

In the Name of God

Curriculum Vita



Personal Information

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Education

B.Sc, Food Science and Technology, Urmia University, Iran, 2000

M.Sc, Food Technology , Tarbiat Modares University, Iran, 2002

PhD, Food Technology, Technical University of Denmark(DTU), Denmark, 2012

Memberships

Iranian Food Science & Technology Society

Referee of Scientific National/International Journals

Iranian Journal of Food Science & Technology
Applied Biochemistry and Biotechnology
Iranian Journal of Biotechnology
Starch
Food Research International
Journal of Food Science and Technology
LWT-Food Science and Technology
Journal of Food Chemistry

Research Interests

1- Production of Functional Foods from Enzyme Technology

Research Publications

1. Kamali E, Sahari MA, Barzegar M, Gavlighi HA. Effect of transesterified amaranth oil oleogel as a cocoa butter replacer on the physicochemical properties of dark chocolate. *Food Chemistry: X*. 2025;26:102305.
2. Ejtemaei R, Gavlighi HA, Nikoo M, Sahari MA, Safaryan MJ. Maize fiber gum as a natural antioxidant: Effects on myofibrillar proteins and textural properties of beef patties. *LWT*. 2025;216:117374.
3. Davoudi M, Ahmadi Gavlighi H, Hashempour-Baltork F, Khosravi-Darani K. In vitro antidiabetic and antioxidant activities of protein hydrolysates via alkaline autolysis of *Fusarium venenatum* mycoprotein. *Scientific Reports*. 2025;15(1):13287.
4. Anvar A, Azizi MH, Gavlighi HA. Exploring the effect of natural deep eutectic solvents on zein: Structural and functional properties. *Current Research in Food Science*. 2025;10:100965.
5. Roudbari M, Barzegar M, Sahari MA, Gavlighi HA. Formulation of functional gummy candies containing natural antioxidants and stevia. *Heliyon*. 2024;10(11).
6. Mousavi NS, Tabarsa M, You S, Yazdi APG, Cao R, Gavlighi HA, et al. Hydrolysis and cross-flow ultrafiltration as an alternative process to isolate fucoidans from edible seaweed *Nizamuddinina zarnardinii* with enhanced immunostimulatory efficacy. *Algal Research*. 2024;82:103632.
7. Mirzaee H, Ahmadi Gavlighi H, Nikoo M, Udenigwe CC, Rezvankhah A, Khodaiyan F. Improved Antioxidant, Antihypertensive, and Antidiabetic Activities and Tailored Emulsion Stability and Foaming Properties of Mixture of Corn Gluten and Soy Protein Hydrolysates Via Enzymatic Processing and Fractionation. *Food Science & Nutrition*. 2024.
8. Maassoumi N, Ghanati F, Gavlighi HA. Interconnections of primary and secondary metabolites of *Astragalus* verus cells under selenium treatment. *Plant Stress*. 2024;11:100329.
9. Jafari A, Tabarsa M, Naderimanesh H, Ahmadi Gavlighi H, You S. The Preparation, Anti-inflammatory, and Antioxidant Properties of Glucosamine Hydrochloride from the Waste of *Litopenaeus vannamei* Processing Plant. *ECOPERSIA*. 2024:175-88.
10. Jafari A, Tabarsa M, Naderi-Manesh H, Gavlighi HA, You S, Vaezi Z. Glucosamine Hydrochloride and Glucosamine-Gallic Acid Nanoparticles for the Treatment of Osteoarthritis: Synthesis, Antioxidant, and Anti-Inflammatory. *Journal of Food Biochemistry*. 2024;2024(1):3272099.
11. Davoudi M, Gavlighi HA, Javanmardi F, Benjakul S, Nikoo M. Antimicrobial peptides derived from food byproducts: Sources, production, purification, applications, and challenges. *Comprehensive Reviews in Food Science and Food Safety*. 2024;23(5):e13422.
12. Bazsefidpar N, Yazdi APG, Karimi A, Yahyavi M, Amini M, Gavlighi HA, et al. Brewers spent grain protein hydrolysate as a functional ingredient for muffins: Antioxidant, antidiabetic, and sensory evaluation. *Food Chemistry*. 2024;435:137565.
13. Bazsefidpar N, Ahmadi Gavlighi H, Ghandehari Yazdi AP, Jafari SM. Optimization of protein extraction from brewer's spent grain and production of bioactive peptides. *Biomass Conversion and Biorefinery*. 2024;14:17455–65.

