



بسمه تعالیٰ

## شرح سوابق علمی

### اطلاعات شخصی

نام و نام خانوادگی	حسن احمدی گاولیقی
تاریخ تولد	۱۳۵۷
کد ملی	۱۵۳۱۷۹۵۴۸۱
میانه	میانه
محل تولد	متاہل
وضعیت تأهل	علوم و صنایع غذایی
گروه آموزشی	دانشگاه کشاورزی - دانشگاه تربیت مدرس - ص پ ۳۳۶-۱۴۱۱۵ تهران
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### سوابق تحصیلات عالی

دوره تحصیلی	نام دانشگاه	رشته تحصیلی	تاریخ اخذ مدرک	معدل
کارشناسی	دانشگاه ارومیه	مهندسی صنایع غذایی	۱۳۷۹	۱۶/۲۰
کارشناسی ارشد	دانشگاه تربیت مدرس	مهندسی صنایع غذایی	۱۳۸۱	۱۷/۲۸
دکتری تخصصی	دانشگاه فنی دانمارک	علوم و صنایع غذایی	۱۳۹۲	عالی

### سوابق شغلی

نوع فعالیت	محل کار	زمان
عضو هیئت علمی (استادیار)	دانشگاه تربیت مدرس	آبان ماه ۱۳۹۲ تا حال
فرا دکتری	دانشگاه فنی دانمارک	۳ ماه
عضو هیئت علمی (مریبی)	دانشگاه تربیت مدرس	۱۳۸۲-۱۳۸۸

### عضویت در مجلات علمی

نام مجمع	انجمان متخصصین علوم و صنایع غذایی ایران	۱
زمان پیوستن	۱۳۸۱	

داوری مجلات علمی	
نام مجله	
مجله علوم و صنایع غذایی ایران	۱
پژوهش‌های صنایع غذایی	۲
Applied Biochemistry and Biotechnology	۳
Iranian Journal of Biotechnology	۴
Agro Food Industry Hi-Tech	۵
Starch	۶
Food Research International	۷
Journal of Food Science and Technology	۸
Journal of Food Chemistry	۹
Meat Science	۱۰

#### زمینه های مورد علاقه تحقیقی

- ۱ جایگزینی مواد طبیعی با مواد شیمیایی در فرمولاسون محصولات گوشته
- ۲ استخراج و کاربرد پروتئینهای گیاهی و محصولات منتج آن عنوان مواد بیوآکتیو
- ۳ استخراج یا ساکاریدها و تجزیه با تکنیک‌های کروماتوگرافی
- ۴ تولید و خالص سازی و کاربرد آن‌زیمهای در مواد غذایی و تولید محصولات فراسودمند

پژوهه های تحقیقاتی	محل اجرا
کاهش ضایعات گندم از تولید تا مصرف، ۱۳۸۳، (همکار)	دانشگاه تربیت مدرس
استفاده از خرما و قند آن برای بهبود خواص رئولوژیکی و حسی برخی فرآورده‌های قندی، ۱۳۸۵ ( مجری)	انستیتو تحقیقات و صنایع غذایی کشور
پژوهه ملی در مورد تهیه فرمولاسیون شیر خشک، ۱۳۹۰ ( همکار)	دانشگاه فنی دانمارک
استخراج ترکیبات فراسودمند از پسماند جامد کارخانجات فراوری ماهی با استفاده از تیمارهای فرآپالایش و جزجز شدن، بررسی خواص ترکیبات فراسودمند تولیدی و استفاده از آنها در فرمولاسیون تولید محصولات غذایی فراسودمند ( همکار)	صندوق حمایت از پژوهشگران و فناوران کشور
استفاده از عصاره‌های طبیعی (پوست پسته و انار) در تولید کیک کم کالری ( مجری)	صندوق حمایت از پژوهشگران و فناوران کشور

<p>۶ : تولید و طراحی فرمولاسیون فراورده های گوشتی فراسودمند با شرکت گوشتیران تاکید بر بهبود ارزش تغذیه ای و افزایش سیستم ایمنی</p> <p>۷ تولید پیتیدهای غذایی با فنیل آلانین پایین از منابع پروتئینی بنیاد ملی نخبگان م مختلف ( مجری )</p>
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#### دروس تدریسی

