Kamahldin Haghbeen, PhD

Date and place of birth: 03 July 1964, Tehran - Iran

Current Position: Professor of Bioorganic Chemistry, Enzymologist

Department of Plant Bioproducts, National Institute of Genetic Engineering and Biotechnology, Tehran, IRAN

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Language: Persian (Farsi) & English

http://scholar.google.com/citations?user=VaCCbT4AAAAJ&hl=en

Curriculum vitae, updated in **March. 2025**

ISI Researcher ID:
K-4916-2017

Scopus ID:
55924008200

ORCid:
0000-0003-3011-5629

Qualifications

High school Diploma	Experimental Sciences	Sharee'ati High school, Mashhad - Iran	1982
BSc	Chemistry	Mashhad University, Iran	1989
MSc	Organic Chemistry	Mashhad University, Iran	1992
PhD	Bio-organic Chemistry	Otago University, NZ	1998
Sabbatical Research	Enzyme immobilization	Chemical Engineering Dept. of Waterloo Un.	2007-2008
Visiting Professor	Diazo Cross-linkers	Chemical Engineering Dept. of Waterloo Un.	Nov. 2012
Visiting Professor	Phenolic metabolites in cell culture of *N. caspica*	Department of Plant Ecophysiology, Paris-Sud/Saclay University	Sep-Oct 2018
Visiting Professor	Fluorescence of plant Phenolic metabolites	Department of Plant Ecophysiology, Paris-Sud/Saclay University	Sep-Oct 2019
Visiting Professor	Pyrrolizidine alkaloids in *L. officinale* cell culture	Department of Pharmaceutical Biology, Christian-Albrecht University, Kiel, Germany	Sep. to Dec. 2021

Current Position

Professor of Bioorganic Chemistry	Agricultural Biotechnology Faculty	NIGEB	Current
Director of the Office for International Scientific Collaboration		NIGEB	Current
ICGEB Liaison Officer		I.R.Iran	Current

Previous Positions

2009 -20011	**Head of Basic Sciences of Biotechnology Research Group (NIGEB)**
2011 - 2013	**Director of Evaluation, Budget, and Planning Office (NIGEB)**
2012 - 2014	**Head of Microbial Biotechnology Group (University of Science and Technology of Mazandaran)**
2014 - 2018	**Head of Plant Bioproducts Group (NIGEB)**
2018 - 2020	**Head of Agricultural Biotechnology Department (NIGEB)**
2023 up to now	**Director of the Office for International Scientific Collaboration (NIGEB)**

Awards

MSc scholarship	1989	The Ministry of Culture and Higher Education
PhD scholarship	1992	The Ministry of Culture and Higher Education
NSERC Grant (Canada)	2007	In collaboration with Professor R.L. Legge
DAAD Grant (Germany)	2012	In collaboration with Professor D. Schlosser
Paris-SUD Un. Grant	2018	In collaboration with Professor J. Ghashghaie
Paris-Saclay Un. Grant	2019	In coll. with Prof. J. Ghashghaie & Dr. Zoran G. Cerovic
DAAD Grant	2021	In collaboration with Professor C. Zidorn

Commissions of Trust

Representative of the Ministry of Science in the Supreme Advisory Council of NIGEB		2023-25
Member of the invited group to sign MOU with Tajikistan Universities	Iran & Tajikistan	2025
Member of the invited group to sign MOU with Iraq Universities	Iran & Iraq	2024
Representative of NIGEB in the Specialized Commission for the Prohibition of Biological Weapons	Iran	2023-25
Leading Iranian Scientific Referees for Joint Research Collaboration between Iran and India	Iran-india	2018-20
Secretary of the Scientific Committee of the First Conference on Chemical Biotechnology	Iran	2016
Selected Reviewer for the Scientific Committee of New Findings in Biology Congress	Iran	2014
Leading the team for the Strategic Program of NIGEB	NIGEB	2011
Member of the invited group to the Auckland University of New Zealand to sign MOU	NIGEB & NZ	2011
Representative of NIGEB for scientific collaboration with New Zealand Universities		2000-02

Memberships in Professional Bodies

Representative of the Ministry of Science in the Supreme Council of NIGEB	NIGEB	2023-25
Representative of NIGEB in the Specialized Commission for the Prohibition of Biological Weapons	Iran	2023-25
Chairing the National Committee of Plant-Derived Antiviral Research during the COVID-19 crisis	Iran	2020-22
Member of the Technical Council of the Center for the Biotechnology Development	Iran	2018-20
Member of the International Relations Policy Council	NIGEB	2017-18
Organizer the first International Congress of Chemical Biotechnology	Iran	2016
Member of the Planning, Administrative, Development, and Productivity Committee	NIGEB	2015-16
Leading the team for the Strategic Program of NIGEB	NIGEB	2011
Head of the Proteomics Group	NIGEB	2010-11
Secretary of the Executive Committee of the Telework Plan		2010-11
Representative in Tehran Municipality Environmental Committee	Tehran	2005-07

Editorial Boards

- Iranian Journal of Biotechnology, June 2014 – June 2016
- Journal of Environmental Studies of Persian Gulf, Aug.2013-July 2015

Research Interests

A. Studying enzymes that oxidize phenolic compounds, including tyrosinase, catechol oxidase, laccase, and peroxidase, focusing on their structures, activities, mechanisms, and biotechnology applications.

