulsion." *Food Chemistry: X* **21**: 101217.
46. Karimkhani, M. M., A. Jamshidi, M. Nasrollahzadeh, M. Armin, **S. M. Jafari** and T. Zeinali (2024). "Fermentation of *Rubus dolichocarpus* juice using *Lactobacillus gasseri* and *Lactocaseibacillus casei* and protecting phenolic compounds by Stevia extract during cold storage." *Scientific Reports* **14**(1): 5711.
47. Yolmeh, M. and **S. M. Jafari** (2024). "Cracking spoilage in jar cream cheese: Introducing, modeling and preventing." *Heliyon* **10**(3): e25259.
48. Hassanbeiki, M., L. Golestan, Z. Mashak, M. Ahmadi and **S. M. Jafari** (2024). "Production of a functional confectionary cream containing licorice root extract and double coated *Lactobacillus plantarum* by alginate and malva mucilage." *Carbohydrate Polymer Technologies and Applications* **7**: 100435.
49. Wu, S., G. Li, H. Qu, W. Xu, Y. Xu, E. G. Kovaleva, **S. M. Jafari**, D. A. Barakat, J. Ma, J. Cheng and H. Li (2023). "Ecofriendly Nanoemulsion to Promote the Wetting and Spreading of Droplet on Soybean Leaves for Regulating the Sheath Blight." *ACS Agricultural Science & Technology* **3**(11): 1025-1033.
50. Zarali, M., A. Sadeghi, **S. M. Jafari**, M. Ebrahimi and A. Sadeghi Mahoonak (2023). "Enhanced viability and improved in situ antibacterial activity of the probiotic LAB microencapsulated layer-by-layer in alginate beads coated with nisin." *Food Bioscience* **53**: 102593.
51. Yousefi, M., **S. M. Jafari**, H. Ahangari and A. Ehsani (2023). "Application of Nanoliposomes Containing Nisin and Crocin in Milk." *Adv Pharm Bull* **13**(1): 134-142.
52. Yahyavi, M., L. Kamali Roustae, A. P. Ghandehari Yazdi, M. Amini, Z. Ahmadi and **S. M. Jafari** (2023). "Effect of precooking process and drying methods on the physicochemical, microstructure, and sensory properties of spinach-enriched lasagna pasta." *Drying Technology* **41**(5): 783-793.
53. Tavasoli, S., Y. Maghsoudlou, H. Shahiri Tabarestani and **S. M. Jafari** (2023). "Changes in emulsifying properties of caseinate-Soy soluble polysaccharides conjugates by ultrasonication." *Ultrasonics Sonochemistry* **101**: 106703.
54. Taheri, A., M. Kashaninejad, A. M. Tamaddon, J. Du and **S. M. Jafari** (2023). "Rheological Characteristics of Soluble Cress Seed Mucilage and β -Lactoglobulin Complexes with Salts Addition: Rheological Evidence of Structural Rearrangement." *Gels* **9**(6): 485.
55. Taghizadeh, M., **S. M. Jafari**, K. K. Darani, M. A. Sani, S. S. Aliabadi, N. K. Khosroshahi and H. Hosseini (2023). "Biopolymeric Nanoparticles, Pickering Nanoemulsions and Nanophytosomes for Loading of *Zataria multiflora* Essential Oil as a Biopreservative." *applied food biotechnology* **10**(2): 113-127.
56. Sarabandi, K., R. Zolqadri, Z. Akbarbaglu, P. Gharehbeglou, S. H. Peighambaroust and **S. M. Jafari** (2023). "Nutritional, functional, biological and antibacterial properties of wild pistachio (*P. khinjuk*) nuts peptides." *Journal of Food Measurement and Characterization* **17**(5): 4482-4494.

57. Rouhi, E., A. Sadeghi, **S. M. Jafari**, M. Abdolhoseini and E. Assadpour (2023). "Effect of the controlled fermented quinoa containing protective starter culture on technological characteristics of wheat bread supplemented with red lentil." Journal of Food Science and Technology **60**(8): 2193-2203.
58. Namdar, N. Z., L. Roufegarinejad, A. Alizadeh, N. Asefi, **S. M. Jafari** and K. Sarabandi (2023). "Protection of navy-bean bioactive peptides within nanoliposomes: morphological, structural and biological changes." Bioresources and Bioprocessing **10**(1): 87.
59. Mirbagheri, M. S., S. Akhavan-Mahdavi, A. Hasan, M. S. Kharazmi and **S. M. Jafari** (2023). "Propolis-loaded nanofiber scaffolds based on polyvinyl alcohol and polycaprolactone." International Journal of Pharmaceutics **642**: 123186.
60. Sarabandi, K., M. Mohammadi, Z. Akbarbaglu, M. Ghorbani, S. Najafi, S. Safaeian Laein and **S. M. Jafari** (2023). "Technological, nutritional, and biological properties of apricot kernel protein hydrolyzates affected by various commercial proteases." Food Science & Nutrition **11**(9): 5078-5090.
61. Narmani, A., S. Ganji, M. Amirishoar, R. Jahedi, M. S. Kharazmi and **S. M. Jafari** (2023). "Smart chitosan-PLGA nanocarriers functionalized with surface folic acid ligands against lung cancer cells." International Journal of Biological Macromolecules **245**: 125554.
62. Kalajahi, S. G., N. Malekjani, K. Samborska, Z. Akbarbaglu, P. Gharehbeglou, K. Sarabandi and **S. M. Jafari** (2023). "Encapsulated powders of Alcea flower polyphenol-rich extract by different hydrocolloid carriers: characterisation, antioxidant activity and chemical structures." International Journal of Food Science & Technology **58**(8): 4246-4255.
63. Sarabandi, K., A. Dashipour, Z. Izadi, Z. Akbarbaglu, I. Katouzian and **S. M. Jafari** (2023). "Nutritional, biological, and structural properties of bioactive peptides from bellflower, Persian-willow, and bitter-orange pollens." Journal of Food Science **88**(7): 3119-3133.
64. Kafashan, A., H. Joze-Majidi, S. Kazemi-Pasarvi, A. Babaei and **S. M. Jafari** (2023). "Nanocomposites of soluble soybean polysaccharides with grape skin anthocyanins and graphene oxide as an efficient halochromic smart packaging." Sustainable Materials and Technologies **38**: e00755.
65. Hosseini, H., V. Pasban Noghabi, H. Saberian and **S. M. Jafari** (2023). "The influence of different gums compared with surfactants as encapsulating stabilizers on the thermal, storage, and low-pH stability of chlorophyllin." Food Chemistry: X **20**: 101020.
66. Sarabandi, K., Z. Akbarbaglu, R. Sarabandi, F. Tamjidi, P. Gharehbeglou and **S. M. Jafari** (2023). "Improving the functionality and biological properties of Iranian date palm (*Phoenix dactylifera* L) seeds protein with different proteases." Food and Humanity **1**: 675-683.
67. Heidari, F., **S. M. Jafari**, A. M. Ziaifar and N. Anton (2023). "Surface modification of silica nanoparticles by chitosan for stabilization of water-in-oil Pickering emulsions." Carbohydrate Polymer Technologies and Applications **6**: 100381.
68. Hashemi, B., M. Varidi and **S. M. Jafari** (2023). "Fabrication and characterization of novel whey protein-based bigels as structured materials with high-mechanical properties." Food Hydrocolloids **145**: 109082.
69. Sarabandi, K., Z. Akbarbaglu, S. H. Peighambari, A. Ayaseh and **S. M. Jafari** (2023). "Physicochemical, antibacterial and bio-functional properties of persian poppy-pollen (*Papaver bracteatum*) protein and peptides." Journal of Food Measurement and Characterization **17**(5): 4638-4649.
70. Gharehbeglou, P., A. Homayouni Rad, Z. Akbarbaglu, K. Sarabandi and **S. M. Jafari** (2023). "Enhancing the bio-polymeric stabilization of spray-dried *Chlorella* phenolic-rich extract: Analysis of its physicochemical, functional, structural, and biological properties." Journal of Agriculture and Food Research **14**: 100822.
71. Kalajahi, S. G., N. Malekjani, K. Samborska, Z. Akbarbaglu, P. Gharehbeglou, K. Sarabandi and **S. M. Jafari** (2023). "The enzymatic modification of whey-proteins for spray drying encapsulation of Ginkgo-biloba extract." International Journal of Biological Macromolecules **245**: 125548.
72. Azari, A., S. H. H. Ghaboos, V. E. Moghadam and **S. M. Jafari** (2023). "Influence of chitosan coating on the physicochemical and antioxidant properties of phycocyanin-loaded nanoliposomes." Algal Research **72**: 103120.
73. Sarabandi, K., Z. Akbarbaglu, S. H. Peighambari, A. Ayaseh and **S. M. Jafari** (2023). "Biological stabilization of natural pigment-phytochemical from poppy-pollen (*Papaver bracteatum*) extract: Functional food formulation." Food Chemistry **429**: 136885.
74. Arabmofrad, S., **S. M. Jafari**, G. Lazzara, A. M. Ziaifar, H. Shahiri Tabarestani, G. Bahlakeh, G. Cavallaro, M. M. Calvino and M. Nasiri Sarvi (2023). "Preparation and characterization of surface-modified montmorillonite by cationic surfactants for adsorption purposes." Journal of Thermal Analysis and Calorimetry **148**(24): 13803-13814.
75. Akbarbaglu, Z., A. Ayaseh, B. Ghanbarzadeh, K. Sarabandi, M. S. Kharazmi and **S. M. Jafari** (2023). "Chemical structure and bio-functional properties of *Arthrospira platensis* peptides produced by ultrasonication-enzymolysis: Their emulsification capabilities." Process Biochemistry **132**: 191-199.
76. Gharehbeglou, P., A. Homayouni-Rad, K. Sarabandi, Z. Akbarbaglu and **S. M. Jafari** (2023). "Assessing the impact of *Chlorella* phenolic-rich extract on gastrointestinal health and function." Gastrointestinal Nursing **21**(9): 24-29.
77. Sarabandi, K., Z. Akbarbaglu, N. Mazloomi, P. Gharehbeglou, S. H. Peighambari and **S. M. Jafari** (2023). "Structural modification of poppy-pollen protein as a natural antioxidant, emulsifier and carrier in spray-drying of O/W-emulsion: Physicochemical and oxidative stabilization." International Journal of Biological Macromolecules **250**: 126260.
78. Abbasi, M., Z. Arab-Bafrani, E. Zabihi, A. Babaei, **S. M. Jafari**, M. Barani and E. Mousavi (2023). "Inhibitory effect of zinc oxide nanoparticles and fibrillar chitosan-zinc oxide nanostructures against herpes simplex virus infection." The Journal of Engineering **2023**(6): e12268.
79. Sadeghi, A., I. Katouzian, M. Ebrahimi, E. Assadpour, C. Tan and **S. M. Jafari** (2023). "Bacteriocin-like inhibitory substances as green bio-preservatives; nanoliposomal encapsulation and evaluation of their *in vitro/in situ* anti-Listerial activity." Food Control **150**: 109725.
80. Li, X., **S. M. Jafari**, F. Zhou, H. Hong, X. Jia, X. Mei, G. Hou, Y. Yuan, B. Liu, S. Chen, Y. Gong, H. Yan, R. Chang, J. Zhang, F. Ren and Y. Li (2023). "The intracellular fate and transport mechanism of shape, size and rigidity varied nanocarriers for understanding their oral delivery efficiency." Biomaterials **294**: 121995.
81. Ghasemi, S., E. Assadpour, M. S. Kharazmi, S. Jafarzadeh, M. Zargar and **S. M. Jafari** (2023). "Encapsulation of Orange Peel Oil in Biopolymeric Nanocomposites to Control Its Release under Different Conditions." Foods **12**(4): 831.
82. Alipour, A., S. Rahaiee, H. Rajaei Litkhi, S. N. Jamali and **S. M. Jafari** (2023). "Development and optimization of whey protein- *Lepidium perfoliatum* gum packaging films: An approach towards antimicrobial and biodegradable films." Industrial Crops and Products **196**: 116447.
83. Akbarmehr, A., S. H. Peighambari, M. Soltanzadeh, **S. M. Jafari** and K. Sarabandi (2023). "Microencapsulation of Yerba mate extract: The efficacy of polysaccharide/protein hydrocolloids on physical, microstructural, functional, and antioxidant properties." International Journal of Biological Macromolecules **234**: 123678.
84. Tan, C., Y. Sun, X. Yao, Y. Zhu, **S. M. Jafari**, B. Sun and J. Wang (2023). "Stabilization of anthocyanins by simultaneous encapsulation-copigmentation via protein-polysaccharide polyelectrolyte complexes." Food Chemistry **416**: 135732.
85. Salehi, A., A. Rezaei, M. S. Damavandi, M. S. Kharazmi and **S. M. Jafari** (2023). "Almond gum-sodium caseinate complexes for loading propolis extract: Characterization, antibacterial activity, release, and in-vitro cytotoxicity." Food Chemistry **405**: 134801.

86. Zanganeh, E., H. Mirzaei, **S. M. Jafari**, A. Javadi and M. R. Afshar Mogaddam (2022). "Spirulina platensis Extract Nanoliposomes: Preparation, Characterization, and Application to White Cheese." Journal of AOAC International **105**(3): 827-834.
87. Taheri, A., M. Kashaninejad, A. M. Tamaddon, M. Ganjeh and **S. M. Jafari** (2022). "Complexation of cress seed mucilage and β -lactoglobulin; optimization through response surface methodology and adaptive neuro-fuzzy inference system (ANFIS)." Chemometrics and Intelligent Laboratory Systems **228**: 104615.
88. Siti-Nuramira, J., R. Farhana, S. Nabil, **S. M. Jafari** and S. Raseetha (2022). "Impact of drying methods on the quality of grey (*Pleurotus sajor caju*) and pink (*Pleurotus djamor*) oyster mushrooms." Journal of Food Measurement and Characterization **16**(5): 3331-3343.
89. Sarabandi, K., F. Tamjidi, Z. Akbarbaglu, K. Samborska, P. Gharehbeglou, M. S. Kharazmi and **S. M. Jafari** (2022). "Modification of Whey Proteins by Sonication and Hydrolysis for the Emulsification and Spray Drying Encapsulation of Grape Seed Oil." Pharmaceutics **14**(11): 2434.
90. Naderi, M., K. Parastouei, **S. M. Jafari**, M. Fathi, H. Rostami and M. Samadi (2022). "A cross-sectional study to monitor the synthetic antioxidants and oxidative quality of distributed vegetable oils in chain stores." Journal of Food Processing and Preservation **46**(11): e17109.
91. Khorasani, S., A. P. Ghandehari Yazdi, A. Saadatfar, L. Kamali Rousta, M. Nejatian, M. Abarian and **S. M. Jafari** (2022). "Valorization of Saffron Tepals for the Green Synthesis of Silver Nanoparticles and Evaluation of Their Efficiency Against Foodborne Pathogens." Waste and Biomass Valorization **13**(11): 4417-4430.
92. Heidari, F., **S. M. Jafari**, A. M. Ziaifar and N. Anton (2022). "Preparation of Pickering emulsions stabilized by modified silica nanoparticles via the Taguchi approach." Pharmaceutics **14**(8): 1561.
93. Ghorbanzade, T., S. Akhavan-Mahdavi, M. S. Kharazmi, S. A. Ibrahim and **S. M. Jafari** (2022). "Loading of fish oil into β -cyclodextrin nanocomplexes for the production of a functional yogurt." Food Chemistry: X **15**: 100406.
94. Falsafi, S. R., Y. Maghsoudlou, M. Aalami, **S. M. Jafari**, M. Raeisi, K. Nishinari and H. Rostamabadi (2022). "Application of multi-criteria decision-making for optimizing the formulation of functional cookies containing different types of resistant starches: A physicochemical, organoleptic, in-vitro and in-vivo study." Food Chemistry **393**: 133376.
95. Blinov, A. V., A. A. Nagdalian, S. A. Siddiqui, D. G. Maglakelidze, A. A. Gvozdenko, A. A. Blinova, M. A. Yasnaya, A. B. Golik, M. B. Rebezov, **S. M. Jafari** and M. A. Shah (2022). "Synthesis and characterization of selenium nanoparticles stabilized with cocamidopropyl betaine." Scientific Reports **12**(1): 21975.
96. Ansari, F., T. C. Pimentel, H. Pourjafari, S. A. Ibrahim and **S. M. Jafari** (2022). "The Influence of Prebiotics on Wheat Flour, Dough, and Bread Properties; Resistant Starch, Polydextrose, and Inulin." Foods **11**(21): 3366.
97. Amani, F., A. Rezaei, M. S. Kharazmi and **S. M. Jafari** (2022). "Loading ferulic acid into β -cyclodextrin nanosponges; antibacterial activity, controlled release and application in pomegranate juice as a copigment agent." Colloids and Surfaces A: Physicochemical and Engineering Aspects **649**: 129454.
98. Amani, F., A. Rezaei, H. Akbari, C. Dima and **S. M. Jafari** (2022). "Active Packaging Films Made by Complex Coacervation of Tragacanth Gum and Gelatin Loaded with Curcumin; Characterization and Antioxidant Activity." Foods **11**(20): 3168.
99. Amani, F., A. Azadi, A. Rezaei, M. S. Kharazmi and **S. M. Jafari** (2022). "Preparation of soluble complex carriers from Aloe vera mucilage/gelatin for cinnamon essential oil: Characterization and antibacterial activity." Journal of Food Engineering **334**: 111160.
100. Alehosseini, E., H. Shahiri Tabarestani, M. S. Kharazmi and **S. M. Jafari** (2022). "Physicochemical, Thermal, and Morphological Properties of Chitosan Nanoparticles Produced by Ionic Gelation." Foods **11**(23): 3841.
101. Akbari, N., E. Assadpour, M. S. Kharazmi and **S. M. Jafari** (2022). "Encapsulation of Vitamin B12 by Complex Coacervation of Whey Protein Concentrate-Pectin; Optimization and Characterization." Molecules **27**(18): 6130.
102. Sarfarazi, M., Q. Rajabzadeh, R. Tavakoli, S. A. Ibrahim and **S. M. Jafari** (2022). "Ultrasound-assisted extraction of saffron bioactive compounds; separation of crocins, picrocrocin, and safranal optimized by artificial bee colony." Ultrasonics Sonochemistry **86**: 105971.
103. Tavasoli, S., Y. Maghsoudlou, **S. M. Jafari** and H. S. Tabarestani (2022). "Improving the emulsifying properties of sodium caseinate through conjugation with soybean soluble polysaccharides." Food Chemistry **377**: 131987.
104. Liu, Q., Z. Wang, A. Mukhamadiev, J. Feng, Y. Gao, X. Zhuansun, R. Han, Y. Chong and **S. M. Jafari** (2022). "Formulation optimization and characterization of carvacrol-loaded nanoemulsions: In vitro antibacterial activity/mechanism and safety evaluation." Industrial Crops and Products **181**: 114816.
105. Hadidi, M., H. Rostamabadi, A. Moreno and **S. M. Jafari** (2022). "Nanoencapsulation of essential oils from industrial hemp (*Cannabis sativa* L.) by-products into alfalfa protein nanoparticles." Food Chemistry **386**: 132765.
106. Mahmoudi-Kordi, F., M. Balvardi, H.-R. Akhavan and **S. M. Jafari** (2022). "Optimization of ethanol-assisted aqueous oil extraction from *Cicadatra querula*." Journal of Food Measurement and Characterization **16**(2): 1426-1436.
107. Kaveh, S., A. S. Mahoonak, M. Ghorbani and **S. M. Jafari** (2022). "Fenugreek seed (*Trigonella foenum graecum*) protein hydrolysate loaded in nanosized liposomes: Characteristic, storage stability, controlled release and retention of antioxidant activity." Industrial Crops and Products **182**: 114908.
108. Falsafi, S. R., H. Rostamabadi, K. Nishinari, R. Amani and **S. M. Jafari** (2022). "The role of emulsification strategy on the electrospinning of β -carotene-loaded emulsions stabilized by gum Arabic and whey protein isolate." Food Chemistry **374**: 131826.
109. Gharanjig, H., M. Iri, M. Hosseinezhad, K. Gharanjig and **S. M. Jafari** (2022). "Enhanced thermal stability of anthocyanins through natural polysaccharides from Annum gum and cress seed gum." Journal of Food Science **87**(2): 585-598.
110. Gromova, O. A., L. A. Maiorova, D. S. Salnikov, V. I. Demidov, A. G. Kalacheva, I. Y. Torshin, T. E. Bogacheva, A. N. Gromov, O. A. Limanova, T. R. Grishina, **S. M. Jafari** and O. I. Koifman (2022). "Vitamin B12 Hydrophobic Derivative Exhibits Bioactivity: Biomedical and Photophysical Study." BioNanoScience **12**(1): 74-82.
111. Alkhatib, H., A. A. Doolaanea, E. Assadpour, A. S. Mohamad Sabere, F. Mohamed and **S. M. Jafari** (2022). "Optimizing the encapsulation of black seed oil into alginate beads by ionic gelation." Journal of Food Engineering **328**: 111065.
112. Amani, F., A. Rezaei, M. S. Damavandi, A. S. Doost and **S. M. Jafari** (2022). "Colloidal carriers of almond gum/gelatin coacervates for rosemary essential oil: Characterization and in-vitro cytotoxicity." Food Chemistry **377**: 131998.
113. Ali, A., A. Rehman, **S. M. Jafari**, M. M. A. N. Ranjha, Q. Shehzad, H. M. Shahbaz, S. Khan, M. Usman, P. Ł. Kowalczewski, M. Jarzębski and W. Xia (2022). "Effect of Co-Encapsulated Natural Antioxidants with Modified Starch on the Oxidative Stability of beta-Carotene Loaded within Nanoemulsions." Applied Sciences **12**(3): 1070.
114. Gao, Y., Q. Liu, Z. Wang, X. Zhuansun, J. Chen, Z. Zhang, J. Feng and **S. M. Jafari** (2021). "Cinnamaldehyde nanoemulsions; physical stability, antibacterial properties/mechanisms, and biosafety." Journal of Food Measurement and Characterization **15**(6): 5326-5336.

