



Reza Khodarahmi

Full Prof.

PhD of Biochemistry

¹School of Pharmaceutical Sciences (and Medical Biology Research Center), Kermanshah University of Medical Sciences, Kermanshah, IRAN

²Biochemistry Department, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, IRAN

e-mail: rkhodarahmi@mbrc.ac.ir

Personal Records

Name: Reza Khodarahmi

Date of Birth: August 4, 1974

Nationality: Iranian

Gender: Male

Place of Birth: Nahavand, Iran

Marital Status: Married, 2 Children

Appointment: PhD in Biochemistry

Address: Faculty of Pharmacy, Kermanshah

University of Medical Sciences, Kermanshah, Iran

Telephone: +98-9122388184

Fax: +98-831-4276493

e-Mail: rkhodarahmi@kums.ac.ir and rkhodarahmi@mbrc.ac.ir

Languages:

I know Farsi (native) and English (semi-fluently).

Present Position: Associate Prof. of Biochemistry

Educational Records

B.Sc:

From: University of Razi, Kermanshah, Iran (1997)

Major: Biology

M.Sc:

From: Faculty of Sciences, University of Tarbiat-Modarres, Tehran, Iran (2000)

Major: Pure Biochemistry

Thesis: Development of a new affinity gel for purification of glycoproteins.

Ph.D:

From: Institute of Biochemistry and Biophysics, University of Tehran, Tehran, Iran (2001-2006)

Major: Applied Biotechnology

Thesis: The effects of new chemical chaperones on the extent of aggregation of recombinant proteins during the refolding processes.

Courses Taught

A. Undergraduate

1. General Biochemistry

2. Metabolism

2001-2008 Biochemistry (Metabolism) for B.S. students at Azad and Razi University

2005-2008 Biochemistry (Metabolism) at Faculty of Pharmacy and Veterinary Medicine

B. Graduate (M. Sc.)

1. Enzymology and Enzyme Kinetics

2. Translation and control of gene expression

3. Bioinformatics

Activity in Scientific Journals

Chairman: Journal of Reports in Pharmaceutical Sciences

Academic Editor: PLOS ONE

Reviewer: PLOS ONE, International journal of Biological Macromolecules, Archives of Biochemistry and Biophysics, Medicinal Chemistry Research, Cytotechnology, Pharmaceutical Biology, Journal of Iranian Chemical Society, Spectrochimica Acta A Molecular and Biomolecular Spectroscopy, Cell biochemistry and Biophysics, Biotechnology Progress, ERMS, JKUMS, . .

Researches and Interests

- 1999-2000 Study on hemoglobin as a ligand for affinity chromatography under supervision of Dr. Hamid Rahi, Kermanshah University of medical Sciences, Kermanshah, Iran
- 2000-2001 National Project of "Expression and Purification of recombinant human interferon $\alpha 2b$ " in Pasteur Institute, under supervision of Dr. Mehr-aeen, Tehran, Iran.
- 2003-2005 Study on refolding strategies (Downstream of Biotechnology)

under supervision of Dr. Yazdanparast, University of Tehran, Tehran, Iran

- 1- Protein aggregation, Amyloidosis and its inhibition
- 2- Protein-Ligand (Drug) interaction
- 3- Enzyme Kinetics and Inhibition

Honors and Awards

1. Top B.Sc student of Biology Department, Razi University, 1997.
2. Top M.Sc student of Biochemistry Department, Faculty of Sciences, Tarbiat Modarres University, 2000.
3. Distinguished as young scientist in 8th Iranian congress of Biochemistry and First international congress of Biochemistry and molecular Biology, September 11-15, 2005.
4. Distinguished researcher in University of Tehran, 2006.
5. Distinguished teacher in Kermanshah University of Medical Sciences.
6. Distinguished researcher in Kermanshah University of Medical Sciences (2009-2014).

Membership of Scientific Societies

- Member of Iranian Society of Biophysical Chemistry (ISOBC).
- Member of Iranian Society of Biochemistry.
- Member of Iranian Peptide Society.
- Member of Iranian Biology Society.

Publications

(Books in Persian)



- 1- Biochemistry and Biophysics of Metabolism, **Noor-e-Danesh Publication**, Tehran, Iran, 2003 (**Second edition, 2008**) Reza Khodarahmi and Nooshin Bahrami Ghane (www.noordanesh-pub.com)

2- From wheat grains to bread loaves, "Biochemistry of wheat" Chapter, First international congress of wheat, Tehran, Iran, 2002, Boards of Authors

(Published Full Journal Papers) - *H-index: 12 (Sep 2016)*

<http://scholar.google.com/citations?user=X4LPEEIAAAA&hl=en>

https://www.researchgate.net/profile/Reza_Khodarahmi/reputation

86. [Captopril/enalapril inhibit promiscuous esterase activity of carbonic anhydrase at micromolar concentrations: An in vitro study](#), S Esmaeili, MR Ashrafi-Kooshk, H Adibi, R Khodarahmi, *Chemico-Biological Interactions*, DOI: 10.1016/j.cbi.2017.01.014.

85. [Diethylalkylsulfonamido \(4-methoxyphenyl\) methyl phosphonate/phosphonic acid derivatives act as acid phosphatase inhibitors: synthesis accompanied by experimental and molecular modeling assessments](#) N Alimoradi, MR Ashrafi-Kooshk, M Shahlaei, S Maghsoudi, Hadi Adibi, Ross P McGeary, Reza Khodarahmi, *Journal of Enzyme Inhibition and Medicinal Chemistry*, <http://dx.doi.org/10.1080/14756366.2016.1230109>

84. [A Spectrophotometric Method for the Determination of Aldehyde Oxidase Activity Using 3-Methyl-2- Benzothiazolinone Hydrazine: A Preliminary Study](#), [Maryam Siah](#) · [Mohammad Hosein Farzaei](#), [Mohammad Reza Ashrafi](#), Hadi Adibi, [Reza Khodarahmi](#), 2017, 6(1), 23-33.