B. Investigating the chemistry and biochemistry of phenolic compounds as plant secondary metabolites and environmental pollutants.

C. Utilizing plant cell culture for the production of plant enzymes and metabolites.

D. Exploring diazo chemistry and its applications, particularly for bio-assay purposes.

SCIENTIFIC INTERESTS AND MAJOR SCIENTIFIC ACHIEVEMENTS

(Please see the Background Information enclosed with this resume.)

Publications Statistic

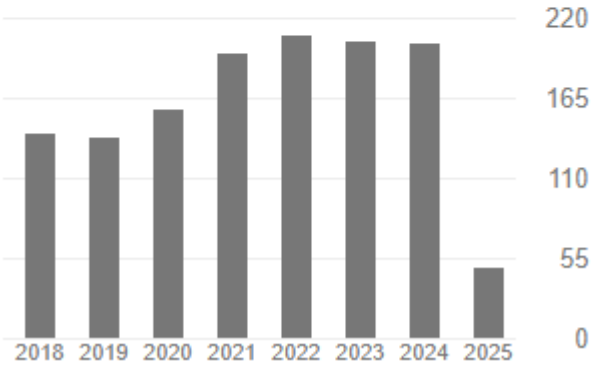
Haghbeen, Kamahldin

National Institute for Genetic Engineering and Biotechnology Iran, Tehran, Iran • Scopus ID: 55924008200 •

Show all information

1,532	86	23
Citations by **1,221** documents	Documents	*h*-index

Cited by		VIEW ALL
	All	Since 2020
Citations	2150	1018
h-index	27	17
i10-index	55	33



Grants & Research Projects

1	Primiphos methyl synthesis	Granted by the science branch of Jehad Daneshgahi-Mashhad University	1991
2	Synthesis of the novel heterocyclic system, pyrimido [4,5-d] [1,2,3] triazine	MSc thesis (Scholarship)	1992
3	Kinetic and spectroscopic studies on cresolase and catecholase activities of tyrosinase	PhD thesis (Scholarship)	1998
4	Comparative study on Laboratory Scale Production of Shikonin by *Arnebia euchroma, Lithospermum officinale* and *Lithospermum erythrorhizon* in suspension Culture.	NRCGEB	2003
5	Examining the effect of shikonin on *Helicobacter Pilori* growth and proliferation	Ministry of Culture and Higher Education	2004
6	Production and purification of cholesterol oxidase from *Nocardia Erythropolis* (Rhodococcus erythropolis ATCC 4277) and proper assay of its activity	Ministry of Culture and Higher Education	2005
7	Examining the biotransformation of phenolic substrates to *ortho*-dihydroxy compounds by the trapped tyrosinase into the solid phase	NRCGEB	2005
8	Measuring phenolic substances in the drinking water underground resources of Tehran by enzymatic and chemical methods.	Organization for Protection of Environment	2007
9	New applications for diazo derivatives of catechol	Presidential Office for Supporting Researchers (INSF)	2008
10	Designing selective inhibitors for tyrosinase	NIGEB	2008
11	Novel Diazo Cross-linkers	Natural Sci. and Eng. Res. Council (NSERC) – Canada	2008
12	Surveying the Biochemical and Biophysical properties of the *Arnebia euchroma* Peroxidase	NIGEB	2009
13	Studying the anti-inflammatory effect of shikonin on microgelial cells	NIGEB	2010
14	Purification, biochemical characterization and hemagglutinin activity of *Agaricus bisporus* Lectin	NIGEB	2010
15	Examining the organogenesis ability of the medicinal plant, *Arnebia euchroma,* callus	NIGEB	2011

16	Co-immobilization of tyrosinase and laccase in Cross Linked Poly acrylamide using One Phase Binary Solutions as the reaction medium	German Academic Exchange Service (DAAD)	2012

Research Projects (2)