115. Jalali-Jivan, M., B. Fathi-Achachlouei, H. Ahmadi-Gavilighi and **S. M. Jafari** (2021). "Improving the extraction efficiency and stability of β -carotene from carrot by enzyme-assisted green nanoemulsification." *Innovative Food Science & Emerging Technologies* **74**: 102836.
116. Rikhtehgaran, S., I. Katouzian, **S. M. Jafari**, H. Kiani, L. A. Maiorova and H. Takbirgou (2021). "Casein-based nanodelivery of olive leaf phenolics: Preparation, characterization and release study." *Food Structure* **30**: 100227.
117. Rajabi, H., **S. M. Jafari**, J. Feizi, M. Ghorbani and S. A. Mohajeri (2021). "Surface-decorated graphene oxide sheets with nanoparticles of chitosan-Arabic gum for the separation of bioactive compounds: A case study for adsorption of crocin from saffron extract." *International Journal of Biological Macromolecules* **186**: 1-12.
118. Kord Heydari, M., E. Assadpour, **S. M. Jafari** and H. Javadian (2021). "Encapsulation of rose essential oil using whey protein concentrate-pectin nanocomplexes: Optimization of the effective parameters." *Food Chemistry* **356**: 129731.
119. Alehosseini, E., **S. M. Jafari** and H. Shahiri Tabarestani (2021). "Production of d-limonene-loaded Pickering emulsions stabilized by chitosan nanoparticles." *Food Chemistry* **354**: 129591.
120. Taheri, A., M. Kashaninejad, A. M. Tamaddon and **S. M. Jafari** (2021). "Comparison of binary cress seed mucilage (CSM)/ β -lactoglobulin (BLG) and ternary CSG-BLG-Ca (calcium) complexes as emulsifiers: Interfacial behavior and freeze-thawing stability." *Carbohydrate Polymers* **266**: 118148.
121. Arab-Bafrani, Z., E. Zabihi, **S. M. Jafari**, A. Khoshbin-Khoshnazar, E. Mousavi, M. Khalili and A. Babaei (2021). "Enhanced radiotherapy efficacy of breast cancer multi cellular tumor spheroids through in-situ fabricated chitosan-zinc oxide bio-nanocomposites as radio-sensitizing agents." *International Journal of Pharmaceutics* **605**: 120828.
122. Rehman, A., Q. Tong, **S. M. Jafari**, S. A. Korma, I. M. Khan, A. Mohsin, M. F. Manzoor, W. Ashraf, B. S. Mushtaq, S. Zainab and I. Cacciotti (2021). "Spray dried nanoemulsions loaded with curcumin, resveratrol, and borage seed oil: The role of two different modified starches as encapsulating materials." *International Journal of Biological Macromolecules* **186**: 820-828.
123. **Jafari, S. M.**, V. Ghanbari, D. Dehnad and M. Ganje (2021). "Improving the storage stability of tomato paste by the addition of encapsulated olive leaf phenolics and experimental growth modeling of *A. flavus*." *International Journal of Food Microbiology* **338**: 109018.
124. Razavi, S. E. and **S. M. Jafari** (2021). "Effect of corm age on the antioxidant, bactericidal and fungicidal activities of saffron (*Crocus sativus* L.) stigmas." *Food Control* **130**: 108358.
125. Ghorbani, Z., N. Zamindar, S. Baghersad, S. Paidari, **S. M. Jafari** and L. Khazdooz (2021). "Evaluation of quality attributes of grated carrot packaged within polypropylene-clay nanocomposites." *Journal of Food Measurement and Characterization* **15**(4): 3770-3781.
126. Seyedabadi, M. M., H. Rostami, **S. M. Jafari** and M. Fathi (2021). "Development and characterization of chitosan-coated nanoliposomes for encapsulation of caffeine." *Food Bioscience* **40**: 100857.
127. Ghalegi Ghalenoe, M., D. Dehnad and **S. M. Jafari** (2021). "Physicochemical and nutritional properties of pomegranate juice powder produced by spray drying." *Drying Technology* **39**(12): 1941-1949.
128. Shehzad, Q., A. Rehman, **S. M. Jafari**, M. Zuo, M. A. Khan, A. Ali, S. Khan, A. Karim, M. Usman, A. Hussain and W. Xia (2021). "Improving the oxidative stability of fish oil nanoemulsions by co-encapsulation with curcumin and resveratrol." *Colloids and Surfaces B: Biointerfaces* **199**: 111481.
129. Soleimanifar, M., **S. M. Jafari**, E. Assadpour and A. Mirarab (2021). "Electrosprayed whey protein nanocarriers containing natural phenolics; thermal and antioxidant properties, release behavior and stability." *Journal of Food Engineering* **307**: 110644.
130. Hoseyni, S. Z., **Jafari, S.M.**, Shahiri Tabarestani, H., Ghorbani, M., Assadpour, E. and Sabaghi, M. (2021). "Release of catechin from Azivash gum-polyvinyl alcohol electrospun nanofibers in simulated food and digestion media." *Food Hydrocolloids* **112**: 106366.
131. Bagheri, M., **Jafari, S.M.** and Eikani, M.H. (2021). "Ultrasonic-assisted production of zero-valent iron-decorated graphene oxide/activated carbon nanocomposites: Chemical transformation and structural evolution." *Materials Science and Engineering: C* **118**: 111362.
132. Taheri, A., Kashaninejad, M., Tamaddon, A.M. and **Jafari, S.M.** (2021). "Vitamin D3 cress seed mucilage - β -lactoglobulin nanocomplexes: Synthesis, characterization, encapsulation and simulated intestinal fluid in vitro release." *Carbohydrate Polymers* **256**: 117420.
133. Shabaani, M., Rahaiee, S., Zare, M. and **Jafari, S.M.** (2020). "Green synthesis of ZnO nanoparticles using loquat seed extract; Biological functions and photocatalytic degradation properties." *LWT* **134**: 110133.
134. Sarabandi, K. and **Jafari, S.M.** (2020). "Improving the antioxidant stability of flaxseed peptide fractions during spray drying encapsulation by surfactants: Physicochemical and morphological features." *Journal of Food Engineering* **286**: 110131.
135. Rajabi, H., **Jafari, S.M.**, Feizi, J., Ghorbani, M. and Mohajeri, S.A. (2020). "Preparation and characterization of 3D graphene oxide nanostructures embedded with nanocomplexes of chitosan- gum Arabic biopolymers." *International Journal of Biological Macromolecules* **162**: 163-174.
136. Rahbari, M., Hamdami, N., Mirzaei, H. and **Jafari, S.M.** (2020). "Investigation of the histological and textural properties of chicken breast thawed by high voltage electric field." *Journal of Food Process Engineering* **43**(11): e13543.
137. Poozesh, S., **Jafari, S.M.** and Akafuah, N.K. (2020). "Interrogation of a new inline multi-bin cyclone for sorting of produced powders of a lab-scale spray dryer." *Powder Technology* **373**: 590-598.
138. Gharanjig, H., Gharanjig, K., Farzi, G., Hosseinneshad, M. and **Jafari, S.M.** (2020). "Novel complex coacervates based on Zedo gum, cress seed gum and gelatin for loading of natural anthocyanins." *International Journal of Biological Macromolecules* **164**: 3349-3360.
139. Hosseini, H., Yaghoubi Hamgini, E., **Jafari, S.M.** and Bolourian, S. (2020). "Improving the oxidative stability of sunflower seed kernels by edible biopolymeric coatings loaded with rosemary extract." *Journal of Stored Products Research* **89**: 101729.
140. Hadavi, R., **Jafari, S.M.** and Katouzian, I. (2020). "Nanoliposomal encapsulation of saffron bioactive compounds; characterization and optimization." *International Journal of Biological Macromolecules* **164**: 4046-4053.
141. Aghajanzadeh, S., Ganjeh, M., **Jafari, S.M.**, Kashaninejad, M. and Ziaifar, A.M. (2020). "Prediction of the changes in physicochemical properties of key lime juice during IR thermal processing by artificial neural networks." *Journal of Food and Bioprocess Engineering* **3**(2): 95-100.
142. Shafiei, G., Ghorbani, M., Hosseini, H., Sadeghi Mahoonak, A., Maghsoudlou, Y., and **Jafari, S.M.** (2020). "Estimation of oxidative indices in the raw and roasted hazelnuts by accelerated shelf-life testing." *Journal of Food Science and Technology* **57**(7): 2433-2442.
143. Hoseyni, S.Z., **Jafari, S.M.**, Shahiri Tabarestani, H., Ghorbani, M., Assadpour, E., and Sabaghi, M. (2020). "Production and characterization of catechin-loaded electrospun nanofibers from Azivash gum- polyvinyl alcohol." *Carbohydrate Polymers* **235**: 115979.
144. Gharanjig, H., Gharanjig, K., Hosseinneshad, M., and **Jafari, S.M.** (2020). "Development and optimization of complex coacervates based on zedo gum, cress seed gum and gelatin." *International Journal of Biological Macromolecules* **148**: 31-40.

145. Feng, J., Wang, R., Chen, Z., Zhang, S., Yuan, S., Cao, H., **Jafari, S. M.**, and Yang, W. (2020). "Formulation optimization of D-limonene-loaded nanoemulsions as a natural and efficient biopesticide." Colloids and Surfaces A: Physicochemical and Engineering Aspects **596**: 124746.
146. Katouzian, I., **Jafari, S. M.**, Maghsoudlou, Y., Karami, L., and Eikani, M. H. (2020). "Experimental and molecular docking study of the binding interactions between bovine α -lactalbumin and oleuropein." Food Hydrocolloids **105**: 105859.
147. Rehman, A., **Jafari, S. M.**, Tong, Q., Karim, A., Mahdi, A. A., Iqbal, M. W., Aadil, R. M., Ali, A., and Manzoor, M. F. (2020). "Role of peppermint oil in improving the oxidative stability and antioxidant capacity of borage seed oil-loaded nanoemulsions fabricated by modified starch." International Journal of Biological Macromolecules **153**: 697-707.
148. Hadidi, M., Pouramin, S., Adinepour, F., Haghani, S., and **Jafari, S. M.** (2020). "Chitosan nanoparticles loaded with clove essential oil: Characterization, antioxidant and antibacterial activities." Carbohydrate Polymers **236**: 116075.
149. Joz Majidi, H., Mirzaee, A., **Jafari, S. M.**, Amiri, M., Shahrousvand, M. and Babaei, A. (2020). "Fabrication and characterization of graphene oxide-chitosan-zinc oxide ternary nano-hybrids for the corrosion inhibition of mild steel." International Journal of Biological Macromolecules **148**: 1190-1200.
150. Sarfarazi, M., **Jafari, S. M.**, Rajabzadeh, G. and Galanakis, C. M. (2020). "Evaluation of microwave-assisted extraction technology for separation of bioactive components of saffron (*Crocus sativus* L.)." Industrial Crops and Products **145**: 111978.
151. Shavandi, M., Kashaninejad, M., Sadeghi, A., **Jafari, S. M.** and Hasani, M. (2020). "Decontamination of *Bacillus cereus* in cardamom (*Elettaria cardamomum*) seeds by infrared radiation and modeling of microbial inactivation through experimental models." Journal of Food Safety **40**(1): e12730.
152. Soleimanifar, M., **Jafari, S. M.** and Assadpour, E. (2020). "Encapsulation of olive leaf phenolics within electrosprayed whey protein nanoparticles; production and characterization." Food Hydrocolloids **101**: 105572.
153. Sarabandi, K. and **Jafari, S. M.** (2020). "Effect of chitosan coating on the properties of nanoliposomes loaded with flaxseed-peptide fractions: Stability during spray-drying." Food Chemistry **310**: 125951.
154. Moghbeli, S., **Jafari, S. M.**, Maghsoudlou, Y. and Dehnad, D. (2020). "A Taguchi approach optimization of date powder production by spray drying with the aid of whey protein-pectin complexes." Powder Technology **359**: 85-93.
155. Ardabilchi Marand, M., Amjadi, S., Ardabilchi Marand, M., Roufegarinejad, L. and **Jafari, S. M.** (2020). "Fortification of yogurt with flaxseed powder and evaluation of its fatty acid profile, physicochemical, antioxidant, and sensory properties." Powder Technology **359**: 76-84.
156. Rezaei Erami, S., Raftani Amiri, Z. and **Jafari, S. M.** (2019). "Nanoliposomal encapsulation of Bitter Gourd (*Momordica charantia*) fruit extract as a rich source of health-promoting bioactive compounds." LWT **116**: 108581.
157. Saffar Taluri, S., **Jafari, S. M.** and Bahrami, A. (2019). "Evaluation of changes in the quality of extracted oil from olive fruits stored under different temperatures and time intervals." Scientific Reports **9**(1): 19688.
158. Yousefdoost, S., Samadi, F., **Jafari, S. M.**, Ramezanzpour, S. S., Hassani, S. and Ganji, F. (2019). "Application of nanoencapsulated silymarin to improve its antioxidant and hepatoprotective activities against carbon tetrachloride-induced oxidative stress in broiler chickens." Livestock Science **228**: 177-186.
159. Farajzadeh Alan, D., Naeli, M. H., Naderi, M., **Jafari S. M.** and Tavakoli, H. R. (2019). "Production of *Trans*-free fats by chemical interesterified blends of palm stearin and sunflower oil." Food Science & Nutrition **7**(11): 3722-3730.
160. Abbasi, F., Samadi, F., **Jafari, S. M.**, Ramezanzpour S. and Shams Shargh M. (2019). "Production of Omega-3-Enriched Meat through Feeding Broilers with Ultrasonicated Flaxseed Oil Nanoemulsions: Performance, Serum Composition, Physicochemical Properties and Oxidative Stability." Iranian Journal of Applied Animal Science **9**(3): 487-496.
161. **Jafari, S. M.**, Masoudi, S. and Bahrami, A. (2019). "A Taguchi approach production of spray-dried whey powder enriched with nanoencapsulated vitamin D₃." Drying Technology **37**(16): 2059-2071.
162. Bagheri, M., **Jafari, S. M.** and Eikani, M. H. (2019). "Development of ternary nanoadsorbent composites of graphene oxide, activated carbon, and zero-valent iron nanoparticles for food applications." Food Science & Nutrition **7**(9): 2827-2835.
163. Ganje, M., **Jafari, S. M.**, Tamadon, A. M., Niakosari, M. and Maghsoudlou, Y. (2019). "Mathematical and fuzzy modeling of limonene release from amylose nanostructures and evaluation of its release kinetics." Food Hydrocolloids **95**: 186-194.
164. **Jafari, S. M.**, Vakili, S. and Dehnad, D. (2019). "Production of a Functional Yogurt Powder Fortified with Nanoliposomal Vitamin D Through Spray Drying." Food and Bioprocess Technology **12**(7): 1220-1231.
165. Joz Majidi, H., Babaei, A., Arab Bafrani, Z., Shahrpour, D., Zabihi, E. and **Jafari, S. M.** (2019). "Investigating the best strategy to diminish the toxicity and enhance the antibacterial activity of graphene oxide by chitosan addition." Carbohydrate Polymers **225**: 115220.
166. Sarabandi, K., **Jafari, S. M.**, Mahoonak, A. S. and Mohammadi, A. (2019). "Application of gum Arabic and maltodextrin for encapsulation of eggplant peel extract as a natural antioxidant and color source." International Journal of Biological Macromolecules **140**: 59-68.
167. Rajabi, H., **Jafari, S. M.**, Rajabzadeh, G., Sarfarazi, M. and Sedaghati, S. (2019). "Chitosan-gum Arabic complex nanocarriers for encapsulation of saffron bioactive components." Colloids and Surfaces A: Physicochemical and Engineering Aspects **578**: 123644.
168. Rezaei, A., Varshosaz, J., Fesharaki, M., Farhang, A. and **Jafari, S. M.** (2019). "Improving the solubility and in vitro cytotoxicity (anticancer activity) of ferulic acid by loading it into cyclodextrin nanosponges." International journal of nanomedicine **14**: 4589-4599.
169. Jamalabadi, M., Saremnezhad, S., Bahrami, A. and **Jafari, S. M.** (2019). "The influence of bath and probe sonication on the physicochemical and microstructural properties of wheat starch." Food Science & Nutrition **7**(7): 2427-2435.
170. Hemmati, F., **Jafari, S. M.** and Taheri, R. A. (2019). "Optimization of homogenization-sonication technique for the production of cellulose nanocrystals from cotton linter." International Journal of Biological Macromolecules **137**: 374-381.
171. Sarfarazi, M., **Jafari, S. M.**, Rajabzadeh, G. and Feizi, J. (2019). "Development of an environmentally-friendly solvent-free extraction of saffron bioactives using subcritical water." LWT **114**: 108428.
172. **Jafari, S. M.**, Mahdavee Khazaei, K. and Assadpour, E. (2019). "Production of a natural color through microwave-assisted extraction of saffron tepal's anthocyanins." Food Science & Nutrition **7**(4): 1438-1445.
173. Sarabandi, K., **Jafari, S. M.**, Mohammadi, M., Akbarbaglu, Z., Pezeshki, A. and Khakbaz Heshmati, M. (2019). "Production of reconstitutable nanoliposomes loaded with flaxseed protein hydrolysates: Stability and characterization." Food Hydrocolloids **96**: 442-450.
174. Falsafi, S. R., Maghsoudlou, Y., Aalami, M., **Jafari, S. M.** and Raeisi, M. (2019). "Physicochemical and morphological properties of resistant starch type 4 prepared under ultrasound and conventional conditions and their *in-vitro* and *in-vivo* digestibilities." Ultrasonics Sonochemistry **53**: 110-119.

175. Yousefdoost, S., Samadi, F., **Jafari, S. M.**, Ramezanpour, S. S., Ganji, F. and Hassani, S. (2019). "Evaluation of Nano and Microcapsules of Silymarin in Simulated Gastrointestinal Conditions for Animal Target Delivery." Iranian Journal of Applied Animal Science **9**(2): 247-255.
176. Tavakoli, H. R., Naderi, M., **Jafari S. M.**, and Naeli, M. H. (2019). "Postmarketing surveillance of the oxidative stability for cooking oils, frying oils, and vanaspati supplied in the retail market." Food Science & Nutrition **7**(4): 1455-1465.
177. Akbarbaglu, Z., **Jafari, S. M.**, Sarabandi, K., Mohammadi, M., Khakbaz Heshmati, M. and Pezeshki, A. (2019). "Influence of spray drying encapsulation on the retention of antioxidant properties and microstructure of flaxseed protein hydrolysates." Colloids and Surfaces B: Biointerfaces **178**: 421-429.
178. Gharehbaglou, P., **Jafari, S. M.**, Hamishekar, H., Homayouni, A. and Mirzaei, H. (2019). "Pectin-whey protein complexes vs. small molecule surfactants for stabilization of double nano-emulsions as novel bioactive delivery systems." Journal of Food Engineering **245**: 139-148.
179. Gharehbaglou, P., **Jafari, S. M.**, Homayouni, A., Hamishekar, H. and Mirzaei, H. (2019). "Fabrication of double W1/O/W2 nano-emulsions loaded with oleuropein in the internal phase (W1) and evaluation of their release rate." Food Hydrocolloids **89**: 44-55.
180. Abbasi, F., Samadi, F., **Jafari, S. M.**, Ramezanpour S. and Shams-Shargh, M. (2019). "Production of omega-3 fatty acid-enriched broiler chicken meat by the application of nanoencapsulated flaxseed oil prepared via ultrasonication." Journal of Functional Foods **57**: 373-381.
181. Hosseini, H., Ghorbani, M., **Jafari, S. M.** and Sadeghi Mahoonak, A. (2019). "Encapsulation of EPA and DHA concentrate from Kilka fish oil by milk proteins and evaluation of its oxidative stability." Journal of Food Science and Technology **56**(1): 59-70.
182. Sarabandi, K., Mahoonak, A. S., Hamishekar, H., Ghorbani, M. and **Jafari, S. M.** (2019). "Protection of casein hydrolysates within nanoliposomes: Antioxidant and stability characterization." Journal of Food Engineering **251**: 19-28.
183. Aghaei, Z., **Jafari S. M.** and Dehnad, D. (2019). "Effect of Different Drying Methods on the Physicochemical Properties and Bioactive Components of Saffron Powder." Plant Foods for Human Nutrition **74**(2): 171-178.
184. Soleimanifar, M., Niazmand, R. and **Jafari, S. M.** (2019). "Evaluation of oxidative stability, fatty acid profile, and antioxidant properties of black cumin seed oil and extract." Journal of Food Measurement and Characterization **13**(1): 383-389.
185. Vahedikia, N., Garavand, F., Tajeddin, B., Cacciotti, I., **Jafari, S. M.**, Omid, T. and Zahedi, Z. (2019). "Biodegradable zein film composites reinforced with chitosan nanoparticles and cinnamon essential oil: Physical, mechanical, structural and antimicrobial attributes." Colloids and Surfaces B: Biointerfaces **177**: 25-32.
186. Moghbeli, S., **Jafari, S. M.**, Maghsoudlou, Y. and Dehnad, D. (2019). "Influence of pectin-whey protein complexes and surfactant on the yield and microstructural properties of date powder produced by spray drying." Journal of Food Engineering **242**: 124-132.
187. Mokhtari, S., **Jafari, S. M.** and Khomeiri, M. (2019). "Survival of encapsulated probiotics in pasteurized grape juice and evaluation of their properties during storage." Food Science and Technology International **25**(2): 120-129.
188. Esfahani, R., **Jafari, S. M.**, Jafarpour, A. and Dehnad, D. (2019). "Loading of fish oil into nanocarriers prepared through gelatin-gum Arabic complexation." Food Hydrocolloids **90**: 291-298.
189. Abbasi, F., Samadi, F., **Jafari, S. M.**, Ramezanpour, S. and Shams Shargh, M. (2019). "Ultrasound-assisted preparation of flaxseed oil nanoemulsions coated with alginate-whey protein for targeted delivery of omega-3 fatty acids into the lower sections of gastrointestinal tract to enrich broiler meat." Ultrasonics Sonochemistry **50**: 208-217.
190. Aghaei, Z., **Jafari, S. M.**, Dehnad, D., Ghorbani, M. and Hemmati, K. (2018). "Refractance-window as an innovative approach for the drying of saffron petals and stigma." Journal of Food Process Engineering **41**(7): e12863.
191. Bakhshabadi, H., Mirzaei, H., Ghodsvai, A., **Jafari, S. M.** and Ziaifar, A. M. (2018). "The influence of pulsed electric fields and microwave pretreatments on some selected physicochemical properties of oil extracted from black cumin seed." Food Science & Nutrition **6**(1): 111-118.
192. Hemmati, F., **Jafari, S. M.**, Kashaninejad, M. and Barani Motlagh, M. (2018). "Synthesis and characterization of cellulose nanocrystals derived from walnut shell agricultural residues." International Journal of Biological Macromolecules **120**: 1216-1224.
193. Tavakoli, H., Hosseini, O., **Jafari, S. M.** and Katouzian, I. (2018). "Evaluation of physicochemical and antioxidant properties of yogurt enriched by olive leaf phenolics within nanoliposomes." Journal of Agricultural and Food Chemistry **66**(35): 9231-9240.
194. Ganje, M., **Jafari, S. M.**, Farzaneh, V. and Malekjani, M. (2018). "Kinetics modelling of color deterioration during thermal processing of tomato paste with the use of response surface methodology." Heat and Mass Transfer, **54**(12): 3663-3671.
195. Sarabandi, K., Sadeghi Mahoonak, A., Hamishekar, H., Ghorbani, M. and **Jafari, S. M.** (2018). "Microencapsulation of casein hydrolysates: Physicochemical, antioxidant and microstructure properties." Journal of Food Engineering **237**: 86-95.
196. Feng, J., Chen, Q., Wu, W., **Jafari, S. M.** and McClements, D. J. (2018). "Formulation of oil-in-water emulsions for pesticide applications: impact of surfactant type and concentration on physical stability." Environmental Science and Pollution Research **25**(22): 21742-21751.
197. Rostami, H., Dehnad, D., **Jafari, S. M.**, and Tavakoli, H. R. (2018). "Evaluation of physical, rheological, microbial and organoleptic properties of meat powder produced by refractance-window drying" Drying Technology **36**(9): 1076-1085.
198. Salimi, A., Maghsoudlou, Y. and **Jafari, S.M.** (2018). "Effect of emulsion stability and spray drying conditions on physicochemical characteristics of encapsulated powders" Latin American Applied Research **48**: 95-100.
199. Feng, J., Yang, G., Zhang, S., Liu, Q., **Jafari S. M.** and McClements D. J. (2018). "Fabrication and characterization of β -cypermethrin-loaded PLA microcapsules prepared by emulsion-solvent evaporation: loading and release properties" Environmental Science and Pollution Research, **25**(14): 13525-13535.
200. **Jafari, S. M.**, Saramnejad F. and Dehnad D. (2018). "Designing and application of a shell and tube heat exchanger for nanofluid thermal processing of liquid food products" Journal of Food Process Engineering **41**(3): e12658.
201. Hosseini, H., Ghorbani, M., **Jafari S. M.** and Mahoonak A. S. (2018). "Investigating the effect of lipase from *Candida rugosa* on the production of EPA and DHA concentrates from Kilka fish (*Clupeonella cultiventris caspia*)" LWT **93**: 534-541.
202. Jabbari, S. S., **Jafari, S. M.**, Dehnad D. and Shahidi S. A. (2018). "Changes in lycopene content and quality of tomato juice during thermal processing by a nanofluid heating medium" Journal of Food Engineering **230**: 1-7.
203. Hashemi Tabatabaei, R., **Jafari, S. M.**, Mirzaei, H., Nafchi A. M. and Dehnad D. (2018). "Preparation and characterization of nano-SiO₂ reinforced gelatin-karrageenan biocomposites" International Journal of Biological Macromolecules **111**: 1091-1099.
204. **Jafari, S. M.**, Bahrami, I., Dehnad D. and Shahidi S. A. (2018). "The influence of nanocellulose coating on saffron quality during storage" Carbohydrate Polymers **181**: 536-542.

205. Jafari, S. M., Amanjani, M., Ganjeh, M., Katouzian I. and Sharifi N. (2018). "The influence of storage time and temperature on the corrosion and pressure changes within tomato paste cans with different filling rates" Journal of Food Engineering **228**: 32-37.
206. Jafari, S. M., Ghanbari, V., Dehnad, D., and Ganje, M. (2018). "Neural networks modeling of *Aspergillus flavus* growth in tomato paste containing microencapsulated olive leaf extract" Journal of Food Safety **38**(1): e12396.
207. Ghasemi, S., Jafari, S. M., Assadpour, E., and Khomeiri, M. (2018). "Nanoencapsulation of d-limonene within nanocarriers produced by pectin-whey protein complexes" Food Hydrocolloids **77**: 152-162.
208. Jalili, F., Jafari, S. M., Emam-Djomeh, Z., Malekjani, N., and Farzaneh, V. (2018). "Optimization of Ultrasound-Assisted Extraction of Oil from Canola Seeds with the Use of Response Surface Methodology" Food Analytical Methods **11**(2): 598-612.
209. Rahbari, M., Hamdami, N., Mirzaei, H., Jafari, S. M., Kashaninejad, M., and Khomeiri, M. (2018). "Effects of high voltage electric field thawing on the characteristics of chicken breast protein" Journal of Food Engineering **216**(Supplement C): 98-106.
210. Ganjeh, M., Jafari, S. M., Amanjani, M., and Katouzian, I. (2017). "Modeling corrosion trends in tin-free steel and tinplate cans containing tomato paste via adaptive-network-based fuzzy inference system" Journal of Food Process Engineering **40**(6): e12580.
211. Jafari, S. M., Ganje, M., Dehnad, D., Ghanbari, V., and Hajitabar, J. (2017). "Arrhenius equation modeling for the shelf life prediction of tomato paste containing a natural preservative" Journal of the Science of Food and Agriculture **97**(15): 5216-5222.
212. Raei, M., Shahidi, F., Farhoodi, M., Jafari, S. M., and Rafe, A. (2017). "Application of whey protein-pectin nano-complex carriers for loading of lactoferrin" International Journal of Biological Macromolecules **105**(Part 1): 281-291.
213. Ghasemi, S., Jafari, S. M., Assadpour, E., and Khomeiri, M. (2017). "Production of pectin-whey protein nano-complexes as carriers of orange peel oil" Carbohydrate Polymers **177**(Supplement C): 369-377.
214. Shamsara, O., Jafari, S. M., and Muhidinov, Z. K. (2017). "Development of double layered emulsion droplets with pectin/ β -lactoglobulin complex for bioactive delivery purposes" Journal of Molecular Liquids **243**(Supplement C): 144-150.
215. Shamsara, O., Jafari, S. M. and Muhidinov, Z. K. (2017). "Fabrication, characterization and stability of oil in water nano-emulsions produced by apricot gum-pectin complexes." International Journal of Biological Macromolecules **103**(Supplement C): 1285-1293.
216. Mokhtari, S., Jafari, S. M., Khomeiri, M., Maghsoudlou, Y. and Ghorbani, M. (2017). "The cell wall compound of *Saccharomyces cerevisiae* as a novel wall material for encapsulation of probiotics" Food Research International **96**: 19-26.
217. Jafari, S. M., Saremnejad, F. and Dehnad, D. (2017). "Nano-fluid thermal processing of watermelon juice in a shell and tube heat exchanger and evaluating its qualitative properties" Innovative Food Science & Emerging Technologies **42**(Supplement C): 173-179.
218. Faridi Esfanjani, A., Jafari, S. M. and Assadpour, E. (2017). "Preparation of a multiple emulsion based on pectin-whey protein complex for encapsulation of saffron extract nanodroplets" Food Chemistry **221**: 1962-1969.
219. Bakhshabadi, H., Mirzaei, H., Ghodsvai, A., Jafari, S. M., Ziaifar, A. M. and Farzaneh, V. (2017). "The effect of microwave pretreatment on some physico-chemical properties and bioactivity of Black cumin seeds' oil" Industrial Crops and Products **97**: 1-9.
220. Azizi, D., Jafari, S. M., Mirzaei, H. and Dehnad, D. (2017). "The Influence of Refractance Window Drying on Qualitative Properties of Kiwifruit Slices" International Journal of Food Engineering **13**(2): 1-9.
221. Jafari, S. M., Ghalegi Ghalenoei, M. and Dehnad, D. (2017). "Influence of spray drying on water solubility index, apparent density, and anthocyanin content of pomegranate juice powder" Powder Technology **311**: 59-65.
222. Jafari, S. M., Jabari, S. S., Dehnad, D., and Shahidi, S. A. (2017). "Effects of thermal processing by nanofluids on vitamin C, total phenolics and total soluble solids of tomato juice" Journal of Food Science and Technology **54**(3): 679-686.
223. Jafari, S. M., Saremnejad, F., Dehnad, D. and Rashidi, A. M. (2017). "Evaluation of performance and thermophysical properties of alumina nanofluid as a new heating medium for processing of food products" Journal of Food Process Engineering **40**(5): 1-9.
224. Mokhtari, S., Jafari, S. M. and Assadpour, E. (2017). "Development of a nutraceutical nano-delivery system through emulsification/internal gelation of alginate" Food Chemistry **229**: 286-295.
225. Mokhtari, S., M. Khomeiri, M., Jafari, S. M., Maghsoudlou, Y. and Ghorbani, M. (2017). "Descriptive analysis of bacterial profile, physicochemical and sensory characteristics of grape juice containing *Saccharomyces cerevisiae* cell wall-coated probiotic microcapsules during storage" International Journal of Food Science & Technology **52**(4): 1042-1048.
226. Mehrnia, M. A., Jafari, S. M., Makhmal-Zadeh, B. S., and Maghsoudlou, Y. (2017). "Rheological and release properties of double nano-emulsions containing crocin prepared with Angum gum, Arabic gum and whey protein" Food Hydrocolloids **66**: 259-267.
227. Ghorbanzade, T., Jafari, S. M., Akhavan, S., & Hadavi, R. (2017). "Nano-encapsulation of fish oil in nano-liposomes and its application in fortification of yogurt" Food Chemistry **216**: 146-152.
228. Assadpour, E., and Jafari, S. M. (2017). "Spray Drying of Folic Acid within Nano-Emulsions; Optimization by Taguchi Approach" Drying Technology **35**(9): 1152-1160.
229. Jafari, S. M., Jabari, S. S., Dehnad, D., and Shahidi, S. A. (2017). "Heat Transfer Enhancement in Thermal Processing of Tomato Juice by Application of Nanofluids" Food and Bioprocess Technology **10**(2): 307-316.
230. Assadpour, E., Jafari, S. M., and Maghsoudlou, Y. (2017). "Evaluation of folic acid release from spray dried powder particles of pectin-whey protein nano-capsules" International Journal of Biological Macromolecules **95**: 238-247.
231. Assadpour, E., Maghsoudlou, Y., Jafari, S. M., Ghorbani, M., and Aalami, M. (2016). "Evaluation of Folic Acid Nano-encapsulation by Double Emulsions" Food and Bioprocess Technology **9**(12): 2024-2032.
232. Assadpour, E., Maghsoudlou, Y., Jafari, S. M., Ghorbani, M., and Aalami, M., (2016). "Optimization of folic acid nano-emulsification and encapsulation by maltodextrin-whey protein double emulsions" International Journal of Biological Macromolecules **86**: 197-207.
233. Mohammadi, A., Jafari, S. M., Assadpour, E. and Faridi, A., (2016). "Nano-encapsulation of olive leaf phenolic compounds through WPC-pectin complexes and evaluating their release rate" International Journal of Biological Macromolecules **82**: 816-822.
234. Mehrnia, M.A., Jafari, S. M., Makhmal-zadeh, B.S., and Maghsoudlou, Y. (2016). "Crocin loaded nano-emulsions: Factors affecting emulsion properties in spontaneous emulsification" International Journal of Biological Macromolecules **84**: 261-267.
235. Jafari, S. M., Khazaei, K., and Hemmati Kakhki, A. (2016). "Microencapsulation of saffron petal anthocyanins with cress seed gum compared with Arabic gum through freeze drying" Carbohydrate Polymers **140**: 20-25.