83. Appraisal of role of the polyanionic inducer length on amyloid formation by 412-residue 1N4R Tau protein: A comparative study, A Jangholi, MR Ashrafi-Kooshk, SS Arab, G Riazi, F Mokhtari, ... R. **Khodarahmi**, *Archives of Biochemistry and Biophysics* 609, 1-19, 2016. (Q1)

82. Is there correlation between A β -heme peroxidase activity and the peptide aggregation state? A literature review combined with hypothesis, R **Khodarahmi**, MR Ashrafi-Kooshk, *International Journal of Biological Macromolecules*, 2016.

81. Degradation products of the artificial azo dye, Allura red, inhibit esterase activity of carbonic anhydrase II: A basic in vitro study on the food safety of the colorant in terms of enzyme inhibition, S Esmaeili, MR Ashrafi-Kooshk, K Khaledian, H Adibi, S Rouhani, ... R. **Khodarahmi**, *Food Chemistry* 213, 494-504, 2016. (Q1)

80. Heme-coordinated histidine residues form non-specific functional "ferritin-heme" peroxidase system: Possible and partial mechanistic relevance to oxidative stress-mediated pathology in neurodegenerative diseases, S Esmaeili, MRA

Kooshk, SM Asghari, R **Khodarahmi**, International journal of biological macromolecules 91, 368-380, 2016.

79. Peptides NAP and SAL attenuate human tau granular-shaped oligomers in vitro and in SH-SY5Y cells, F Mokhtari, G Riazi, S Balalaie, R **Khodarahmi**, S Karima, A Hemati, ..., Neuropeptides 59, 21-31, 2016.

78. Plant Cell Cancer: May Natural Phenolic Compounds Prevent Onset and Development of Plant Cell Malignancy? A Literature Review, H Rasouli, MH Farzaei, K Mansouri, S Mohammadzadeh, R **Khodarahmi**, Molecules 21 (9), 1104, 2016.

77. Critical Effects on Binding of Epidermal Growth Factor Produced by Amino Acid Substitutions, M Mehrabi, R **Khodarahmi**, M Shahlaei, Journal of Biomolecular Structure and Dynamics, 1-60, 2016

76. Synthesis, Characterization, Molecular Modeling, and DNA Interaction Studies of Copper Complex Containing Food Additive Carmoisine Dye, N Shahabadi, A Akbari, M Jamshidbeigi, R **Khodarahmi**, Nucleosides, Nucleotides and Nucleic Acids, 1-19, 2016.

75. Functionalization of γ -Fe₂O₃@ SiO₂ nanoparticles using the antiviral drug zidovudine: synthesis, characterization, in vitro cytotoxicity and DNA interaction studies, N Shahabadi, M Falsafi, F Feizi, R **Khodarahmi**, RSC Advances 6 (77), 73605-73616, 2016.

74. Inhibition of guinea pig aldehyde oxidase activity by different flavonoid compounds: An in vitro study, M Siah, MH Farzaei, MR Ashrafi-Kooshk, H Adibi, SS Arab, MR Rashidi, **R Khodarahmi**. Bioorganic chemistry 64, 74-84, 2016.

73. Exploring binding properties of sertraline with human serum albumin: Combination of spectroscopic and molecular modeling studies, M Shahlaei, B Rahimi, A Nowroozi, MR Ashrafi-Kooshk, K Sadrjavadi, **R Khodarahmi**. Chemico-biological interactions 242, 235-246, 2015.

72. Possible peroxidase active site environment in amyloidogenic proteins: Native monomer or misfolded-oligomer; which one is susceptible to the enzymatic activity, with contribution of heme?
R Khodarahmi, MR Ashrafi-Kooshk, S Khodarahmi, SA Ghadami, ...
International Journal of Biological Macromolecules 80, 293-301

71. Allura Red, the Artificial Azo Dye, Inhibits Esterase Activity of Carbonic Anhydrase II: A Preliminary Study on the Food Safety in Term of Enzyme Inhibition, **R Khodarahmi**, MR Ashrafi-Kooshk, K Khaledian, Journal of Reports in Pharmaceutical Sciences (J. Rep. Pharm. Sci.) 4 (1), 43-52

70. Spectroscopic and molecular modeling studies on binding of dorzolamide to bovine and human carbonic anhydrase II, N Bijari, S Ghobadi, H Mahdiuni, **R Khodarahmi**, SA Ghadami, International journal of biological macromolecules 80,

69. Comparative studies on drug binding to the purified and pharmaceutical-grade human serum albumins: Bridging between basic research and clinical applications of albumin, Mohammad Reza Ashrafi-Kooshk, Farangis Ebrahimi, Samira Ranjbar, Sirous Ghobadi, Nastaran Moradi, **Reza Khodarahmi**, Biologicals

68. Engineering of a disulfide loop instead of a Zn binding loop restores the anti-proliferative, anti-angiogenic and anti-tumor activities of the N-terminal fragment of endostatin: Mechanistic and therapeutic insights

Reyhane Chamani, S Mohsen Asghari, Ali Mohammad Alizadeh, Sedigheh Eskandari, Kamran Mansouri, **Reza Khodarahmi**, Majid Taghdir, Zahra Heidari, Ali Gorji, Alireza Aliakbar, Bijan Ranjbar, Khosro Khajeh, Vascular pharmacology

67. Enhancement of thermal reversibility and stability of human carbonic anhydrase II by mesoporous nanoparticles

A Khatibi, L Ma'mani, **R Khodarahmi**, A Shafiee, P Maghami, F Ahmad, ...
International journal of biological macromolecules 75, 67-72

66. Toxicity of Protein Oligomers Is Rationalized by a Function Combining Size and Surface Hydrophobicity

B. Mannini, E. Mulvihill, C. Sgromo, R. Cascella, **R. Khodarahmi**, M. Ramazzotti, C. M. Dobson, C. Cecchi, F. Chiti

ACS Chem. Biol., DOI: 10.1021/cb500505m

65. Spectroscopic Study of drug-binding characteristics of unmodified and pNPA-based acetylated human serum albumin: Does esterase activity affect microenvironment of drug binding sites on the protein?

