Dr. Asghar Taheri-Kafrani (B.Sc., M.Sc., and Ph.D.)

Associate Professor of Biotechnology

+98 31 37 93 43 46 +98 31 37 93 23 42

a.taheri@ast.ui.ac.ir a.taheri84@gmail.com

Department of Biotechnology, Faculty of Biological Science and Technology, University of Isfahan, Isfahan 81746-73441, Iran

Scopus ID: 15840386600

ORCiD: https://orcid.org/0000-0002-3277-6925

Google Scholar: https://scholar.google.com/citations?user=WRP3CNIAAAAJ&hl=en

Statics (May 2019)	All
Citations	2353
h-index	27
i10-index	52

Academic Qualifications

2007-2011 **Ph.D. (Cotutelle)**
University of Nantes, Nantes, France;
Department of Chemistry, University of Isfahan, Iran

Thesis: Structural and allergenicity characteristics of bovine β-lactoglobulin due to heating, glycation and mutation and investigation of it's binding properties with serotonin and arachidonyl serotonin

Thesis Supervisors: Prof. Thomas Haertle, Prof. Abdol-Khalegh Bordbar

2005-2007 **M.Sc.**
Department of Chemistry, University of Isfahan, Iran

2001-2005 **B. Sc.**
Department of Chemistry, University of Isfahan, Iran

Academic Employment

2022-date	**Vice Dean of the Faculty of Biological Science and Technology, University of Isfahan, Iran**
2018-2021	**Head of Department of Biotechnology, University of Isfahan, Iran**
2016-2021	**Associate Professor: Department of Biotechnology, University of Isfahan, Iran**
2013-2015	**Head of Department of Biotechnology, University of Isfahan, Iran**
2011-2016	**Assistant Professor: Department of Biotechnology, University of Isfahan, Iran**

Honors and Awards

2018	• **The best Iranian Biotechnological researcher at year 2018**
2010	• **The best young-scientist student at National Proteomics Congress**
2009	• **The best PhD student of the University of Isfahan**
2007-2011	• **The CROUS institute grant for PhD student, France**
2007	• **University prize for first rank M.Sc. student at University of Isfahan**
2006	• **The prize for the best oral presentation at 7th Iranian Biophysical Chemistry Conference**
2005	• **University prize for first rank B.Sc. student at University of Isfahan**
2001	• **University prize for 29th position in State Universities examination ranking**

Area of Expertise

Advanced Functional Bio/Materials	• **Design of advanced nanostructured materials for various biomedical and bioindustrial applications such as drug/nutrient delivery, enzyme immobilization, and tissue engineering**
Enzyme and Protein Biotechnology	• **Structure-Function relationship of proteins, whey protein nanoparticles, protein and enzyme chemistry, enzyme immobilization**

Skills

Personal

- **Communication, Ability to Work under Pressure, Decision Making, Time Management, Self-Motivation, Conflict Resolution, Leadership, and Adaptability.**

Instruments

Nuclear magnetic resonance spectroscopy (NMR), Electron microscopy and energy dispersion of X-ray analysis (SEM, TEM, EDAX), Thermogravimetric analysis (TGA), Atomic force microscopy (AFM), X-ray photoelectron spectroscopy (XPS), Dynamic light scattering (DLS), X-ray powder diffraction (XRD), Fourier transform infrared spectroscopy (FTIR), Vibrating sample magnetometer (VSM), UV-VIS spectroscopy, Circular dichroism spectroscopy, Fluorescence spectroscopy, Mass spectrometry, HPLC, GC, FPLC, ELISA, Flow cytometry, Gel electrophoresis, etc.and etc.

Techniques

Preparation of nanostructured materials bio-functionalization, nanocomposite material preparation, systematic characterization, enzyme immobilization, protein adsorption assays, biocompatibility analysis, microtiter assay for bacterial attachment, ELISA, MTT assay, molecular docking.

Teaching Experience

My teaching background demonstrates my ability and willingness to deliver high quality and innovative teaching to both undergraduate and postgraduate students. Having ten years of teaching experience, I have developed my teaching skills resulting in a high level of student satisfaction and evaluation scores. I follow the two general teaching models of "Social Interaction" and "Information Processing" for undergraduate and postgraduate students, respectively.