236. Jafari, S.M., Azizi, D., Mirzaei, H.A., and Dehnad, D. (2016). "Comparing quality characteristics of oven-dried and refractance window-dried kiwifruits" *Journal of Food Processing and Preservation* **40**(3): 362-372.
237. Akhavan, S., Jafari, S. M., Assadpoor, E. and Dehnad, D. (2016). "Microencapsulation optimization of natural anthocyanins with maltodextrin, gum Arabic and gelatin" *International Journal of Biological Macromolecules* **85**: 379-385.
238. Ganje, M., Jafari, S.M., Dusti, A., Dehnad, D., Amanjani, M., and Ghanbari, V. (2016). "Modeling quality changes in tomato paste containing microencapsulated olive leaf extract by accelerated shelf life testing" *Food and Bioproducts Processing* **97**: 12-19.
239. Shabani, J., Sarfarazi, M., Mirzaei, H., and Jafari, S. M. (2016). "Influence of the sunflower oil content, cooking temperature and cooking time on the physical and sensory properties of spreadable cheese analogues based on UF white-brined cheese" *International Journal of Dairy Technology* **69**(4): 576-584.
240. Jafari, S.M., Ganje, M., Dehnad, D., and Ghanbari, V. (2016). "Mathematical, Fuzzy Logic and Artificial Neural Networks modeling techniques to predict the drying kinetics of onion" *Journal of Food Processing and Preservation* **40**(2): 329-339.
241. Khazaei, K., Jafari, S.M., Ghorbani, M., and Hemmati Kakhki, A. (2016). "Optimization of anthocyanin extraction from saffron petals with response surface methodology" *Food Analytical Methods* **9**(7): 1993-2001.
242. Akhavan, S., Jafari, S. M., Assadpoor, E. and Ghorbani, M. (2016). "Storage stability of encapsulated barberry's anthocyanin and its application in jelly formulation" *Journal of Food Engineering* **181**: 59-66.
243. Mohammadi, A., Jafari, S.M., Faridi, A., and Akhavan, S. (2016). "Application of nano-encapsulated olive leaf extract in controlling the oxidative stability of soybean oil" *Food Chemistry* **190**: 513-519.
244. Jafari, S.M., Ghanbari, V., Ganje, M., and Dehnad, D. (2016). "Modeling the Drying Kinetics of Green Bell Pepper in a Heat Pump Assisted Fluidized Bed Dryer" *Journal of Food Quality* **39**: 98-108.
245. Bahmani, A., Jafari, S.M., Shahidi, S.A., and Dehnad, D. (2016). "Mass Transfer Kinetics of Eggplant during Osmotic Dehydration by Neural Networks" *Journal of Food Processing and Preservation* **40**(5): 815-827.
246. Shamsara, O., Muhidinov, Z.K., Jafari, S.M., Bobokalonov, J., Jonmurodov, A. Kumpugdee-Vullrath, M., and Taghvaei, M. (2015). "Effect of ultrasonication, pH and heating on stability of apricot gum-lactoglobuline two layer nanoemulsions" *International Journal of Biological Macromolecules* **81**: 1019-1025.
247. Rajabi, H., Ghorbani, M., Jafari, S.M., Sadeghi, A.R., and Rajabzadeh, G. (2015). "Retention of saffron bioactive components by spray drying encapsulation using maltodextrin, gum Arabic and gelatin as wall materials" *Food Hydrocolloids* **51**: 327-337.
248. Raei, M., Rajabzadeh, G., Zibaei, S., Jafari, S.M., and Sani, A.M. (2015). "Nano-encapsulation of isolated lactoferrin from camel milk by calcium alginate and evaluation of its release" *International Journal of Biological Macromolecules* **79**: 669-673.
249. Jafari, S.M., Khanzadi, M., Mirzaei, H.A., Dehnad, D., Khodaeian, F., and Maghsoudlou, Y., (2015). "Hydrophobicity, thermal and micro-structural properties of whey protein concentrate-pullulan-beeswax films" *International Journal of Biological Macromolecules* **80**: 506-511.
250. Faridi, A., Jafari, S.M., Assadpoor, E., and Mohammadi, A. (2015). "Nano-encapsulation of saffron extract through double-layered multiple emulsions of pectin and whey protein concentrate" *Journal of Food Engineering* **165**: 149-155.
251. Hoseini, S.A., Jafari, S.M., Mirzaei, H.A., Asghari, A., and Akhavan, S., (2015). "Application of image processing to assess emulsion stability and emulsification properties of Arabic gum" *Carbohydrate Polymers* **126**: 1-8.
252. Khanzadi, M., Jafari, S.M., Mirzaei, H.A., Khodaeian, F., Maghsoudlou, Y., and Dehnad, D., (2015). "Physical and mechanical properties in biodegradable films of whey protein concentrate-pullulan by application of beeswax" *Carbohydrate Polymers* **118**: 24-29.
253. Sarfarazi, M., Jafari, S.M., and Rajabzadeh, Q., (2015). "Extraction optimization of saffron nutraceuticals through response surface methodology" *Food Analytical Methods* **8**: 2273-2285.
254. Salimi, A., Maghsoudlou, Y., Jafari, S.M., Kashaninejad, M., Sadeghi, A.R. and Ziaieifar, A.M. (2015). "Preparation of Lycopene Emulsions by Whey Protein Concentrate and Maltodextrin and Optimization by Response Surface Methodology" *Journal of Dispersions Science and Technology* **36**(2): 274-283.
255. Taghvaei, M., Jafari, S. M., Nowruzies, S. and Alishah, O. (2015). "The influence of cooking process on the microwave-assisted extraction of cottonseed oil" *Journal of Food Science and Technology* **52**(2): 1138-1144.
256. Pourashouri, P., Shabanpour, B., Razavi, S.H., Jafari, S.M., Shabani, A., and Aubourg, S.P. (2014). "Impact of wall materials on physicochemical properties of microencapsulated fish oil by spray drying" *Food and Bioprocess Technology* **7**(8): 2354-2365.
257. Daraei Garmakhany, A., Mirzaei, H.O., Maghsoudlou, Y., Kashaninejad, M. and Jafari, S.M. (2014). "Production of low fat french-fries with single and multi-layer hydrocolloid coatings" *Journal of Food Science and Technology* **51**(7): 1334-1341.
258. Pourashouri, P., Shabanpour, B., Razavi, S.H., Jafari, S.M., Shabani, A., and Aubourg, S.P. (2014). "Oxidative stability of spray-dried microencapsulated fish oils with different wall materials" *Journal of Aquatic Food Product Technology* **23**(6): 567-578.
259. Dehnad, D., Mirzaei, H.A., Emamjomee, Z., and Jafari, S.M. (2014). "Thermal and antimicrobial properties of chitosan-nanocellulose films for extending shelf life of ground meat" *Carbohydrate Polymers* **109**: 148-154.
260. Hashemi Shahraki, M., Jafari, S.M., Mashkour, M. and Esmaeilzadeh, E. (2014). "Optimization of closed-cycle fluidized bed drying of sesame seeds using response surface methodology and genetic algorithms" *International Journal of Food Engineering* **10**(1): 167-182.
261. Taghvaei, M., Jafari, S. M., Nowruzies, S. and Alishah, O. (2014). "Optimization of microwave-assisted extraction of cottonseed oil and evaluation of its oxidative stability and physicochemical properties" *Food Chemistry* **160**: 90-97.
262. Dehnad, D., Emamjomee, Z., Mirzaei, H.A., and Jafari, S.M. (2014). "Optimisation of physical and mechanical properties for chitosan-nanocellulose biocomposites" *Carbohydrate Polymers* **105**: 222-228.
263. Gharib Zahedi, S.M.T., Emam Djomeh, Z., Razavi, S.H., and Jafari, S. M. (2014). "Mechanical Behavior of Lentil Seed in Relation to their Physicochemical and Microstructural Characteristics" *International Journal of Food Properties* **17**(3): 545-558.
264. Khazaei, K., Jafari, S.M., Ghorbani, M., and Hemmati Kakhki, A. (2014). "Application of maltodextrin and gum Arabic in microencapsulation of saffron petal's anthocyanins and evaluating their storage stability and color" *Carbohydrate Polymers* **105**: 57-62.
265. Taghvaei, M., Jafari, S. M., Sadeghi Mahoonak, A.R., Mehregan, A., Rahmanian, N., Hajitabar, J. and Meshkinfar, N. (2014). "The effect of natural antioxidants extracted from plant and animal resources on the oxidative stability of soybean oil" *LWT* **56**(1): 124-130.
266. Malekjani, N., Jafari, S.M., Rahmati, M.H., Esmaeilzadeh, E., and Mirzaei, H.A. (2013). "Evaluation of thin-layer drying models and artificial neural networks for describing drying kinetics of canola seed in a heat pump assisted fluidized bed dryer" *International Journal of Food Engineering* **9**(4): 375-384.

267. Jafari, S. M., Beheshti, P., and Assadpoor, E. (2013). "Emulsification properties of a novel hydrocolloid (Angum gum) for d-limonene droplets compared with Arabic gum" International Journal of Biological Macromolecules **61**(10): 182-188.
268. Tajik, S., Maghsoudlou, Y., Khodaeian, F., Jafari, S.M., Ghasemlou, M. and Aalami, M. (2013). "Soluble soybean polysaccharide: A new carbohydrate to make a biodegradable film for sustainable green packaging" Carbohydrate Polymers **97**(2): 817-824.
269. Raei, M., and Jafari, S. M. (2013). "Influence of modified atmospheric conditions and different packaging materials on pistachio (*Pistacia vera* L.) oil quality" Latin American Applied Research **43**(1): 43-46.
270. Jafari, S. M., Beheshti, P., and Assadpoor, E. (2012). "Rheological behavior and stability of d-limonene emulsions made by a novel hydrocolloid (Angum gum) compared with Arabic gum" Journal of Food Engineering **109**(1): 1-8.
271. Rafiee, Z., Jafari, S.M., Alami, M., and Khomeiri, M. (2012). "Antioxidant Effect of Microwave-assisted Extracts of Olive Leaves on Sunflower Oil". Journal of Agricultural Science and Technology. **14**(4): 1497-1509.
272. Gharib Zahedi, S.M.T., Mousavi, S. M., Jafari, S.M., and Faraji, K. (2011). "Proximate composition, mineral contents, and fatty acids profile of two varieties of lentil seeds cultivated in Iran" Chemistry of Natural Compounds **47**(6): 976-978.
273. Rafiee, Z., Jafari, S.M., Alami, M., and Khomeiri, M. (2011). "Microwave-assisted Extraction of phenolic compounds from olive leaves; a comparison with maceration". The Journal of Animal & Plant Sciences. **21**(4): 46-51.
274. Gharib Zahedi, S.M.T., Ghasemlou, M., Razavi, S., Jafari, S.M., and Faraji, K. (2011). "Moisture-dependent physical properties and biochemical composition of red lentil seeds" International Agrophysics **25**(4): 343-347.
275. SalimiHizaji, A., Maghsoudlou, Y. and Jafari, S. M. (2011). "Effect of Water Temperature, Variety and Shelf Life on Rehydration Kinetics of Microwave Dried Potato Cubes" Latin American Applied Research **41**(3): 249-254.
276. Mortazavi, S.V., Eikani, M.H., Mirzaei, H.O., Jafari, S.M. and Golmohammad, F. (2010). "Extraction of essential oils from *Buniumpersicum* Boiss. using superheated water" Food and Bioproducts Processing **88**(1): 41-46.
277. Salimi Hizaji, A., Maghsoudlou, Y. and Jafari, S.M. (2010). "Application of Peleg model to study effect of water temperature and storage time on rehydration kinetics of air dried potato cubes" Latin American Applied Research **40**(2): 131-136.
278. Jafari, S.M., Assadpoor, E., He, Y., & Bhandari B. (2008). Nanoparticle encapsulation of fish oil by spray drying. Food Research International **41**(2):172-183.
279. Jafari, S.M., He, Y., & Bhandari B. (2007). "Role of powder particle size on encapsulation efficiency of oils during spray drying" Drying Tech **25**(6):1081-89.
280. Jafari, S.M., He, Y., and Bhandari B. (2007). "Encapsulation of nano-particles of d-limonene by spray drying- role of emulsifiers and emulsifying techniques" Drying Technology **25**(6): 1069-1079.
281. Jafari, S.M., He, Y., and Bhandari B. (2007). "Effectiveness of encapsulating biopolymers to produce sub-micron emulsions by high energy emulsification techniques" Food Research International **40**(7): 862-873.
282. Jafari, S.M., He, Y., and Bhandari B. (2007). "Optimization of nano-emulsions production by microfluidization. " European Food Res Tech **225**: 733-741.
283. Jafari, S.M., He, Y., and Bhandari B. (2007). "Production of sub-micron emulsions by ultrasound and microfluidization techniques" Journal of Food Engineering **82**(4): 478-488.
284. Jafari, S.M., He, Y., and Bhandari B. (2006). "Nano-emulsion production by sonication and microfluidization- A comparison." International Journal of Food Properties **9**(3): 475-485.

Review Papers

1. Hashemi, B., E. Assadpour, F. Zhang and **S. M. Jafari** (2025). "Interactions between β -lactoglobulin and polyphenols: Mechanisms, properties, characterization, and applications." Advances in Colloid and Interface Science **339**: 103424.
2. Tavassoli, M., W. Zhang, E. Assadpour, F. Zhang and **S. M. Jafari** (2025). "Self-healing packaging films/coatings for food applications; an emerging strategy." Advances in Colloid and Interface Science **339**: 103423.
3. Abedi-Firoozjah, R., B. Behnam, Z. Balouch Zehi, M. Tavassoli, E. Sadeghi, E. Assadpour, F. Zhang and **S. M. Jafari** (2025). "Detection and quantification of lactoferrin: Innovations, applications, and challenges." Food Chemistry **466**: 142204.
4. Khan, F. I., S. Akhtar, M. Qamar, T. Ismail, W. Saeed, T. Esatbeyoglu and **S. M. Jafari** (2025). "A comprehensive review on guava: Nutritional profile, bioactive potential, and health-promoting properties of its pulp, peel, seeds, pomace and leaves." Trends in Food Science & Technology **156**: 104822.
5. Can Karaca, A., C. Tan, E. Assadpour and **S. M. Jafari** (2025). "Recent advances in the plant protein-polyphenol interactions for the stabilization of emulsions." Advances in Colloid and Interface Science **335**: 103339.
6. Eghbaljoo, H., M. Alizadeh Sani, I. K. Sani, S. M. Maragheh, D. K. Sain, Z. H. Jawhar, S. Pirs, A. Kadi, R. Dadkhodayi, F. Zhang and **S. M. Jafari** (2025). "Development of smart packaging halochromic films embedded with anthocyanin pigments; recent advances." Critical Reviews in Food Science and Nutrition **65**(4): 770-786.
7. Heidari-Dalfard, F., S. Tavasoli, E. Assadpour, R. Miller and **S. M. Jafari** (2025). "Surface modification of particles/nanoparticles to improve the stability of Pickering emulsions; a critical review." Advances in Colloid and Interface Science **336**: 103378.
8. Abedi-Firoozjah, R., B. Bahramian, M. Tavassoli, N. Ahmadi, S. M. A. Noori, M. Hashemi, N. Oladzadabbasabadi, E. Assadpour, F. Zhang and **S. M. Jafari** (2025). "A comprehensive review of gum-based electrospun nanofibers for food packaging: Preparation, developments, and potential applications." International Journal of Biological Macromolecules **288**: 138717.
9. Can Karaca, A., A. Rezaei, M. Qamar, E. Assadpour, T. Esatbeyoglu and **S. M. Jafari** (2025). "Lipid-based nanodelivery systems of curcumin: Recent advances, approaches, and applications." Food Chemistry **463**: 141193.
10. Hashemi, B., E. Assadpour, F. Zhang and **S. M. Jafari** (2025). "Oleo-foams and emulsion-foams as lipid-based foam systems: a review of their formulation, characterization, and applications." Critical Reviews in Food Science and Nutrition **65**(4): 787-810.
11. Ashaolu, T. J., T. Malik, R. Soni, M. A. Prieto and **S. M. Jafari** (2025). "Extremophilic Microorganisms as a Source of Emerging Enzymes for the Food Industry: A Review." Food Science & Nutrition **13**(1): e4540.
12. Sadeghi, A., A. Can Karaca, M. Ebrahimi, E. Assadpour and **S. M. Jafari** (2024). "The 3D printed probiotic products; an emerging category of the functional foods for the next-generations." Trends in Food Science & Technology **148**: 104526.
13. Rafieian, F., R. Amani, A. Rezaei, A. C. Karaça and **S. M. Jafari** (2024). "Exploring fennel (*Foeniculum vulgare*): Composition, functional properties, potential health benefits, and safety." Critical Reviews in Food Science and Nutrition **64**(20): 6924-6941.
14. Abedi-Firoozjah, R., H. Ebdali, M. Soltani, P. Abdolahi-Fard, M. Heydari, E. Assadpour, M. Azizi-Lalabadi, F. Zhang and **S. M. Jafari** (2024). "Nanomaterial-based sensors for the detection of pathogens and microbial toxins in the food industry; a review on recent progress." Coordination Chemistry Reviews **500**: 215545.
15. Abedi-Firoozjah, R., M. Alizadeh-Sani, L. Zare, O. Rostami, S. Azimi Salim, E. Assadpour, M. Azizi-Lalabadi, F. Zhang, X. Lin and **S. M. Jafari** (2024). "State-of-the-art nanosensors and kits for the detection of antibiotic residues in milk and dairy products." Advances in Colloid and Interface Science **328**: 103164.
16. Dehnad, D., B. Emadzadeh, B. Ghorani, G. Rajabzadeh, M. S. Kharazmi and **S. M. Jafari** (2024). "Nano-vesicular carriers for bioactive compounds and their applications in food formulations." Critical Reviews in Food Science and Nutrition **64**(16): 5583-5602.
17. Abedini, A., S. Sohravandi, P. Sadighara, H. Hosseini, M. Farhoodi, E. Assadpour, M. Alizadeh Sani, F. Zhang, S. Seyyedi-Mansour and **S. M. Jafari** (2024). "Personalized nutrition with 3D-printed foods: A systematic review on the impact of different additives." Advances in Colloid and Interface Science **328**: 103181.
18. Ansari, F., C. C. Lee, A. Rashidimehr, S. Eskandari, T. J. Ashaolu, E. Mirzakhani, H. Pourjafar and **S. M. Jafari** (2024). "The Role of Probiotics in Improving Food Safety: Inactivation of Pathogens and Biological Toxins." Current Pharmaceutical Biotechnology **25**(8): 962-980.
19. Rehman, A., **S. M. Jafari**, A. Karim, H. A. Rasheed, E. Assadpour, M. S. Virk, Q. Liang, H. A. R. Suleria, R. Gan and X. Ren (2024). "Ultrasonically Prepared Biopolymeric Multifunctional Nanocarriers for Encapsulating Dietary Oils: Recent Developments and Food Applications." Food and Bioprocess Technology **17**(12): 4537-4574.
20. Assadpour, E., A. Can Karaça, M. Fasamanesh, S. A. Mahdavi, M. Shariat-Alavi, J. Feng, M. S. Kharazmi, A. Rehman and **S. M. Jafari** (2024). "Application of essential oils as natural biopesticides; recent advances." Critical Reviews in Food Science and Nutrition **64**(19): 6477-6497.
21. Jha, S. K., V. K. Nelson, P. R. Suryadevara, S. P. Panda, C. P. Pullaiah, M. V. Nuli, M. Kamal, M. Imran, S. Ausali, M. M. Abomughaid, R. Srivastava, R. Deka, P. Pritam, N. Gupta, H. Shyam, I. K. Singh, B. W. Pandey, S. Dewanjee, N. K. Jha and **S. M. Jafari** (2024). "Cannabidiol and neurodegeneration: From molecular mechanisms to clinical benefits." Ageing Research Reviews **100**: 102386.
22. Rostami, M., N. Beheshtizadeh, E. L. Mazaheri, G. Mirzaei, H. Andishmand, A. Mafi, Z. Esfandiari, V. Safavizadeh, E. Assadpour, M. A. Sani, H. Ahari and **S. M. Jafari** (2024). "Resveratrol-loaded nanocarriers: Characteristics, sources, health effects, recent delivery systems, and their food and biomedical applications." Food Bioscience **61**: 104845.
23. Adampourezare, M., B. Nikzad, S. Nasrollahzadeh, K. Asadpour-Zeynali, M. de la Guardia, J. Ezzati Nazhad Dolatabadi, F. Zhang and **S. M. Jafari** (2024). "Polysaccharide-based sensors and nanosensors: A review of recent progress and challenges." Microchemical Journal **204**: 110944.
24. Ashaolu, T. J., C. C. Lee, J. O. Ashaolu, O. Tarhan, H. Pourjafar and **S. M. Jafari** (2024). "Pepsin: An Excellent Proteolytic Enzyme for the Production of Bioactive Peptides." Food Reviews International **40**(7): 1875-1912.
25. Yousefi, M., H. Andishmand, E. Assadpour, A. Barzegar, M. S. Kharazmi and **S. M. Jafari** (2024). "Nanoliposomal delivery systems of natural antibacterial compounds; properties, applications, and recent advances." Critical Reviews in Food Science and Nutrition **64**(19): 6498-6511.
26. Karaca, A. C., S. Boostani, E. Assadpour, C. Tan, F. Zhang and **S. M. Jafari** (2024). "Pickering emulsions stabilized by prolamin-based proteins as innovative carriers of bioactive compounds." Advances in Colloid and Interface Science **333**: 103246.
27. Salehi, S., J. Allahverdy, H. Pourjafar, K. Sarabandi and **S. M. Jafari** (2024). "Gut Microbiota and Polycystic Ovary Syndrome (PCOS): Understanding the Pathogenesis and the Role of Probiotics as a Therapeutic Strategy." Probiotics and Antimicrobial Proteins **16**(5): 1553-1565.