Nastaran Moradi, Mohammad Reza Ashrafi-Kooshk, Sirous Ghobadi, Mohsen Shahlaei, **Reza Khodarahmi**, [Doi:10.1016/j.jlumin.2014.11.019](https://doi.org/10.1016/j.jlumin.2014.11.019), Journal of Luminescence.

64. Appearance and Disappearance of Chronic Myeloid Leukemia (CML) in Patient with Chronic Lymphocytic Leukemia (CLL)

Mehrdad Payandeh, Edris Sadeghi, **Reza Khodarahmi**, Masoud Sadeghi

International Journal of Hematology- Oncology and Stem Cell Research, 1 October 2014. Volume 8, Number 4, 49-53.

63. The efficacy of erlotinib as molecularly targeted maintenance therapy in advanced non-small-cell lung cancer (NSCLC): Case reports in western Iran

Mehrdad Payandeh, **Reza Khodarahmi**, Masoud Sadeghi, Edris Sadeghi

Journal of Solid Tumors, 2014, Vol. 4, No. 3, 38-44

62. [Direct Evidence for Nonspecific Peroxidase Activity of "Ferritin-Heme" complex: Possible Role in the Development of Neurodegenerative Diseases.](#)

Morteza Jaafari, Mohammad Reza Ashrafi Kooshk, Seyyed Mohsen Asghari, Ali Akbar Moosavi-Movahedi, Sirous Ghobadi, **Reza Khodarahmi**,

J. Iran. Chem. Society, DOI: [10.1007/s13738-014-0538-z](#).

61. [Probing of possible olanzapine binding site on Human Serum Albumin: Combination of spectroscopic methods and molecular dynamics simulation](#)

Reza Khodarahmi, Mohsen Shahlaei, Behnoosh Rahimi, Mohammad Reza Ashrafi-

Kooshk, Komail Sadrjavadi, Journal of Luminescence 158 (2015) 91-98

60. [Purification and biochemical characterisation of glucoamylase from a newly isolated Aspergillus niger: Relation to starch processing](#)

A. Bagheri, **R. Khodarahmi**, A. Mostafaie

Food chemistry, 2014, 161, 270-278

59. [Application of radial basis function neural network and DFTquantum mechanical calculations for the prediction of the activity of 2-biarylethylimidazole derivatives as bombesin receptor subtype-3 \(BRS-3\) agonists](#)

M. Shahlaei, A. Nowroozi, **R. Khodarahmi**

Medicinal Chemistry Research, 2014, 23, 8, 3681-3693

58. [Evidence of human hemoglobin interaction and chorionic gonadotropin hormone: Prospects for the use of hemoglobin as ligand in affinity chromatography for the purification of the hormone](#)

R. Khodarahmi, S. Maghsoodi, H. Rahi, K. Hamzehee, S. Zamaheni, E. Davarpanah

Journal of Paramedical Sciences, 2014, 5 (3)

57. [The Role of Anionic Peptide Fragments in 1N4R Human Tau Protein](#)

Aggregation

M. Ali Nasiri Khalili, G. Riazi, S. Ahmadian, **R. Khodarahmi**, S. Khodadadi, A. Afrasiabi, O. Karima, F. Mokhtari, E. Hoveizi

Protein and peptide letters, 2014, 21 (6), 511-516

56. Does Long-Term Administration of a Beta-Blocker (Timolol) Induce Fibril-Based Cataract Formation In-vivo?

M.R. Nikbakht, M.R. Ashrafi-Kooshk, M. Ghasemi, **R. Khodarahmi**

Iranian Journal of Pharmaceutical Research, 2014, 13 (2), 599-611

55. A Combined DFT and QSAR Calculations to Study Substituted Biphenyl imidazoles as Bombesin Receptor Subtype-3 Agonists

M. Shahlaei, A. Nowroozi, **R. Khodarahmi**

Letters in Drug Design & Discovery, 2014, 11 (5), 665-676

54. Comparative spectroscopic studies on Curcumin Stabilization by Association to Bovine Serum Albumin and Casein: A perspective on drug-delivery application

M.M. Nadi, M.R. Ashrafi Kooshk, K. Mansouri, S.A. Ghadami, M. Amani, S. Ghobadi, **R. Khodarahmi**

International Journal of Food Properties, 2014

53. In vitro Anti-angiogenic Activity of Persian Shallot (*Allium Hirtifolium*) Extract Is Mediated Through Inhibition of Endothelial Cell Proliferation/Migration and Down-regulation of VEGF and MMP Expression

D. Arshadi, K. Mansouri, **R. Khodarahmi**, P. Seyfi, Y. Shakiba, A. Mostafaie

Journal of Reports in Pharmaceutical Sciences (J. Rep. Pharm. Sci.), 2014, 3 (1), 65-78

52. Antioxidant status in patients with psoriasis

H. Nemati, **R. Khodarahmi**, M. Sadeghi, A. Ebrahimi, M. Rezaei, A. Vaisi-Raygani

Cell Biochem Funct 2014, 32: 268-273

51. Proteins expression clustering of Alzheimer disease in rat hippocampus

proteome

H. Zali, M.R. Tavirani, F.A. Jalilian, **R. Khodarahmi**

Journal of Paramedical Sciences, 2014, 4 (3)

50. Protective effects of accompanying proteins on light-and water-mediated degradation of Curcumin

F. Mirzaee, M.R.A. Kooshk, M. Rezaei-Tavirani, **R. Khodarahmi**

Journal of Paramedical Sciences, 2014, 5 (1)

49. Anovel, efficient, fast and inexpensive DNA extraction protocol from whole blood applicable for studying drug-DNA interaction

M. T. Moradi, K. Yari, **R. Khodarahmi**

Journal of reports in pharmaceutical science, 2014, 3(1), 79-83

48. Mushroom tyrosinase inhibition by benzaldehyde derivatives

S. Maghsoudi, H. Adibi, M. Hamzeh, M. R. Ashrafi, M. Rezaei-Tavirani, **R. Khodarahmi**

Journal of reports in pharmaceutical science, 2013, 2(2), 67-75

47. Spectroscopic study of interaction between osthole and human serum albumin: identification of possible binding site of the compound