HDR Supervision

I have supervised either as a primary or joint supervisor so far more than 48 postgraduate students (PhD and MsC students), 41 of them successfully graduated.

Publications

I have published about 70 peers reviewed papers until March 2023. Most of them are in high ranked journals such as Scientific Reports, Chemical Engineering Journal, Journal of Colloid and Interface Science, Biosensor and Bioelectronics, Food Chemistry, Carbohydrate Polymers, Critical Reviews in Food Science and Nutrition, Langmuir and etc. For around 70% of the papers, I am either the first or corresponding author. I also attended many world-class conferences to present my work, share

my ideas and thoughts as well as expanding my network.

1. L. J. Mohammad, A. Taheri-Kafrani, Fabrication of doxorubicin loaded aptamer-functionalized cationic β-lactoglobulin nanocomplex: A biocompatible multifunctional nanoplatform for encapsulation and controlled release of anticancer drugs, Journal of Drug Delivery Science and Technology, 81 (2023) 104254.
2. P. Shafaei, A. A. Rastegari, M. Fouladgar, A. Taheri-Kafrani, A. A. Moshtaghie, Investigation of structural changes in human serum albumin after binding with elaidic acid, Journal of Molecular Structure, 1272 (2023) 134134.
3. P. Shafaei, A. A. Rastegari, M. Fouladgar, A. Taheri-Kafrani, A. A. Moshtaghie, Insight into the binding of alpha-linolenic acid (ALA) on human serum albumin using spectroscopic and molecular dynamics (MD) studies, Process Biochemistry, 112 (2022) 95-104.
4. A. Javid, H. Amiri, A. Taheri Kafrani, H. Rismani-Yazdi, Post-hydrolysis of cellulose oligomers by cellulase immobilized on chitosan-grafted magnetic nanoparticles: A key stage of butanol production from waste textile, International Journal of Biological Macromolecules, 207 (2022) 324-332.
5. A. Soozanipour, A. Taheri-Kafrani, A. Razmjou, M. Asadnia, Hyaluronidase enzyme conjugated polyamidoamine dendrimer: An efficient and stable nanobiocatalyst for enzymatic degradation of hyaluronic acid, Journal of Molecular Liquids, 349 (2022) 118111.
6. A. Taheri-Kafrani, S. Kharazmi, M. Nasrollahzadeh, A. Soozanipour, F. Ejeian, P. Etedali, H. Mansouri-Tehrani, A. Razmjou, S. Mahmoudi-Gom Yek, R.S. Varma, **Recent developments in enzyme immobilization technology for high-throughput processing in food industries**, Critical Reviews in Food Science and Nutrition, 61 (2021) 3160-3196.
7. A. Taheri-Kafrani, H. Shirzadfar, A. Abbasi Kajani, B. K. Kudhair, L. J. Mohammed, S. Mohammadi, F. Lotfi, **Functionalized graphene oxide/Fe_3O_4 nanocomposite: A biocompatible and robust nanocarrier for targeted delivery and release of anticancer agents**, Journal of Biotechnology, 331 (2021) 26-36.
8. E. Emadi,A. K. Bordbar, H. Nadri, A. Shams, A. Taheri-Kafrani, S. M. Kalantar, **Isolation of HLA-G+ cells using MEM-G/9 antibody-conjugated magnetic nanoparticles for prenatal screening: a reliable, fast and efficient method**, RSC Advances, 11 (2021) 30990-31001.
9. A. Soozanipour, H. Sohrabi, F. Abazar, A. Khataee, A. Noorbakhsh, M. Asadnia, A. Taheri-Kafrani, M. R. Majidi, A. Razmjou, **Ion Selective Nanochannels: From Critical Principles to Sensing and Biosensing Applications**, Advanced Materials Technologies, 6 (2021) 2000765.
10. E. Sharafi, A. Dehestani, J. Farmani, A. Pakdin Parizi, A. Taheri-Kafrani, **Chlorophyllase-catalyzed chlorophyll removal from vegetable oils using recombinant eukaryotic and prokaryotic enzymes**, Journal of the American Oil Chemists' Society, 98 (2021) 391-401.