14. Bachari S, Ghaderi-Ghahfarokhi M, Gavligi HA, Zarei M. Ultrasonic depolymerization of pomegranate peel pectin: Effect of sonication time on antioxidant, α -amylase inhibitory, and prebiotic properties. *Food Chemistry: X*. 2024;24:101901.
15. Anvar A, Azizi MH, Gavligi HA. Enhancing zein functionality through sequential limited Alcalase hydrolysis and transglutaminase treatment: Structural changes and functional properties. *Food Chemistry: X*. 2024;24:101957.
16. Zoghi A, Vedadi S, Esfahani ZH, Gavligi HA, Khosravi-Darani K. A review on pectin extraction methods using lignocellulosic wastes. *Biomass Conversion and Biorefinery*. 2023;13(7):5577-89.
17. Mousavi NS, Tabarsa M, Ahmadi Gavligi H. Antioxidant activity of purified fractions obtained from membrane ultrafiltration of hydrolysed fucoidan from brown seaweed *Nizamuddinina zanardinii*. *Journal of Fisheries*. 2023;76(2):195-207.
18. Mirzaee H, Ahmadi Gavligi H, Nikoo M, Udenigwe CC, Khodaiyan F. Relation of amino acid composition, hydrophobicity, and molecular weight with antidiabetic, antihypertensive, and antioxidant properties of mixtures of corn gluten and soy protein hydrolysates. *Food Science & Nutrition*. 2023;11(3):1257-71.
19. Jalili Safaryan M, Ahmadi Gavligi H, Udenigwe CC, Tabarsa M, Barzegar M. Associated Changes in the Structural and Antioxidant Activity of Myofibrillar Proteins via Interaction of Polyphenolic Compounds and Protein Extracted from Lentil (*Lens culinaris*). *Journal of Food Biochemistry*. 2023;2023(1):4204377.
20. Hossein Zadeh Z, Najdegerami EH, Niko M, Nejati V, Ahmadi Gavligi H. Low-molecular weight oligosaccharides from gum tragacanth (*Astragalus gossypinus*) ameliorate nonalcoholic fatty liver disease (NAFLD) in Wistar male rats. *Food Science & Nutrition*. 2023;11(2):765-77.
21. Ejtemaei R, Ahmadi H, Jalili Safaryan M, Tabarsa M. Evaluation of the interaction of maize fiber gum with α -amylase and α -glucosidase enzymes and its effect on enzymes inhibition activity. *Journal of food science and technology (Iran)*. 2023;19(132):51-63.
22. Delfanian M, Yesiltas B, Sørensen A-DM, Sahari MA, Barzegar M, Gavligi HA, et al. Interfacial effects of gallate alkyl esters on physical and oxidative stability of high fat fish oil-in-water emulsions stabilized with sodium caseinate and OSA-modified starch. *Food Chemistry*. 2023;417:135923.
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25. Azhdari P, Seifzadeh N, Sahari MA, Gavligi HA. Application of enzymatic treatments in concentration of pistachio hull extract by ultrafiltration. *Food Chemistry Advances*. 2023;3:100471.
26. Arasteh F, Barzegar M, Gavligi HA. Potential inhibitory effect of fish, maize, and whey protein hydrolysates on advanced glycation end-products (AGEs). *Food Science & Nutrition*. 2023;11(6):3075-82.