N. Bijari, Y. Shokoohinia, M.R. Ashrafi-Kooshk, S. Ranjbar, S. Parvaneh, M. Moieni-Arya, **R. Khodarahmi**

Journal of Luminescence, 2013, 143, 328-336

46. Studies of the Interaction between Isoimperatorin and Human Serum Albumin by Multispectroscopic Method: Identification of Possible Binding Site of the Compound Using Esterase Activity of the Protein

S. Ranjbar, Y. Shokoohinia, S. Ghobadi, N. Bijari, S. Gholamzadeh, N. Moradi, M.R. Ashrafi-Kooshk, A. Aghaei, **R. Khodarahmi**

The Scientific World Journal, 2013

45. Molecular Chaperones or Amyloid-binding compounds? Perspective on Their Application as Possible Therapeutic Agents in Reduction of Cytotoxicity of Amyloid

Oligomers

R. Khodarahmi

Journal of Reports in Pharmaceutical Sciences, 2013, 2 (2), 205-206

44. Carbonic Anhydrases: Battlefield for Enzyme Inhibitor and Activator Drugs?

R. Khodarahmi

Journal of Paramedical Sciences, 2013, 4 (4)

43. Methyltetrahydrofolatereductase (rs1801133) polymorphism and psoriasis: contribution to oxidative stress, lipid peroxidation and correlation with vascular adhesion protein 1, preliminary report

M. Asefi, A. Vaisi-Raygani, ***R. Khodarahmi***, H. Nemati, Z. Rahimi, H. Vaisi-Raygani, H. Tavailani, T. Pourmotabbed

Journal of the European Academy of Dermatology and Venereology, 2013

42. In Vitro Anti-Cancer Activity of Native Curcumin and "Protein-Curcumin" Systems: A Perspective on Drug-Delivery Application

M.R. Ashrafi Kooshk, K. Mansouri, M.M. Nadi, S. Khodarahmi, ***R. Khodarahmi***

Journal of Reports in Pharmaceutical Sciences, 2013, 2 (1), 66-74

41. Appraisal of sildenafil binding on the structure and promiscuous esterase activity of native and histidine-modified forms of carbonic anhydrase II

H. Mahdiuni, N. Bijari, M. Varzandian, S.A. Ghadami, M. Khazaei, M.R. Nikbakht, ***R. Khodarahmi***

Biophysical chemistry, 2013, 175, 1-16

40. Synthesis and investigation of antioxidant activities of 2-benzylidene-3-coumaranones

H. Adibi, A. Foroumadi, ***R. Khodarahmi***, K. Najafi, M. Rezaei-Tavirani

Journal of Paramedical Sciences, 2013, 4 (2)

38. Modified β -casein restores thermal reversibility of human carbonic anhydrase II: The salt bridge mechanism

A. Fallah-Bagheri, A.A. Moosavi-Movahedi, M. Taghizadeh, ***R. Khodarahmi***, L. Mamani, N. Bijari, M. Bohlooli, A. Shafiee, N. Sheibani, A.A. Saboury

Biotechnology and applied biochemistry, 2013, 60 (3), 298-304

37. [Synthesis of 4-Aryl-4H-Chromene Derivatives with Boric Acid: Evaluation of Their in vitro Anti-Angiogenesis Effects and Possible Mechanism of Action](#)

H. Adibi, **R. Khodarahmi**, K. Mansouri, M. Khaleghi, S. Maghsoudi

35. [Molecular approaches in obesity studies](#)

M. Zamanian-Azodi, R. Vafaei, T. Azodi, R. Omid, S. Gilanchi, F. Azizi-Jalilian, **R. Khodarahmi**

Gastroenterology and Hepatology from bed to bench, 2013, 6 (Suppl 1), S23

36. [Synthesis and in vitro characterization of some benzothiazole-and benzofuranone- derivatives for quantification of fibrillar aggregates and inhibition of amyloid-mediated peroxidase activity](#)

S.A. Ghadami, Z. Hossein-pour, **R. Khodarahmi**, S. Ghobadi, H. Adibi,

Medicinal Chemistry Research, 2013, Vol 22, page 115-126.

35. [Effect of essential oil of rosa damascena on human colon cancer cell line SW742](#)

M. Rezaie-Tavirani, S. Fayazfar, S. Heydari-Keshel, M.B. Rezaee, M. Zamanian-Azodi, M. Rezaei-Tavirani, **R. Khodarahmi**

Research Institute for Gastroenterology and Liver Diseases, 2013, vol 6, pages 25

34. [Comparative evaluation of amphotericin B binding to the native and modified forms of rice lipid-transfer protein: a possible perspective on improving the drug-binding affinity and specificity](#)

S. Maghsoudi, M.R. Ashrafi-Kooshk, M. Shahlaei, S.A. Ghadami, S. Ghobadi, A. Mostafaie, **R. Khodarahmi**

Journal of the Iranian Chemical Society, 2013, DOI 10.1007/s13738-013-0231-7.

33. [Antibacterial effects of Scrophularia striata seed aqueous extract on staphylococcus aureus](#)

M. Zamanian-Azodi, A. Ardehshiry Lajimi, N. Ahmadi, M.B. Rezaee, F. Jalalian, **R.**

Khodarahmi

Journal of Paramedical Sciences, 2013, Vol.4, No.1, page 58 – 62.

32. [An in vitro model for spontaneous angiogenesis using rat mesenteric endothelial cells: Possible therapeutic perspective for obesity and related disorders](#)

K. Mansouri, **R. Khodarahmi**, and S.A. Ghadami

pharmaceutical biology, 2013, DOI: 10.3109/13880209.2013.773452.