11. S. Kharazmi, A. Taheri-Kafrani, A. Soozanipour, M. Nasrollahzadeh, R.S. Varma, **Xylanase immobilization onto trichlorotriazine-functionalized polyethylene glycol grafted magnetic nanoparticles: A thermostable and robust nanobiocatalyst for fruit juice clarification**, International Journal of Biological Macromolecules, 163 (2020) 402-413.
12. S. Kharazmi, A. Taheri-Kafrani, A. Soozanipour, **Efficient immobilization of pectinase on trichlorotriazine-functionalized polyethylene glycol-grafted magnetic nanoparticles: A stable and robust nanobiocatalyst for fruit juice clarification**, Food Chemistry, 325 (2020) 126890.
13. M. Defaei, A. Taheri-Kafrani, M. Miroliaei, P. Yaghmaei, **Alpha-amylase immobilized on polycaprolactone-grafted magnetic nanoparticles: improving stability and reusability**, Journal of Chemical Technology & Biotechnology, 95 (2020) 2243-2250.
14. Z. Changani, A. Razmjou, A. Taheri-Kafrani, M.E. Warkiani, M. Asadnia, **Surface modification of polypropylene membrane for the removal of iodine using polydopamine chemistry**, Chemosphere, 249 (2020) 126079.
15. Z. Changani, A. Razmjou, A. Taheri-Kafrani, M. Asadnia, **Domino P-μMB: A New Approach for the Sequential Immobilization of Enzymes Using Polydopamine/Polyethyleneimine Chemistry and Microfabrication**, Advanced Materials Interfaces, 7 (2020) 1901864.
16. Z. Mehrabi, A. Taheri-Kafrani, M. Asadnia, A. Razmjou, **Bienzymatic modification of polymeric membranes to mitigate biofouling**, Separation and Purification Technology, 237 (2020) 116464.
17. H. Zare-Zardini, A. Alemi, A. Taheri-Kafrani, S. A. Hosseini, H. Soltaninejad, A. A. Hamidieh, M. Haghi Karamallah, M. Farrokhifar, M. Farrokhifar, **Assessment of a new ginsenoside Rh2 nanoniosomal formulation for enhanced antitumor efficacy on prostate cancer: An in vitro study**, Drug Design, Development and Therapy, 14 (2020) 3315-3324.
18. S. Ghosouri, M. Setayeshmehr, A. Taheri-Kafrani, A. Valiani, **Cartilage particles can promote chondrogenesis of adipose-derived stromal cells on poly(ε-caprolactone)/fibrin hybrid constructs prepared via sandwich model**, Journal of Biomimetics, Biomaterials and Biomedical Engineering, 47 (2020) 63-74.
19. B.K. Kudhair, N.N. Alabid, K.S. Zayed, I.J. Lafta, A. Taheri-Kafrani, **The correlation of combined OGG1, CYP1A1 and GSTP1 gene variants and risk of lung cancer of male Iraqi waterpipe tobacco smokers**, Molecular Biology Reports, 47 (2020) 5155-5163.
20. B.K. Kudhair, N.N. Alabid, A. Taheri-Kafrani, I.J. Lafta, **Correlation of GSTP1 gene variants of male Iraqi waterpipe (Hookah) tobacco smokers and the risk of lung cancer**, Molecular Biology Reports, 47 (2020) 2677-2684.
21. N. Motahharifar, M. Nasrollahzadeh, A. Taheri-Kafrani, R.S. Varma, M. Shokouhimehr, **Magnetic chitosan-copper nanocomposite: A plant assembled catalyst for the synthesis of amino- and N-sulfonyl tetrazoles in eco-friendly media**, Carbohydrate Polymers, 232 (2020) 115819.