17	Examination of phenol removal methods from drinking water resources	Organization for Protection of Environment	2012
18	Identifying the phenolic pollutants in the drinking water resources of Tehran	Organization for Protection of Environment	2012
19	Enzymatic production of L-dopa; pre-pilot research	the Iran National Science Foundation (INSF)	2015
20	Study of indirect regeneration of Arnebia pulchra	NIGEB	2015
21	Synthesis of a novel class of chromophoric cross-linkers	University of Waterloo, ON-Canada	2016
22	Comparative evaluation of the antioxidant capacity of the extracts of callus and natural root of Arnebia euchroma	NIGEB	2016
23	Synthesis and preparation of advanced nano and mesoporous xerogels for enzyme immobilization and pollutant adsorption	ICRP	
24	Reviewing analytical methods for measuring the concentration of total aromatic compounds in water resources	Tehran Water and Waste Waters Management	2017
25	Comparative study on the production of phenolic metabolites in the callus of *Alkanna frigida* and its natural root	NIGEB	2018
26	Non-destructive fluorescence-based method for monitoring the development of phenolic compounds in the solid cell culture of medicinal plants	Joint Research with the University of Paris-SUD	2018-2019
27	Evaluation of capabilities of phenolic compounds of *Onosma dasytrichum* and *Alkanna frigida* for UVA absorption and tyrosinase inhibition	NIGEB	2019
28	Extraction of phenolic acids with polyphenolase inhibition and UVA extinction capabilities from *Rosa damascene* waste	INSF	2019
29	Controlled release of plant aroma from hydrogel	Ministry of Science and Technology	2020
30	The fate of alkaloids in the cell culture of two medicinal plants of Boraginaceae; *Lithospermum officinale* and *Nonea caspica*	DAAD + NIGEB	2021
31	Investigating the Browning Inhibition Power of Natural Phenolic Compounds with Antioxidant Capacity	Ministry of Science and Technology & Paris Saclay Un.	2024

REVIEWER ACTIVITY

(I have reviewed a large number of publications, several projects, and a few chapters and 2 books. (details not shown here)

National presentations are not included.

International proceedings and presentations

1	A Facile Method For Synthesising Diazo Catechol Dyes Used As Chromophoric Substrates For Tyrosinase	K. Haghbeen*, E. W. Tan	Molecules For Future) (University Of Otago, Dunedin 2-6 December **1996**)
2	Mix-Cooperativity in the Mushroom Tyrosinase Activities	K. Haghbeen*, E. W. Tan	15th FAOBMB Symposium, Perspectives Of Biochemistry And Molecular Biology In The 21 Century (Beigin, China, October 21-24, **2000**)
3	Preliminary Experiments on Cell Culture of Iranian *Arnebia Euchrom* Root Seems Quite Promising	K. Haghbeen*, A. Meshkat, S. Poormolaee	First International Congress On Plant Metabolomics (Wageningen, Netherlands, April 7-11, **2002**)
4	Calorimetric Studies Reveal Inhibition of The Catecholase Reaction of Mushroom Tyrosinase By The Nitrated Diazo Derivatives of Catechol	K. Haghbeen*, B. Zamani	8th European Symposium On Thermal Analysis And Calorimetry (Barcelona, Spain, August 25-29, **2002**)
5	Efficient Competitive Inhibitor Lets Resonance Raman Studies on Cresolase Activity of Mushroom Tyrosinase	B. Zamani, K. Haghbeen*, A.A. Sabouri	Biophysical Society (46th Annual Meeting, February 23-27) *Biophysical Journal,*Vol 82No 1, Part2, 2134-Pos, (**2002**)
6	Kinetic Evidence for The Allosteric Behavior of Mushroom Tyrosinase	F. Karbasi, K. Haghbeen*, A. A. Sabouri	Biophysical Society (46th Annual Meeting, February 23-27) *Biophysical Journal,*Vol 82No 1, Part2, 2133-Pos, (**2002**).
7	Non-Enzymicide Substrate for The Catecholase Reaction of Mushroom Tyrosinase	Farhad Karbassi[1], Kamahldin Haghbeen[2], Ali Akbar Saboury[1]	*Biophysical Journal*, February 2003, Volume 84, Number 2, Part 2 Of 2 1692-Pos Board # B64 **2003**
8	Inhibition Studies on The Catecholase Reaction of Mushroom Tyrosinase Failed to Produce Normal Dixon Plots	K. Haghbeen[1], Ali Akbar Saboury[2], Bita Zamani[2], Ali Akbar Moosavi-Movahedi[2]	*Biophysical Journal*, February **2003**, Volume 84, Number 2, Part 2 Of 2 1693-Pos.
9	Organogenesis Ability of The *Arnebia Euchroma* Callus"	K. Haghbeen, K. Rahimi*, S. A. Mohammadi, M. Valizadeh	Fifth International Plant Tissue Culture & Biotechnology Conference From At. (Dhaka, Bangladesh, December 4- 6, **2004**)
10	*Rhodococcus*: Multi-Purposes Micro-Organism	B. Nazari, K. Haghbeen*	10th International Congress For Culture Collections (Tsukuba, Japan, October 10-15, **2004**)

11	The Effects of Copper And Nickel Ions On The Activity And Stability Of Mushroom Tyrosinase"	F. Karbasi*, N. Gheibi, A.A. Sabouri, K. Haghbeen	Biophysical Society (49th Annual Meeting, February 12-16) *Biophysical Journal,* (**2005**)
12	Novel Optical Ph Sensors Based on Catechol Azo Dye Derivatives	S. Rouhani*, S. Salimi, K. Haghbeen	International Conference Analytical Chemistry And Chemical Analysis, 12-18 Sep. **2005**, Keiv, Ukraine

International proceedings and presentations (2)