31. [Serum lipid profile in psoriatic patients in Kermanshah: a survey on vascular adhesion protein-1](#)

H. Nemati, **R. Khodarahmi**, M. Sadeghi, A. Rahmani, M. Rezaei

ZJRMS, 2013, 15(2), 8-10

30. [Seventeen years of science production among researchers of Kermanshah University of Medical sciences \(1995-2011\) based on Web of Science \(WOS\)](#)

F. Foroughi, K. Hamzehee, A. Foroughinia, F. Najafi, **R. Khodarahmi**, A. Saleki

Journal of Kermanshah University of Medical Sciences, 2012, 16 (7), 549-56

29. [Structural and functional impacts of albumin oxidation by hypochlorite: possible changes in drug binding characteristics upon myeloperoxidase- mediated oxidation in vivo](#)

M.R. Ashrafi Kooshk, **R. Khodarahmi**, S.A. Karimi, M.R. Nikbakht,

Journal of Reports in Pharmaceutical Sciences, 2012, vol 1,pages 80-92.

28. [Spectroscopic characterization of furosemide binding to human carbonic anhydrase II](#)

S. Ranjbar, S. Ghobadi, **R. Khodarahmi**, H. Nemati

International Journal of Biological Macromolecules, Volume 50, Issue 4, 2012, Pages 910-917.

27. [Serum lipid profile in psoriatic patients: correlation between vascular adhesion protein 1 and lipoprotein](#)

H. Nemati, **R. Khodarahmi**, A. Rahmani , A. Ebrahimi , M. Amani and K. Eftekhari
Cell biochemistry and function, 2012, DOI: 10.1002/cbf.2857.

26. [Non-specific peroxidase activity and catalase-inhibitory behavior of fibrillar aggregates after interaction with heme: relevance to the etiology of amyloid-related neurodegenerative disorders using the experimental-based evidences](#)

R. Khodarahmi, Z. Hossein-pour, S. Ghobadi, K. Mansouri, A. Mostafaie, K. Yari, S.A. Ghadami

Journal of the Iranian Chemical Society, 2012, Vol 9(6),pages 939-950.

25. [Effects of silica nanoparticle supported ionic liquid as additive on thermal reversibility of human carbonic anhydrase II](#)

A. Fallah-Bagheri, A.A. Saboury, L. Ma'mani, M. Taghizadeh, **R. Khodarahmi**, S. Ranjbar, M. Bohlooli, A. Shafiee, A. Foroumadi, N. Sheibani, A.A. Moosavi-Movahedi
International Journal of Biological Macromolecules, 2012 Vol 51, Pages 933-938.

24. [Comparative studies on drug binding characteristics and protein surface hydrophobicity of native and modified forms of bovine serum albumin: possible relevance to change in protein structure upon glycation](#)

R. Khodarahmia, S.A. Karimi, M.R. Ashrafi Kooshk, S.A. Ghadamia, S. Ghobadic, M. Amani

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 2012, vol 89, page 177-186.

23. [Challenge in cancer therapy with vap-1 inhibition strategy: possible interferece of this type of intervention within protection from autoimmunity: hypothesis](#)

M.E. Zare, **R. Khodarahmi**, S.A. Ghadami, A. Nasir Kansestani

Journal of Reports in Pharmaceutical Sciences, 2012, vol 1, pages 104-108.

22. [Amyloidogenic proteins in their fibrillar states may be detrimental via different mechanisms: perspective of potential curative/preventive strategies against neurodegenerative disorders](#)

R. Khodarahmi, Z. Hossein-pour, K. Mansouri, S.A. Ghadami

Journal of Reports in Pharmaceutical Sciences, 2012, Vol 1, page 23 – 33.

21. [Differential scanning calorimetry study on thermal denaturation of human carbonic anhydrase II](#)

M. Amani, **R. Khodarahmi**, S. Ghobadi, M. Mehrabi, B.I. Kurganov, A.A. Moosavi-Movahedi

Journal of Chemical & Engineering Data, 2011, 56 (4), 1158-1162

20. [Evaluation of Common Genetic Disorders in Myeloproliferative Neoplasms](#)

M. Payandeh, F.S. Zadeh, M.E. Zare, K. Mansouri, **R. Khodarahmi**, S. Alimoradi, H. Yousefi, F. Darabi

International Journal of Hematology-Oncology and Stem Cell Research, 2011, 5 (3), 16-20

19. [Artemin as an efficient molecular chaperone: in vitro, in vivo and theoretical studies](#)

S. Shahangian, B. Rasti, R. H. sajadi, **R. Khodarahmi**, M. Taghdir, B. Ranjbar, protein journal, 2011, vol 30(8), page 549-557.

18. [Anti-angiogenic/proliferative behavior of a “4-aryl-4H-chromene” on blood vessel’s endothelial cells: A possible evidence on dual “anti-tumor” activity](#)

K. Mansouri, **R. Khodarahmi**, A. Foroumadi, A. Mostafaie and H. Mohammadi Motlagh,

Medicinal Chemistry Research, 2011, 20(7), page 920 – 929.

17. [Amyloid fibril formation by native and modified bovine \$\beta\$ -lactoglobulins proceeds through unfolded form of proteins: A comparative study](#)

S.A. Ghadami, **R. Khodarahmi**, S. Ghobadi, M. Ghasemi, S. Pirmoradi .

Biophysical Chemistry, 2011, Vol 159(2-3), Pages 311-320.

16. [Heme, as a chaperone, binds to amyloid fibrils and forms peroxidase in vitro: Possible evidence on critical role of non-specific peroxidase activity in neurodegenerative disease onset/progression using the \$\alpha\$ -crystallin-based](#)

experimental system

R. Khodarahmi, F. Naderi, A. Mostafaie, K. Mansouri,

Archives of Biochemistry and Biophysics, 2010, Vol 494, pages 205-215.

15. Study of Cosolvent-Induced α -Chymotrypsin Fibrillogenesis: Does Protein Surface Hydrophobicity Trigger Early Stages of Aggregation Reaction?

R. Khodarahmi, H. Soori and M. Amani

The Protein Journal, 2009, Vol 28, Pages 349-361.