22. M. Setayeshmehr, E. Esfandiari, M. Rafieinia, B. Hashemibeni, A. Taheri-Kafrani, A. Samadikuchaksaraei, D.L. Kaplan, L. Moroni, M.T. Joghataei, **Hybrid and Composite Scaffolds Based on Extracellular Matrices for Cartilage Tissue Engineering**, Tissue Engineering Part B: Reviews, 25 (2019) 202-224.
23. Z. Abdollahi, A. Taheri-Kafrani, S. A. Bahrani, A. Abbasi Kajani, **PEGAylated graphene oxide/superparamagnetic nanocomposite as a high-efficiency loading nanocarrier for controlled delivery of methotrexate**, Journal of Biotechnology, 298 (2019) 88-97.
24. A. Soozanipour, A. Taheri-Kafrani, M. Barkhori, M. Nasrollahzadeh, **Preparation of a stable and robust nanobiocatalyst by efficiently immobilizing of pectinase onto cyanuric chloride-functionalized chitosan grafted magnetic nanoparticles**, Journal of Colloid and Interface Science, 536 (2019) 261-270.
25. V. Mehnati-Najafabadi, A. Taheri-Kafrani, A.K. Bordbar, Akram Eidi, **Covalent immobilization of xylanase from Thermomyces lanuginosus on aminated superparamagnetic graphene oxide nanocomposite**, Journal of the Iranian Chemical Society, 16 (2019) 21-31.
26. T. Shahriari-Farfani, A. Shahpiri, A. Taheri-Kafrani, **Enhancement of Tryptic Digestibility of Milk β-Lactoglobulin Through Treatment with Recombinant Rice Glutathione/Thioredoxin and NADPH Thioredoxin Reductase/Thioredoxin Systems**, Applied Biochemistry and Biotechnology, 187 (2019) 649-661.
27. H. Zare-Zardini, A. Taheri-Kafrani, Mahtab Ordooei, A. Amiri, Mojgan Karimi-Zarchi, **Evaluation of toxicity of functionalized graphene oxide with ginsenoside Rh2, Lysine and Arginine on blood cancer cells (K562), Red blood cells, blood coagulation and cardiovascular tissue: In vitro and in vivo study**, Journal of the Taiwan Institute of Chemical Engineers, 93 (2018) 70-78.
28. F. Ejeian, P. Etedali, H. Mansouri-Tehrani, A. Soozanipour, Z.-X. Low, M. Asadnia, A. Taheri-Kafrani, A. Razmjou, **Biosensors for wastewater monitoring: A review**, Biosensors and Bioelectronics, 118 (2018) 66-79.
29. M. Defaei, A. Taheri-Kafrani, M. Miroliaei, P. Yaghmaei, **Improvement of stability and reusability of α-amylase immobilized on naringin functionalized magnetic nanoparticles: A robust nanobiocatalyst**, International Journal of Biological Macromolecules, 113 (2018) 354-360.
30. R. Kordesedehi, A. Taheri-Kafrani, M. Rabbani-Khorasgani, R. Kazemi, D. Mutangadura, T. Haertle, **Modification of IgE binding to α S1-casein by proteolytic activity of Enterococcus faecium isolated from Iranian camel milk samples**, Journal of Biotechnology, 276-277 (2018) 10-14.
31. R. Kazemi, A. Taheri-Kafrani, A. Motahari, R. Kordesedehi, **Allergenicity reduction of bovine milk β-lactoglobulin by proteolytic activity of lactococcus lactis BMC12C and BMC19H**

isolated from Iranian dairy products, International Journal of Biological Macromolecules, 112 (2018) 876-881.