13	Studying The Apoptosis-Inducing Activity of Shikonin	F. Sabouni*, S.H. Abbasi, K. Haghbeen, S.Z. Bathaie	First ICBMB, Tehran, Iran, Sep. 11-15, 2005, Clinical Biochemistry, 38 (9), **2005**, Abs. 90
14	Efficient Medium Engineering for Tyrosinase Durability	Haghbeen, K*.; Jahangeeri, E.	1th *Nternational* IUPAC Conference On Green Chemistry, Dresden, Germany, Sep. 10-15; **2006**
15	Simple Reactions for Biomimic Purposes; Versatility of Imines as Chelating Ligands	Haghbeen, K.; Mansouri-Torshizi, H	1th *Nternational* IUPAC Conference On Green Chemistry, Dresden, Germany, Sep. 10-15; **2006**
16	Genetic Analysis and Shikimate Assay Of Glyphosphate …	R. Sheikhani, A. Mossavi, P. Jonoubi, K. Haghbeen	11th IUPAC International Congress Of Pesticide Chem., Kobe, Japan, 6-11 Aug **2006**
17	Kinetic Studies Guide to Effective Administration of Tyrosinase Inhibitor	*Kamahldin Haghbeen, Fatimah Saied Nematpour*	BIT Life Sciences' 7th Annual Congress Of International Drug Discovery Science And Technology (IDDST) **2009,** Shanghai·China
18	Interesting Results from The Preliminary Studies on The Optimization of The *Neurospora Crassa* (FGSC #321) Growth and Laccase Production	Seyed Mohammad Moshtaghioun,1,2 Kamahldin Haghbeen1	16th National And 4th International Conference Of Biology, Ferdowsi University Of Mashhad, Mashhad, Iran 14-16 September **2010**
19	A Direct and Accurate Spectrophotometric Method for Assaying The Laccase	S.M. Moshtaghioun, K. Haghbeen	Oxizymes & 9th International Symposium On Peroxidases Leipzig-Germany 14-16 June **2010**
20	Biochemical Characterization of The Peroxidase Extracted from The *Arnebia Euchroma* Callus	S. Farhadi, K. Haghbeen	Oxizymes & 9th International Symposium On Peroxidases Leipzig-Germany 14-16 June **2010**
21	Stability And Kinetics Parameters of Mushroom Tyrosinase in One-Phase Binary Medium	E. Jahangiri, K. Haghbeen	Oxizymes & 9th International Symposium On Peroxidases Leipzig-Germany 14-16 June **2010**
22	Interesting Results from the Preliminary Studies on the Optimization of the Neurospora crassa (FGSC#321) Growth and Laccase Production	S.M. Moshtaghioun, K. Haghbeen	16th National and 4th International Conference of Biology, Ferdowsi University of Mashhad, Iran 14-16 September **2010**

23	Bioethics; Can scientists meet a global consensus?	K. Haghbeen*, E. Karimi, F. Ahmadpour, R. Heidari, H. Khorshidi	2nd International Congress of Bioethics; 5-7 Feb **2011**, Tehran, Iran
24	Tyrosinase immobilization on the magnetized hybrid xerogels with controlable binding sites	B. Gharehchei, S. Nikfard, M. Baharloui, D. Schlosser, K. Haghbeen	Oxizyme **2014**, Vienna
25	Chemical oxidation versus enzymatic oxidation of azo dyes	F. Mirazi, A. Bahrami, K. Haghbeen	Oxizyme **2014**, Vienna
26	Combining laccase and tyrosinase for the biodegradation of environmental micro-pollutants	E. Jahangiri, K. Haghbeen, D. Schlosser	Oxizyme **2014**, Vienna
27	Callogenesis and organogenesis in medicinal plant; *Lithospermum officinalis*	E. Khosravi, K. Haghbeen, A. Mosavi, F. Ghanati	19th National & 7th International Congress of Biology (30-31 Aug **2016**); Tabriz - Iran
28	Measuring antioxidant power of plant callus of *Origanum Vulgare*	F. Ghaseminsb, Z. Rasoulian, K. Haghbeen, M.J. Marefatjoo	First International Congress of Biotechnology, 24-26 May **2015**, Tehran - Iran
29	Study on callus induction in plant of *Nonea caspica*	Z. rasoulian, F. ghaseminasab, K. haghbin, E. khosravi	First International Congress of Biotechnology, 24-26 May **2015**, Tehran - Iran
30	Evaluation of catalase and peroxidase production in callus culture of medicinal plant lemon balm (*Melissa officinalis* L.)	S, Soleimany, E. Khosravi, K. Haghbin	First International Congress of Biotechnology, 24-26 May **2015**, Tehran - Iran
31			Second International Congress of Biotechnology **2018**
32	Adverse effect of latitude on phenolic acids and alkaloids biosynthesis in *Lithospermum officinale*	E. Khosravi, K. Haghbeen, A. Mosavi	X lnternational Scientific Agriculture Symposium, AGROSYM **2019**" 03- 06 Oct. Jahorina mountain, Bosnia and Herzegovina

International proceedings and presentations (3)