14. Spectroscopic study on the interaction of celecoxib with human carbonic anhydrase II: Thermodynamic characterization of the binding process

M. Mehrabi, S. Ghobadi, **R. Khodarahmi**,

Journal of Photochemistry and Photobiology B: Biology, 2009, Vol 9, pages 161-168.

13. Chaperone-like activity of Heme group against amyloid-like fibril formation by hen egg ovalbumin: Possible mechanism of action

R. Khodarahmi, H. Soori and S. A. Karimi

International Journal of Biological Macromolecules, 2009, Vol 44, Pages 98-106.

12. Anti-Angiogenic Effect of Aqueous Extract of Shallot (*Allium ascalonicum*) Bulbs in Rat Aorta Ring Model

H.R. Mohammadi Motlagh, K. Mansouri, Y. Shakiba, M. Keshavarz, **R. Khodarahmi**, A. Siami, A. Mostafaie. Yakhteh

Medical Journal, 2009, Vol 11 (2)Pages: 190-195.

11. Synthesis, in vitro antibacterial and carbonic anhydrase II inhibitory activities of Nacylsulfonamides using silica sulfuric acid as an efficient catalyst under both solvent-free and heterogeneous conditions

A.R. Massah, H. Adibi, **R. Khodarahmi**, R. Abiri, M.B. Majnooni, S. Shahidi, B. Asadi, M. Mehrabi and M.A. Zolfigol

Bioorganic & Medicinal Chemistry 16 (2008) 5465–5472.

10. Appraisal of casein's inhibitory effects on aggregation accompanying carbonic anhydrase refolding and heat induced ovalbumin fibrillogenesis

R. Khodarahmi, M. Beyrami , H. Soori ,

Archives of Biochemistry and Biophysics , 2008, 477 ,pages 67–76.

9. Evaluation of TRAP and FRAP methods for assessing total antioxidant capacity of rat serum

N.H. Tayefi, **R. Khodarahmi**

Scientific Information Database, 2007, 9(3(33)), 41-47

8. Protein refolding assisted by molecular tube based α -cyclodextrin as an artificial chaperone

R. Yazdanparast, M.A. Esmaeili and **R. Khodarahmi**

Biochemistry (Moscow), 2006, Vol 7(12), Pages 1298-1306.

7. The Combined effects of two anti-aggregatory agents, α -cyclodextrin and Ca^{2+} , on the refolding process of denatured α -amylase

R. Yazdanparast and **R. Khodarahmi**

Biotechnol. Appl. Biochem., 2005, 41, 157-162.

6. Suppression effect of guanidine hydrochloride on α -cyclodextrin-assisted refolding of denatured α -amylase

R. Khodarahmi and R. Yazdanparast

Process Biochem., 2005, 40, 2973-2979.

5. Fluorimetric study of the artificial chaperone-assisted renaturation of carbonic anhydrase: a kinetic analysis

R. Khodarahmi and R. Yazdanparast

Int. J. Biol. Macromol., 2005, 36, 191-197.

4. Evaluation of artificial chaperoning behavior of an insoluble cyclodextrin-rich copolymer: Solid-phase assisted refolding of carbonic anhydrase

R. Yazdanparast and **R. Khodarahmi**

Int. J. Biol. Macromol., 2005.

3. Comparative studies of the artificial chaperone-assisted refolding of thermally denatured bovine carbonic anhydrase using different capturing ionic detergents and β -cyclodextrin

R. Yazdanparast, **R. Khodarahmi** and H. Soori

Arch. Biochem. Biophys., 2005, 437, 178-185.

2. Artificial chaperone-assisted refolding of chemically denatured α -amylase

R. Yazdanparast, F. Khodagholi and **R. Khodarahmi**,

Int. J. Biol. Macromol., 2005, 35, 257-263.

1. Refolding of chemically denatured α -amylase in dilution additive mode

R. Khodarahmi and R. Yazdanparast

Biochim. Biophys. Acta, 2004, vol 1674, 175-181.

مقالات فارسی:

6. بررسی اثر عصاره ی آبی برگ توت سفید (*Morus alba* L.) بر میزان قند و چربی های خون در موش های

صحرائی نر، رحمت اله پرندین، **رضا خدارحمی**، شفیع امینی مقدم، 1389، فصلنامه داروهای گیاهی، پیش شماره

3، صفحه 35 تا 42.

5. بررسی اثر آنتی بیوتیکی عصاره آبی گیاه اسکروفولاریا استریاتا بر اشرشیاکلی در مقایسه با تتراسایکلین، مونا

زمانیان عضدی، عبدالرضا اردشیری لاجیمی، مصطفی رضایی طاویرانی، مجید رضایی طاویرانی، **رضا خدارحمی**، مجله

علمی دانشگاه علوم پزشکی ایلام، 1391، دوره 20، شماره 4 صفحه 127-133.

4. تخلیص فریتین از کبد گوسفند و گزارش فعالیت پراکسیدازی مجموعه هم- فریتین، سمیرا رنجبر، مرتضی

جعفری، **رضا خدارحمی**، زهرا زارعی، محمد رضا اشرفی، سیدشهرام آقائی، مجله علمی دانشگاه علوم پزشکی ایلام،

3. هفده سال تولید علم دانشگاه علوم پزشکی کرمانشاه بر اساس پایگاه استنادی علم . (wos) سال 1374-1390. فیض اله فروغی، کورش حمزه ای، آزاده فروغی نیا، **رضا خدارحمی**، فرید نجفی، علیرضا سالکی، ماهنامه علمی پژوهشی علوم پزشکی کرمانشاه، 1391، سال 12، شماره 7، صفحه 549-561.

2. ارزیابی دو روش TRAP و FRAP جهت تعیین پتانسیل آنتی اکسیدانی تام سرم موش صحرایی، حسین طایفی نصر آبادی، **رضا خدارحمی**، 1386، فصلنامه علمی پژوهشی یاخته، دوره نهم، شماره 3، صفحه 41 - 47.