دانشگاه تربیت مدرس	صنایع گوشت تکمیلی ( کارشناسی ارشد )	۱
دانشگاه تربیت مدرس	تولید و کاربرد آنزیمهای در صنایع غذایی ( دکتری )	۲
دانشگاه تربیت مدرس	فرآوری محصولات جانبی و ضایعات مواد غذایی ( کارشناسی ارشد )	۳
دانشگاه تربیت مدرس	اثر فرایندها بر میکروارگانیسمها و آنزیمهای ( کارشناسی ارشد )	۴
دانشگاه تربیت مدرس	فرآوری پیشرفته آبزیان ( دکتری )	۵

#### مقالات علمی چاپ شده در مجلات بین المللی

#### 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, Gavighi HA, et al. Hydrolysis and cross-flow ultrafiltration as an alternative process to isolate fucoidans from edible seaweed Nizamuddinia zarnardinii with enhanced immunostimulatory efficacy. *Algal Research*. 2024;82:103632.
7. Mirzaee H, Ahmadi Gavighi 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, Gavighi 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 Gavighi 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, Gavighi 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, Gavighi 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, Gavighi 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 Gavighi 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-Gahfarokhi M, Gavighi HA, Zarei M. Ultrasonic depolymerization of pomegranate peel pectin: Effect of sonication time on antioxidant,  $\alpha$ -amylase inhibitory, and prebiotic properties. *Food Chemistry*: X. 2024;24:101901.
15. Anvar A, Azizi MH, Gavighi 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, Gavighi 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 Gavighi H. Antioxidant activity of purified fractions obtained from membrane ultrafiltration of hydrolysed fucoidan from brown seaweed Nizamuddinia zanardinii. *Journal of Fisheries*. 2023;76(2):195-207.
18. Mirzaee H, Ahmadi Gavighi 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 Gavighi 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 Gavighi 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  $\alpha$ -amylase and  $\alpha$ -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, Gavighi 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.
23. Delfanian M, Sahari MA, Barzegar M, Gavighi HA, Barba FJ. Interfacial behavior of gallic acid and its alkyl esters in stripped soybean oil in combination with monoacylglycerol and phospholipid. *Food Chemistry*. 2023;413:135618.
24. Chaloshtori FN, Tabarsa M, Gavighi HA, You S. Structure-activity relationship of fucoidans and alginates obtained from *Cystoseira indica* in a biorefinery concept. *International Journal of Biological Macromolecules*. 2023;251:126326.
25. Azhdari P, Seifzadeh N, Sahari MA, Gavighi HA. Application of enzymatic treatments in concentration of pistachio hull extract by ultrafiltration. *Food Chemistry Advances*. 2023;3:100471.
26. Arasteh F, Barzegar M, Gavighi 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, Gavighi 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 Gavighi H, Marzocchi S, Marziali S, et al. Deodorization of sunflower oil by high voltage electric field as a nonthermal method for sunflower oil refining by electric field. *Journal of Food Science*. 2022;87(10):4363-78.
29. Sharifi A, Hamidi-Esfahani Z, Gavighi HA, Saberian H. Assisted ohmic heating extraction of pectin from pomegranate peel. *Chemical Engineering and Processing-Process Intensification*. 2022;172:108760.
30. Sardabi F, Azizi MH, Gavighi HA, Rashidinejad A. Potential benefits of *Moringa peregrina* defatted seed: Effect of processing on nutritional and anti-nutritional properties, antioxidant capacity, in vitro digestibility of protein and starch, and inhibition of  $\alpha$ -glucosidase and  $\alpha$ -amylase enzymes. *Food Chemistry Advances*. 2022;1:100034.
31. Rahimi R, Gavighi 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.
32. Noorolahi Z, Sahari MA, Gavighi HA, Barzegar M. Pistachio green hull extract as natural antioxidant incorporated to omega-3 rich kappa-carrageenan oleogel in dry fermented sausage. *Food Bioscience*. 2022;50:101986.
33. Nikoo M, Gavighi HA. Natural Antioxidants and Flavorings for Clean Label Foods. *The Age of Clean Label Foods*: Springer Nature; 2022. p. 73.
34. Nikoo M, Benjakul S, Ahmadi Gavighi H. Protein hydrolysates derived from aquaculture and marine byproducts through autolytic hydrolysis. *Comprehensive Reviews in Food Science and Food Safety*. 2022;21(6):4872-99.
35. Mousavi NS, Tabarsa M, Ahmadi H. Evaluation of relationship between molecular weight and antioxidant properties of hydrolyzed fucoidan from brown seaweed *Nizamuddinia zanardinii*. *Fisheries Science and Technology*. 2022;11(2):153-63.
36. Maassoumi N, Ghanati F, Zare-Maivan H, Gavighi HA. Metabolic changes network in selenium-treated Astragalus cells derived by glutathione as a core component. *Plant Cell, Tissue and Organ Culture (PCTOC)*. 2022;149(1-2):455-65.
37. Khodaei D, Nejatian M, Gavighi HA, Garavand F, Cacciotti I. Utilization of Bitter Orange Seed as a Novel Pectin Source: Compositional and Rheological Characterization. *JOURNAL OF RENEWABLE MATERIALS*. 2022;10(11):2805-17.
38. Jalili Safaryan M, Ahmadi Gavighi H, Barzegar M, Tabarsa M, Udenigwe C. Evaluation of inhibitory effect of alpha-amylase and alpha-glucosidase by interaction phenolic compounds, soluble fiber, and protein extracted from green lentils. *Journal of food science and technology (Iran)*. 2022;19(122):35-45.
39. Ghanbari Kiasara M, Tabarsa M, Ahmadi H, Mokhlesi A. Evaluation of stepwise precipitation of fucoidan from brown seaweed *Nizamuddinia zanardinii* on its chemical, molecular and antioxidant properties. *Fisheries Science and Technology*. 2022;11(4):331-45.