25	Chemical oxidation versus enzymatic oxidation of azo dyes	F. Mirazi, A. Bahrami, K. Haghbeen	Oxizyme **2014**, Vienna
26	Combining laccase and tyrosinase for the biodegradation of environmental micro-pollutants	E. Jahangiri, K. Haghbeen, D. Schlosser	Oxizyme **2014**, Vienna
27	Callogenesis and organogenesis in medicinal plant; *Lithospermum officinalis*	E. Khosravi, K. Haghbeen, A. Mosavi, F. Ghanati	19th National & 7th International Congress of Biology (30-31 Aug **2016**); Tabriz - Iran
28	Measuring antioxidant power of plant callus of *Origanum Vulgare*	F. Ghaseminsb, Z. Rasoulian, K. Haghbeen, M.J. Marefatjoo	First International Congress of Biotechnology, 24-26 May **2015**, Tehran - Iran
29	Study on callus induction in plant of *Nonea caspica*	Z. rasoulian, F. ghaseminasab, K. haghbin, E. khosravi	First International Congress of Biotechnology, 24-26 May **2015**, Tehran - Iran
30	Evaluation of catalase and peroxidase production in callus culture of medicinal plant lemon balm (*Melissa officinalis* L.)	S, Soleimany, E. Khosravi, K. Haghbin	First International Congress of Biotechnology, 24-26 May **2015**, Tehran - Iran
31	Alkaloid free of *Lithospermum officinale* extract		Second International Congress of Biotechnology **2018**
32	Controlling Browning Phenomena in	K. Haghbeen	Sud-Paris University, **2018**
33	Adverse effect of latitude on phenolic acids and alkaloids biosynthesis in *Lithospermum officinale*	E. Khosravi, K. Haghbeen, A. Mosavi	X lnternational Scientific Agriculture Symposium, AGROSYM **2019**" 03- 06 Oct. Jahorina mountain, Bosnia and Herzegovina
34	What is a Lead Compound?	K. Haghbeen	Kiel University, **2021**

Patents

1 Technology of *in-vitro* production of *Arnebia euchroma* root

2 Enzymatic production of L-dopa

Books & Chapters

1 -	Biotechnological Production of Plant Secondary Metabolites, Edited by Ilkay Erdogan Orhan	Translated to Persian, Published by NIGEB in 2021
2 -	Benefits and challenges of olive biophenols: a perspective, By *H Rasouli, MH Mazinani*, K Haghbeen*	In "Olives and Olive Oil in Health and Disease Prevention", 489-503
3 -	Treatment and valorization of olive mill wastewater By *P Mohammadnejad, K Haghbeen*, H Rasouli*	In "Olives and Olive Oil in Health and Disease Prevention", 505-519
4 -	Laccases in the Context of Potentially Cooperating Enzymes By *K Haghbeen, D Schlossser*	In "Laccases in Bioremediation and Waste Valorisation", 79-114

Teaching experiences

Undergraduate Courses	**Postgraduate Courses**
1 - General Chemistry (I), 2 - General Chemistry (II), 3 - Analytical Chemistry, 4 - Organic Chemistry (I), 5 - Organic Chemistry (II), 6 - Organic Chemistry (III), 7 - Biochemistry (Basic), 8 - Environmental Chemistry, 9 - Principle of Organic Synthesis, 10 - Physical Organic Chemistry, 11 - Separation and Identification of Organic Compounds, 12 - Applications of Spectroscopic Methods	13 - Biochemistry (Advanced), 14 - Cellular Biophysics, 15 - Transport phenomena in living organisms, 16 - Biochemical and Biophysical Methods in Bioscience, 17 - Applied Enzymology

Career History

Jan. 1990 to Aug. 1991	Researcher (part-time)	Mashhad University, (Science branch of Jehad Daneshgahi)
Feb. 1990 to Feb. 1992	Teaching Assistant (part-time)	Mashhad University (Department of Chemistry)
	Teaching Fellowship (part-time)	Free University of Mashhad
May 1992 to Oct. 1993	Junior Lecturer (Full time)	Department of Chemistry, International University of Imam Khomeini
Feb. 1998 to July 1999	Assistant Professor (Full-time)	Department of Chemistry, International Un. of Imam Khomeini
Oct. 1999 up to now	Tenure Position as a Researcher and a Lecturer (Professor of Bioorganic Chemistry)	NRCGEB (now NIGEB)
Feb. 1992 up to now	Collaboration with other Iranian Universities as a lecturer and presenting courses for undergrad and grad students.	