32. M. Poorebrahim, M. Asghari, M.F. Abazari, H. Askari, S. Sadeghi, A. Taheri-Kafrani, M.H. Nasr-Esfahani, P. Ghoraeian, M.N. Aleagha, S.S. Arab, D. Kennedy, **Immunomodulatory effects of a rationally designed peptide mimetic of human IFNβ in EAE model of multiple sclerosis**, Progress in Neuro-Psychopharmacology and Biological Psychiatry, 82 (2017) 49-61.
33. R. Kordesedehi, A. Taherikafrani, M. Rabbani khorasgani, **Investigation of Proteolytic Ctivity of Lactococcus lactis in Reducing Cow´s Milk Caseins Allergenicity**, Journal of Ilam University of Medical Sciences, 26 (2018) 198-209.
34. A. Rostami-Vartooni; H. Mostaanzadeh; A. Morshedifar; A. Taheri-Kafrani, **The preparation of CuO nanoparticles using leaf extract of walnut and persimmon plants and investigation of their antibacterial properties**, Journal of Applied Chemistry, 13 (2018) 223-246.
35. M. Karimian Amroabadi, A. Taheri-Kafrani, L. Heidarpoor Saremi, A.A. Rastegari, **Spectroscopic studies of the interaction between alprazolam and apo-human serum transferrin as a drug carrier protein**, International Journal of Biological Macromolecules, 108 (2018) 263-271.
36. D. Shokri, M. Rabbani Khorasgani, M. Mohkam, S.M. Fatemi, Y. Ghasemi, A. Taheri-Kafrani, **The inhibition effect of lactobacilli against growth and biofilm formation of Pseudomonas aeruginosa**, Probiotics and Antimicrobial Proteins, 10 (2018) 34-42.
37. V. Mehnati-Najafabadi, A. Taheri-Kafrani, A.K. Bordbar, **Xylanase immobilization on modified superparamagnetic graphene oxide nanocomposite: Effect of PEGylation on activity and stability**, International Journal of Biological Macromolecules, 107 (2018) 418-425.
38. H. Zare-Zardini, M. Salehvarzi, F. Ghanizadeh, Z. Sadri, R. Sheikhpour, F. Zare Bidoki, F. Shabani, A. Taheri Kafrani, **Antimicrobial Peptides of Innate Immune System as a Suitable Compound for Cancer Treatment and Reduction of its Related Infectious Disease**, Iranian Journal of Pediatric Hematology and Oncology, 8 (2018) 62-70.
39. H. Zare-Zardini, A. Taheri-Kafrani, A. Amiri, A.K. Bordbar, **New generation of drug delivery systems based on ginsenoside Rh2-, Lysine-and Arginine-treated highly porous graphene for improving anticancer activity**, Scientific Reports, 8 (2018) 586.
40. M. Amirbandeh, A. Taheri-Kafrani, A., Soozanipour, C. Gaillard, **Triazine-functionalized chitosan-encapsulated superparamagnetic nanoparticles as reusable and robust nanocarrier for glucoamylase immobilization**, Biochemical Engineering Journal, 127 (2017) 119-127.
41. R. Nazari, M. Aghababaie, A. Razmjou, A. Landarani-Isfahani, M. Amini, M. Hajjari, V. Mirkhani, M. Moghadam, A. Taheri-Kafrani, **Multifunctional hyperbranched polyglycerol-grafted silica-encapsulated superparamagnetic iron oxide nanoparticles as novel and reusable draw agents in forward osmosis process,** Desalination and Water Treatment, 64 (2017) 81-89.

42. M. Amirbandeh, A. Taheri-Kafrani, **Immobilization of Glucoamylase on Triazine-Functionalized Fe3O4/Graphene Oxide Nanocomposite: Improved Stability and Reusability,** International Journal of Biological Macromolecules, 93 (2016) 1183-1191.
43. D. Shokri, M. Rabbani Khorasgani, S. Zaghian, S.M. Fatemi, M. Mohkam, Y. Ghasemi, A. Taheri-Kafrani, Determination of Acquired **Resistance Profiles of Pseudomonas aeruginosa Isolates and Characterization of an Effective Bacteriocin-Like Inhibitory Substance (BLIS) Against These Isolates**, Jundishapur Journal of Microbiology, 9 (2016) e32795.
44. H. Shahrestani, A. Taheri-Kafrani, A. Soozanipour, O. Tavakoli, **Enzymatic clarification of fruit juices using xylanase immobilized on1,3,5-triazine-functionalized silica-encapsulated magneticnanoparticles**, Biochemical Engineering Journal, 109 (2016) 51-58.
45. M. Royvaran, A. Taheri-Kafrani, A. Landarani-Isfahani, S. Mohammadi, **Functionalized superparamagnetic graphene oxide nanosheet in enzyme engineering: A highly dispersive, stable and robust biocatalyst,** Chemical Engineering Journal, 288 (2016) 414-422.
46. R. Yousefi, M. Jamshidi, M. B. Shahsavani, S. M. Nabavizadeh,·M. Golbon Haghighi, M. Rashidi, A. Taheri-Kafrani, A. Niazi, F. Keshavarz, M. M. Alavinamehr, **Study on the interaction of three structurally related cationic Pt(II) complexes with human serum albumin: importance of binding affinity and denaturing properties,** Journal of the Iranian Chemical Society, 13 (2016) 617-630.
47. A. Landarani-Isfahani, A. Taheri-Kafrani, M. Amini, V. Mirkhani, M. Moghadam, A. Soozanipour, A. Razmjou**, Xylanase Immobilized on Novel Multifunctional Hyperbranched Polyglycerol-Grafted Magnetic Nanoparticles: An Efficient and Robust Biocatalyst,** Langmuir, 31 (2015) 9219-9227.
48. A. Taheri-Kafrani, N. Tavakoli, T. Haertle, **β-Lactoglobulin mutant Lys69Asn has attenuated IgE and increasedretinol binding activity**, The Journal of Biotechnology, 212 (2015) 181-188.
49. N. Kazem-Farzandi, A. Taheri-Kafrani, T. Haertle, **β-Lactoglobulin mutation Ala86Gln improves its ligand bindingand reduces its immunoreactivity**, International Journal of Biological Macromolecules, 81 (2015) 340-348.
50. R. Yousefi, A. Taheri-Kafrani, S. M. Nabavizadeh, Z. Pouryasin, M.B. Shahsavani, K. Khoshnam, M. Rashidi, **The binding assessment with human serum albumin of novel six-coordinate Pt(IV) complexes, containing bidentate nitrogen donor/methyl ligands**, Molecular Biology Research Communications 4 (2015) 167-179.
51. H. Zare-Zardini, A. Amiri, M. Shanbedi, A. Taheri-Kafrani, Z. Sadri, F. Ghanizadeh, H. Neamatzadeh, R. Sheikhpour, F. Keyvani Boroujeni, R. Masoumi Dehshiri, A. Hashemi, M.M. Aminorroaya, M.R. Dehgahnzadeh, Sh. Shahriari, **Nanotechnology and Pediatric Cancer: Prevention, Diagnosis and Treatment**, Iranian journal of pediatric hematology and oncology 5 (2015) 227-241.