40. Ghanati F, Maassoumi N, Ahmadi Gavighi H. Selenium elicitation and increase of secondary metabolites production by suspension-cultured *Astragalus verus* cells. *Journal of Plant Process and Function*. 2022;11(49):11-7.
41. Tavakoli A, Sahari MA, Barzegar M, Gavighi HA, Marzocchi S, Marziali 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, Gavighi HA, Regenstein JM, Nikoo M, Udenigwe CC. Influence of fish protein hydrolysate-pistachio green hull extract interactions on antioxidant activity and inhibition of  $\alpha$ -glucosidase,  $\alpha$ -amylase, and DPP-IV enzymes. *LWT*. 2021;142:111019.
43. Sardabi F, Azizi MH, Gavighi 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 Gavighi 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 Gavighi 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.
46. Karimi A, Gavighi HA, Sarteshnizi RA, Udenigwe CC. Effect of maize germ protein hydrolysate addition on digestion, in vitro antioxidant activity and quality characteristics of bread. *Journal of Cereal Science*. 2021;103148.
47. Jalali-Jivan M, Fathi-Achachlouei B, Ahmadi-Gavighi H, Jafari SM. Improving the extraction efficiency and stability of  $\beta$ -carotene from carrot by enzyme-assisted green nanoemulsification. *Innovative Food Science & Emerging Technologies*. 2021;74:102836.
48. Gheshlaghi SP, Khaledabad MA, Nikoo M, Regenstein JM, Gavighi HA. Impact of sturgeon gelatin hydrolysates (SGH) on physicochemical and microbiological properties of fat-free set-type yogurt. *LWT*. 2021;148:111665.
49. Ghandehari Yazdi A, Barzegar M, Sahari M, Ahmadi Gavighi H. Encapsulation of Pistachio Green Hull Phenolic Compounds by Spray Drying. *Journal of Agricultural Science and Technology*. 2021;23(1):51-64.
50. Ghaderi-Ghahfarokhi M, Yousefvand A, Ahmadi Gavighi H, Zarei M. The effect of hydrolysed tragacanth gum and inulin on the probiotic viability and quality characteristics of low-fat yoghurt. *International Journal of Dairy Technology*. 2021;74(1):161-9.