28. Wang, Y., A. Rehman, **S. M. Jafari**, Q. Shehzad, L. Yu, Y. Su, G. Wu, Q. Jin, H. Zhang, H. A. R. Suleria and X. Wang (2024). "Micro/nano-encapsulation of marine dietary oils: A review on biomacromolecule-based delivery systems and their role in preventing cardiovascular diseases." *International Journal of Biological Macromolecules* **261**: 129820.
29. Siddiqui, S. A., S. Khan, N. A. Bahmid, A. A. Nagdalian, **S. M. Jafari** and R. Castro-Muñoz (2024). "Impact of high-pressure processing on the bioactive compounds of milk - A comprehensive review." *Journal of Food Science and Technology* **61**(9): 1632-1651.
30. Sadeghi, A., M. Ebrahimi, E. Assadpour and **S. M. Jafari** (2024). "Recent advances in probiotic breads; a market trend in the functional bakery products." *Critical Reviews in Food Science and Nutrition* **64**(33): 13163-13174.
31. Gao, X., H. Pourramezan, Y. Ramezan, S. Roy, W. Zhang, E. Assadpour, J. Zou and **S. M. Jafari** (2024). "Application of gums as techno-functional hydrocolloids in meat processing and preservation: A review." *International Journal of Biological Macromolecules* **268**: 131614.
32. Safaeian Laein, S., K. Samborska, A. Can Karaca, P. Mostashari, Z. Akbarbaglu, K. Sarabandi and **S. M. Jafari** (2024). "Strategies for further stabilization of lipid-based delivery systems with a focus on solidification by spray-drying." *Trends in Food Science & Technology* **146**: 104412.
33. Ashaolu, T. J., M. Zarei, H. Agrawal, M. S. Kharazmi and **S. M. Jafari** (2024). "A critical review on immunomodulatory peptides from plant sources; action mechanisms and recent advances." *Critical Reviews in Food Science and Nutrition* **64**(20): 7220-7236.
34. Rehman, A., Q. Liang, A. Karim, E. Assadpour, **S. M. Jafari**, H. A. Rasheed, M. S. Virk, A. Qayyum, H. A. Rasul Suleria and X. Ren (2024). "Pickering high internal phase emulsions stabilized by biopolymeric particles: From production to high-performance applications." *Food Hydrocolloids* **150**: 109751.
35. Agriopoulou, S., S. Smaoui, M. Chaari, T. Varzakas, A. Can Karaca and **S. M. Jafari** (2024). "Encapsulation of Probiotics within Double/Multiple Layer Beads/Carriers: A Concise Review." *Molecules* **29**(11): 2431.
36. Homayoonfal, M., N. Malekjani, V. Baeghbali, E. Ansarifar, S. Hedayati and **S. M. Jafari** (2024). "Optimization of spray drying process parameters for the food bioactive ingredients." *Critical Reviews in Food Science and Nutrition* **64**(17): 5631-5671.
37. Rafieian, F., A. Dufresne, G. Askari, A. Rezaei, H. seyedhosseini-Ghaheh and **S. M. Jafari** (2024). "Aerogels as novel ingredients: Production, properties and applications in medical, food and environmental sectors." *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **687**: 133410.
38. Abedini, A. H., N. Vakili Saatloo, M. Salimi, P. Sadighara, M. Alizadeh Sani, P. Garcia-Oliviera, M. A. Prieto, M. S. Kharazmi and **S. M. Jafari** (2024). "The role of additives on acrylamide formation in food products: a systematic review." *Critical Reviews in Food Science and Nutrition* **64**(10): 2773-2793.
39. Nejatian, M., A. P. Ghandehari Yazdi, R. Fattahi, H. Saberian, N. Bazsefidpar, E. Assadpour and **S. M. Jafari** (2024). "Improving the storage and oxidative stability of essential fatty acids by different encapsulation methods; a review." *International Journal of Biological Macromolecules* **260**: 129548.
40. Joshua Ashaolu, T., O. Joshua Olatunji, A. Can Karaca, C.-C. Lee and **S. M. Jafari** (2024). "Anti-obesity and anti-diabetic bioactive peptides: A comprehensive review of their sources, properties, and techno-functional challenges." *Food Research International* **187**: 114427.
41. Dehnad, D., B. Ghorani, B. Emadzadeh, M. Emadzadeh, E. Assadpour, G. Rajabzadeh and **S. M. Jafari** (2024). "Recent advances in iron encapsulation and its application in food fortification." *Critical Reviews in Food Science and Nutrition* **64**(33): 12685-12701.
42. Kheiriabad, S., A. Jafari, S. Namvar Aghdash, J. Ezzati Nazhad Dolatabadi, H. Andishmand and **S. M. Jafari** (2024). "Applications of Advanced Nanomaterials in Biomedicine, Pharmaceuticals, Agriculture, and Food Industry." *BioNanoScience* **14**(4): 4298-4321.
43. Boostani, S., K. Sarabandi, O. Tarhan, A. Rezaei, E. Assadpour, H. Rostamabadi, S. R. Falsafi, C. Tan, F. Zhang and **S. M. Jafari** (2024). "Multiple Pickering emulsions stabilized by food-grade particles as innovative delivery systems for bioactive compounds." *Advances in Colloid and Interface Science* **328**: 103174.
44. Mohammadian, M., M. Salami, E. Assadpour and **S. M. Jafari** (2024). "Curcumin-protein complexes: Technological and biological functionalities." *Trends in Food Science & Technology* **145**: 104372.
45. Malekjani, N., R. Karimi, E. Assadpour and **S. M. Jafari** (2024). "Control of release in active packaging/coating for food products; approaches, mechanisms, profiles, and modeling." *Critical Reviews in Food Science and Nutrition* **64**(29): 10789-10811.
46. Hashemi, B., E. Assadpour and **S. M. Jafari** (2024). "Bigels as novel carriers of bioactive compounds: Applications and research trends." *Food Hydrocolloids* **147**: 109427.
47. Karimi Sani, I., F. Mehrnoosh, N. H. Rasul, B. Hassani, H. Mohammadi, H. Gholizadeh, N. Sattari, M. Kaveh, S. M. Khodaei, M. Alizadeh Sani, H. Eghbaljoo, E. Assadpour, F. Zhang and **S. M. Jafari** (2024). "Pulsed electric field-assisted extraction of natural colorants; principles and applications." *Food Bioscience* **61**: 104746.
48. Karimi, R., M. Homayoonfal, N. Malekjani, M. S. Kharazmi and **S. M. Jafari** (2024). "Interaction between β -glucans and gut microbiota: a comprehensive review." *Critical Reviews in Food Science and Nutrition* **64**(22): 7804-7835.
49. Sadeghi, A., M. Ebrahimi, S. Shahryari, E. Assadpour and **S. M. Jafari** (2024). "Potential applications of encapsulated yeasts especially within alginate and chitosan as smart bioreactors and intelligent micro-machines." *Carbohydrate Polymer Technologies and Applications* **7**: 100513.
50. Arabmofrad, S., G. Lazzara, R. Miller and **S. M. Jafari** (2024). "Surface modification of bentonite and montmorillonite as novel nano-adsorbents for the removal of phenols, heavy metals and drug residues." *Advances in Colloid and Interface Science* **334**: 103334.
51. Hadidi, M., C. Tan, E. Assadpour and **S. M. Jafari** (2024). "Oilseed meal proteins: From novel extraction methods to nanocarriers of bioactive compounds." *Food Chemistry* **438**: 137971.
52. Alizadeh, A. M., M. Mohseni, K. Gerami, M. Gharavi-nakhjavani, M. Aminzare, H. Rastegar, E. Assadpour, F. Hashempour-baltork and **S. M. Jafari** (2024). "Electrospun Fibers Loaded with Probiotics: Fundamentals, Characterization, and Applications." *Probiotics and Antimicrobial Proteins* **16**(3): 1099-1116.
53. Karimkhani, M. M., M. Nasrollahzadeh, M. Maham, A. Jamshidi, M. S. Kharazmi, D. Dehnad and **S. M. Jafari** (2024). "Extraction and purification of α -pinene; a comprehensive review." *Critical Reviews in Food Science and Nutrition* **64**(13): 4286-4311.
54. Ghandehari-Alavijeh, S., A. Can Karaca, S. Akbari-Alavijeh, E. Assadpour, P. Farzaneh, V. Saidi and **S. M. Jafari** (2024). "Application of encapsulated flavors in food products; opportunities and challenges." *Food Chemistry* **436**: 137743.
55. Castro-Muñoz, R., A. Can Karaça, M. Saeed Kharazmi, G. Boczkaj, F. J. Hernández-Pinto, S. Anusha Siddiqui and **S. M. Jafari** (2024). "Deep eutectic solvents for the food industry: extraction, processing, analysis, and packaging applications – a review." *Critical Reviews in Food Science and Nutrition* **64**(30): 10970-10986.
56. Sadeghzadeh, R., F. Rafieian, M. Keshani, Z. Salehi and **S. M. Jafari** (2024). "Novel strategies to control the biofilm formation by *Pseudomonas aeruginosa* in the food industry." *Future Foods* **10**: 100481.
57. Ferreyra-Suarez, D., L. Paredes-Vargas, **S. M. Jafari**, O. García-Depraect and R. Castro-Muñoz (2024). "Extraction pathways and purification strategies towards carminic acid as natural-based food colorant: A comprehensive review." *Advances in Colloid and Interface Science* **323**: 103052.

58. Rashidinejad, A., C. Dima, A. Can Karaca and **S. M. Jafari** (2024). "A review on rutin-loaded nanocarriers: Fundamentals, bioavailability, application in functional foods, and challenges." *European Polymer Journal* **219**: 113385.
59. Zhang, W., A. Sadeghi, A. C. Karaca, J. Zhang and **S. M. Jafari** (2024). "Carbohydrate polymer-based carriers for colon targeted delivery of probiotics." *Critical Reviews in Food Science and Nutrition* **64**(33): 12759-12779.
60. Dehnad, D., B. Emadzadeh, B. Ghorani, E. Assadpour, N. Yang and **S. M. Jafari** (2024). "The influence of high hydrostatic pressure on different properties of legume proteins with an emphasis on soy proteins; a comprehensive review." *Food Hydrocolloids* **146**: 109188.
61. Belyagoubi-Benhammou, N., L. Belyagoubi, B. Loukidi, M. A. Mir, E. Assadpour, M. Boudghene-Stambouli, M. S. Kharazmi and **S. M. Jafari** (2024). "Bioactivity and applications of saffron floral bio-residues (tepals): a natural by-product for the food, pharmaceutical, and cosmetic industries." *Critical Reviews in Food Science and Nutrition* **64**(23): 8399-8413.
62. Mazloomi, N., B. Safari, A. Can Karaca, L. Karimzadeh, S. Moghadasi, M. Ghanbari, E. Assadpour, K. Sarabandi and **S. M. Jafari** (2024). "Loading bioactive peptides within different nanocarriers to enhance their functionality and bioavailability; in vitro and in vivo studies." *Advances in Colloid and Interface Science* **334**: 103318.
63. Hashemi, B., M. Varidi, E. Assadpour, F. Zhang and **S. M. Jafari** (2024). "Natural oleogelators for the formulation of oleogels by considering their rheological and textural perspective; a review." *International Journal of Biological Macromolecules* **259**: 129246.
64. Nejatian, M., A. P. Ghandehari Yazdi, H. Saberian, N. Bazsefidpar, A. Karimi, A. Soltani, E. Assadpour, O. S. Toker and **S. M. Jafari** (2024). "Application of Spirulina as an innovative ingredient in pasta and bakery products." *Food Bioscience* **62**: 105170.
65. Bodbodak, S., M. Nejatian, A. P. Ghandehari Yazdi, L. Kamali Roustae, Z. Rafiee, M. Jalali-Jivan, M. S. Kharazmi and **S. M. Jafari** (2024). "Improving the thermal stability of natural bioactive ingredients via encapsulation technology." *Critical Reviews in Food Science and Nutrition* **64**(10): 2824-2846.
66. Ansari, F., C.-C. Lee, A. Rashidimehr, S. Eskandari, T. J. Ashaolu, E. Mirzakhani, H. Pourjafar and **S. M. Jafari** (2024). "The role of probiotics in improving food safety; detoxification of heavy metals and chemicals." *Toxin Reviews* **43**(1): 63-91.
67. Altay, Ö., Ö. Köprüalan, I. İlter, M. Koç, F. K. Ertekin and **S. M. Jafari** (2024). "Spray drying encapsulation of essential oils; process efficiency, formulation strategies, and applications." *Critical Reviews in Food Science and Nutrition* **64**(4): 1139-1157.
68. Alizadeh Sani, M., W. Zhang, A. Abedini, A. Khezerlou, N. Shariatifar, E. Assadpour, F. Zhang and **S. M. Jafari** (2024). "Intelligent packaging systems for the quality and safety monitoring of meat products: From lab scale to industrialization." *Food Control* **160**: 110359.
69. Bahramian, B., R. Abedi-Firoozjah, N. Kiani-Salmi, A. Azizian, N. Dorud, S. Mohammad Ali Noori, M. Hashemi, E. Assadpour, M. Tavassoli, E. Sadeghi, F. Zhang and **S. M. Jafari** (2024). "Multifunctional performance of gallic acid in biodegradable food packaging films and coatings: Mechanisms, developments, applications, and horizons." *European Polymer Journal* **221**: 113559.
70. Hosseini, H., F. Hosseini, S. Bolourian, H. Sabet Sarvestani, E. Assadpour and **S. M. Jafari** (2024). "Functional chewing gum: Transition from a conventional chew to a novel matrix delivering encapsulated bioactives with health-promoting properties." *Future Foods* **10**: 100482.
71. Shaddel, R., S. Akbari-Alavijeh, I. Cacciotti, S. Yousefi, M. Tomas, E. Capanoglu, O. Tarhan, A. Rashidinejad, A. Rezaei, M. Bhia and **S. M. Jafari** (2024). "Caffeine-loaded nano/micro-carriers: Techniques, bioavailability, and applications." *Critical Reviews in Food Science and Nutrition* **64**(15): 4940-4965.
72. Akhavan-Mahdavi, S., M. S. Mirbagheri, E. Assadpour, M. A. Sani, F. Zhang and **S. M. Jafari** (2024). "Electrospun nanofiber-based sensors for the detection of chemical and biological contaminants/hazards in the food industries." *Advances in Colloid and Interface Science* **325**: 103111.
73. Ehsani, N., H. Rostamabadi, S. Dadashi, B. Ghanbarzadeh, M. S. Kharazmi and **S. M. Jafari** (2024). "Electrospun nanofibers fabricated by natural biopolymers for intelligent food packaging." *Critical Reviews in Food Science and Nutrition* **64**(15): 5016-5038.
74. Dehnad, D., B. Ghorani, B. Emadzadeh, F. Zhang, N. Yang and **S. M. Jafari** (2024). "Electrospinning of legume proteins: Fundamentals, fiber production, characterization, and applications with a focus on soy proteins." *Food Hydrocolloids* **151**: 109795.
75. Dima, C., E. Assadpour, A. Nechifor, S. Dima, Y. Li and **S. M. Jafari** (2024). "Oral bioavailability of bioactive compounds; modulating factors, in vitro analysis methods, and enhancing strategies." *Critical Reviews in Food Science and Nutrition* **64**(24): 8501-8539.
76. Saberian, H., A. P. Ghandehari Yazdi, M. Nejatian, N. Bazsefidpar, A. H. Mohammadian, M. Rahmati, E. Assadpour and **S. M. Jafari** (2024). "Brewers' spent grain as a functional ingredient in bakery, pasta, and cereal-based products." *Future Foods* **10**: 100479.
77. Zolqadri, R., M. Heidari Damani, N. Malekjani, M. Saeed Kharazmi and **S. M. Jafari** (2023). "Rice bran protein-based delivery systems as green carriers for bioactive compounds." *Food Chemistry* **420**: 136121.
78. Zhang, W., M. Azizi-Lalabadi, S. Jafarzadeh and **S. M. Jafari** (2023). "Starch-gelatin blend films: A promising approach for high-performance degradable food packaging." *Carbohydrate Polymers* **320**: 121266.
79. Yekta, R., E. Assadpour, H. Hosseini and **S. M. Jafari** (2023). "The influence of ionic polysaccharides on the physicochemical and techno-functional properties of soy proteins; a comprehensive review." *Carbohydrate Polymers* **319**: 121191.
80. Tavassoli, S., Z. Borjzadeh, A. Anvar, H. Ahari, S. Moradi and **S. M. Jafari** (2023). "Crocetin-loaded nanocarriers; approaches and applications." *Current Opinion in Food Science* **54**: 101099.
81. Tan, C., A. C. Karaca, E. Assadpour and **S. M. Jafari** (2023). "Influence of different nano/micro-carriers on the bioavailability of iron: Focus on in vitro–in vivo studies." *Advances in Colloid and Interface Science* **318**: 102949.
82. Zhang, W., M. Azizi-Lalabadi, S. Roy, S. A. Salim, R. Castro-Muñoz and **S. M. Jafari** (2023). "Maillard-reaction (glycation) of biopolymeric packaging films; principles, mechanisms, food applications." *Trends in Food Science & Technology* **138**: 523-538.
83. Siddiqui, S. A., N. A. Bahmid, A. Taha, I. Khalifa, S. Khan, H. Rostamabadi and **S. M. Jafari** (2023). "Recent advances in food applications of phenolic-loaded micro/nanodelivery systems." *Critical Reviews in Food Science and Nutrition* **63**(27): 8939-8959.
84. Samborska, K., K. Sarabandi, R. Tonon, A. Topuz, E. Eroğlu, F. Kaymak-Ertekin, N. Malekjani and **S. M. Jafari** (2023). "Recent progress in the stickiness reduction of sugar-rich foods during spray drying." *Drying Technology* **41**(16): 2566-2585.
85. Sadeghi, A., M. Ebrahimi, F. Hajinia, M. S. Kharazmi and **S. M. Jafari** (2023). "FoodOmics as a promising strategy to study the effects of sourdough on human health and nutrition, as well as product quality and safety; back to the future." *Trends in Food Science & Technology* **136**: 24-47.
86. Tan, C., X. Yao, **S. M. Jafari**, B. Sun and J. Wang (2023). "Hyaluronic acid-based nanodelivery systems for food bioactive compounds." *Trends in Food Science & Technology* **141**: 104163.
87. Zhang, W., P. Ezati, A. Khan, E. Assadpour, J.-W. Rhim and **S. M. Jafari** (2023). "Encapsulation and delivery systems of cinnamon essential oil for food preservation applications." *Advances in Colloid and Interface Science* **318**: 102965.

88. Siddiqui, S. A., M. Q. U. Farooqi, S. Bhowmik, Z. Zahra, M. M. C. Mahmud, E. Assadpour, R.-Y. Gan, M. S. Kharazmi and **S. M. Jafari (2023)**. "Application of micro/nano-fluidics for encapsulation of food bioactive compounds - principles, applications, and challenges." *Trends in Food Science & Technology* **136**: 64-75.
89. Pourjafari, H., F. Ansari, A. Sadeghi, S. A. Samakkhah and **S. M. Jafari (2023)**. "Functional and health-promoting properties of probiotics' exopolysaccharides; isolation, characterization, and applications in the food industry." *Critical Reviews in Food Science and Nutrition* **63**(26): 8194-8225.
90. Nasrollahzadeh, A., S. Mollaei Tavani, E. Arjeh and **S. M. Jafari (2023)**. "Production of conjugated linoleic acid by lactic acid bacteria; important factors and optimum conditions." *Food Chemistry: X* **20**: 100942.
91. Zhang, W., M. Hadidi, A. C. Karaca, S. Hedayati, M. Tarahi, E. Assadpour and **S. M. Jafari (2023)**. "Chitosan-grafted phenolic acids as an efficient biopolymer for food packaging films/coatings." *Carbohydrate Polymers* **314**: 120901.
92. Siddiqui, S. A., H. Fidan, S. Stankov, M. Mehdizadeh, T. G. Ambartsumov, M. Kharazmi, S. Singh and **S. M. Jafari (2023)**. "Are cannabidiol (CBD) levels in consumer food products well tested?—A review." *Food Frontiers* **4**(4): 1778-1793.
93. Sadeghi, A., M. Ebrahimi, M. S. Kharazmi and **S. M. Jafari (2023)**. "Role of nanomaterials in improving the functionality of probiotics; integration of nanotechnology onto micro-structured platforms." *Food Bioscience* **53**: 102843.
94. Mohammadi, Z. B., F. Zhang, M. S. Kharazmi and **S. M. Jafari (2023)**. "Nano-biocatalysts for food applications; immobilized enzymes within different nanostructures." *Critical Reviews in Food Science and Nutrition* **63**(32): 11351-11369.
95. Mirbagheri, M. S., S. Akhavan-Mahdavi, A. Hasan, M. S. Kharazmi and **S. M. Jafari (2023)**. "Chitosan-based electrospun nanofibers for diabetic foot ulcer management; recent advances." *Carbohydrate Polymers* **313**: 120512.
96. Zhang, W., S. Roy, E. Assadpour, X. Cong and **S. M. Jafari (2023)**. "Cross-linked biopolymeric films by citric acid for food packaging and preservation." *Advances in Colloid and Interface Science* **314**: 102886.
97. Siddiqui, S. A., S. Singh, N. A. Bahmid, T. Mehany, D. J. H. Shyu, E. Assadpour, N. Malekjani, R. Castro-Muñoz and **S. M. Jafari (2023)**. "Release of Encapsulated Bioactive Compounds from Active Packaging/Coating Materials and Its Modeling: A Systematic Review." *Colloids and Interfaces* **7**(2): 25.
98. Malekjani, N. and **S. M. Jafari (2023)**. "Valorization of olive processing by-products via drying technologies: a case study on the recovery of bioactive phenolic compounds from olive leaves, pomace, and wastewater." *Critical Reviews in Food Science and Nutrition* **63**(29): 9797-9815.
99. Köprüalan Aydın, Ö., U. Baysan, Ö. Altay, I. İlter Baysan, F. Kaymak Ertekin and **S. M. Jafari (2023)**. "Vitamin delivery systems by spray-drying encapsulation within plant protein-based carriers: A review." *Food Bioscience* **56**: 103341.
100. Joshua Ashaolu, T., C. C. Lee, J. Opeolu Ashaolu, H. Pourjafari and **S. M. Jafari (2023)**. "Metal-binding peptides and their potential to enhance the absorption and bioavailability of minerals." *Food Chemistry* **428**: 136678.
101. Jannat, B., A. Mirza Alizadeh, P. Farshi, M. Dadgarnejad, H. Hosseini, F. Hashempour-Baltork and **S. M. Jafari (2023)**. "Anti-biofilm activity of essential oils in fruit and vegetable: A systematic review." *Food Control* **152**: 109875.
102. Jafarzadeh, S., M. Forough, V. J. Kouzegaran, M. Zargar, F. Garavand, M. Azizi-Lalabadi, M. Abdollahi and **S. M. Jafari (2023)**. "Improving the functionality of biodegradable food packaging materials via porous nanomaterials." *Comprehensive Reviews in Food Science and Food Safety* **22**(4): 2850-2886.
103. Hashemi, B., E. Assadpour, F. Zhang and **S. M. Jafari (2023)**. "A comparative study of the impacts of preparation techniques on the rheological and textural characteristics of emulsion gels (emulgels)." *Advances in Colloid and Interface Science* **322**: 103051.
104. Díaz-Ovalle, C. O. and **S. M. Jafari (2023)**. "Multiple-Effect Evaporators in the Food Industry: Fundamentals, Design, Simulation, Control, and Applications." *Food Engineering Reviews* **15**(4): 691-717.
105. Dehnad, D., B. Emadzadeh, B. Ghorani, G. Rajabzadeh and **S. M. Jafari (2023)**. "Role of high hydrostatic pressure pretreatment on the formation of electrospun nanofibers from soy protein isolate/polyvinyl alcohol." *Food Bioscience* **55**: 103030.
106. Chen, S., C. Dima, M. S. Kharazmi, L. Yin, B. Liu, **S. M. Jafari** and Y. Li (2023). "The colloid and interface strategies to inhibit lipid digestion for designing low-calorie food." *Advances in Colloid and Interface Science* **321**: 103011.
107. Chang, R., L. Chen, M. Qamar, Y. Wen, L. Li, J. Zhang, X. Li, E. Assadpour, T. Esatbeyoglu, M. S. Kharazmi, Y. Li and **S. M. Jafari (2023)**. "The bioavailability, metabolism and microbial modulation of curcumin-loaded nanodelivery systems." *Advances in Colloid and Interface Science* **318**: 102933.
108. Castro-Muñoz, R., M. S. Kharazmi and **S. M. Jafari (2023)**. "Chitosan-based electrospun nanofibers for encapsulating food bioactive ingredients: A review." *International Journal of Biological Macromolecules* **245**: 125424.
109. Dehnad, D., B. Emadzadeh, B. Ghorani, G. Rajabzadeh, N. Tucker and **S. M. Jafari (2023)**. "Bioactive-loaded nanovesicles embedded within electrospun plant protein nanofibers; a double encapsulation technique." *Food Hydrocolloids* **141**: 108683.
110. Can Karaca, A., E. Assadpour and **S. M. Jafari (2023)**. "Plant protein-based emulsions for the delivery of bioactive compounds." *Advances in Colloid and Interface Science* **316**: 102918.
111. Babazadeh, A., F. M. Vahed, Q. Liu, S. A. Siddiqui, M. S. Kharazmi and **S. M. Jafari (2023)**. "Natural Bioactive Molecules as Neuromedicines for the Treatment/Prevention of Neurodegenerative Diseases." *ACS Omega* **8**(4): 3667-3683.
112. Azizi-Lalabadi, M., Z. Rahimzadeh-Sani, J. Feng, H. Hosseini and **S. M. Jafari (2023)**. "The impact of essential oils on the qualitative properties, release profile, and stimuli-responsiveness of active food packaging nanocomposites." *Critical Reviews in Food Science and Nutrition* **63**(13): 1822-1845.
113. Assadpour, E., A. Rezaei, S. Das, B. V. Krishna Rao, S. K. Singh, M. S. Kharazmi, N. K. Jha, S. K. Jha, M. A. Prieto and **S. M. Jafari (2023)**. "Cannabidiol-Loaded Nanocarriers and Their Therapeutic Applications." *Pharmaceutics* **16**(4): 487.
114. Ansari, F., M. Neshat, H. Pourjafari, **S. M. Jafari**, S. A. Samakkhah and E. Mirzakhani (2023). "The role of probiotics and prebiotics in modulating of the gut-brain axis." *Frontiers in Nutrition* **10**: 1173660.
115. Agriopoulou, S., M. Tarapoulouzi, T. Varzakas and **S. M. Jafari (2023)**. "Application of Encapsulation Strategies for Probiotics: From Individual Loading to Co-Encapsulation." *Microorganisms* **11**(12): 2896.
116. Abedini, A., M. Salimi, Y. Mazaheri, P. Sadighara, M. Alizadeh Sani, E. Assadpour and **S. M. Jafari (2023)**. "Assessment of cheese frauds, and relevant detection methods: A systematic review." *Food Chemistry: X* **19**: 100825.
117. Hadidi, M., C. Tan, E. Assadpour, M. S. Kharazmi and **S. M. Jafari (2023)**. "Emerging plant proteins as nanocarriers of bioactive compounds." *Journal of Controlled Release* **355**: 327-342.
118. Tan, C., Y. Zhu, H. Ahari, **S. M. Jafari**, B. Sun and J. Wang (2023). "Sonochemistry: An emerging approach to fabricate biopolymer cross-linked emulsions for the delivery of bioactive compounds." *Advances in Colloid and Interface Science* **311**: 102825.