52. H. Zare-Zardini, A. Amiri, M. Shanbedi, A. Taheri-Kafrani, S. N. Kazi, B. T. Chew, A. Razmjou, **In vitro and in vivo study of hazardous effects of Ag nanoparticles and Arginine-treated multi walled carbon nanotubes on blood cells: Application in hemodialysis membranes,** Journal of Biomedical Materials Research Part A, 103A (2015) 2959-2965.
53. H. Zare-Zardini, A. Taheri-Kafrani, M. Ordooei, L. Ebrahimi, B. Tolueinia, M. Soleimanizadeh, **Identification and biochemical characterization of a new antibacterial and antifungal peptide derived from the insect *Sphodromantis viridis***, Biochemistry (Moscow), 80 (2015) 508-516.
54. A. Soozanipour, A. Taheri-Kafrani, A. Landarani Isfahani, **Covalent attachment of xylanase on functionalized magnetic nanoparticles and determination of its activity and stability**, Chemical Engineering Journal, 270 (2015) 235-243.
55. R. Yousefi, R. Mohammadi, A. Taheri-Kafrani, M. B. Shahsavani, M. Dadkhah Aseman, S. M. Nabavizadeh, M. Rashidi, N. Poursasan, A. A. Moosavi-Movahedi, **Study of the interaction between two newly synthesized cyclometallated platinum (II) complexes and human serum albumin: Spectroscopic characterization and docking simulation**, Journal of Luminescence, 159 (2015) 139-146.
56. A. Taheri-Kafrani, A.A. Rastegari, A.-K. Bordbar**, The Unfolding Process of Apo-Human Serum Transferrin in the Presence of Cetylpyridinium Chloride: An Isothermal Titration Calorimetry Study**, Acta Chimica Slovenica, 61 (2014) 645-649.
57. N. Ghorbani, A. K. Bordbar, A. Taheri-Kafrani, A. Vaseghi, **Preparation of esterified derivatives of α-lactalbumin and investigation of their antibacterial activity,** Journal of Biotherapy, 1 (2014) 1-5.
58. A. Taheri-Kafrani, A.-K. Bordbar, **Isothermal titration calorimetric study on the interaction of apo-human transferrin with sodium n-dodecyl sulfate**, Journal of Thermal Analysis and Calorimetry, 115 (2014) 2123-2127.
59. M. H. Mehraban, R. Yousefi, A. Taheri-Kafrani, F. Panahi, A. Khalafi-Nezhad, **Binding study of novel anti-diabetic pyrimidine fused heterocycles to β-lactoglobulin as a carrier protein**, Colloids and Surfaces B: Biointerfaces, 112 (2013) 374-379.
60. A. Taheri-Kafrani, Y. Choiset, D. A. Faizullin, V. V. Bezuglov, J.-M. Chobert, A.-K. Bordbar, T. Haertlé, **Interactions of β-Lactoglobulin with serotonin and arachidonyl serotonin**, Biopolymers 95 (2011) 871-880.
61. A. Taheri-Kafrani, E. Asgari-Mobarakeh, A.-K. Bordbar, T. Haertle´, **Structure-function relationship of β-lactoglobulin in the presence of dodecyltrimethyl ammonium bromide**, Colloids and Surfaces B: Biointerfaces, 75 (2010) 268-274.
62. A. Taheri-Kafrani, J.-C. Gaudin, H. Rabesona, C. Nioi, D. Argwal, M. Drouet, J.-M. Chobert, A.-K. Bordbar, T. Haertlé, **Effects of Heating and Glycation of β-Lactoglobulin on Its**