1. بررسی اثر ضد رگ زایی عصاره ابی پیازچه مو سیر در مدل حلقه ائورت موش صحرایی، حمید رضا محمدی مطلق، کامران منصوری، یدالله شکیبیا، مریم کشاورز، **رضا خدارحمی**، عباس صیامی، علی مصطفایی، 1387، فصل نامه پزشکی یاخته، سال یازدهم، شماره 2، صفحه 191 - 195.

Congresses and symposiums

37. Effect of Sudlow site I drugs on human serum albumin esterase-like activity, N. Moradi, **R. Khodarahmi**, M.R. Ashrafi-Kooshk, 1st Tabriz International Life Science Conference and 12th Iran Biophysical, 2013.
36. The effects of glibenclamide on the kinetic parameters of esterase activity of human carbonic anhydrase II, S. Ghobadi, M. Pazhohi, **R. Khodarahmi**, 1st Tabriz International Life Science Conference and 12th Iran Biophysical , 2013.
35. Improving the stability and antioxidant activity of curcumin upon interaction with native and acetylated forms of albumin, casein and β -Lactoglobulin: A comparative study with perspective of functional food application, F. Mirzaee, **R. Khodarahmi**, M.R. Ashrafi-Kooshk, 1st Tabriz International Life Science Conference and 12th Iran Biophysical, 2013.

34. Serum Lipid Profile in Psoriatic Patients in Kermanshah: A Survey on Vascular Adhesion Protein-1, H. Nemati, **R. Khodarahmi**, M. Sadeghi, A. Rahmani, M. Rezaei, *Zahedan Journal of Research in Medical Sciences*, 2013, 15 (2), 8-10.
33. Traumatic spinal cord lesions: Impact of comprehensive nursing care, F. Roshanpour, R. Pourmirza, **R. Khodarahmi**, A. Saleki, *Journal of Injury and Violence Research*, 2012, 4 (3 Suppl 1)
32. A Possible Role of Peroxidase Activity of "heme-ferritin" Complex in Development of Neurodegenerative diseases, M. Jafari, **R. Khodarahmi**, S. Ranjbar, M. R. Ashrafi, S. M. Asghari, , The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.
31. Effects of dorzolamide on thermal aggregation and flexibility of bovine carbonic anhydrase II, N. Bijari, S. Ghobadi, **R. Khodarahmi**, The 17th National & 5th International Iranian Biology Conference, 4-6 September 2012, Shahid Bahonar University of Kerman, Kerman, Iran.
30. Comparative spectroscopic characterization of the interaction of dorzolamide with bovine and human carbonic anhydrase II, N. Bijari, S. Ghobadi, **R. Khodarahmi**, S. A. Ghadami, The 17th National & 5th International Iranian Biology Conference, 4-6 September 2012, Shahid Bahonar University of Kerman, Kerman, Iran.
29. Effect of topiramate on the thermodynamic and kinetic stability of human carbonic anhydrase, M.R. Ashrafi Kooshk, S. Ghobadi, **R. Khodarahmi**, The 17th National & 5th International Iranian Biology Conference, 4-6 September 2012, Shahid Bahonar University of Kerman, Kerman, Iran.
28. Investigation on the Effects of Glibenclamide on the Structure and Function

of Human Carbonic Anhydrase II, S. Ghobadi, **R. Khodarahmi**, M. Pazhoi, S. A. Ghadami, N. Bijari, The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.

27. Detection of Fibrillar Aggregates and Inhibition of Amyloid-Mediated Peroxidase Activity Using the Novel Benzothiazole and Benzofuranone-Derivatives Fluorescence Compounds, S.A. Ghadami, **R. Khodarahmi**, H. Adibi, S. Ghobadi, The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.

26. Comparative Evaluation of Sildenafil Effects on the Structure and Activity of Native and Modified States of Human Carbonic Anhydrase II, **R. Khodarahmi**, N. Bijari, S. A. Ghadami, S. Ghobadi, The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.

25. Purification of Lipid-Transfer Protein-1 (LTP-1) from Rice Grain and Study of Drug Binding to Normal and Modified LTPs, **R. Khodarahmi**, Sh. Maghsoudi, M. R. Ashrafi, S. A. Ghadami, S. Ghobadi, M. Hamzeh The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.

24. Prediction of Aggregation Propensity and Amyloidogenic Regions in Proteins, Based on Their Primary Sequences, **R. Khodarahmi**, S. A. Ghadami, S. Ghobadi, The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.

23. Fibrillar, Protein Aggregation May be Detrimental Via Different Oxidative Routes: Relevance to the Etiology of Amyloid-Related Neurodegenerative Disorders Using the Experimental-Based Evidences, **R. Khodarahmi**, Z.

Hosseinpour, S. Ghobadi, K. Mansouri, A. Mostafaie, Kh. Yari, S. A. Ghadami, The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.

22. Comparative Studies on Drug Binding Characteristics and Protein Surface Hydrophobicity of Native and Modified forms of Bovine Serum Albumin: Possible Relevance to Change in Protein Structure Upon Glycation, **R. Khodarahmi**, S.A. Karimi, M. R. Ashrafi, S. A. Ghadami, S. Ghobadi , M. Amani, The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.
21. Comparative Studies on PSH, Drug Binding Characteristics and Conformational Stability of Native and Modified Forms of Bovine Serum Albumin, **R. Khodarahmi**, S.A. Karimi, M. R. Ashrafi, S. A. Ghadami, S. Ghobadi, M. Amani, The First International & 11th Iran Biophysical Chemistry Conference, 13-15 June 2012, Ardabil University of Medical Sciences, Ardabil, Iran.
20. Aqueous extract of shallot (*Allium ascalonicum*) can abolish in vitro angiogenesis through inhibition of vascular endothelial growth factor (VEGF) and matrix metalloproteinases 2 and 9 (MMP-2,9), D. Arshadi, K. Mansouri, P. Seify, Y. Shakiba, **R. Khodarahmi**, A. Mostafaie, *Inflammation Research*, 2011, 60, 199-199
19. Comparative study on the formation of amyloid fibrils in the native and modified β -lactoglobulins, S. A. Ghadami, Moosa Ghasemi, **R. khodarahmi**, S. Ghobadi 11th Iranian Congress of Biochemistry and Molecular Biology, Qazvin University of Medical Sciences, 7-9 Feb 2011, Qazvin, Iran.
18. Study of the interaction between furosemide and human carbonic anhydrase II by spectroscopic methods, S. Ranjbar, S. Ghobadi, **R. Khodarahmi**, *FEBS Journal*, 2010, 277, 184-184