119. Enayati, A., A. Rezaei, S. R. Falsafi, H. Rostamabadi, N. Malekjani, S. Akhavan-Mahdavi, M. S. Kharazmi and **S. M. Jafari** (2023). "Bixin-loaded colloidal nanodelivery systems, techniques and applications." *Food Chemistry* **412**: 135479.
120. Andishmand, H., S. Azadmard-damirchi, H. Hamishekar, M. Torbati, M. S. Kharazmi, G. P. Savage, C. Tan and **S. M. Jafari** (2023). "Nano-delivery systems for encapsulation of phenolic compounds from pomegranate peel." *Advances in Colloid and Interface Science* **311**: 102833.
121. Castro-Muñoz, R., G. Boczkaj and **S. M. Jafari** (2023). "The role of hydrodynamic cavitation in tuning physicochemical properties of food items: A comprehensive review." *Trends in Food Science & Technology* **134**: 192-206.
122. Rostami, M., N. Beheshtizadeh, F. E. Ranjbar, N. Najafi, A. Ahmadi, P. Ahmadi, H. Rostamabadi, Z. Pazhouhnia, E. Assadpour, M. Mirzanajafi-Zanjani, M. F. Kisomi, M. S. Kharazmi and **S. M. Jafari** (2023). "Recent advances in electrospun protein fibers/nanofibers for the food and biomedical applications." *Advances in Colloid and Interface Science* **311**: 102827.
123. Jafari, S., **S. M. Jafari**, M. Ebrahimi, I. Kijpatanasilp and K. Assatarakul (2023). "A decade overview and prospect of spray drying encapsulation of bioactives from fruit products: Characterization, food application and in vitro gastrointestinal digestion." *Food Hydrocolloids* **134**: 108068.
124. Zhang, W., M. A. Sani, Z. Zhang, D. J. McClements and **S. M. Jafari** (2023). "High performance biopolymeric packaging films containing zinc oxide nanoparticles for fresh food preservation: A review." *International Journal of Biological Macromolecules* **230**: 123188.
125. Zhang, W., H. Ahari, Z. Zhang and **S. M. Jafari** (2023). "Role of silica (SiO₂) nano/micro-particles in the functionality of degradable packaging films/coatings and their application in food preservation." *Trends in Food Science & Technology* **133**: 75-86.
126. Sadeghi, A., M. Ebrahimi, M. S. Kharazmi and **S. M. Jafari** (2023). "Effects of microbial-derived biotics (meta/pharma/post-biotics) on the modulation of gut microbiome and metabolome; general aspects and emerging trends." *Food Chemistry* **411**: 135478.
127. Barciela, P., M. Carpena, N.-Y. Li, C. Liu, **S. M. Jafari**, J. Simal-Gandara and M. A. Prieto (2023). "Macroalgae as biofactories of metal nanoparticles; biosynthesis and food applications." *Advances in Colloid and Interface Science* **311**: 102829.
128. Agrawal, K., P. Chakraborty, S. Dewanjee, S. Arfin, S. S. Das, A. Dey, M. Moustafa, P. C. Mishra, **S. M. Jafari**, N. K. Jha, S. K. Jha and D. Kumar (2023). "Neuropharmacological interventions of quercetin and its derivatives in neurological and psychological disorders." *Neuroscience & Biobehavioral Reviews* **144**: 104955.
129. Abedi-Firoozjah, R., S. A. Salim, S. Hasanvand, E. Assadpour, M. Azizi-Lalabadi, M. A. Prieto and **S. M. Jafari** (2023). "Application of smart packaging for seafood: A comprehensive review." *Comprehensive Reviews in Food Science and Food Safety* **22**(2): 1438-1461.
130. Yang, T., Z. Luo, T. Bewal, L. Li, Y. Xu, **S. M. Jafari** and X. Lin (2022). "When smartphone enters food safety: A review in on-site analysis for foodborne pathogens using smartphone-assisted biosensors." *Food Chemistry* **394**: 133534.
131. Tan, C., C. Dima, M. Huang, E. Assadpour, J. Wang, B. Sun, M. S. Kharazmi and **S. M. Jafari** (2022). "Advanced CaCO₃-derived delivery systems for bioactive compounds." *Advances in Colloid and Interface Science* **309**: 102791.
132. Siddiqui, S. A., S. Khan, M. Murid, Z. Asif, N. P. Oboturova, A. A. Nagdalian, A. V. Blinov, S. A. Ibrahim and **S. M. Jafari** (2022). "Marketing Strategies for Cultured Meat: A Review." *Applied Sciences* **12**(17): 8795.
133. Sharma, S., H. Rostamabadi, S. Gupta, A. Kumar Nadda, M. S. Kharazmi and **S. M. Jafari** (2022). "Nano/micro-formulations of keratin in biocomposites, wound healing and drug delivery systems; recent advances in biomedical applications." *European Polymer Journal* **180**: 111614.
134. Sadeghi, A., M. Ebrahimi, S. Shahryari, M. S. Kharazmi and **S. M. Jafari** (2022). "Food applications of probiotic yeasts; focusing on their techno-functional, postbiotic and protective capabilities." *Trends in Food Science & Technology* **128**: 278-295.
135. Rezaei, A., F. Rafieian, S. Akbari-Alavijeh, M. S. Kharazmi and **S. M. Jafari** (2022). "Release of bioactive compounds from delivery systems by stimuli-responsive approaches; triggering factors, mechanisms, and applications." *Advances in Colloid and Interface Science* **307**: 102728.
136. Siddiqui, S. A., N. A. Bahmid, A. Taha, A.-M. E. Abdel-Moneim, A. M. Shehata, C. Tan, M. S. Kharazmi, Y. Li, E. Assadpour, R. Castro-Muñoz and **S. M. Jafari** (2022). "Bioactive-loaded nanodelivery systems for the feed and drugs of livestock; purposes, techniques and applications." *Advances in Colloid and Interface Science* **308**: 102772.
137. Rashidinejad, A., O. Tarhan, A. Rezaei, E. Capanoglu, S. Boostani, S. Khoshnoudi-Nia, K. Samborska, F. Garavand, R. Shaddel, S. Akbari-Alavijeh and **S. M. Jafari** (2022). "Addition of milk to coffee beverages; the effect on functional, nutritional, and sensorial properties." *Critical Reviews in Food Science and Nutrition* **62**(22): 6132-6152.
138. Nejatian, M., N. Darabzadeh, S. Bodbodak, H. Saberian, Z. Rafiee, M. S. Kharazmi and **S. M. Jafari** (2022). "Practical application of nanoencapsulated nutraceuticals in real food products; a systematic review." *Advances in Colloid and Interface Science* **305**: 102690.
139. Siddiqui, S. A., Z. Asif, M. Murid, I. Fernando, D. N. Adli, A. V. Blinov, A. B. Golik, W. S. Nugraha, S. A. Ibrahim and **S. M. Jafari** (2022). "Consumer Social and Psychological Factors Influencing the Use of Genetically Modified Foods—A Review." *Sustainability* **14**(23): 15884.
140. Sharma, R., A. Rashidinejad and **S. M. Jafari** (2022). "Application of Spray Dried Encapsulated Probiotics in Functional Food Formulations." *Food and Bioprocess Technology* **15**(10): 2135-2154.
141. Lu, X., C. Wang, M. Zhao, J. Wu, Z. Niu, X. Zhang, J. Simal-Gandara, I. Süntar, **S. M. Jafari**, X. Qiao, X. Tang, Z. Han, J. Xiao and L. Ningyang (2022). "Improving the bioavailability and bioactivity of garlic bioactive compounds via nanotechnology." *Critical Reviews in Food Science and Nutrition* **62**(30): 8467-8496.
142. Karim, A., A. Rehman, J. Feng, A. Noreen, E. Assadpour, M. S. Kharazmi, Z. Lianfu and **S. M. Jafari** (2022). "Alginate-based nanocarriers for the delivery and controlled-release of bioactive compounds." *Advances in Colloid and Interface Science* **307**: 102744.
143. Jalali-Jivan, M., H. Rostamabadi, E. Assadpour, M. Tomas, E. Capanoglu, M. Alizadeh-Sani, M. S. Kharazmi and **S. M. Jafari** (2022). "Recent progresses in the delivery of β -carotene: From nano/microencapsulation to bioaccessibility." *Advances in Colloid and Interface Science* **307**: 102750.
144. Sharma, R., S. Mokhtari, **S. M. Jafari** and S. Sharma (2022). "Barley-based probiotic food mixture: health effects and future prospects." *Critical Reviews in Food Science and Nutrition* **62**(29): 7961-7975.
145. Eghbaljoo, H., I. K. Sani, M. A. Sani, S. Rahati, E. Mansouri, E. Molaei-Aghae, N. Fatourehchi, A. Kadi, A. Arab, K. Sarabandi, K. Samborska and **S. M. Jafari** (2022). "Advances in plant gum polysaccharides; Sources, techno-functional properties, and applications in the food industry - A review." *International Journal of Biological Macromolecules* **222**: 2327-2340.
146. Belwal, T., C. Cravotto, M. A. Prieto, P. R. Venskutonis, M. Daglia, H. P. Devkota, A. Baldi, S. M. Ezzat, L. Gómez-Gómez, M. M. Salama, L. Campone, L. Rastrelli, J. Echave, **S. M. Jafari** and G. Cravotto (2022). "Effects of different drying techniques on the quality and bioactive compounds of plant-based products: a critical review on current trends." *Drying Technology* **40**(8): 1539-1561.

147. Akbari-Alavijeh, S., R. Shaddel and **S. M. Jafari** (2022). "In vivo assessments for predicting the bioavailability of nanoencapsulated food bioactives and the safety of nanomaterials." *Critical Reviews in Food Science and Nutrition* **62**(27): 7460-7478.
148. Ahari, H., L. Golestan, S. A. A. Anvar, I. Cacciotti, F. Garavand, A. Rezaei, M. A. Sani and **S. M. Jafari** (2022). "Bio-nanocomposites as food packaging materials; the main production techniques and analytical parameters." *Advances in Colloid and Interface Science* **310**: 102806.
149. Tan, C., S. F. Hosseini and **S. M. Jafari** (2022). "Cubosomes and Hexosomes as Novel Nanocarriers for Bioactive Compounds." *Journal of Agricultural and Food Chemistry* **70**(5): 1423-1437.
150. Samborska, K., S. Poozesh, A. Barańska, M. Sobulska, A. Jedlińska, C. Arpagaus, N. Malekjani and **S. M. Jafari** (2022). "Innovations in spray drying process for food and pharma industries." *Journal of Food Engineering* **321**: 110960.
151. Siddiqui, S. A., A. Ali Redha, E. R. Snoeck, S. Singh, J. Simal-Gandara, S. A. Ibrahim and **S. M. Jafari** (2022). "Anti-Depressant Properties of Crocin Molecules in Saffron." *Molecules* **27**(7): 2076.
152. Tomas, M., E. Capanoglu, A. Bahrami, H. Hosseini, S. Akbari-Alavijeh, R. Shaddel, A. Rehman, A. Rezaei, A. Rashidinejad, F. Garavand, M. Goudarzi and **S. M. Jafari** (2022). "The direct and indirect effects of bioactive compounds against coronavirus." *Food Frontiers* **3**(1): 96-123.
153. Rashidinejad, A., A. Bahrami, A. Rehman, A. Rezaei, A. Babazadeh, H. Singh and **S. M. Jafari** (2022). "Co-encapsulation of probiotics with prebiotics and their application in functional/synbiotic dairy products." *Critical Reviews in Food Science and Nutrition* **62**(9): 2470-2494.
154. Tavasoli, S., Q. Liu and **S. M. Jafari** (2022). "Development of Pickering emulsions stabilized by hybrid biopolymeric particles/nanoparticles for nutraceutical delivery." *Food Hydrocolloids* **124**: 107280.
155. Liu, R., F. Zhang, Y. Sang, I. Katouzian, **S. M. Jafari**, X. Wang, W. Li, J. Wang and Z. Mohammadi (2022). "Screening, identification, and application of nucleic acid aptamers applied in food safety biosensing." *Trends in Food Science & Technology* **123**: 355-375.
156. Maqsoodlou, A., E. Assadpour, H. Mohebdini and **S. M. Jafari** (2022). "The influence of nanodelivery systems on the antioxidant activity of natural bioactive compounds." *Critical Reviews in Food Science and Nutrition* **62**(12): 3208-3231.
157. Heidari, F., **S. M. Jafari**, A. M. Ziiaifar and N. Malekjani (2022). "Stability and release mechanisms of double emulsions loaded with bioactive compounds; a critical review." *Advances in Colloid and Interface Science* **299**: 102567.
158. Hadidi, M., S. Boostani and **S. M. Jafari** (2022). "Pea proteins as emerging biopolymers for the emulsification and encapsulation of food bioactives." *Food Hydrocolloids* **126**: 107474.
159. Garavand, F., I. Cacciotti, N. Vahedikia, A. Rehman, Ö. Tarhan, S. Akbari-Alavijeh, R. Shaddel, A. Rashidinejad, M. Nejatian, S. Jafarzadeh, M. Azizi-Lalabadi, S. Khoshnoudi-Nia and **S. M. Jafari** (2022). "A comprehensive review on the nanocomposites loaded with chitosan nanoparticles for food packaging." *Critical Reviews in Food Science and Nutrition* **62**(5): 1383-1416.
160. Hedayati, S., **S. M. Jafari**, S. Babajafari, M. Niakousari and S. M. Mazloomi (2022). "Different food hydrocolloids and biopolymers as egg replacers: A review of their influences on the batter and cake quality." *Food Hydrocolloids* **128**: 107611.
161. Khoshnoudi-Nia, S., Z. Forghani and **S. M. Jafari** (2022). "A systematic review and meta-analysis of fish oil encapsulation within different micro/nanocarriers." *Critical Reviews in Food Science and Nutrition* **62**(8): 2061-2082.
162. Siddiqui, S. A., M. J. Pahmeyer, E. Assadpour and **S. M. Jafari** (2022). "Extraction and purification of d-limonene from orange peel wastes: Recent advances." *Industrial Crops and Products* **177**: 114484.
163. Falsafi, S. R., H. Rostamabadi, A. Babazadeh, Ö. Tarhan, A. Rashidinejad, S. Boostani, S. Khoshnoudi-Nia, S. Akbari-Alavijeh, R. Shaddel and **S. M. Jafari** (2022). "Lycopene nanodelivery systems; recent advances." *Trends in Food Science & Technology* **119**: 378-399.
164. Comunian, T., A. Babazadeh, A. Rehman, R. Shaddel, S. Akbari-Alavijeh, S. Boostani and **S. M. Jafari** (2022). "Protection and controlled release of vitamin C by different micro/nanocarriers." *Critical Reviews in Food Science and Nutrition* **62**(12): 3301-3322.
165. Castro-Muñoz, R., E. Gontarek-Castro and **S. M. Jafari** (2022). "Up-to-date strategies and future trends towards the extraction and purification of Capsaicin: A comprehensive review." *Trends in Food Science & Technology* **123**: 161-171.
166. Hadidi, M., S. Jafarzadeh, M. Forough, F. Garavand, S. Alizadeh, A. Salehabadi, A. M. Khaneghah and **S. M. Jafari** (2022). "Plant protein-based food packaging films; recent advances in fabrication, characterization, and applications." *Trends in Food Science & Technology* **120**: 154-173.
167. Falsafi, S. R., H. Rostamabadi, K. Samborska, S. Mirarab, A. Rashidinejad and **S. M. Jafari** (2022). "Protein-polysaccharide interactions for the fabrication of bioactive-loaded nanocarriers: Chemical conjugates and physical complexes." *Pharmacological Research* **178**: 106164.
168. Bangar, S. P., M. M. Harussani, R. A. Ilyas, A. O. Ashogbon, A. Singh, M. Trif and **S. M. Jafari** (2022). "Surface modifications of cellulose nanocrystals: Processes, properties, and applications." *Food Hydrocolloids* **130**: 107689.
169. Bahrami, R., R. Zibaei, Z. Hashami, S. Hasanvand, F. Garavand, M. Rouhi, **S. M. Jafari** and R. Mohammadi (2022). "Modification and improvement of biodegradable packaging films by cold plasma; a critical review." *Critical Reviews in Food Science and Nutrition* **62**(7): 1936-1950.
170. Bahrami, A., R. Delshadi, I. Cacciotti, A. Faridi Esfajani, A. Rezaei, O. Tarhan, C. C. Lee, E. Assadpour, M. Tomas, B. Vahapoglu, E. Capanoglu Guven, L. Williams and **S. M. Jafari** (2022). "Targeting foodborne pathogens via surface-functionalized nano-antimicrobials." *Advances in Colloid and Interface Science* **302**: 102622.
171. Garavand, F., S. Jafarzadeh, I. Cacciotti, N. Vahedikia, Z. Sarlak, Ö. Tarhan, S. Yousefi, M. Rouhi, R. Castro-Muñoz and **S. M. Jafari** (2022). "Different strategies to reinforce the milk protein-based packaging composites." *Trends in Food Science & Technology* **123**: 1-14.
172. Alizadeh Sani, M., M. Maleki, H. Eghbaljoo-Gharehgheshlaghi, A. Khezerlou, E. Mohammadian, Q. Liu and **S. M. Jafari** (2022). "Titanium dioxide nanoparticles as multifunctional surface-active materials for smart/active nanocomposite packaging films." *Advances in Colloid and Interface Science* **300**: 102593.
173. Adinepour, F., S. Pouramin, A. Rashidinejad and **S. M. Jafari** (2022). "Fortification/enrichment of milk and dairy products by encapsulated bioactive ingredients." *Food Research International* **157**: 111212.
174. Akhavan-Mahdavi, S., R. Sadeghi, A. Faridi Esfajani, S. Hedayati, R. Shaddel, C. Dima, N. Malekjani, S. Boostani and **S. M. Jafari** (2022). "Nanodelivery systems for d-limonene; techniques and applications." *Food Chemistry* **384**: 132479.
175. Solanki, R., H. Rostamabadi, S. Patel and **S. M. Jafari** (2021). "Anticancer nano-delivery systems based on bovine serum albumin nanoparticles: A critical review." *International Journal of Biological Macromolecules* **193**: 528-540.
176. Kamali Rosta, L., S. Bodbodak, M. Nejatian, A. P. Ghandehari Yazdi, Z. Rafiee, J. Xiao and **S. M. Jafari** (2021). "Use of encapsulation technology to enrich and fortify bakery, pasta, and cereal-based products." *Trends in Food Science & Technology* **118**: 688-710.

177. Ashaolu, T. J., K. Samborska, C. C. Lee, M. Tomas, E. Capanoglu, Ö. Tarhan, B. Taze and **S. M. Jafari (2021)**. "Phycocyanin, a super functional ingredient from algae; properties, purification characterization, and applications." International Journal of Biological Macromolecules **193**: 2320-2331.
178. Mohammadi, K., M. A. Sani, P. Safaei, J. Rahmani, E. Molaee-Aghaee and **S. M. Jafari (2021)**. "A systematic review and meta-analysis of the impacts of glyphosate on the reproductive hormones." Environmental Science and Pollution Research, <https://doi.org/10.1007/s11356-021-16145-x>
179. Rehman, A., J. Feng, T. Qunyi, S. A. Korma, E. Assadpour, M. Usman, W. Han and **S. M. Jafari (2021)**. "Pesticide-loaded colloidal nanodelivery systems; preparation, characterization, and applications." Advances in Colloid and Interface Science **298**: 102552.
180. Dima, C., E. Assadpour, S. Dima and **S. M. Jafari (2021)**. "Nutraceutical nanodelivery; an insight into the bioaccessibility/bioavailability of different bioactive compounds loaded within nanocarriers." Critical Reviews in Food Science and Nutrition **61**(18): 3031-3065.
181. Bagheri Darvish, H., Bahrami, A., **Jafari, S.M.** and Williams, L. (2021). "Micro/nanoencapsulation strategy to improve the efficiency of natural antimicrobials against *Listeria monocytogenes* in food products." Critical Reviews in Food Science and Nutrition **61**(8): 1241-1259.
182. Azizi-Lalabadi, M. and **S. M. Jafari (2021)**. "Bio-nanocomposites of graphene with biopolymers; fabrication, properties, and applications." Advances in Colloid and Interface Science **292**: 102416.
183. Boostani, S. and **S. M. Jafari (2021)**. "A comprehensive review on the controlled release of encapsulated food ingredients; fundamental concepts to design and applications." Trends in Food Science & Technology **109**: 303-321.
184. Bhia, M., M. Motalebi, B. Abadi, A. Zarepour, M. Pereira-Silva, F. Saremnejad, A. C. Santos, A. Zarrabi, A. Melero, **S. M. Jafari** and M. Shakibaei (2021). "Naringenin Nano-Delivery Systems and Their Therapeutic Applications." Pharmaceutics **13**(2).
185. Akbarbaglu, Z., S. H. Peighambari, K. Sarabandi and **S. M. Jafari (2021)**. "Spray drying encapsulation of bioactive compounds within protein-based carriers; different options and applications." Food Chemistry **359**: 129965.
186. Garavand, F., M. Jalai-Jivan, E. Assadpour and **S. M. Jafari (2021)**. "Encapsulation of phenolic compounds within nano/microemulsion systems: A review." Food Chemistry **364**: 130376.
187. **Jafari, S. M.**, C. Arpagaus, M. A. Cerqueira and K. Samborska (2021). "Nano spray drying of food ingredients; materials, processing and applications." Trends in Food Science & Technology **109**: 632-646.
188. Azizi-Lalabadi, M., F. Garavand and **S. M. Jafari (2021)**. "Incorporation of silver nanoparticles into active antimicrobial nanocomposites: Release behavior, analyzing techniques, applications and safety issues." Advances in Colloid and Interface Science **293**: 102440.
189. Jafarzadeh, S., A. Salehabadi, A. Mohammadi Nafchi, N. Oladzadabbasabadi and **S. M. Jafari (2021)**. "Cheese packaging by edible coatings and biodegradable nanocomposites; improvement in shelf life, physicochemical and sensory properties." Trends in Food Science & Technology **116**: 218-231.
190. Narmani, A. and **S. M. Jafari (2021)**. "Chitosan-based nanodelivery systems for cancer therapy: Recent advances." Carbohydrate Polymers **272**: 118464.
191. Jamali, S. N., E. Assadpour, J. Feng and **S. M. Jafari (2021)**. "Natural antimicrobial-loaded nanoemulsions for the control of food spoilage/pathogenic microorganisms." Advances in Colloid and Interface Science **295**: 102504.
192. Rashidinejad, A., S. Boostani, A. Babazadeh, A. Rehman, A. Rezaei, S. Akbari-Alavijeh, R. Shaddel and **S. M. Jafari (2021)**. "Opportunities and challenges for the nanodelivery of green tea catechins in functional foods." Food Research International **142**: 110186.
193. Delshadi, R., A. Bahrami, E. Assadpour, L. Williams and **S. M. Jafari (2021)**. "Nano/microencapsulated natural antimicrobials to control the spoilage microorganisms and pathogens in different food products." Food Control **128**: 108180.
194. Jafarzadeh, S., A. Mohammadi Nafchi, A. Salehabadi, N. Oladzadabbasabadi and **S. M. Jafari (2021)**. "Application of bio-nanocomposite films and edible coatings for extending the shelf life of fresh fruits and vegetables." Advances in Colloid and Interface Science **291**: 102405.
195. Samborska, K., S. Boostani, M. Geranpour, H. Hosseini, C. Dima, S. Khoshnoudi-Nia, H. Rostamabadi, S. R. Falsafi, R. Shaddel, S. Akbari-Alavijeh and **S. M. Jafari (2021)**. "Green biopolymers from by-products as wall materials for spray drying microencapsulation of phytochemicals." Trends in Food Science & Technology **108**: 297-325.
196. Rostamabadi, H., S. R. Falsafi, M. M. Rostamabadi, E. Assadpour and **S. M. Jafari (2021)**. "Electrospraying as a novel process for the synthesis of particles/nanoparticles loaded with poorly water-soluble bioactive molecules." Advances in Colloid and Interface Science **290**: 102384.
197. Cao, H., O. Saroglu, A. Karadag, Z. Diaconeasa, G. Zoccatelli, C. A. Conte-Junior, G. A. Gonzalez-Aguilar, J. Ou, W. Bai, C. M. Zamarioli, L. A. P. de Freitas, A. Shpigelman, P. H. Campelo, E. Capanoglu, C. L. Hii, **S. M. Jafari**, Y. Qi, P. Liao, M. Wang, L. Zou, P. Bourke, J. Simal-Gandara and J. Xiao (2021). "Available technologies on improving the stability of polyphenols in food processing." Food Frontiers **2**(2): 109-139.
198. Malekjani, N. and **Jafari, S.M. (2021)**. "Modeling the release of food bioactive ingredients from carriers/nanocarriers by the empirical, semiempirical, and mechanistic models." Comprehensive Reviews in Food Science and Food Safety **20**(1): 3-47.
199. Zare, M., Norouzi Roshan, Z., Assadpour, E., and **Jafari, S.M. (2021)**. "Improving the cancer prevention/treatment role of carotenoids through various nano-delivery systems." Critical Reviews in Food Science and Nutrition **61**(3): 522-534.
200. Mohammadi, A., **Jafari, S.M.**, Mahoonak, A.S. and Ghorbani, M. (2021). "Liposomal/Nanoliposomal Encapsulation of Food-Relevant Enzymes and Their Application in the Food Industry." Food and Bioprocess Technology **14**(1): 23-38.
201. Zheng, J., Guo, H., Ou, J., Liu, P., Huang, C., Wang, M., Simal-Gandara, J., Battino, M., **Jafari, S.M.**, Zou, L., Ou, S. and Xiao, J. (2021). "Benefits, deleterious effects and mitigation of methylglyoxal in foods: A critical review." Trends in Food Science & Technology **107**: 201-212.
202. Jafarzadeh, S. and **Jafari, S.M. (2021)**. "Impact of metal nanoparticles on the mechanical, barrier, optical and thermal properties of biodegradable food packaging materials." Critical Reviews in Food Science and Nutrition **61**(16): 2640-2658.
203. Mohammadian, E., Alizadeh-Sani, M. and **Jafari, S.M. (2020)**. "Smart monitoring of gas/temperature changes within food packaging based on natural colorants." Comprehensive Reviews in Food Science and Food Safety **19**(6): 2885-2931.
204. Jafarzadeh, S., **Jafari, S.M.**, Salehabadi, A., Nafchi, A.M., Uthaya Kumar, U.S. and Khalil, H.P.S.A. (2020). "Biodegradable green packaging with antimicrobial functions based on the bioactive compounds from tropical plants and their by-products." Trends in Food Science & Technology **100**: 262-277.
205. Rehman, A., **Jafari, S.M.**, Tong, Q., Riaz, T., Assadpour, E., Aadil, R.M., Niazi, S., Khan, I.M., Shehzad, Q., Ali, A. and Khan, S. (2020). "Drug nanodelivery systems based on natural polysaccharides against different diseases." Advances in Colloid and Interface Science **284**: 102251.
206. Dima, C., Assadpour, E., Dima, S. and **Jafari, S.M. (2020)**. "Bioavailability and bioaccessibility of food bioactive compounds; overview and assessment by in vitro methods." Comprehensive Reviews in Food Science and Food Safety **19**(6): 2862-2884.
207. Mohammadi, Z. and **Jafari, S.M. (2020)**. "Detection of food spoilage and adulteration by novel nanomaterial-based sensors." Advances in Colloid and Interface Science **286**: 102297.