51. Delfanian M, Sahari MA, Barzegar M, Gavlighi HA. Structure–antioxidant activity relationships of gallic acid and phloroglucinol. Journal of Food Measurement and Characterization. 2021;1-11.
52. Delfanian M, Sahari MA, Barzegar M, Ahmadi Gavlighi H. Effect of Steric Structure on Mechanism of Antioxidant Activity of Alkyl Gallates in Soybean Oil Triacylglycerols—A Kinetic Approach. European Journal of Lipid Science and Technology. 2021;2100019.
53. Alavi M, Mehdi T, Ahmadi Gavlighi H. Antioxidant activity,  $\alpha$ -amylase and  $\alpha$ -glucosidase inhibition properties of sulfated-polysaccharides purified from freshwater plant *Myriophyllum spicatum* L. Journal of food science and technology (Iran). 2021;18(116):81-90.
54. Ahmadi Gavlighi H, Tabarsa M, Ghaderi Ghahfarokhi M. Antioxidant ,  $\alpha$ -amylase and  $\alpha$ -glucosidase inhibition properties of polysaccharide from pomegranate peel via enzymatic and acidic approach. Journal of food science and technology (Iran). 2021;18(117):145-53.
55. Abbasi MA, Ghazanfari S, Sharifi SD, Gavlighi HA. Effect of different levels of rapeseed oil and garden thyme essential oil on performance, immune traits and intestinal morphology of broiler chickens. Animal Production. 2021;23(3):594-608.
56. Abbasi MA, Ghazanfari S, Sharifi SD, Gavlighi 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 Gavlighi 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, Gavlighi 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 Gavlighi H. Improvement of oxidative stability and textural properties of fermented sausage via addition of pistachio hull extract. Food Science & Nutrition. 2020.
60. Keshavarzi M, Najafi G, Ahmadi Gavlighi H, Seyfi P, Ghomi H. Enhancement of polyphenolic content extraction rate with maximal antioxidant activity from green tea leaves by cold plasma. Journal of Food Science. 2020;85(10):3415-22.
61. Karimi N, Nikoo M, Gavlighi HA, Gheshlaghi SP, Regenstein JM, Xu X. Effect of pacific white shrimp (*Litopenaeus vannamei*) protein hydrolysates (SPH) and (−)-epigallocatechin gallate (EGCG) on sourdough and bread quality. LWT. 2020;131:109800.

62. Karimi A, Azizi MH, Gavighi HA. Fractionation of hydrolysate from corn germ protein by ultrafiltration: In vitro antidiabetic and antioxidant activity. *Food Science & Nutrition*. 2020;8(5):2395-405.
63. Ghandehari Yazdi AP, Barzegar M, Ahmadi Gavighi 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.
64. Ghaderi-Ghahfarokhi M, Yousefvand A, Ahmadi Gavighi H, Zarei M, Farhangnia P. Developing novel symbiotic low-fat yogurt with fucoxylogalacturonan from tragacanth gum: Investigation of quality parameters and *Lactobacillus casei* survival. *Food Science & Nutrition*. 2020.
65. Ataei D, hamidi-Esfahani Z, Ahmadi-Gavighi H. Enzymatic production of xylooligosaccharide from date (*Phoenix dactylifera L.*) seed. *Food Science & Nutrition*. 2020.
66. Ataei D, Hamidi Z, Ahmadi Gavighi H. Evaluation of Prebiotic Potential of the Xylooligosaccharides Produced by Enzymatic Method from Date Kernel. *Journal of Food Research*. 2020;30(3):123-35.
67. Aliyari P, Bakhshi Kazaj F, Barzegar M, Ahmadi Gavighi H. Production of Functional Sausage Using Pomegranate Peel and Pistachio Green Hull Extracts as Natural Preservatives. *Journal of Agricultural Science and Technology*. 2020;22(1):159-72.
68. Alavi M, Tabarsa M, You S, Gavighi HA. Structural characteristics, molecular properties and immunostimulatory effects of sulfated polysaccharide from freshwater *Myriophyllum spicatum L.* *International Journal of Biological Macromolecules*. 2020;153:951-61.
69. Abbasi MA, Ghazanfari S, Sharifi SD, Gavighi HA. Influence of dietary plant fats and antioxidant supplementations on performance, apparent metabolizable energy and protein digestibility, lipid oxidation and fatty acid composition of meat in broiler chicken. *Veterinary Medicine and Science*. 2020;6(1):54-68.
70. Zahedi M, Hamidi-Esfahani Z, Ahmadi-Gavighi H. Optimization of Ultrasound-assisted Extraction of Pectin from Tomato Pomace Using Response Surface Methodology. *Iranian Food Science and Technology Research Journal*. 2019;15(1):91-105.
71. Tavakoli A, Sahari MA, Barzegar M, Gavighi HA. Optimization of high voltage electric field as a novel non-thermal method of sunflower oil neutralization. *Separation and Purification Technology*. 2019;211:430-7.
72. Seifzadeh N, Sahari MA, Barzegar M, Ahmadi Gavighi H, Calani L, Del Rio D, et al. Evaluation of polyphenolic compounds in membrane concentrated pistachio hull extract. *Food Chemistry*. 2019;277(30):398-406.