27. Zaidel DNA, Gavligi HA, Lazim NAM. Functional Properties and Potential Application of Biosurfactants as a Natural Ingredient in the Food Industry. *Microbial Surfactants: Volume 2: Applications in Food and Agriculture*. 2022.
28. Tavakoli A, Sahari MA, Barzegar M, Ahmadi Gavligi H, Marzocchi S, Marzali S, et al. Deodorization of sunflower oil by high voltage electric field as a nonthermal method sunflower oil refining by electric field. *Journal of Food Science*. 2022;87(10):4363-78.
29. Sharifi A, Hamidi-Esfahani Z, Gavligi HA, Saberian H. Assisted ohmic heating extraction of pectin from pomegranate peel. *Chemical Engineering and Processing-Process Intensification*. 2022;172:108760.
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31. Rahimi R, Gavligi HA, Sarteshnizi RA, Barzegar M, Udenigwe CC. In vitro antioxidant activity and antidiabetic effect of fractionated potato protein hydrolysate via ultrafiltration and adsorption chromatography. *LWT*. 2022;154:112765.
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35. Mousavi NS, Tabarsa M, Ahmadi H. Evaluation of relationship between molecular weight and antioxidant properties of hydrolyzed fucoidan from brown seaweed *Nizamuddinina zanardinii*. *Fisheries Science and Technology*. 2022;11(2):153-63.
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41. Tavakoli A, Sahari MA, Barzegar M, Gavlighi HA, Marzocchi S, Marzali S, et al. The Effect of Refining Process on the Volatile Compounds, Oxidation Stability and Fatty Acids Profile of Soybean Oil Using an Electrostatic Field. *Journal of Food Processing and Preservation*. 2021:e16160.
42. Sarteshnizi RA, Sahari MA, Gavlighi HA, Regenstien JM, Nikoo M, Udenigwe CC. Influence of fish protein hydrolysate-pistachio green hull extract interactions on antioxidant activity and inhibition of α -glucosidase, α -amylase, and DPP-IV enzymes. *LWT*. 2021;142:111019.
43. Sardabi F, Azizi MH, Gavlighi HA, Rashidinejad A. The effect of *Moringa peregrina* seed husk on the in vitro starch digestibility, microstructure, and quality of white wheat bread. *LWT*. 2021;136:110332.
44. Saberian H, Hamidi-Esfahani Z, Ahmadi Gavlighi H. Semi-Pilot scale extraction of pectin from orange peel waste and evaluating its quantitative and qualitative features. *Journal of Food Processing and Preservation*. 2021;12(2):53-66.
45. Khajavi S, Tabarsa M, Ahmadi Gavlighi H, Rezaie M. Relationship evaluation of molecular weight and antioxidant and alpha amylase inhibition properties of fucoidan and alginate from brown seaweed *Padina pavonica* in comparison with polysaccharides from Flixweed and Fennel. *Fisheries Science and Technology*. 2021;10(1):31-45.
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49. Ghandehari Yazdi A, Barzegar M, Sahari M, Ahmadi Gavlighi H. Encapsulation of Pistachio Green Hull Phenolic Compounds by Spray Drying. *Journal of Agricultural Science and Technology*. 2021;23(1):51-64.
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56. Abbasi MA, Ghazanfari S, Sharifi SD, Gavligi HA. Effect of rosemary essential oil as nitrite substitute on quality of sausage produced using chicken fed by thymus essential oil and rapeseed oil. *Journal of Food Science and Technology*. 2021:1-12.
57. Noorolahi Z, Sahari MA, Barzegar M, Ahmadi Gavligi H. Tannin fraction of pistachio green hull extract with pancreatic lipase inhibitory and antioxidant activity. *Journal of food biochemistry*. 2020;44(6):e13208.
58. Mirab B, Gavligi HA, Sarteshnizi RA, Azizi MH, Udenigwe CC. Production of low glycemic potential sponge cake by pomegranate peel extract (PPE) as natural enriched polyphenol extract: Textural, color and consumer acceptability. *LWT*. 2020;134:109973.
59. Lashgari SS, Noorolahi Z, Sahari MA, Ahmadi Gavligi H. Improvement of oxidative stability and textural properties of fermented sausage via addition of pistachio hull extract. *Food Science & Nutrition*. 2020.
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63. Ghandehari Yazdi AP, Barzegar M, Ahmadi Gavligi H, Sahari MA, Mohammadian AH. Physicochemical properties and organoleptic aspects of ice cream enriched with microencapsulated pistachio peel extract. *International Journal of Dairy Technology*. 2020.
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65. Ataei D, hamidi-Esfahani Z, Ahmadi-Gavligi H. Enzymatic production of xylooligosaccharide from date (*Phoenix dactylifera* L.) seed. *Food Science & Nutrition*. 2020.
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87. Seifzadeh N, Sahari MA, Barzegar M, Ahmadi Gavlighi H. Concentration of pistachio hull extract antioxidants using membrane separation and reduction of membrane fouling during process. *Food Science & Nutrition*. 2018;6(6):1741-50.
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application as a button mushroom postharvest anti-browning agent. *Postharvest Biology and Technology*. 2018;145:157-65.

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Patent

ENZYMATIC PRODUCTION OF POLYSACCHARIDES FROM GUM TRAGACANTH
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