Publications (1)

1	J. Org. Chem. 63, 4503-4505, (**1998**)	K. Haghbeen, Eng Wui Tan	Facile Synthesis of Catechol Azo Dyes
2	Anal. Biochem., 312 23-32 (**2003**)	K. Haghbeen*, Eng Wue Tan	Direct Spectrophotometric Assay of Mono-oxygenase and Oxidase Activities of Mushroom Tyrosinase in the Presence of Synthetic and Natural Substrates
3	Coll. Surf. B; Biointerfaces, 32, 137-143 (**2003**)	F. Karbassi, K. Haghbeen A. A. Saboury, B. Ranjbarb, A. A. Moosavi-Movahedia	Activity, Structural and Stability Changes of Mushroom Tyrosinase by Sodium Dodecyl Sulfate
4	BBRC. 314 925-930 (**2004**).	Shahrzad Shareefi Brojerdi, K. Haghbeen*,	Successful resonance Raman study of cresolase activity of mushroom tyrosinase
5	Biologia, Bratislava, 59/3: 317-324, (**2004**)	F. Karbassi, K. Haghbeen, A.A. Saboury	Calorimetric, spectrophotometric and circular dichroism studies on the impact of sodium dodecyl sulfate on the mushroom tyrosinase structure
6	Intl J Biol Macromol 34 257–262, (**2004**)	A.A. Saboury, F. Karbassi, K. Haghbeen, B. Ranjbar, A.A. Moosavi-Movahedi,	Stability, structural and suicide inactivation changes of Mushroom tyrosinase after acetylation by N-acetyl imidazole
7	BBA - Gen. Subjects 1675/1-3 139-146, (**2004**)	K. Haghbeen*, Ali Akbar Saboury, Farhad Karbassi	Substrate share in the suicide inactivation of mushroom tyrosinase
8	Iranian J Biotechnol, 2(3) 189-194, (**2004**)	K. Haghbeen*, S. Shareefi Borojerdi, F. Rastgar	Purification of Tyrosinase from edible mushroom
9	Iranian Polymer J. 14(8) 729-734. (**2005**)	R. Agharafeie, K. Haghbeen*, M. Maghsudi	Polyacrylamide ability for protein immobilizing in one-phase binary-solvent systems
10	Coll. Surf. B: Biointerfaces 45 104–107. (**2005**)	N. Gheibi, A.A. Saboury, K. Haghbeen, A.A. Moosavi-Movahedi	Activity and structural changes of mushroom tyrosinase induced by n-alkyl sulfates
11	Intl J Biol Macromol. 36 305-309. (**2005**)	A. A. Saboury, M.S. Atri,M. H. Sanati, A.A. Moosavi-Movahedi, K. Haghbeen	Effects of calcium binding on the structure and stability of human growth hormone
12	J Enz Inh Med Chem. 20(4) 393-399. (**2005**)	N. Gheibi, A.A. Saboury, H. Mansuri-Torshizi, K. Haghbeen*, A.A. Moosavi	The inhibition effect of some n-alkyl dithiocarbamates on mushroom tyrosinase
13	Biologia Bratislava 20(4) 393-399 (**2006**)	K. Haghbeen*, V. Mozaffarian, F. Ghaffari	Lithospermum officinale callus produces shikalkin
14	J Enz Inh Med Chem. 21(6), 711-717 (**2006**)	A. A. Saboury, S. Zolghadri, K. Haghbeen, A. A. Moosavi-Movahedi	The inhibitory effect of benzenethiol on the cresolase and catecholase activities of mushroom tyrosinase.
15	J Biosci. 31 (3), 355-362 (**2006**).	N. Gheibi, A.A. Saboury, K. Haghbeen, A. A. Moosavi-Movahedi	The effect of some osmolytes on the activity and stability of mushroom tyrosinase
16	Bull Korean Chem Soc. 27 (5), 642-648 (**2006**)	N. Gheibi, A.A. Saboury, K. Haghbeen	Substrate Construes the Copper and Nickel Ions Impacts on the Mushroom Tyrosinase Activities
17	J Enz Inh Med Chem. 22(2), 239-246 (**2007**)	M. Alijanianzadeh, A.A. Saboury, H. Mansuri-Torshizi, K. Haghbeen,	The Inhibitory effect of some new synthesized xanthates on mushroom tyrosinase activities

18	Modern Genetics Journal, 2(2), **2007**, 41-51.	Sheikhani R., Mousavi A., Jonoubi P., Haghbeen K.	Analysis of T1 generation of 5-enol pyruvylshikmate-3-phosphate synthase (EPSPS) transformed oil seed rape plants for glyphosate resistance

Publications (2)