73. Sarteshnizi RA, Sahari MA, Gavighi HA, Regenstein JM, Nikoo M. Antioxidant activity of Sind sardine hydrolysates with pistachio green hull (PGH) extracts. *Food Bioscience*. 2019;27:37-45.
74. Sadeghinejad N, Sarteshnizi RA, Gavighi HA, Barzegar M. Pistachio green hull extract as a natural antioxidant in beef patties: Effect on lipid and protein oxidation, color deterioration, and microbial stability during chilled storage. *LWT*. 2019;102:393-402.
75. Nikoo M, Benjakul S, Yasemi M, Gavighi HA, Xu X. Hydrolysates from rainbow trout (*Oncorhynchus mykiss*) processing by-product with different pretreatments: Antioxidant activity and their effect on lipid and protein oxidation of raw fish emulsion. *LWT*. 2019;108:120-8.
76. Nikoo M, Benjakul S, Gavighi HA, Xu X, Regenstein JM. Hydrolysates from rainbow trout (*Oncorhynchus mykiss*) processing by-products: Properties when added to fish mince with different freeze-thaw cycles. *Food Bioscience*. 2019;30:100418.
77. Nikoo M, Ahmadi Gavighi H, Yasemi M. Effect of washing with distilled water, citric acid and calcium ion on composition of protein isolates from rainbow trout by-product and antioxidant and anti-diabetic activities of hydrolysate. *Journal of food science and technology (Iran)*. 2019;16(87):197-207.
78. Kamali E, Sahari MA, Barzegar M, Ahmadi Gavighi H. Novel oleogel formulation based on amaranth oil: Physicochemical characterization. *Food science & nutrition*. 2019;7(6):1986-96.
79. Gharai Z, Azizi MH, Barzegar M, Gavighi HA. Gum tragacanth oil/gels as an alternative to shortening in cookies: Rheological, chemical and textural properties. *LWT*. 2019;105:265-71.
80. Ghandahari Yazdi AP, Barzegar M, Sahari MA, Ahmadi Gavighi H. Optimization of the enzyme-assisted aqueous extraction of phenolic compounds from pistachio green hull. *Food science & nutrition*. 2019;7(1):356-66.
81. Fatan B, Ahmadi Gavighi H, Sahari M. Effect of Molecular Weight of Isolated Protein Hydrolysate from *Sardinella sindensis* Obtained Using Pancratin on the Anti-Oxidative and Anti-Diabetic Properties. *Fisheries Science and Technology*. 2019;8(2):59-63.
82. Bitalebi S, Nikoo M, Rahmanifar K, Noori F, Gavighi HA. Effect of apple peel extract as natural antioxidant on lipid and protein oxidation of rainbow trout (*Oncorhynchus mykiss*) mince. *International Aquatic Research*. 2019;1-12.
83. Bitalebi S, Nikoo M, Rahmanifar K, Noori F, Ahmadi Gavighi H. Effect of apple peel extract as natural antioxidant on lipid and protein oxidation of rainbow trout (*Oncorhynchus mykiss*) mince. *International Aquatic Research*. 2019;11(2):135-46.
84. Aghagholizadeh R, Kadivar M, Nazari M, Ahmadi H, Azizi MH. Capability of solvent retention capacity to quality of flat bread in three wheat cultivars. *Journal of Food Science and Technology*. 2019;1-8.