Recognition by IgE of Sera from Cow milk Allergy Patients, Journal of Agricultural and Food Chemistry, 57 (2009) 4974-4982.

63. A. Taheri-Kafrani, A.-K. Bordbar, **Energetics of Micellization of Sodium N-dodecyl Sulphate at Physiological Condition Using Isothermal Titration Calorimetry**, Journal of Thermal Analysis and Calorimetry, 98 (2009) 567-575.
64. A. A. Rastegari, A.-K. Bordbar, A. Taheri-Kafrani, **Interaction of Cellulase with Cationic Surfactants: Using Surfactant Membrane Selective Electrodes and Fluorescence Spectroscopy**, Colloids and Surfaces B: Biointerfaces, 73 (2009) 132-139.
65. A. Taheri-Kafrani, A.-K. Bordbar, H. Mousavi, T. Haertle´, **β-lactoglobulin Structure and Retinol Binding Changes in Presence of Anionic and Neutral Detergents**, Journal of Agricultural and Food Chemistry, 56 (2008) 7528-7534.
66. A.-K. Bordbar, A. Taheri-Kafrani, H. Mousavi, T. Haertle´, **Energetics of the Interactions of Human Serum Albumin with Cationic Surfactant**, Archives of Biochemistry and Biophysics 470 (2008) 103–110.
67. V. Ravanmehr, A.-K Bordbar, M. Miroliaei, A. Taheri-Kafrani, **Role of Sugar Osmolytes in the Stabilization of Yeast Alcohol Dehydrogenase During Heat Stress**, Journal of Biologycal Physics and Chemistry, 8 (2008) 3-12.
68. A.-K. Bordbar, A. Taheri-Kafrani, **Binding and Fluorescence Study on Interaction of Human Serum Albumin (HSA) with Cetylpyridinium Chloride (CPC)**, Colloids and Surfaces B: Biointerfaces 55 (2007) 84–89.

Co-author of books

1 A. Soozanipour, A. Taheri-Kafrani, **Enzyme Immobilization on Functionalized Graphene Oxide Nanosheets: Efficient and Robust Biocatalysts**, Methods in Enzymology, 609 (2018) 371-403.

2 **Telemedicine Technologies**: This book authorized with Dr H. Shirzadfar and F. Lotfi for Biomedical Engineering courses, 2018.

3 A. Taheri-Kafrani, H.R. Shirzadfar, E. Tavassoli-Kafrani, **Dendrimers and Dendrimers-Grafted Superparamagnetic Iron Oxide Nanoparticles: Synthesis, Characterization, Functionalization, and Biological Applications in Drug Delivery Systems**, Nano-and Microscale Drug Delivery Systems, 2017, 75-94.

4 A. Amiri, H. Zare-Zardini, M. Shanbedi, S. N. Kazi, A. Taheri-Kafrani, B.T. Chew, A. Zarrabi, **Microbial toxicity of different functional groups-treated carbon nanotubes**, Surface Chemistry of Nanobiomaterials (2016): 33.

5 ***Structural and Functional Changes in Proteins Induced by Modifications:*** This book authorized with Professors A.-K. Bordbar and T. Haertle, and published in LAMBERT ACADEMIC PUBLISHING (LAP), Germany, 2012.

6 ***Solutions Manual for Physical Chemistry:*** This book that authorized with Dr Ahmad Motahari deals with problem solving for "Ira N. Levine Physical Chemistry" in Iran, Fifth Edition, 2012.

7 ***Principles of Chemical Industries***: including four chapter,"Mass Transfer, Heat Transfer, Distillation and Rectification, which autho ANVOC 2005, 29May-1 June, 2005, Istanbul, Turkey.