208. Rostamabadi, H., Falsafi, S.R., Assadpour, E. and **Jafari, S.M.** (2020). "Evaluating the structural properties of bioactive-loaded nanocarriers with modern analytical tools." Comprehensive Reviews in Food Science and Food Safety **19**(6): 3266-3322.
209. Rehman, A., **Jafari, S.M.**, Aadil, R.M., Assadpour, E., Randhawa, M.A. and Mahmood, S. (2020). "Development of active food packaging via incorporation of biopolymeric nanocarriers containing essential oils." Trends in Food Science & Technology **101**: 106-121.
210. Alizadeh-Sani, M., Mohammadian, E., Rhim, J.W. and **Jafari, S.M.** (2020). "pH-sensitive (halochromic) smart packaging films based on natural food colorants for the monitoring of food quality and safety." Trends in Food Science & Technology **105**: 93-144.
211. Rostamabadi, H., Assadpour, E., Tabarestani, H.S., Falsafi, S.R. and **Jafari, S.M.** (2020). "Electrospinning approach for nanoencapsulation of bioactive compounds; recent advances and innovations." Trends in Food Science & Technology **100**: 190-209.
212. Mohammadi, M., **Jafari, S.M.**, Hamishehkar, H. and Ghanbarzadeh, B. (2020). "Phytosterols as the core or stabilizing agent in different nanocarriers." Trends in Food Science & Technology **101**: 73-88.
213. Koshani, R., **Jafari, S.M.** and van de Ven, T.G.M. (2020). "Going deep inside bioactive-loaded nanocarriers through Nuclear Magnetic Resonance (NMR) spectroscopy." Trends in Food Science & Technology **101**: 198-212.
214. Jalali-Jivan, M., Garavand, F. and **Jafari, S.M.** (2020). "Microemulsions as nano-reactors for the solubilization, separation, purification and encapsulation of bioactive compounds." Advances in Colloid and Interface Science **283**: 102227.
215. Hosseini, H. and **Jafari, S.M.** (2020). "Introducing nano/microencapsulated bioactive ingredients for extending the shelf-life of food products." Advances in Colloid and Interface Science **282**: 102210.
216. Geranpour, M., Assadpour, E. and **Jafari, S.M.** (2020). "Recent advances in the spray drying encapsulation of essential fatty acids and functional oils." Trends in Food Science & Technology **102**: 71-90.
217. Falsafi, S. R., Rostamabadi, H., Assadpour, E. and **Jafari, S.M.** (2020). "Morphology and microstructural analysis of bioactive-loaded micro/nanocarriers via microscopy techniques; CLSM/SEM/TEM/AFM." Advances in Colloid and Interface Science **280**: 102166.
218. Beikzadeh, S., Khezerlou, A., **Jafari, S.M.**, Pilevar, Z. and Mortazavian, A.M. (2020). "Seed mucilages as the functional ingredients for biodegradable films and edible coatings in the food industry." Advances in Colloid and Interface Science **280**: 102164.
219. Azizi-Lalabadi, M., Hashemi, H., Feng, J. and **Jafari, S.M.** (2020). "Carbon nanomaterials against pathogens; the antimicrobial activity of carbon nanotubes, graphene/graphene oxide, fullerenes, and their nanocomposites." Advances in Colloid and Interface Science **284**: 102250.
220. Alehosseini, E. and **Jafari, S.M.** (2020). "Nanoencapsulation of phase change materials (PCMs) and their applications in various fields for energy storage and management." Advances in Colloid and Interface Science **283**: 102226.
221. Dima, C., Assadpour, E., Dima, S., and **Jafari, S.M.** (2020). "Bioavailability of nutraceuticals: Role of the food matrix, processing conditions, the gastrointestinal tract, and nanodelivery systems." Comprehensive Reviews in Food Science and Food Safety **19**(3): 954-994.
222. Jamali, S. N., Assadpour, E. and **Jafari, S. M.** (2020). "Formulation and application of nanoemulsions for the nutraceuticals and phytochemicals." Current medicinal chemistry **27**(18): 3079-3095.
223. Salari, S., and **Jafari, S. M.** (2020). "Influence of Ohmic Heating on Degradation of Food Bioactive Ingredients." Food Engineering Reviews **12**(2): 191-208.
224. Sarabandi, K., Gharehbeiglou, P. and **Jafari, S. M.** (2020). "Spray-drying encapsulation of protein hydrolysates and bioactive peptides: Opportunities and challenges." Drying Technology **38**(5-6): 577-595.
225. Babazadeh, A., Mohammadi Vahed, F., and **Jafari, S.M.** (2020). "Nanocarrier-mediated brain delivery of bioactives for treatment/prevention of neurodegenerative diseases." Journal of Controlled Release **321**: 211-221.
226. Akbari-Alavijeh, S., Shaddel, R., and **Jafari, S.M.** (2020). "Encapsulation of food bioactives and nutraceuticals by various chitosan-based nanocarriers." Food Hydrocolloids **105**: 105774.
227. Sharif, N., Khoshnoudi-Nia, S., and **Jafari, S.M.** (2020). "Nano/microencapsulation of anthocyanins; a systematic review and meta-analysis." Food Research International **132**: 109077.
228. Salari, S., and **Jafari, S.M.** (2020). "Application of nanofluids for thermal processing of food products." Trends in Food Science & Technology **97**: 100-113.
229. Sharma, R., **Jafari, S.M.**, and Sharma, S. (2020). "Antimicrobial bio-nanocomposites and their potential applications in food packaging." Food Control **112**: 107086.
230. Rahaiee, S., Assadpour, E., Faridi Esfanjani, A., Silva, A. S., and **Jafari, S. M.** (2020). "Application of nano/microencapsulated phenolic compounds against cancer." Advances in Colloid and Interface Science **279**: 102153.
231. Bahrami, A., Delshadi, R., and **Jafari, S. M.** (2020). "Active delivery of antimicrobial nanoparticles into microbial cells through surface functionalization strategies." Trends in Food Science & Technology **99**: 217-228.
232. Tavakolian, M., **Jafari, S.M.**, and van de Ven, T.G.M. (2020). "A Review on Surface-Functionalized Cellulosic Nanostructures as Biocompatible Antibacterial Materials." Nano-Micro Letters **12**(1): 73.
233. Maqsoodlou, A., Assadpour, E., Mohebodini, H., and **Jafari, S.M.** (2020). "Improving the efficiency of natural antioxidant compounds via different nanocarriers." Advances in Colloid and Interface Science **278**: 102122.
234. Yousefi, M., Narmani, A., and **Jafari, S.M.** (2020). "Dendrimers as efficient nanocarriers for the protection and delivery of bioactive phytochemicals." Advances in Colloid and Interface Science **278**: 102125.
235. Bahrami, A., Delshadi, R., Assadpour, E., **Jafari, S. M.**, and Williams, L. (2020). "Antimicrobial-loaded nanocarriers for food packaging applications." Advances in Colloid and Interface Science **278**: 102140.
236. **Jafari, S.M.**, Sedaghat Doost, A., Nikbakht Nasrabadi, M., Boostani, S., and Van der Meeren, P. (2020). "Phytoparticles for the stabilization of Pickering emulsions in the formulation of novel food colloidal dispersions." Trends in Food Science & Technology **98**: 117-128.
237. Khoshnoudi-Nia, S., Sharif, N. and **Jafari, S. M.** (2020). "Loading of phenolic compounds into electrospun nanofibers and electrosprayed nanoparticles." Trends in Food Science & Technology **95**: 59-74.
238. Dima, C., Assadpour, E., Dima, S. and **Jafari, S. M.** (2020). "Bioactive-loaded nanocarriers for functional foods: from designing to bioavailability." Current Opinion in Food Science **33**: 21-29.
239. Rehman, A., Tong, Q., **Jafari, S. M.**, Assadpour, E., Shehzad, Q., Aadil, R. M., Iqbal, M. W., Rashed, M. M. A., Mushtaq, B. S. and Ashraf, W. (2020). "Carotenoid-loaded nanocarriers: A comprehensive review." Advances in Colloid and Interface Science **275**: 102048.

240. Bahrami, A., Moaddabdoost Baboli, Z., Schimmel, K., **Jafari, S. M.** and Williams, L. (2020). "Efficiency of novel processing technologies for the control of *Listeria monocytogenes* in food products." Trends in Food Science & Technology **96**: 61-78.
241. Bahrami, A., Delshadi, R., **Jafari, S. M.** and Williams, L. (2019). "Nanoencapsulated nisin: An engineered natural antimicrobial system for the food industry." Trends in Food Science & Technology **94**: 20-31.
242. Assadpour, E. and **Jafari, S. M.** (2019). "A systematic review on nanoencapsulation of food bioactive ingredients and nutraceuticals by various nanocarriers." Critical Reviews in Food Science and Nutrition **59**(19): 3129-3151.
243. Rafiee, Z., Nejatian, M., Daeihamed, M. and **Jafari, S. M.** (2019). "Application of different nanocarriers for encapsulation of curcumin." Critical Reviews in Food Science and Nutrition **59**(21): 3468-3497.
244. Gharehbeglou, P. and **Jafari, S. M.** (2019). "Antioxidant components of Brassica vegetables including turnip and the influence of processing and storage on their anti-oxidative properties." Current medicinal chemistry **26**(24): 4559-4572.
245. Taheri, A. and **Jafari, S. M.** (2019). "Gum-based nanocarriers for the protection and delivery of food bioactive compounds." Advances in Colloid and Interface Science **269**: 277-295.
246. Alehosseini, E. and **Jafari, S. M.** (2019). "Micro/nano-encapsulated phase change materials (PCMs) as emerging materials for the food industry." Trends in Food Science & Technology **91**: 116-128.
247. Katouzian, I. and **Jafari, S. M.** (2019). "Protein nanotubes as state-of-the-art nanocarriers: Synthesis methods, simulation and applications." Journal of Controlled Release **303**: 302-318.
248. Garavand, F., Rahaee, S., Vahedikia, N. and **Jafari, S. M.** (2019). "Different techniques for extraction and micro/nanoencapsulation of saffron bioactive ingredients." Trends in Food Science & Technology **89**: 26-44.
249. Poozesh, S. and **Jafari, S. M.** (2019). "Are traditional small-scale screening methods reliable to predict pharmaceutical spray drying?" Pharmaceutical Development and Technology **24**(7): 915-925.
250. Koshani, R. and **Jafari, S. M.** (2019). "Ultrasound-assisted preparation of different nanocarriers loaded with food bioactive ingredients." Advances in Colloid and Interface Science **270**: 123-146.
251. Yousefi, M. and **Jafari, S. M.** (2019). "Recent advances in application of different hydrocolloids in dairy products to improve their techno-functional properties." Trends in Food Science & Technology **88**: 468-483.
252. Rafiee, Z., Nejatian, M., Daeihamed, M. and **Jafari, S. M.** (2019). "Application of curcumin-loaded nanocarriers for food, drug and cosmetic purposes." Trends in Food Science & Technology **88**: 445-458.
253. Rostamabadi, H., Falsafi, S. R. and **Jafari, S. M.** (2019). "Starch-based nanocarriers as cutting-edge natural cargos for nutraceutical delivery." Trends in Food Science & Technology **88**: 397-415.
254. Pilevar, Z., Bahrami, A., Beikzadeh, S., Hosseini, H. and **Jafari, S. M.** (2019). "Migration of styrene monomer from polystyrene packaging materials into foods: Characterization and safety evaluation." Trends in Food Science & Technology **91**: 248-261.
255. Yousefi, M., Ehsani, A. and **Jafari, S. M.** (2019). "Lipid-based nano delivery of antimicrobials to control food-borne bacteria." Advances in Colloid and Interface Science **270**: 263-277.
256. Assadpour, E. and **Jafari, S. M.** (2019). "Advances in Spray-Drying Encapsulation of Food Bioactive Ingredients: From Microcapsules to Nanocapsules." Annual Review of Food Science and Technology **10**(1): 103-131.
257. Rostami, M., Yousefi, M., Khezerlou, A., Aman Mohammadi, M. and **Jafari, S. M.** (2019). "Application of different biopolymers for nanoencapsulation of antioxidants via electrohydrodynamic processes." Food Hydrocolloids **97**: 105170.
258. Rostamabadi, H., Falsafi, S. R. and **Jafari, S. M.** (2019). "Nanoencapsulation of carotenoids within lipid-based nanocarriers." Journal of Controlled Release **298**: 38-67.
259. Rezaei, A., Fathi, M. and **Jafari, S. M.** (2019). "Nanoencapsulation of hydrophobic and low-soluble food bioactive compounds within different nanocarriers." Food Hydrocolloids **88**: 146-162.
260. Arpagaus, C., Collenberg, A., Rütt, D., Assadpour, E. and **Jafari, S. M.** (2018). "Nano spray drying for encapsulation of pharmaceuticals." International Journal of Pharmaceutics **546**(1-2): 194-214.
261. Malekjani, N. and **Jafari, S. M.** (2018). "Simulation of food drying processes by Computational Fluid Dynamics (CFD); recent advances and approaches." Trends in Food Science & Technology **78**: 206-223.
262. Faridi Esfanjani, A., Assadpour E. and **Jafari S. M.** (2018). "Improving the bioavailability of phenolic compounds by loading them within lipid-based nanocarriers" Trends in Food Science & Technology **76**: 56-66.
263. McClements, D. J. and **Jafari S. M.** (2018). "Improving emulsion formation, stability and performance using mixed emulsifiers: A review" Advances in Colloid and Interface Science **251**: 55-79.
264. Akhavan, S., Assadpour, E., Katouzian I. and **Jafari S. M.** (2018). "Lipid nano scale cargos for the protection and delivery of food bioactive ingredients and nutraceuticals." Trends in Food Science & Technology **74**: 132-146.
265. Hoseinnejad, M., **Jafari, S. M.**, and Katouzian, I. (2018). "Inorganic and metal nanoparticles and their antimicrobial activity in food packaging applications" Critical Reviews in Microbiology **44**(2): 161-181.
266. Abaee, A., Mohammadian, M. and **Jafari, S. M.** (2017). "Whey and soy protein-based hydrogels and nano-hydrogels as bioactive delivery systems." Trends in Food Science & Technology **70**(Supplement C): 69-81.
267. Assadpour, E., **Jafari, S. M.** and Esfanjani, A. F. (2017). "Protection of phenolic compounds within nanocarriers." CAB Reviews **12**(057): 1-8.
268. Katouzian, I., Faridi Esfanjani, A., **Jafari, S. M.**, and Akhavan, S. (2017). "Formulation and application of a new generation of lipid nano-carriers for the food bioactive ingredients" Trends in Food Science & Technology **68**(Supplement C): 14-25.
269. Gharibzahedi, S. M. T. and **Jafari, S. M.** (2017). "The importance of minerals in human nutrition: Bioavailability, food fortification, processing effects and nanoencapsulation" Trends in Food Science & Technology **62**: 119-132.
270. Yolmeh, M. and **Jafari, S. M.** (2017). "Applications of Response Surface Methodology in the Food Industry Processes" Food and Bioprocess Technology **10**(3): 413-433.

271. Shahi, T., Assadpour, E., and **Jafari, S. M. (2016)**. "Main chemical compounds and pharmacological activities of stigmas and tepals of "red gold"; saffron". Trends in Food Science and Technology **58**: 69-78.
272. Dehnad, D., **Jafari, S. M.**, and Afrasiabi, M. (2016). "Influence of drying on functional properties of food biopolymers: From traditional to novel dehydration techniques" Trends in Food Science and Technology **57**, Part A: 116-131.
273. Katouzian, I., and **Jafari, S. M. (2016)**. "Nano-encapsulation as a promising approach for targeted delivery and controlled release of vitamins" Trends in Food Science and Technology, **53**: 34-48.
274. Faridi Esfanjani, A., and **Jafari, S. M. (2016)**. "Biopolymer nano-particles and natural nano-carriers for nano-encapsulation of phenolic compounds" Colloids and Surfaces B: Biointerfaces **146**: 532-543.
275. Hoseinnejad, M., and **Jafari, S.M. (2016)**. "Evaluation of different factors affecting antimicrobial properties of chitosan" International Journal of Biological Macromolecules **85**: 467-475.
276. Rahmanian, N., **Jafari, S.M.**, and Wani, T.A. (2015). "Bioactive profile, dehydration, extraction and application of the bioactive components of olive leaves" Trends in Food Science and Technology **42**(2): 150-172.
277. Taghvaei, M., and **Jafari, S. M. (2015)**. "Application and stability of natural antioxidants in edible oils in order to substitute synthetic additives" Journal of Food Science and Technology **52**(3): 1272-1282.
278. Rahaie, S., Gharib Zahedi, S.M.T., Razavi, S.H., and **Jafari, S.M. (2014)**. "Recent developments on new formulations based on nutrient-dense ingredients for the production of healthy functional bread: a review" Journal of Food Science and Technology **51**(11): 2896-2906.
279. Akhavan, S., **Jafari, S. M.**, Ghorbani, M. and Assadpour, E. (2014). "Spray Drying Microencapsulation of Anthocyanins by Natural Biopolymers: A Review" Drying Technology **32**(5): 509-518.
280. Rahmanian, N., **Jafari, S. M.**, and Calanagis, E. (2014). "Recovery and Removal of Phenolic Compounds from Olive Mill Wastewater" Journal of American Oil Chemists' Society **91**(1): 1-18.
281. **Jafari, S.M.**, Assadpour, E., He, Y., & Bhandari B. (2008). Encapsulation efficiency of food flavors and oils during spray drying. Drying Tech **26**(7) 816-835.
282. **Jafari, S.M.**, Assadpour, E., He, Y., & Bhandari B. (2008). "Re-coalescence of emulsion droplets during high-energy emulsification" Food Hyd. **22**: 119-1202

Published Books

Books:

1. **Jafari, S.M.** (Co-editor), Kumar Jha, S. and Kumar Goswami, V. **2025**. "Nutraceuticals: A New Millennium Approach for Preventive Medicine", *Springer*. ISBN: 978-3-031-76480-6.
2. **Jafari, S.M.** (Co-editor), Darvishi Harzevili, F., and Can-Karaca, A. **2025**. "Microbial production of food bioactive compounds", *Springer*. ISBN: 978-3-030-81403-8.
3. **Jafari, S.M.** (Co-Editor) and Therdtthai, N., **2025**. "Modeling of food processing operations", *Elsevier*. Volume 20 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-822180-8.
4. **Jafari, S.M.** (Co-Editor) and Samborska, K., **2025**. "Utilities in the food factories", *Elsevier*. Volume 19 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819517-8.
5. **Jafari, S.M.** (Co-Editor) and Zhang, W., **2025**. "Packaging operations in the food industry", *Elsevier*. Volume 18 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819769-1.
6. **Jafari, S.M.** (Co-Editor) and Sadeghi, A.R., **2025**. "Biological processes in the food industry", *Elsevier*. Volume 17 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819533-8.
7. **Jafari, S.M.** (Co-Editor) and Capanoglu, E., **2025**. "Extrusion and size change processes in the food industry", *Elsevier*. Volume 16 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819518-5.
8. **Jafari, S.M.** (Co-Editor) and Castro-Muñoz, R., **2025**. "Membrane separation processes in the food industry", *Elsevier*. Volume 15 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819529-1.
9. **Jafari, S.M.** (Co-Editor) and Can Karaca, A., **2025**. "Mechanical separation processes in the food industry", *Elsevier*. Volume 14 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819523-9.
10. **Jafari, S.M.** (Co-Editor) and Malekjani, N., **2024**. "Mass transfer operations in the food industry", *Elsevier*. Volume 13 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819536-9.
11. **Jafari, S.M.** (Co-Editor) and Akhavan-Mahdavi, S., **2024**. "Extraction processes in the food industry", *Elsevier*. Volume 12 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819516-1.
12. **Jafari, S.M.** (Co-Editor) and Samborska, K., **2024**. "Spray drying for the food industry", *Elsevier*. Volume 11 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819799-8.
13. **Jafari, S.M.** (Co-editor), Rashidinejad, A., and Simal-Gandara, J. **2023**. "Handbook of food bioactive ingredients; properties and applications", *Springer*. ISBN: 978-3-030-81404-5.
14. **Jafari, S.M.** (Co-Editor) and Malekjani, N., **2023**. "Drying technology in food processing", *Elsevier*. Volume 10 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-819895-7.
15. **Jafari, S.M.** (Co-Editor), Capanoglu, E. and Can Karaca, A., **2023**. "Evaporation technology in food processing", *Elsevier*. Volume 9 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818764-7.
16. **Jafari, S.M.** (Co-Editor) and Therdtthai, N., **2023**. "Non-thermal food processing operations", *Elsevier*. Volume 8 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818717-3.
17. **Jafari, S.M.** (Co-Editor) and Rostamabadi, H., **2023**. "Low temperature processing of food products", *Elsevier*. Volume 7 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818733-3.
18. **Jafari, S.M.** (Editor), **2023**. "Emerging thermal processes in the food industry", *Elsevier*. Volume 6 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-822107-5.
19. **Jafari, S.M.** (Editor), **2023**. "High-temperature processing of food products ", *Elsevier*. Volume 5 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818618-3.
20. **Jafari, S.M.** (Editor), **2023**. "Thermal processing of food products by steam and hot water", *Elsevier*. Volume 4 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818616-9.
21. **Jafari, S.M.** (Co-Editor) and Malekjani, N., **2023**. "Transporting operations of food materials within food factories", *Elsevier*. Volume 3 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818585-8.
22. **Jafari, S.M.** (Editor), **2022**. "Postharvest and postmortem processing of raw food materials", *Elsevier*. Volume 2 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818572-8.
23. **Jafari, S.M.** (Co-editor) and Capanoglu, E., **2022**. "Retention of bioactives in food processing", *Springer*. ISBN: 978-3-030-96885-4.
24. **Jafari, S.M.** (Co-editor) and Sanches Silva, A., **2022**. "Releasing systems in active food packaging; preparation and applications", *Springer*. ISBN: 978-3-030-90299-5.
25. **Jafari, S.M.** (Editor), **2021**. "Engineering principles of unit operations in food processing", *Elsevier*. Volume 1 in the book series "Unit operations and processing equipment in the food industry ". ISBN: 978-0-12-818473-8.
26. **Jafari, S.M.** (Co-editor) and Rashidinejad, A., **2021**. "Spray Drying Encapsulation of Bioactive Materials", *CRC Press (Taylor and Francis)*. ISBN: 978-0-42-935546-2.
27. **Jafari, S.M.** (Co-editor) and Castro-Muñoz, R., **2021**. "Membrane separation of food bioactive ingredients", *Springer*. ISBN: 978-3-030-84643-5.
28. **Jafari, S.M.** (Co-editor), Nabavi, S.M. and Silva, A.S., **2021**. "Nutraceuticals and cancer signaling; clinical aspects and mode of action", *Springer*. ISBN: 978-3-030-74035-1.
29. **Jafari, S.M.** (Editor), **2021**. "Safety and Regulatory Issues of Nanoencapsulated Food Ingredients ", *Elsevier*. Volume 7 in the book series "Nanoencapsulation in the Food Industry". ISBN: 978-0-12-815725-1.
30. **Jafari, S.M.** (Editor), **2021**. "Application of Nano/Microencapsulated Ingredients in Food Products", *Elsevier*. Volume 6 in the book series "Nanoencapsulation in the Food Industry". ISBN: 978-0-12-815726-8.
31. **Jafari, S.M.** (Editor), **2020**. "Handbook of Food Nanotechnology: Applications and Approaches ", *Elsevier*. ISBN: 978-0-12-815866-1.
32. **Jafari, S.M.** (Editor), **2020**. "Release and Bioavailability of Nanoencapsulated Food Ingredients ", *Elsevier*. Volume 5 in the book series "Nanoencapsulation in the Food Industry". ISBN: 978-0-12-815665-0.
33. **Jafari, S.M.** (Editor), **2020**. "Characterization of Nanoencapsulated Food Ingredients ", *Elsevier*. Volume 4 in the book series "Nanoencapsulation in the Food Industry". ISBN: 978-0-12-815667-4.
34. **Jafari, S.M.** (Editor), **2019**. "Nanoencapsulation of Food Ingredients by Specilized Equipment", *Elsevier*. Volume 3 in the book series "Nanoencapsulation in the Food Industry". ISBN: 978-0-12-815671-1.
35. **Jafari, S.M.** (Editor), **2019**. "Lipid-based Nanostructures for Food Encapsulation Purposes", *Elsevier*. Volume 2 in the book series "Nanoencapsulation in the Food Industry". ISBN: 978-0-12-815673-5.
36. **Jafari, S.M.** (Editor), **2019**. "Biopolymer Nanostructures for Food Encapsulation Purposes", *Elsevier*. Volume 1 in the book series "Nanoencapsulation in the Food Industry". ISBN: 978-0-12-815663-6.
37. **Jafari, S.M.** (Co-editor) and McClements, D.J., **2018**. "Nanoemulsions; Formulation, Characterization, and Applications", *Elsevier*. ISBN: 978-0-12-811838-2.
38. **Jafari, S.M.** (Editor), **2017**. "Nano-encapsulation Technologies for the Food and Nutraceutical Industries", *Elsevier*. ISBN: 978-0-12-809436-5.
39. **Jafari, S.M.** (Editor), **2017**. "Nano-encapsulation of Food Bioactive Ingredients: Principles and Applications", *Elsevier*. ISBN: 978-0-12-809740-3.
40. **Jafari, S.M.** (Author), **2009**. "Encapsulation of Nano-emulsions by Spray Drying", *Lambert Academic Publishing, Germany*. ISBN: 978-383-831-94-76.