85. Abbasi MA, Ghazanfari S, Sharifi SD, Ahmadi Gavighi H. The Effect of Rosemary, Thymus and Satureja Essential Oils, Vitamin E and Vegetable Oils on Immune System and Intestinal Microflora of Broiler Chicken. *Journal of Veterinary Research*. 2019;74(2):153-66.
86. Abbasi E, Sarteshnizi RA, Gavighi HA, Nikoo M, Azizi MH, Sadeghinejad N. Effect of partial replacement of fat with added water and tragacanth gum (*Astragalus gossypinus* and *Astragalus compactus*) on the physicochemical, texture, oxidative stability, and sensory property of reduced fat emulsion type sausage. *Meat Science*. 2019;147:135-43.
87. Seifzadeh N, Sahari MA, Barzegar M, Ahmadi Gavighi 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.
88. Saberian H, Hamidi-Esfahani Z, Ahmadi Gavighi H, Banakar A, Barzegar M. The potential of ohmic heating for pectin extraction from orange waste. *Journal of Food Processing and Preservation*. 2018;42(2).
89. Saberian H, Hamidi-Esfahani Z, Gavighi H, Barzegar M. The comparison between enzymatic, ohmic and conventional methods on the yield and quality properties of the extracted pectins from orange waste. *Iranian Food Science & Technology Research Journal*. 2018;14(1):69-80.
90. Omranifar F, Ahmadi Gavghili H, Azizi MH, Manafzadeh A. Effect of Lentil Dahl Flour and Gluten on Quality Properties of Toast Bread. *Iranian Food Science and Technology Research Journal*. 2018;14(4):473-83.
91. Nikoo M, Regenstein JM, Ahmadi Gavighi H. Antioxidant and Antimicrobial Activities of (-)-Epigallocatechin-3-gallate (EGCG) and its Potential to Preserve the Quality and Safety of Foods. *Comprehensive Reviews in Food Science and Food Safety*. 2018;17(3):732-53.
92. Nemati F, Ghanati F, Gavighi HA, Sharifi M. Fructan dynamics and antioxidant capacity of 4-day-old seedlings of wheat (*Triticum aestivum*) cultivars during drought stress and recovery. *Functional Plant Biology*. 2018;45(10):1000-8.
93. Nemati F, Ghanati F, Gavighi HA, Sharifi M. Comparison of sucrose metabolism in wheat seedlings during drought stress and subsequent recovery. *Biologia Plantarum*. 2018;62(3):595-9.
94. Lalegani S, Gavighi HA, Azizi MH, Sarteshnizi RA. Inhibitory activity of phenolic-rich pistachio green hull extract-enriched pasta on key type 2 diabetes relevant enzymes and glycemic index. *Food Research International*. 2018.
95. Gavighi HA, Tabarsa M, You S, Surayot U, Ghaderi-Ghahfarokhi M. Extraction, characterization and immunomodulatory property of pectic polysaccharide from pomegranate peels: Enzymatic vs conventional approach. *International journal of biological macromolecules*. 2018;116:698-706.