17. Formation of Amyloid Fibril Aggregation by β -Crystallin: Characterization of Non-Specific Peroxidase Activity of "Heme-Aggregate" Complex in the Presence of Various Substrates, Z. Hossein-Pour, **R. Khodarahmi**, S. Ghobadi, A. Mostafaie 16th and 4th International Conference of Biology, Ferdowsi University of Mashhad, 14-16 Sep 2010, Mashhad, Iran.
16. RBC Distruption and SK-N-MC Cell Toxicity in the Presence of β -Crystallin/ β -Chymotrypsin Derived Amyloid Fibrils: The Ambiguous Effect of Heme, **R. Khodarahmi**, Z. Hossein-Pour, K. Mansouri, S.Ghobadi, F. Ahmadi 16th and 4th International Conference of Biology, Ferdowsi University of Mashhad, 14-16 Sep 2010, Mashhad, Iran.
15. Spectroscopic Study of Interaction between Topiramate and Human Carbonic Anhydrase II, M.R. Ashrafi, S. Ghobadi, **R. Khodarahmi** 16th and 4th International Conference of Biology, Ferdowsi University of Mashhad, 14-16 Sep 2010, Mashhad, Iran.
14. Spectroscopic Study on the Interaction of Celecoxib with Human Carbonic Anhydrase II: Thermodynamic Characterization of the Binding Process, M. Mehrabi, **R. Khodarahmi**, S. Ghobadi, , 10th Iranian Congress of Biochemistry & 3rd International Congress of Biochemistry and Molecular Biology, 16-19 Nov 2009, Tehran, Iran.
13. Irreversible Thermal Denaturation of Human Carbonic Anhydrase, M. Amani, **R. Khodarahmi**, M. Mehrabi, S. Ghobadi, A. A. Moosavi-Movahedi, 10th Iranian Congress of Biochemistry & 3rd International Congress of Biochemistry and Molecular Biology, 16-19 Nov 2009, Tehran, Iran.
12. Fluorimetric study of the assisted renaturation of carbonic anhydrase, **R. Khodarahmi** and R. Yazdanparast, 8th Iranian congress of Biochemistry and First international congress of Biochemistry and molecular Biology,

September 11-15, 2005.

11. Comparative evaluation of the artificial chaperone-assisted renaturation of carbonic anhydrase using β -cyclodextrin and ionic detergents, **R. Khodarahmi** and R. Yazdanparast, 30th FEBS congress and 9th IUBMB conference, Budapest, Hungary, 2-7 July, 2005.
10. Glycerol as folding aid and aggregation suppressor of denatured α -amylase, F. Khodaghali, **R. Khodarahmi** and R. Yazdanparast, 12th Iranian Congress of Biology, Hamedan, Iran, Sep. 1-3, 2004.
9. Quantitative evaluation of chaperone-like activity of calcium ion based on suppression of α -amylase aggregation, **R. Khodarahmi** and R. Yazdanparast, 12th Iranian Congress of Biology, Hamedan, Iran, Sep. 1-3, 2004.
8. The effects of Calcium and α -CD on the renaturation yield and aggregation extent of denatured α -amylase, R. Yazdanparast and **R. Khodarahmi**, 5th international congress on Biochemistry and Chemical Engineering, Havana, Cuba, Oct. 18-22, 2004.
7. Effect of guanidine hydrochloride concentration on the α -CD-induced renaturation of denatured α -amylase, **R. Khodarahmi** and R. Yazdanparast, 5th international congress on Biochemistry and Chemical Engineering, Havana, Cuba, Oct. 18-22, 2004.
6. Study of dilution factor and protein concentration effects on the yield of artificial chaperone-assisted refolding of α -amylase, F. Khodaghali, **R. Khodarahmi** and R. Yazdanparast, The 17th FAOBMB Symposium / 2nd IUBMB Special Meeting / 7th A-IMBN Conference on "Genomics and Health in the 21st Century", Bangkok, Thailand, November, 22-26, 2004.
5. Artificial chaperone-assisted refolding of denatured α -amylase using β -cyclodextrin, **R. Khodarahmi**, R. Yazdanparast and F. Khodaghali, The 17th

FAOBMB Symposium / 2nd IUBMB Special Meeting / 7th A-IMBN Conference on "Genomics and Health in the 21st Century", Bangkok, Thailand, November, 22-26, 2004.

4. Purification and characterization of Lumbricus Terrestris (Earth Worm) extracellular giant hemoglobin and its perspective as a ligand for affinity chromatography, Hamid Rahi and **R.Khodarahmi**, 6th Iranian Biophysical chemistry Conference, Damghan, Iran, 7-9 September, 2004.
3. Importance of α -cyclodextrin (α -CD) central cavity in control of aggregation and refolding yield of α -amylase, **R. Khodarahmi** and R. Yazdanparast, 10th Congress of the Federation of Asian and Oceanic Biochemists and Molecular Biologists (FAOBMB), Bangalore, India, December 7-11, 2003.
2. The effect of Calcium ion on the extent of refolding and aggregation of denatured α -amylase, **R. Khodarahmi** and R. Yazdanparast, 7th Congress of Biochemistry, Ahvaz University of Medical Sciences, Ahvaz, Iran, 26-29 Jan 2004.
1. Rapid purification of human Chorionic Gonadotropin (hCG) using Hb-Sepharose, H. Rahi and **R. Khodarahmi**, 5th Iranian Congress of Biology, University of Tehran, Tehran, Iran, 15-18 Aug 2001.