19	Dyes and Pigments 77, 363-368 (**2008**)	S. Rouhani , S. Salimi, K. Haghbeen	Development of optical pH sensors based on derivatives of hydroxyazobenzene, and the extended linear dynamic range using mixture of dyes
20	Spectrochimica Acta Part A 70(1) 1–6 (**2008**)	M. Shamsipur, B. Maddah, K. Haghbeen	Multiwavelength spectrophotometric determination of acidity constants of some azo dyes
21	Biotechnology, (ANSI) 7(2); 200-204 (**2008**)	K. Rahimi, K. Haghbeen, J. Marefatjo, F. Rastgar Jazii	Successful production of hairy root of Valeriana sisymbriifolium by Agrobacterium rhizogenes
22	Iranian Polymer J 17 (5), **2008**, 345-352	N. Bahmanyar, K. Haghbeen*, A. Jamshidi, H. Mobedi	Studying the Structural Stability of Leuprolide acetate after Releasing from Lactide-co-Glycolide Copolymer by Different Spectroscopic Methods and HPTLC
23	J. Biol. Sci (ANSI), 8(3), 526-533, **2008**	F. Saeid Nematpour, K. Haghbeen,	The Banana Pulp Polyphenol Oxidase Is a Tyrosinase
24	Chem. Engin. J. **2009**, 150, 1-7.	K. Haghbeen, R.. L. Legge	Adsorption of Phenolic Compounds on Some Hybrid Xerogels
25	J. Enz. Inh. and Med. Chem. 24(5), 1076-1081 (**2009**)	N. Gheibi, A.A. Saboury, *K. Haghbeen,* F. Rajaei, A.A. Pahlevan	Dual effects of aliphatic carboxylic acids on cresolase and catecholase reactions of mushroom tyrosinase
26	Iranian J. of Biology, 22(2), **2009**, 300-311	Alizadeh M., Sabouni F., Abbasi AH., Moghimi A., Haghbeen K.	Effects of shikonin, a component of Chinese herbal medicine, on activation and apoptosis of inflammated microglial cells in vitro
27	Spectrochimica Acta Part A 74 (**2009**) 691–694	K. Alizadeh, S. Seyyedi, K. Haghbeen	Solvatochromism and temperature effects on the electronic absorption spectra of some azo dyes
28	Interl J Biotechnol & Biochem (IJBB) 5, 4 (**2009**) 423—431.	J. Raheb, H. Esmaeil Lashgarian, Babak K. Haghbeen,	Identification of Novel Cholesterol Oxidase from Rhodococcus Erythropolis ATCC 4277
29	J. Food Biochem. **2010**, 34(2) 308-327	K. haghbeen,* F. Saeid Nematpour, M. Babaei,	Surveying allosteric cooperativity and cooperative inhibition in mushroom tyrosinase
30	J. Biomed. Biotech. **2011**, doi:10.1155/2011/165852	K. Haghbeen,* S. Pourmolaei, M. J.Mareftjo, A.Mousavi, K. Akbari	Detailed Investigations on the Solid Cell Culture and Antimicrobial Activities of the Iranian Arnebia euchroma
31	Analytical Chemistry, **2011**. 83(11), 4200-4205.	S.M. Moshtaghioun, K. Haghbeen	Direct Spectrophotometric Assay of Laccase Using Diazo Derivatives of Guaiacol,
32	Biotechnol Applied Biochem **2011**, 58(6):456-63. doi: 10.1002/bab.42.	S. Farhadi, K. Haghbeen*, M.J. Marefatjo, M. Ghiyami Hoor	Anionic Peroxidase Production by *Arnebia euchroma* Callus
33	Intl Res J Applied & Basic Sci **2011**, 392-397.pd	S. Bageri, F. Sanjarian, K. Haghbeen, M. Ali Ebrahimi	Establishment of cell suspension culture from onosma dasytrichum seed Callus culture
34	Biochem Eng J. 60, **2012**, 99-105.	E. Jahangiria, R. Agharafeiea, K. Haghbeen*	Medium engineering to enhance mushroom tyrosinase stability

35	Iranian J. Biol, **2012** (1391), 25(3); 358-365.	Mirrazavi M., Sabouni F., Abbasi AH., Haghbeen K., Hajhosseini R. Nazem H.	The investigation of cytotoxic effects of standard shikonin andextraction shikonin from Arnebia euchroma on astrocytes

Publications (3)