Book Chapters:

- Parashar, R., A. K. Jha, S. K. Jha and **S. M. Jafari** (2024). Ch 1 - A Brief Overview of Nutraceuticals. Nutraceuticals: A New Millennium Approach for Preventive Medicine. S. M. Jafari, S. Kumar Jha and V. Kumar Goswami. Cham, Springer Nature Switzerland: 1-17.
- Soni, R., S. Beri, K. Anand, V. K. Gowasmi, **S. M. Jafari** and S. K. Jha (2024). Ch 8 - Prevention of Chronic Obstructive Pulmonary Disease via Nutraceuticals. Nutraceuticals: A New Millennium Approach for Preventive Medicine. S. M. Jafari, S. Kumar Jha and V. Kumar Goswami. Cham, Springer Nature Switzerland: 223-241.
- Malekjani, N. and **S. M. Jafari** (2025). Chapter One - Introduction to mass transfer operations in food industry. Mass Transfer Operations in the Food Industry. S. M. Jafari and N. Malekjani, Woodhead Publishing: 1-12.
- Li, D., B. Li, Y. Li, S. Liu and **S. M. Jafari** (2024). Chapter Three - Micellar delivery systems of bioactive compounds for precision nutrition. Advances in Food and Nutrition Research. M. Tan, Academic Press. **112**: 89-145.
- Günel-Köroğlu, D., A. Can Karaca, E. Çapanoğlu and **S. M. Jafari** (2024). Ch 1 - Introduction to evaporation technology for the food industry. Evaporation Technology in Food Processing. S. M. Jafari, E. Çapanoğlu and A. C. Karaca, Woodhead Publishing: 3-11.
- Akhavan-Mahdavi, S. and **S. M. Jafari** (2024). Ch 1 - Principles of extraction processes for the food industry. Extraction Processes in the Food Industry. S. M. Jafari and S. Akhavan-Mahdavi, Woodhead Publishing: 1-14.
- Arpagaus, C., K. Samborska, M. A. Cerqueira and **S. M. Jafari** (2024). Ch 16 - Nanoencapsulation of food ingredients by nano spray drying. Spray Drying for the Food Industry. S. M. Jafari and K. Samborska, Woodhead Publishing: 517-547.
- Hosseini, H., E. Yaghoubi Hamgini and **S. M. Jafari** (2024). Ch 9 - Spray drying of starches and gums. Spray Drying for the Food Industry. S. M. Jafari and K. Samborska, Woodhead Publishing: 243-274.
- Malekjani, N., M. Homayoonfal, V. Baeghbali, E. Ansarifar, S. Hedayati and **S. M. Jafari** (2024). Ch 3 - Optimization of the spray drying process parameters for the food and bioactive ingredients. Spray Drying for the Food Industry. S. M. Jafari and K. Samborska, Woodhead Publishing: 57-83.
- Samborska, K., A. Barańska, S. Boostani, M. Riazzi and **S. M. Jafari** (2024). Ch 1 - Introduction to the spray drying process. Spray Drying for the Food Industry. S. M. Jafari and K. Samborska, Woodhead Publishing: 3-28.
- Malekjani, N., F. P. Talem, R. Zolqadri and **S. M. Jafari** (2023). Ch 3 - Roller/drum dryers and rotary dryers. Drying Technology in Food Processing. S. M. Jafari and N. Malekjani, Woodhead Publishing: 47-66.
- Zolqadri, R., N. Malekjani, F. P. Talem and **S. M. Jafari** (2023). Ch 2 - Belt dryers and tray dryers. Drying Technology in Food Processing. S. M. Jafari and N. Malekjani, Woodhead Publishing: 33-46.
- Therdthai, N. and **S. M. Jafari** (2023). Ch 1 - Introduction to non-thermal food processes. Non-thermal Food Processing Operations. S. M. Jafari and N. Therdthai, Woodhead Publishing: 1-14.
- Baeghbali, V., S. Hedayati and **S. M. Jafari** (2023). Ch 3 - Infrared processing equipment for the food industry. Emerging Thermal Processes in the Food Industry. S. M. Jafari, Woodhead Publishing: 47-61.
- Aguiló-Aguayo, I., J. Ortiz, V. Prieto-Santiago, I. Hernández, M. J. Rodríguez-Roque, M. Abadias and **S. M. Jafari** (2023). Ch 1 - Introduction to emerging thermal food processes. Emerging Thermal Processes in the Food Industry. S. M. Jafari, Woodhead Publishing: 1-29.
- Ansarifar, E., S. Hedayati and **S. M. Jafari** (2023). Ch 8 - Thawing equipment for the food industry. High-Temperature Processing of Food Products. S. M. Jafari, Woodhead Publishing: 175-224.
- Hedayati, S., V. Baeghbali and **S. M. Jafari** (2023). Ch 3 - Cooking equipment for the food industry. High-Temperature Processing of Food Products. S. M. Jafari, Woodhead Publishing: 59-76.
- İlter, I., Ö. Altay, Ö. Köprüalan, F. Kaymak Ertekin and **S. M. Jafari** (2023). Ch 1 - An overview of high-temperature food processes. High-Temperature Processing of Food Products. S. M. Jafari, Woodhead Publishing: 1-43.
- Rehman, A., T. Qunyi, A. Karim, A. Noreen, S. Ahmad, M. Usman and **S. M. Jafari** (2023). Ch 11 - Heat exchangers in the dairy industry. Thermal Processing of Food Products by Steam and Hot Water. S. M. Jafari, Woodhead Publishing: 303-314.
- Azizi-Lalabadi, M., N. R. Moghaddam and **S. M. Jafari** (2023). Ch 9 - Pasteurization in the food industry. Thermal Processing of Food Products by Steam and Hot Water. S. M. Jafari, Woodhead Publishing: 247-273.
- Hedayati, S., E. Ansarifar and **S. M. Jafari** (2023). Ch 4 - Plate heat exchangers in the food industry. Thermal Processing of Food Products by Steam and Hot Water. S. M. Jafari, Woodhead Publishing: 111-128.
- Karim, A., A. Rehman, Z. Lianfu, A. Noreen, S. Ahmad, M. Usman and **S. M. Jafari** (2023). Ch 1 - Introduction to thermal food processes by steam and hot water. Thermal Processing of Food Products by Steam and Hot Water. S. M. Jafari, Woodhead Publishing: 3-26.
- Homayoonfal, M., N. Malekjani and **S. M. Jafari** (2023). Ch 12 - Transporting vehicles/trucks used in food plants. Transporting Operations of Food Materials Within Food Factories. S. M. Jafari and N. Malekjani, Woodhead Publishing: 317-339.
- Mohammadi, Z., F. Heidari, M. Fasamanesh, A. Saghafian, F. Amini and **S. M. Jafari** (2023). Ch 6 - Centrifugal pumps. Transporting Operations of Food Materials Within Food Factories. S. M. Jafari and N. Malekjani, Woodhead Publishing: 155-200.
- Baeghbali, V., S. Hedayati and **S. M. Jafari** (2023). Ch 2 - Storage vats, vessels, and tanks. Transporting Operations of Food Materials Within Food Factories. S. M. Jafari and N. Malekjani, Woodhead Publishing: 15-30.
- Malekjani, N. and **S. M. Jafari** (2023). Ch 1 - Introduction to food material handling within food factories. Transporting Operations of Food Materials Within Food Factories. S. M. Jafari and N. Malekjani, Woodhead Publishing: 1-11.
- Karami, Z., **S. M. Jafari** and K. Duangmal (2023). Crocins. Handbook of Food Bioactive Ingredients: Properties and Applications. S. M. Jafari, A. Rashidinejad and J. Simal-Gandara. Springer: 1-27.
- Enayati, A., E. Assadpour and **S. M. Jafari** (2023). Bixin. Handbook of Food Bioactive Ingredients: Properties and Applications. S. M. Jafari, A. Rashidinejad and J. Simal-Gandara. Springer: 1-33.
- Jafari, S., M. Ebrahimi, K. Assatarakul and **S. M. Jafari** (2023). Plant Oils Rich in Essential Fatty Acids. Handbook of Food Bioactive Ingredients: Properties and Applications. S. M. Jafari, A. Rashidinejad and J. Simal-Gandara. Springer: 1-24.
- Ebadi, M., M. Mohammadi, A. Pezeshki and **S. M. Jafari** (2023). Health Benefits of Beta-Carotene. Handbook of Food Bioactive Ingredients: Properties and Applications. S. M. Jafari, A. Rashidinejad and J. Simal-Gandara. Springer: 1-26.
- Garcia-Marti, M., **S. M. Jafari**, A. Rashidinejad, J. Xiao and J. Simal-Gandara (2023). An Overview of Different Food Bioactive Ingredients. Handbook of Food Bioactive Ingredients: Properties and Applications. S. M. Jafari, A. Rashidinejad and J. Simal-Gandara. Springer: 1-27.
- Kamiloglu, S., E. Capanoglu and **S. M. Jafari** (2022). An Overview of Food Bioactive Compounds and Their Health-Promoting Features. Retention of Bioactives in Food Processing. S. M. Jafari and E. Capanoglu. Springer: 3-36.
- Silva, A. S. and **S. M. Jafari** (2022). The Evolution of Food Packaging, the Active Food Packaging Concept and Its Current and Future Trends. Releasing Systems in Active Food Packaging: Preparation and Applications. S. M. Jafari and A. S. Silva. Springer: 3-12.
- Hedayati, S., V. Baeghbali and **S. M. Jafari** (2022). Application of Releasing Active Packaging in Cereals and Cereal Based Products. Releasing Systems in Active Food Packaging: Preparation and Applications. S. M. Jafari and A. S. Silva. Springer: 403-425.
- Rehman, A., T. Qunyi, M. Usman, M. F. Manzoor, L. Zhao, J. Feng and **S. M. Jafari** (2022). Ch 17 - Nano-enabled agrochemicals for sustainable agriculture. Nano-enabled Agrochemicals in Agriculture. M. Ghorbanpour and M. A. Shahid, Academic Press: 291-306.
- Siddiqui, S. A., N. A. Bahmid, G. K. Shekhawat and **S. M. Jafari** (2022). Ch 1 - Introduction to postharvest and postmortem technology. Postharvest and Postmortem Processing of Raw Food Materials. S. M. Jafari, Woodhead Publishing: 1-38.
- Castro-Muñoz, R. and **S. M. Jafari** (2021). Introduction to Membrane Separation of Bioactive Compounds; Challenges and Opportunities. Membrane Separation of Food Bioactive Ingredients. S. M. Jafari and R. Castro-Muñoz. Springer: 3-37.

38. Nourbakhsh, H. and **S. M. Jafari** (2021). Separation of Bioactive Peptides and Proteins from by-Products and Co-Products Through Membranes. Membrane Separation of Food Bioactive Ingredients. S. M. Jafari and R. Castro-Muñoz. Springer: 177-203.
39. Jalali-Jivan, M., S.-N. Jamali, E. Assadpour and **S. M. Jafari** (2021). Ionic-Liquid Membranes (Microemulsions) for the Separation of Bioactive Compounds. Membrane Separation of Food Bioactive Ingredients. S. M. Jafari and R. Castro-Muñoz. Springer: 389-426.
40. Silva, A. S., S. M. Nabavi and **S. M. Jafari** (2021). A Brief Overview of Cancer, Its Mechanisms, and Prevention Methods. Nutraceuticals and Cancer Signaling: Clinical Aspects and Mode of Action. S. M. Jafari, S. M. Nabavi and A. S. Silva. Springer: 3-10.
41. da Silveira Vasconcelos, M., L. M. N. de Oliveira, D. C. S. Nunes-Pinheiro, C. de Araújo Viana, A. F. B. da Silva, A. D. N. Pinheiro, S. S. Santos, J. de Freitas Rocha, E. F. Mota, **S. M. Jafari**, A. S. Silva, S. M. Nabavi and D. F. de Melo (2021). Fruits and Vegetables in Cancer. Nutraceuticals and Cancer Signaling: Clinical Aspects and Mode of Action. S. M. Jafari, S. M. Nabavi and A. S. Silva. Springer: 201-257.
42. Bhia, M., H. F. Rajani, N. Mohammadkhani and **S. M. Jafari** (2021). Saffron (Crocins) Against Cancer. Nutraceuticals and Cancer Signaling: Clinical Aspects and Mode of Action. S. M. Jafari, S. M. Nabavi and A. S. Silva. Springer: 323-365.
43. **Jafari, S. M.**, M. Fathi and I. Mandala (2021). Ch 13 - Emerging product formation. Food Waste Recovery (Second Edition). C. M. Galanakis. San Diego, Academic Press: 257-275.
44. Rakmai, J., J.-C. Mejuto, Y. Sang, **S. M. Jafari**, J. Xiao and J. Simal-Gandara (2021). Encapsulation of Essential Oils. Functionality of Cyclodextrins in Encapsulation for Food Applications. T. M. Ho, H. Yoshii, K. Terao and B. R. Bhandari. Springer: 115-135.
45. Alehosseini, E., Z. Mohammadi and **S. M. Jafari** (2021). Ch 1 - Introduction to unit operations and process description in the food industry. Engineering Principles of Unit Operations in Food Processing. S. M. Jafari, Woodhead Publishing: 1-27.
46. Malekjani, N. and **S. M. Jafari** (2021). Ch 14 - General mathematical and engineering principles in unit operations of food processing. Engineering Principles of Unit Operations in Food Processing. S. M. Jafari, Woodhead Publishing: 403-417.
47. Rostamabadi, H., S. R. Falsafi and **S. M. Jafari** (2021). Covalent and Electrostatic Protein-Polysaccharide Systems for Encapsulation of Nutraceuticals. Encyclopedia of Materials: Composites. D. Brabazon. Oxford, Elsevier: 818-831.
48. Zibaei, A. and **S. M. Jafari** (2021). Ch 1 - Safety and toxicity aspects of food nanoparticles. Safety and Regulatory Issues of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 7: 1-29.
49. Rezaei, A., M. Daeihamed, E. Capanoglu, M. Tomas, S. Akbari-Alavijeh, R. Shaddel, S. Khoshnoudi-Nia, S. Boostani, H. Rostamabadi, S. R. Falsafi and **S. M. Jafari** (2021). Ch 2 - Possible health risks associated with nanostructures in food. Safety and Regulatory Issues of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 7: 31-118.
50. Shaddel, R., S. Akbari-Alavijeh and **S. M. Jafari** (2021). Ch 4 - *In vivo* assays for predicting the safety of food-based nanomaterials. Safety and Regulatory Issues of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 7: 143-176.
51. Daeihamed, M., M. Faghhi Akhlaghi and **S. M. Jafari** (2021). Ch 5 - Regulatory principles on food nano-particles legislated by European countries. Safety and Regulatory Issues of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 7: 177-200.
52. Mohammadi, Z. and **S. M. Jafari** (2021). Ch 6 - Regulatory principles on food nanoparticles legislated by Asian and Oceanian countries. Safety and Regulatory Issues of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 7: 201-238.
53. Faghhi Akhlaghi, M., M. Daeihamed and **S. M. Jafari** (2021). Ch 7 - Regulatory principles on food nano-particles legislated by North and South American countries. Safety and Regulatory Issues of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 7: 239-250.
54. Cui, H., Abdel-Samie, M.A.S., Lin, L. and **Jafari, S.M.** (2021). Ch 11 - Application of antimicrobial-loaded nano/microcarriers in different food products. Application of Nano/Microencapsulated Ingredients in Food Products. S. M. Jafari, Academic Press. 6: 469-517.
55. Garavand, F., Eghbal, N., Nooshkam, M., Miraballes, I. and **Jafari, S.M.** (2021). Ch 10 - Salt, spices, and seasonings formulated with nano/microencapsulated ingredients. Application of Nano/Microencapsulated Ingredients in Food Products. S. M. Jafari, Academic Press. 6: 435-467.
56. Cacciotti, I., Garavand, F., Rostamabadi, H., Khorshidian, N., Sarlak, Z. and **Jafari, S.M.** (2021). Ch 8 - Application of nano/microencapsulated ingredients in chewing gum. Application of Nano/Microencapsulated Ingredients in Food Products. S. M. Jafari, Academic Press. 6: 345-386.
57. Rostamabadi, H., Falsafi, S.R., Boostani, S., Katouzian, I., Rezaei, A., Assadpour, E. and **Jafari, S.M.** (2021). Ch 1 - Design and formulation of nano/micro-encapsulated natural bioactive compounds for food applications. Application of Nano/Microencapsulated Ingredients in Food Products. S. M. Jafari, Academic Press. 6: 1-41.
58. Malekjani, N. and **S. M. Jafari** (2020). Food Process Modeling and Optimization by Response Surface Methodology (RSM). Mathematical and Statistical Applications in Food Engineering. Surajbhan Sevda, and Anoop Singh, CRC Press. 23-89.
59. Tan, C., Celli, G.B. and **Jafari, S.M.** (2020). Ch 10 - Biological fate of nanoencapsulated food bioactives. Release and Bioavailability of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 5: 351-393.
60. Malekjani, N. and **Jafari, S.M.** (2020). Ch 7 - Release modeling of nanoencapsulated food ingredients by mechanistic models. Release and Bioavailability of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 5: 247-271.
61. Malekjani, N. and **Jafari, S.M.** (2020). Ch 6 - Release modeling of nanoencapsulated food ingredients by empirical and semiempirical models. Release and Bioavailability of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 5: 211-246.
62. Akbari-Alavijeh, S., Shaddel, R. and **Jafari, S.M.** (2020). Ch 5 - *In vivo* assays for evaluating the release of nanoencapsulated food ingredients. Release and Bioavailability of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 5: 179-207.
63. Dima, C., Assadpour, E., Dima, S. and **Jafari, S.M.** (2020). Ch 4 - *In vitro* assays for evaluating the release of nanoencapsulated food ingredients. Release and Bioavailability of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 5: 123-177.
64. Boostani, S. and **Jafari, S.M.** (2020). Ch 2 - Controlled release of nanoencapsulated food ingredients. Release and Bioavailability of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 5: 27-78.
65. Assadpour, E. and **Jafari, S.M.** (2020). Ch 1 - Importance of release and bioavailability studies for nanoencapsulated food ingredients. Release and Bioavailability of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press. 5: 1-24.
66. Dima, C., Assadpour, E., Dima, S. and **Jafari, S.M.** (2020). Ch 15 - Characterization and analysis of nanomaterials in foods. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 577-653.
67. Martelli-Tosi, M., Esposto, B.S., Cristina da Silva, N., Tapia-Blácido D.R., and **Jafari, S.M.** (2020). Ch 14 - Reinforced nanocomposites for food packaging. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 533-574.
68. Khezerlou, A. and **Jafari, S.M.** (2020). Ch 13 - Nanoencapsulated bioactive components for active food packaging. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 493-532.
69. Mohammadi, Z. and **Jafari, S.M.** (2020). Ch 12 - Nanoparticles/nanofibers for checking adulteration/spoilage of food products. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 459-492.
70. Jafarzadeh, S., Salehabadi, A. and **Jafari, S.M.** (2020). Ch 10 - Metal nanoparticles as antimicrobial agents in food packaging. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 379-414.
71. Rashidinejad, A. and **Jafari, S.M.** (2020). Ch 8 - Nanoencapsulation of bioactive food ingredients. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 279-344.
72. Nogueira, L. F. B., Guidelli, É.J. **Jafari, S.M.** and Ramos, A.P. (2020). Ch 7 - Green synthesis of metal nanoparticles by plant extracts and biopolymers. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 257-278.
73. Arabmofrad, S., Bagheri, M., Rajabi, H. and **Jafari, S.M.** (2020). Ch 4 - Nanoadsorbents and nanoporous materials for the food industry. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 107-159.

74. Salari, S. and Jafari, S.M. (2020). Ch 2 - Nanofluid thermal processing of food products. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 39-71.
75. Assadpour, E., Dima, C. and Jafari, S.M. (2020). Ch 1 - Fundamentals of food nanotechnology. Handbook of Food Nanotechnology. S. M. Jafari, Academic Press: 1-35.
76. Jafari, S.M., Tsimidou, M. Z., Rajabi, H. and Kyriakoudi, A. (2020). Ch 16 - Bioactive ingredients of saffron: extraction, analysis, applications. Saffron. A. Koocheki and M. Khajeh-Hosseini, Woodhead Publishing: 261-290.
77. Maqsoudlou, A., Mohebbodini, H. and Jafari, S.M. (2020). Ch 18 - Antioxidant activity analysis of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 617-664.
78. Tarhan, Ö. and Jafari, S.M. (2020). Ch 17 - Spectroscopic and chromatographic analyses of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 585-615.
79. Rehman, A., Tong, Q., Shehzad, Q., Aadil, R. M., Khan, I. M., Riaz, T. and Jafari, S.M. (2020). Ch 16 - Rheological analysis of solid-like nanoencapsulated food ingredients by rheometers. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 547-583.
80. Lee, C. C., Tomas, M. and Jafari, S.M. (2020). Ch 14 - Optical analysis of nanoencapsulated food ingredients by color measurement. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 505-528.
81. Koshani, R. and Jafari, S.M. (2020). Ch 12 - Nuclear magnetic resonance (NMR) spectroscopy of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 411-458.
82. Hosseini, H. and Jafari, S.M. (2020). Ch 11 - Fourier transform infrared (FT-IR) spectroscopy of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 347-410.
83. Gharanjig, H., Gharanjig, K., Hosseinneshad, M. and Jafari, S.M. (2020). Ch 10 - Differential scanning calorimetry (DSC) of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 295-346.
84. Falsafi, S. R., Rostamabadi, H. and Jafari, S.M. (2020). Ch 9 - X-ray diffraction (XRD) of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 271-293.
85. Rafiee, Z., Nejatian, M., Bodbodak, S. and Jafari, S.M. (2020). Ch 8 - Surface composition of nanoencapsulated food ingredients by X-ray photoelectron spectroscopy (XPS). Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 243-268.
86. Tosi, M. M., Ramos, A. P., Esposto, B. S. and Jafari, S.M. (2020). Ch 6 - Dynamic light scattering (DLS) of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 191-211.
87. Sharif, N., Khoshnoudi-Nia, S. and Jafari, S.M. (2020). Ch 4 - Confocal laser scanning microscopy (CLSM) of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 131-158.
88. Sarabandi, K., Gharehbeglou, P. and Jafari, S.M. (2020). Ch 3 - Scanning electron microscopy (SEM) of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 83-130.
89. Rostamabadi, H., Falsafi, S. R. and Jafari, S.M. (2020). Ch 2 - Transmission electron microscopy (TEM) of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 53-82.
90. Assadpour, E., Rostamabadi, H. and Jafari, S.M. (2020). Ch 1 - Introduction to characterization of nanoencapsulated food ingredients. Characterization of Nanoencapsulated Food Ingredients. S. M. Jafari, Academic Press: 1-50.
91. Koshani, R. and Jafari, S.M. (2019). Ch 8 - Production of food bioactive-loaded nanostructures by ultrasonication. Nanoencapsulation of Food Ingredients by Specialized Equipment. S. M. Jafari, Academic Press: 391-448.
92. Comunian, T. A. and Jafari, S.M. (2019). Ch 5 - Production of food bioactive-loaded nanostructures by micro-/nanofluidics. Nanoencapsulation of Food Ingredients by Specialized Equipment. S. M. Jafari, Academic Press: 213-250.
93. Tabarestani, H. S. and Jafari, S.M. (2019). Ch 2 - Production of food bioactive-loaded nanofibers by electrospinning. Nanoencapsulation of Food Ingredients by Specialized Equipment. S. M. Jafari, Academic Press: 31-105.
94. Assadpour, E. and Jafari, S.M. (2019). Ch 1 - An overview of specialized equipment for nanoencapsulation of food ingredients. Nanoencapsulation of Food Ingredients by Specialized Equipment. S. M. Jafari, Academic Press: 1-30.
95. Babazadeh, A., Jafari, S.M. and Shi, B. (2019). Ch 10 - Encapsulation of food ingredients by nanophytosomes. Lipid-Based Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 405-443.
96. Sarabandi, K., Rafiee, Z., Khodaei, D. and Jafari, S.M. (2019). Ch 9 - Encapsulation of food ingredients by nanoliposomes. Lipid-Based Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 347-404.
97. Mohammadi, M., Assadpour, E. and Jafari, S.M. (2019). Ch 7 - Encapsulation of food ingredients by nanostructured lipid carriers (NLCs). Lipid-Based Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 217-270.
98. Shaddel, R., Akbari-Alavijeh, S. and Jafari, S.M. (2019). Ch 5 - Encapsulation of food ingredients by Pickering nanoemulsions. Lipid-Based Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 151-176.
99. Nejatian, M., Saberian, H. and Jafari, S.M. (2019). Ch 3 - Encapsulation of food ingredients by double nanoemulsions. Lipid-Based Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 89-128.
100. Assadpour, E. and Jafari, S.M. (2019). Ch 1 - An overview of lipid-based nanostructures for encapsulation of food ingredients. Lipid-Based Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 1-34.
101. Yousefi, M., Orojzadeh, P. and Jafari, S.M. (2019). Ch 20 - Nanoencapsulation of food ingredients by dendrimers. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 607-625.
102. Taheri, A. and Jafari, S.M. (2019). Ch 18 - Nanostructures of gums for encapsulation of food ingredients. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 521-578.
103. Rostamabadi, H., Falsafi, S. R. and Jafari, S.M. (2019). Ch 16 - Nano-helices of amylose for encapsulation of food ingredients. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 463-491.
104. Rostamabadi, H., Falsafi, S. R. and Jafari, S.M. (2019). Ch 15 - Nanostructures of starch for encapsulation of food ingredients. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 419-462.
105. Akbari-Alavijeh, S., Shaddel, R. and Jafari, S.M. (2019). Ch 14 - Nanostructures of chitosan for encapsulation of food ingredients. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 381-418.
106. Rahaiee, S., Zare, M. and Jafari, S.M. (2019). Ch 12 - Nanostructures of silk fibroin for encapsulation of food ingredients. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 305-331.
107. Katouzian, I. and Jafari, S.M. (2019). Ch 4 - Nanotubes of α -lactalbumin for encapsulation of food ingredients. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 101-124.
108. Assadpour, E. and Jafari, S.M. (2019). Ch 1 - An overview of biopolymer nanostructures for encapsulation of food ingredients. Biopolymer Nanostructures for Food Encapsulation Purposes. S. M. Jafari, Academic Press: 1-35.
109. Wani, T. A., Masoodi, F. A., Baba, W. N., Ahmad, M., Rahmanian, N. and Jafari, S.M. (2019). Ch 11 - Nanoencapsulation of Agrochemicals, Fertilizers, and Pesticides for Improved Plant Production. Advances in Phytonanotechnology. M. Ghorbanpour and S. H. Wani, Academic Press: 279-298.
110. Hosseini, H., Tajiani, Z. and Jafari, S.M. (2019). Ch 5 - Improving the shelf-life of food products by nano/micro-encapsulated ingredients. Food Quality and Shelf Life. C. M. Galanakis, Academic Press: 159-200.
111. Assadpour, E. and Jafari, S.M. (2019). Ch 3 - Nanoencapsulation: Techniques and Developments for Food Applications. Nanomaterials for Food Applications. A. López Rubio, M. J. Fabra Rovira, M. Martínez Sanz and L. G. Gómez-Mascaraque, Elsevier: 35-61.