96. Fattahifar E, Barzegar M, Gavighi HA, Sahari M. Evaluation of the inhibitory effect of pistachio (*Pistacia vera L.*) green hull aqueous extract on mushroom tyrosinase activity and its application as a button mushroom postharvest anti-browning agent. *Postharvest Biology and Technology*. 2018;145:157-65.
97. Sarfaraz A, Azizi MH, Gavighi HA, Barzegar M. Physicochemical and functional characterization of wheat milling co-products: Fine grinding to achieve high fiber antioxidant-rich fractions. *Journal of Cereal Science*. 2017;77:228-34.
98. Saberian H, Hamidi-Esfahani Z, Gavighi HA, Barzegar M. Optimization of pectin extraction from orange juice waste assisted by ohmic heating. *Chemical Engineering and Processing: Process Intensification*. 2017;117:154-61.
99. Nikoo M, Xu X, Gavighi HA. Seafood Waste-Derived Peptides: Their Antioxidant Activity and Potential as Alternative Preservatives in Fish Products. *Protein Byproducts*: Elsevier; 2017. p. 315-32.
100. Kordjazi M, Shabanpour B, Zabihi E, Faramarzi MA, GAVLIGHI HA, Feghhi SMA, et al. Investigation of effects of fucoidan polysaccharides extracted from two species of *Padina* on the wound-healing process in the rat. *Turkish Journal of Veterinary and Animal Sciences*. 2017;41(1):106-17.
101. Ghasemian S, Sahari MA, Barzegar M, Gavighi HA. Omega-3 PUFA concentration by a novel PVDF nano-composite membrane filled with nano-porous silica particles. *Food Chemistry*. 2017;230:454-62.
102. Ghaderi-Ghahfarokhi M, Barzegar M, Sahari M, Gavighi HA, Gardini F. Chitosan-cinnamon essential oil nano-formulation: Application as a novel additive for controlled release and shelf life extension of beef patties. *International Journal of Biological Macromolecules*. 2017;102:19-28.
103. Alnajjar N, Ghanati F, Behmanesh M, Ahmadi Gavighi H. Fine quantitation of novel trace taxans in suspension-cultured *Corylus avellana L.* cells by photo diode array HPLC technique. *Journal of Plant Physiology*. 2017;7(2):1963-9.
104. Razmkhah S, Razavi SMA, Mohammadifar MA, Ale MT, Gavighi HA. Protein-free cress seed (*Lepidium sativum*) gum: Physicochemical characterization and rheological properties. *Carbohydrate Polymers*. 2016;153:14-24.
105. Ghasemian S, Sahari MA, Barzegar M, Gavighi HA. Omega-3 Polyunsaturated Fatty Acids Concentration Using Synthesized Poly-Vinylidene Fluoride (PVDF) Asymmetric Membranes. *Journal of the American Oil Chemists' Society*. 2016;93(9):1201-10.
106. Azizi MH, Ahmadi Gavighi H, Ebrahimian M. The Effect of Native and Acetylated Wheat Starches on Reological Properties of Dough and Quality of Barbari Bread. *Research and Innovation in Food Science and Technology*. 2016;5(3):221-34.

107. Ghasemian S, Sahari MA, Barzegar M, Gavighi HA. Concentration of Omega-3 polyunsaturated fatty acids by polymeric membrane. International Journal of Food Science & Technology. 2015;50(11):2411-8.
108. Gavighi HA, Michalak M, Meyer AS, Ale MT, Nielsen DS. Enzymatic production of polysaccharides from gum tragacanth. WO Patent 2,014,170,498; 2014.
109. Kordjazi M, Shabanpour B, Zabihi E, Faramarzi MA, Feizi F, Ahmadi Gavighi H, et al. Sulfated polysaccharides purified from two species of *Padina* improve collagen and epidermis formation in the rat. International Journal of Molecular and Cellular Medicine (IJMCM). 2013;2(4):156-63.
110. Gavighi HA, Michalak M, Meyer AS, Mikkelsen JD. Enzymatic depolymerization of gum Tragacanth: Bifidogenic potential of low molecular weight oligosaccharides. Journal of Agricultural and Food Chemistry. 2013;61(6):1272–8.
111. Gavighi HA, Meyer AS, Zaidel DN, Mohammadifar MA, Mikkelsen JD. Stabilization of emulsions by gum tragacanth (<i></i>Astragalus spp</i>.) correlates to the galacturonic acid content and methoxylation degree of the gum. Food Hydrocolloids. 2013;31(1):5-14.
112. Gavighi HA. Tragacanth gum: structural composition, natural functionality and enzymatic conversion as source of potential prebiotic activity: Ph. D Thesis. DTU Chemical Engineering, Department of Chemical and Biochemical Engineering; 2013.
113. Gavighi HA, Meyer, A.S., J.D.Mikkelsen. Tragacanth gum: functionality and prebiotic potential. Agro FOOD industry hi-tech. 2013;24(2):46-8.
114. Gavighi HA, Meyer AS, Mikkelsen JD. Enhanced enzymatic cellulose degradation by cellobiohydrolases via product removal. Biotechnology Letters. 2012;35(2):205-12.
115. Balaghi S, Mohammadifar MA, Zargaraan A, Gavighi HA, Mohammadi M. Compositional analysis and rheological characterization of gum tragacanth exudates from six species of Iranian Astragalus. Food Hydrocolloids. 2011;25(7):1775–84.
116. Ahmadi Gavighi H, Azizi M, Jahanian L, Amirkaveei S. EVALUATION OF REPLACEMENT OF DATE LIQUID SUGAR AS A REPLACEMENT FOR INVERT SYRUP IN A LAYER CAKE. 2010.
117. Sahari MA, Gavighi HA, Tabrizzad MHA. Classification of protein content and technological properties of eighteen wheat varieties grown in Iran. International journal of food science & technology. 2006;41(s2):6-11.