112. Rafiee, Z. and **Jafari, S.M. (2018)**. Application of Lipid Nanocarriers for the Food Industry. Bioactive Molecules in Food. J.-M. Mérillon and K. G. Ramawat. Springer: 1-43.
113. Tomas, M. and **Jafari, S.M. (2018)**. "Influence of food processing operations on vitamins". Encyclopedia of Food Chemistry, Edited by Varelis, P., Melton, L. and Shahidi, F. Elsevier. doi: <https://doi.org/10.1016/B978-0-08-100596-5.21661-2>.
114. Nosrati, M. and **Jafari, S.M. (2018)**. "Bioavailability of Minerals (Ca, Mg, Zn, K, Mn, Se) in Food Products". Encyclopedia of Food Chemistry, Edited by Varelis, P., Melton, L. and Shahidi, F. Elsevier. doi: <https://doi.org/10.1016/B978-0-08-100596-5.21618-1>.
115. McClements, D. J. and **Jafari, S.M. (2018)**. Chapter 1 - General Aspects of Nanoemulsions and Their Formulation. Nanoemulsions, Academic Press: 3-20.
116. Villalobos-Castillejos, F., Granillo-Guerrero, V. G., Leyva-Daniel, D. E., Alamilla-Beltrán, L., Gutiérrez-López, G. F., Monroy-Villagrana, A. and **Jafari, S.M. (2018)**. Ch 8 - Fabrication of Nanoemulsions by Microfluidization. Nanoemulsions, Academic Press: 207-232.
117. Gharibzadeh, S. M. T. and **Jafari, S.M. (2018)**. Chapter 9 - Fabrication of Nanoemulsions by Ultrasonication. Nanoemulsions, Academic Press: 233-285.
118. Feng, J., Zhang, Q., Liu, Q., Zhu, Z., McClements, D. J. and **Jafari, S.M. (2018)**. Ch 12 - Application of Nanoemulsions in Formulation of Pesticides. Nanoemulsions, Academic Press: 379-413.
119. Wani, T. A., Masoodi, F. A., **Jafari, S.M.** and McClements, D. J. (2018). Ch 19 - Safety of Nanoemulsions and Their Regulatory Status. Nanoemulsions, Academic Press: 613-628.
120. **Jafari, S.M. (2017)**. Ch 1 - An overview of nanoencapsulation techniques and their classification. Nanoencapsulation Technologies for the Food and Nutraceutical Industries, Academic Press: 1-34.
121. **Jafari, S.M.**, Paximada, P., Mandala, I., Assadpour, E. and Mehrnia, M. A. (2017). Ch 2 - Encapsulation by nanoemulsions. Nanoencapsulation Technologies for the Food and Nutraceutical Industries, Academic Press: 36-73.
122. Gharibzadeh, S. M. T. and **Jafari, S.M. (2017)**. Ch 7 - Nanocapsule formation by cyclodextrins. Nanoencapsulation Technologies for the Food and Nutraceutical Industries, Academic Press: 187-261.
123. **Jafari, S.M.**, Katouzian, I., Rajabi, H. and Ganje, M. (2017). Ch 13 - Bioavailability and release of bioactive components from nanocapsules. Nanoencapsulation Technologies for the Food and Nutraceutical Industries, Academic Press: 494-523.
124. **Jafari, S.M.** and Esfanjani, A. F. (2017). Ch 14 - Instrumental analysis and characterization of nanocapsules. Nanoencapsulation Technologies for the Food and Nutraceutical Industries, Academic Press: 524-544.
125. **Jafari, S.M.**, Katouzian, I. and Akhavan, S. (2017). Ch 15 - Safety and regulatory issues of nanocapsules. Nanoencapsulation Technologies for the Food and Nutraceutical Industries, Academic Press: 545-590.
126. **Jafari, S.M.** and McClements, D. J. (2017). Nanotechnology Approaches for Increasing Nutrient Bioavailability. Advances in Food and Nutrition Research, Academic Press.
127. **Jafari, S.M. (2017)**. Ch 1 - An Introduction to Nanoencapsulation Techniques for the Food Bioactive Ingredients. Nanoencapsulation of Food Bioactive Ingredients, Academic Press: 1-62.
128. Esfanjani, A. F. and **Jafari, S.M. (2017)**. Ch 2 - Nanoencapsulation of Phenolic Compounds and Antioxidants. Nanoencapsulation of Food Bioactive Ingredients, Academic Press: 63-101.
129. Katouzian, I. and **Jafari, S.M. (2017)**. Ch 4 - Nanoencapsulation of Vitamins. Nanoencapsulation of Food Bioactive Ingredients, Academic Press: 145-181.
130. Akhavan, S. and **Jafari, S.M. (2017)**. Ch 6 - Nanoencapsulation of Natural Food Colorants. Nanoencapsulation of Food Bioactive Ingredients, Academic Press: 223-260.
131. Asghari Ghajari, M., Katouzian, I., Ganje, M. and **Jafari, S.M. (2017)**. Ch 7 - Nanoencapsulation of Flavors. Nanoencapsulation of Food Bioactive Ingredients, Academic Press: 261-296.
132. Gharibzadeh, S. M. T. and **Jafari, S.M. (2017)**. Ch 9 - Nanoencapsulation of Minerals. Nanoencapsulation of Food Bioactive Ingredients, Academic Press: 333-400.
133. **Jafari, S.M.**, Esfanjani, A. F., Katouzian, I. and Assadpour, E. (2017). Ch 10 - Release, Characterization, and Safety of Nanoencapsulated Food Ingredients. Nanoencapsulation of Food Bioactive Ingredients, Academic Press: 401-453.
134. **Jafari, S.M.**, Fathi, M. and Mandala, I. (2015). Emerging product formation. Food Waste Recovery: Processing Technologies and Industrial Techniques, Elsevier Inc.: 293-317.

Edited and translated books in Persian (Farsi):

1. Introduction to Food Science and Technology, ISBN: 964-6344-64-1,
2. Food Factories (Translated), ISBN: 964-92233-0-4,
3. HACCP, A Practical Approach (Translated), ISBN: 978-964-5782-18-2,
4. Food Process Design (Translated), ISBN: 978-964-8926-23-1,
5. Physical Properties of Foods (Translated), ISBN: 978-964-508-42-0,
6. Fundamentals of Food Process Engineering (Translated), ISBN: 978-964-508-42-17,
7. Food Plant Economics (Translated), ISBN: 978-964-8926-35-4,
8. A Comprehensive Guide to the Quality Control of Wheat, Flour and Bread, ISBN: 978-964-04-7574-4,
9. Plant Design of Iranian Indigenous Food Products, ISBN: 978-964-8926-47-7,
10. Food Plant Design (Volume 1), ISBN: 978-964-8926-46-01,
11. Food Plant Design (Volume 2), ISBN: 978-964-8926-58-3,
12. Unit Operations in Food Processing, ISBN: 978-964-8926-61-3,
13. Application of Excel Software in Food Process Engineering, ISBN: 978-964-8926-45-3,
14. Oils and Fats in the Food Industry (Translated), ISBN: 978-964-8926-57-6,
15. Encyclopedia of Food Science and Technology, ISBN: 978-964-04-8116-5.
16. Introduction to Food Manufacturing Engineering (Translated), ISBN: 978-622-6212-14-4,

Registered Patents

- 1- Design and synthesis of electrospun nanofibers loaded with phase change materials for preventing the heat penetration into butter packaging; **2024**, Patent No. 111423, IRIPO.
- 2- Fabrication and design of polycaprolactone-based nanofibrous patch as a pH indicator to detect the spoilage of Beluga fish; **2023**, Canada, TSIAS.
- 3- Fabrication and synthesis of nanoencapsulated fish oil via complex coacervation for the fortification of milk and other drinks; **2021**, Patent No. 104504, IRIPO.
- 4- Production and encapsulation of bioactive peptides from flaxseed protein and its application in fabrication of functional pastille; **2021**, Patent No. 102320, IRIPO.
- 5- Fabrication of 3D graphene oxide nanostructures surface functionalized with chitosan-Arabic gum nanoparticles by ionic gelation; **2020**, Patent No. 102009, IRIPO.
- 6- Production of a functional pastille by the addition of encapsulated eggplant peel extract; **2020**, Patent No. 101178, IRIPO.
- 7- Production of concentrated omega 3 fish oil powder without unfavorable odor; **2019**, Patent No. 97902, IRIPO.
- 8- Design and construction of diffuse cell for determination of mass transfer diffusion coefficient in soft foods; **2019**, Patent No. 96510, IRIPO.
- 9- Microencapsulation of nutraceuticals, pharmaceuticals and microorganisms with yeast cell wall coating; **2017**, Patent No. 34989, IRIPO.
- 10- Design and construction of nano-coater for saffron; **2017**, Patent No. 16391, IRIPO.
- 11- Production of alginate nanocarriers through emulsification for encapsulation purposes; **2017**, Patent No. 34706, IRIPO.
- 12- Design and construction of a nanofluids smart system for thermal processing of liquid food products; **2015**, Patent No. 10087, IRIPO.
- 13- Nanoencapsulation of saffron extract by double emulsions and their release kinetics; **2015**, Patent No. 83580, IRIPO.
- 14- Design and construction of a computer-based colorimetric system for foods; **2011**, Patent No. 68268, IRIPO.
- 15- Design and construction of a fluidized bed dryer equipped with a heat pump for the control of drying air moisture level; **2011**, Patent No. 59321, IRIPO.
- 16- Design and construction of an open-vessel microwave system for extraction of medicinal bioactive compounds; **2010**, Patent No. 59321, IRIPO.

Presented Papers in International Conferences

1. **Jafari, S.M. (Plenary Speaker). 2024.** Food nanotech: An emerging trend. *2nd International Biotechnology Conference — BIOCON*. Kazan, Russia.
2. **Jafari, S.M. (Plenary Speaker). 2024.** Adsorption of phenolic compounds from olive mill wastewater by surface-modified montmorillonite; a novel valorization strategy. *International Conference on Biotechnology for Better Tomorrow— BTBT*. Tashkent, Uzbekistan.
3. Ahari, H. and **Jafari, S.M. 2024.** Investigation of sensory properties of Turkish and Iranian *crocus sativus* l. *International Consumer and Sensory Sciences Conference*. Istanbul, Turkey.
4. **Jafari, S.M. (Plenary Speaker)** and Heidari, F. **2023.** Pickering emulsions stabilized by surface-modified silica nanoparticles. *11th Edition of the International Euro-Aliment Symposium*. Dunarea de Jos, Romania.
5. **Jafari, S.M. (Keynote Speaker). 2022.** Recent advances in the fabrication and application of nanocarriers for bioactive compounds and nutraceuticals. *International Conference on Pharmaceutical Sciences (ICOPS)*. Pahang, Malaysia.
6. **Jafari, S.M. (Invited Speaker)** and Assadpour, E. **2022.** Electrospun biopolymeric nanofibers as nanocarriers of bioactive compounds. *ACS Spring International Symposium "Bonding Through Chemistry"*. San Diego, USA.
7. **Jafari, S.M. (Invited Speaker). 2022.** Nano-delivery strategies for the encapsulation of nutraceuticals; fabrication, characterization, release and bioavailability. *International Symposium on Bioactive Compounds*. Antalya, Turkey.
8. **Jafari, S.M. (Invited Speaker). 2022.** Release of orange peel oil from whey protein-low methoxyl pectin nanocomplexes under different conditions. *6th International Symposium on Phytochemicals in Medicine and Food*. Hangzhou, China.
9. Bohlool, Z., Hashemi, S.R., Sadeghi, A.R., **Jafari, S.M.**, Heydari, M., and Saif Davati, J. **2022.** Screening and identification of antibiotic resistant *Lactobacilli* isolated from broiler breeder hens. *4th International Congress on Engineering, Technology and Innovation*. Darmstadt, Germany.
10. **Jafari, S.M. (Plenary Speaker). 2022.** Trends in bioactive-loaded nanocarriers. *International Webinar on Bioactive Compounds*. Tehran, Iran.
11. **Jafari, S.M. (Invited Speaker). 2022.** Electrospun nanofibers as emerging nanomaterials for the food industry. *International Symposium on Nutrition and Future Food*. Wuhan, China.
12. Bohlool, Z., Hashemi, S.R., Sadeghi, A.R., **Jafari, S.M.**, Heydari, M., and Saif Davati, J. **2022.** Screening for probiotics in lactic acid bacteria isolated from broiler breeder hens. *11th International Conference on Food Industry Sciences, Organic Farming and Food Security*. Tbilisi, Georgia.
13. **Jafari, S.M. (Invited Speaker). 2021.** Development of phytochemical-loaded nanocarriers for the application in medicine and food. *5th International Symposium on Phytochemicals in Medicine and Food*. Nanchang, China.
14. **Jafari, S.M. (Plenary Speaker)** and Rostamabadi, H. **2021.** Protein-Polysaccharide Interactions for the Fabrication of Bioactive-Loaded Nanocarriers; Chemical Conjugates versus Physical Complexes. *10th Edition of the International Euro-Aliment Symposium*. Dunarea de Jos, Romania.
15. **Jafari, S.M. (Invited Speaker)** and Akhavan Mahdavi, S. **2021.** Improving stability of barberry's anthocyanins through encapsulation by spray drying and freeze drying. *5th International Symposium on Phytochemicals in Medicine and Food*. Nanchang, China.
16. **Jafari, S.M. (Plenary Speaker). 2021.** Nutraceutical nanodelivery systems; an overview. *1st International Congress on Innovations & Sustainability in Food Processing*. Uttar Pradesh, India.
17. **Jafari, S.M. (Keynote Speaker). 2019.** A systematic overview of bioactive-loaded nanocarriers. *1st International Congress on Medical Sciences and Biotechnology*. Usak, Turkey.
18. **Jafari, S.M. (Plenary Speaker). 2019.** Application of nanotechnology in the field of Agriculture (nano-pesticides and nano-fertilizers). *1st International Workshop on Challenges and Innovations in Nanotechnology*. Damascus, Syria.
19. **Jafari, S.M. (Plenary Speaker). 2019.** Recent advances in the design of nutraceutical nanodelivery systems. *1st International Workshop on Challenges and Innovations in Nanotechnology*. Damascus, Syria.
20. **Jafari, S.M. (Plenary Speaker). 2018.** Recent advances in nanoencapsulation of food ingredients and classification of these techniques. *2nd International Conference of Food Science and Technology*. Sari, Iran.
21. **Jafari, S.M. 2017.** Modern technologies in food process engineering through nano-encapsulation. *International Conference on Modern Technologies in Science*. Amol, Iran.
22. **Jafari, S.M. 2017.** Modern technologies in nano-encapsulation of food bioactive ingredients by lipid-based formulations. *International Conference on Modern Technologies in Science*. Amol, Iran.
23. Taghvaei, M., Ghaderi, S., Ghanbari, V., **Jafari, S.M.**, and Scott Smith, J. **2016.** The evaluation of *Thymus Daenensis* Celak and *Echinaophora Platyloba* DC. Essential Oil Composition and their Antioxidant Activity in Soybean Oil. *International Conference Institute of Food Technologists*. USA.
24. Dehnad, D., Emam-Djomeh, Z., Mirzaei, H.A. and **Jafari, S.M.**, **2015.** Investigation on Physical, Mechanical, Thermal and Antimicrobial Properties of Biodegradable Chitosan-Nanocellulose Nanocomposites. *5th international conference on Ultrafine Grained and Nanostructured Materials*. Iran.
25. Saramnejad, S.F. and **Jafari, S.M.**, **2014.** Use of geothermal energy as an emerging renewable energy efficient technology in dairy processing. *3rd International Conference on Emerging Trends in Energy Conservation*. Iran.
26. Saramnejad, S.F. and **Jafari, S.M.**, **2014.** Atmospheric freeze drying using heat pump dryer as an economical alternative to classic vacuum freeze drying. *3rd International Conference on Emerging Trends in Energy Conservation*. Iran.
27. Hadavi, R. and **Jafari, S.M.**, **2014.** Nano-encapsulation of saffron by Nano-liposomes and evaluation of the influence of concentration of lecithin, oil and saffron on encapsulation efficiency and stability of produced Nano-liposomes. *5th International Congress on Nanoscience & Nanotechnology*. Iran.
28. Mazidi, M., **Jafari, S.M.**, Taheri Geravand, A., and Mirzaei, E. **2013.** Modeling the terminal velocity of orange to characterize a suitable sorting process. *1st International e-Conference on Novel Food Processing*. Iran.
29. Akhavan, S., **Jafari, S.M.**, Ghorbani, M., and Assadpour, E. **2013.** Microencapsulation of Anthocyanins by Spray Drying; A Review. *1st International e-Conference on Novel Food Processing*. Iran.
30. Faridi, A., **Jafari, S.M.**, Mirzaei, H.A., and Assadpour, E. **2013.** Nano-encapsulation of food hydrophobic ingredients using o/w nanoemulsion. *1st International e-Conference on Novel Food Processing*. Iran.

31. Alehoseini, A., **Jafari, S.M.**, Malekjani, N., Ganje, M. and Alehoseini, E. **2013**. Applying fuzzy logic to develop an expert system for determination of the physical properties of green pea. *International EFFoST Annual Meeting*. Italy.
32. **Jafari, S.M.**, Beheshti, P., and Assadpour, E. **2013**. Emulsification of d-limonene droplets with a novel hydrocolloid (Angum gum) compared with Arabic gum. *International EFFoST Annual Meeting*. Italy.
33. Rafiei, Z., **Jafari, S.M.**, Khomeiri, M. and Galanakis, M. **2013**. Antimicrobial activity of olive leaf extracts produced by microwave assisted extraction and maceration method. *International EFFoST Annual Meeting*. Italy.
34. Jalili, F., **Jafari, S.M.**, Emamjomee, Z., Kashaninejad, M. and Malekjani, N. **2013**. Total phenolic content and oxidative stability of ultrasound-assisted extracted canola oil. *International EFFoST Annual Meeting*. Italy.
35. Sadati, S.E., **Jafari, S.M.**, Malekjani, N., Toosi, S., and Kashaninejad, M. **2013**. Influence of combined coating pretreatment and osmotic dehydration on final drying time and rehydration of Golden delicious apple. *International EFFoST Annual Meeting*. Italy.
36. Sadati, S.E., **Jafari, S.M.**, Malekjani, N., Toosi, S., and Kashaninejad, M. **2013**. Coating with Carboxy methyl Cellulose and Carrageenan in Osmotic Dehydration of Golden delicious apple. *International EFFoST Annual Meeting*. Italy.
37. Dehnad, D., **Jafari, S.M.**, Ghanbari, V. and Ganje, M. **2012**. Energy saving in microwave drying process of foods. *1st Middle East Drying Conference*. Iran.
38. Dehnad, D., **Jafari, S.M.**, Ghanbari, V. and Ganje, M. **2012**. Simultaneous heat and mass transfer during microwave drying of foods. *1st Middle East Drying Conference*. Iran.
39. Dehnad, D., and **Jafari, S.M.** **2012**. Modeling of microwave drying method for foods. *1st Middle East Drying Conference*. Iran.
40. Dehnad, D., **Jafari, S.M.**, Ghanbari, V. and Ganje, M. **2012**. Optimization of microwave drying for foods. *1st Middle East Drying Conference*. Iran.
41. Dehnad, D., and **Jafari, S.M.** **2012**. Combined microwave drying with other drying methods. *1st Middle East Drying Conference*. Iran.
42. Dehnad, D., and **Jafari, S.M.** **2012**. Some applied new control equipment for microwave drying of foods. *1st Middle East Drying Conference*. Iran.
43. Mahdavi Khazaei, K., Ghorbani, M., **Jafari, S.M.**, and Hemmati Kakhki, A. **2012**. Extraction optimization of anthocyanins from saffron flower's petals by conventional solvent extraction with response surface methodology. *4th International Saffron Symposium*. India.
44. Mahdavi Khazaei, K., **Jafari, S.M.**, Ghorbani, M., and Hemmati Kakhki, A. **2012**. Effect of microencapsulation and storage time on the stability of anthocyanins in spray dried petal's extract of saffron flower. *4th International Saffron Symposium*. India.
45. Mahdavi Khazaei, K., Hemmati Kakhki, A., Ghorbani, M., and **Jafari, S.M.**, **2012**. Optimization of microwave-assisted extraction of anthocyanins from petals of saffron's flower. *4th International Saffron Symposium*. India.
46. Sarfarazi, M., Rajabzadeh, Q. and **Jafari, S.M.**, **2012**. Extraction optimization of saffron nutraceuticals through response surface methodology. *4th International Saffron Symposium*. India.
47. Sarfarazi, M., **Jafari, S.M.**, Rajabzadeh, Q., Mirzaei, H.O. and Maskuki, A.M. **2012**. Microwave-assisted extraction of saffron nutraceuticals. *4th International Saffron Symposium*. India.
48. Sarfarazi, M., **Jafari, S.M.**, Rajabzadeh, Q., Maskuki, A.M. and Mirzaei, H.O. **2012**. Subcritical water extraction of saffron nutraceuticals by response surface methodology. *4th International Saffron Symposium*. India.
49. Sarfarazi, M., **Jafari, S.M.**, Rajabzadeh, Q., Mirzaei, H.O. and Maskuki, A.M. **2012**. Optimization of ultrasound-assisted extraction of saffron nutraceuticals. *4th International Saffron Symposium*. India.
50. Rajabi, H., Ghorbani, M., **Jafari, S.M.**, Rajabzadeh, Q. and Sadeghi Mahoonak, A.R. **2012**. Microencapsulation of saffron extract by spray drying using different wall materials. *4th International Saffron Symposium*. India.
51. Rajabi, H., Rajabzadeh, Q., **Jafari, S.M.**, Ghorbani, M., and Sadeghi Mahoonak, A.R. **2012**. The influence of high-energy emulsification with Ultra-Turrax on surface tension and viscosity of saffron emulsions. *4th International Saffron Symposium*. India.
52. Taghvaei, M., **Jafari, S.M.**, Nowrouzieh, S., and Alishah, O. **2012**. The effect of microwave-assisted extraction on free and total gossypol content and extraction efficiency of cottonseed oil. *1st International Conference on Science, Industry and Trade of Cotton*. Iran.
53. Malekjani, N., **Jafari, S.M.**, Mirzaee, H.A. and Rahmati, M.H. **2011**. Design and Application of a Novel Dehumidifying System for a Fluidized Bed Dryer for the Drying of Canola Seeds. *International Conference on Advanced Science, Engineering and Information Technology*. Malaysia.
54. Beheshti, P., **Jafari, S.M.** and Saffarpour, S. **2011**. Microencapsulation properties of Angum gum for the emulsification of D-limonene droplets compared with Arabic gum. *International Food Congress; Novel Approaches in Food Industry*. Turkey.
55. **Jafari, S.M.**; Assadpour, E. **2008**. GMP and HACCP for Saffron Processing Plants in Iran. *4th Int. Conference on Food Factory for the Future*. Laval, France.
56. **Jafari, S.M.**; Assadpour, E. **2008**. Encapsulating biopolymers and high energy emulsification techniques. *9th Int. Hydrocolloids Conference*. Singapore.
57. **Jafari, S.M.**; Assadpour, E. **2008**. Microfluidization of emulsions for encapsulation purposes. *9th International Hydrocolloids Conference*. Singapore.
58. Khomeiri, M., **Jafari, S.M.**; Vosough, A.S. **2008**. Effect of mint extract on the viability of probiotic bacteria in a native Iranian dairy drink (Doogh). *9th Food Microbiology Conference*. Ireland.
59. **Jafari, S.M.** **2006**. Sub-micron emulsions for nano-particle encapsulation. *The semester seminar of School of Land and Food Sciences at University of Queensland*. Brisbane, Australia.
60. **Jafari, S.M.**; He, Y.; Bhandari, B. **2006**. Evaluation of microfluidizer to produce submicron emulsions. *Australian National Science Graduate Conference on Nanotechnology*. Sydney, Australia.
61. **Jafari, S.M.**; He, Y.; Bhandari, B. **2005**. Optimization of nano-emulsion production by Microfluidization and Ultrasonication; *Annual Conference of Asia Pacific Society of Chemical Engineers*, Brisbane, Australia.
62. **Jafari, S.M.**; Bhandari, B.; He, Y. **2004**. Nano-particle encapsulation by spray drying. *Annual Conference of Faculty of Natural Resources, Agriculture, and Veterinary Sciences at University of Queensland*. Gatton, Australia.
63. **Jafari, S.M.**; Khodaparast, M.H. **2001**. The evaluation of effects of some factors like natural antioxidants on preservation of soybean oil; *AOCS Annual Conference*, Minneapolis, USA.

Teaching and Thesis Supervising Records

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8. Simulation of shell and tube heat exchanger based on alumina nanofluid and modeling of quality changes of the final product (Abdolsatar Avazsoofian, **2022**).
9. Evaluation of *d*-limonene encapsulation in the hybrid system of Pickering emulsion- electrospun nanofibers and investigation of the micro-structural and rheological properties and modeling of *d*-limonene release (Elham Alehosseini, **2021**).
10. Evaluation of separation and adsorption kinetics modeling of saffron crocin by normal and functionalized 3D graphene oxide nanostructures (Hamid Rajabi, **2020**).
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