## Conference Paper

عنوان فارسی	زبان	مرحله	نوع	نوع	نام	عنوان فارسی همایش
مقاله	چاپ	چاپ	ارائه	محل		

بیست و دومین کنگره ملی علوم و صنایع غذایی ایران	تهران	گرگان	شفاهی	ارائه شده	چاپ شده	فارسی	عوامل مؤثر بر تولید آنزیم تاناز از قارچ جهش یافته Penicillium EZ-ZH390 در محیط کشت جامد
اولین همایش روش های افزایش ماندگاری فراورده های غذایی	تهران	پوستر	ارائه مقاله	پذیرش قطعی	فارسی	روش های مدرن اصلاح نشاسته	
سومین همایش بزرگ علوم و صنایع غذایی	اصفهان	پوستر	ارائه مقاله	چاپ شده	فارسی	مروری بر اکسایش پروتئین در گوشت و استفاده از ضداکساینده ها در کاهش آن	
بیست و سومین کنگره ملی علوم و صنایع غذایی ایران	مشهد	پوستر	ارائه مقاله	چاپ شده	فارسی	نشاسته های اصلاح شده و کاربرد آن در فراورده های غذایی	
بیست و سومین کنگره ملی علوم و صنایع غذایی ایران	مشهد	پوستر	ارائه مقاله	چاپ شده	فارسی	کاربرد نشاسته های اصلاح شده در پخت نان	
اولین کنگره بین المللی و بیست و چهارمین کنگره ملی علوم و صنایع غذایی ایران	تهران	شفاهی	ارائه مقاله	چاپ شده	فارسی	تأثیر روش های آنزیمی، اهمی و متدائل بر بازده و خواص پکتین استخراجی از ضایعات پرتقال	
اولین کنگره بین المللی و بیست و چهارمین کنگره ملی علوم و صنایع غذایی ایران	تهران	شفاهی	ارائه مقاله	چاپ شده	فارسی	اثر عصاره‌ی پوست انار بر بازدارندگی آنزیم‌های آلفا آمیلаз و آلفا گلوکوزیداز	

Nanoencapsulation Approach to Improve Cinnamon Essential Oil Functionality: Lipid and Color Stability of Beef Burgers	انگلیسی	چاپ شده	ارائه مقاله	شفاهی	تهران	اولین کنگره بین المللی و بیست و چهارمین کنگره ملی علوم و صنایع غذایی ایران
ارزیابی اثر ماده فعال سطحی اسپن ۸۵ بر عملکرد و رفتار گرفتگی غشای PVDF در تغليظ اسیدهای چرب امگا-۳	فارسی	چاپ شده	ارائه مقاله	شفاهی	تهران	اولین کنگره بین المللی و بیست و چهارمین کنگره ملی علوم و صنایع غذایی ایران
تأثیر جایگزینی صمغ کتیرا به جای چربی در سوسيس کم چرب و برخی ویژگی های فيزيکوشيميايی آن	فارسی	چاپ شده	ارائه مقاله	پوستر	تهران	اولین کنگره بین المللی و بیست و چهارمین کنگره ملی علوم و صنایع غذایی ایران

## Book Chapter

Nikoo, M., Xu, X., & Ahmadi Gavlighi, H. (2016). Chapter 17 - Seafood Waste-Derived Peptides: Their Antioxidant Activity and Potential as Alternative Preservatives in Fish Products A2 - Dhillon, Gurpreet Singh *Protein Byproducts* (pp. 315-332): Academic Press.

ثبت اختراع بین المللی (اختراع اروپا)

## ENZYMATIC PRODUCTION OF POLYSACCHARIDES FROM GUM TRAGACANTH

MIKKELSEN, Jørn Dalgaard; (DK), **GAVLIGHI, Hassan Ahmadi**; (IR), MICHALAK, Malwina; (DK), MEYER, Anne S.; (DK), ALE, Marcel Tutor; (DK); (WO 2014170498 A1), Publication Date: 23.10.2014