36	Biochem Genet. **2012**, 50(9-10):722-35. doi: 10.1007/s10528-012-9515-3	S. Babashpour, S. Aminzadeh, N. Farrokhi, A. Karkhane, K. Haghbeen	Characterization of a Chitinase (Chit62) from Serratia marcescens B4A and Its Efficacy as a Bioshield Against Plant Fungal Pathogens
37	Iranian Journal of Horticaltural Sciences, 43(4), 403-410, **2013**	N. zaynali , M. Delshad , A. kashi , K. Haghbin	Effect of Water Stress on Yield and Fruit Quality of some Iranian Melons
38	J of Aquatic Ecology, **2013**, 2(3), 1-13	Akbarzadeh A, Farahmand H, Mahjoubi F, Nematollahi M A, Haghbeen K, Kolangi Miandareh H.	Selection of suitable reference genes for real-time PCR studies of early developmental stages of sturgeons
39	AAPS PharmSciTech **2013**, 14(1):160-7. doi: 10.1208/s12249-012-9899-8	M. Alemi, F. Sabouni, F. Sanjarian, K. Haghbeen, S. Ansari	Anti-inflammatory Effect of Seeds and Callus of Nigella sativa L. Extracts on Mix Glial Cells with Regard to Their Thymoquinone Content
40	progress in biological sciences 3(1) **2013**, 53-59	A. Ahmadizadeh; F. Sanjarian; K. Haghbeen	Enzymatic detoxification of Don in transgenic plants via expression of Fusarium graminearum Tri101 gene
40	Appl Biochem Biotechnol. **2013**, 169(3):773-85. doi: 10.1007/s12010-012-0014-0	M. Hosseini, A.A. Karkhane, B. Yakhchali, M. Shamsara, K. Haghbeen	In Silico and Experimental Characterization of Chimeric Bacillus thermocatenulatus Lipase with the Complete Conserved Pentapeptide of Candida rugosa Lipase
41	Marine and Freshwater Behaviour and Physiology, **2013**, 45(5) 349–355,	A. Akbarzadeh, K. Haghbeen*, H. Farahmand,	The time course of L-gulono-gamma-lactone oxidase expression during the larval ontogeny
42	Acta Biochem Biophys Sinica, **2013** 45:10 845-856.	S. Matroodi, M. Zamani, K. Haghbeen*	Physicochemical Study of a Novel Chimeric Chitinase with Enhanced Binding Ability
43	Biotechnol Appl Biochem. **2014** Mar-Apr;61(2):118-25. doi: 10.1002/bab.1140.	Mojallali L, Shahbani Zahiri H, Rajaei S, Akbari Noghabi K, Haghbeen K.	A novel ~34-kDa α-amylase from psychrotroph Exiguobacterium sp. SH3: production, purification, and characterization
43	Env Stu Persian Gulf, **2014**, 1(2), 93-101)	A. Zaribafan, K. Haghbeen*	Spectrophotometric method for hydrogen peroxide determination through oxidation of organic dyes
44	Heterocycl. Commun. **2014**; 20(6): 339–341	S. Rezaeian, M. Rahimizadeh, H. Eshghi*, K. Haghbin	Synthesis of the new heterocyclic system 7,8-dihydro-6H-benzotetrazolothiadiazine and derivatives
45	Tetrahedron, (**2015**) 71(3), 436-444	H. Eshghi, F. Moeinpour, S. Rezaeian, M. Bakavoli, M. Teymouri, A. Rostami, K. Haghbeen	Nanomagnetic organic-inorganic hybrid (Fe@Si-Gu-Prs): a novel magnetically green catalyst for the synthesis of tetrahydropyridine derivatives at room temperature under solvent-free conditions

46	Iran J Basic Med Sci, 18(2) **2015**, 122-129	N. Gheibi, N. Taherkhani, A. Ahmadi, K. Haghbeen, D. Ilghari	Characterization of inhibitory effects of the potential therapeutic inhibitors, benzoic acid and pyridine derivatives, on the monophenolase and diphenolase activities of tyrosinase
47	Iran J Biotech. **2015**;13(4): e1058	P. Arghavani, K. Haghbeen*, A. Mousavi	Enhancement of Shikalkin Production in Arnebia euchroma Callus by a Fungal Elicitor, Rhizoctonia solani

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48	Canadian J. Chem. Eng. DOI: 10.1002/cjce.22341 **2015**, 93(12) 2214–2221	S. Hassani, A. Ghasemi, M. Fazli, K. Haghbeen,* R. L. Legge	Cation-assisted Adsorption of Chlorophenols by Nanoxerogels
49	J Applied Chem. **2015**, 9 (33), 35-50 DOI: 10.22075/CHEM.2017.689	M. Shamsodin, M. Fazli, K. Haghbeen	Removal of Strontium (II) from aqueous solution by adsorption using Xerogel synthesized from TEOS: Batch and Fixed-bed Study
50	J Nanostructures, 5 (**2015**) 209-218	F. Bourumand Sarand, S. Hassani, M. Fazli, K. Haghbeen*	Nanoporous Xerogel for Adsorption of Pb^{2+} and Cd^{2+}
51	J. Med. Plants and By-products, JMPB **2015**, 4(2), 233-242	T.Ezati, M.J. Marefatjo, K. Haghbeen*,R. Ahmmadkhaniha	Successful indirect regeneration of Arnebia pulchra (Roemer and Schultes)
52	Iran. J. Chem. Chem. Eng. 34(4) **2015,** 89-96	Darroudi, A.; Eshghi, H.; Rezaeian, S.; Chamsaz, M.; Bakavoli, M.; Haghbeen, K.	A Novel Carbon Paste Electrode for Potentiometric Determination of Vanadyl Ion
53	NSMSI, 34(4) **2016**, 31-43	M. Shamsodin; M. Fazli; M. Nasiri; K. Haghbeen	Removal of Strontium (II) from Aqueous Solution by Adsorption Using Xerogel Synthesized by TEOS: Kinetics and Thermodynamics Study
54	J. Food Biochem. DOI: 10.1111/jfbc.12199 **2016**, 40(1) 100–108	S. Javadian, F. Sabouni, K. Haghbeen*	Origanum vulgare l. Extracts versus thymol: an Anti-inflammatory study on activated microglial And mixed glial cells
55	J. Enz Inhib. Med. Chem. **2016**; 31(6):1162-9. doi: 10.3109/14756366.2015.1103234	F. Mirazizi, A. Bahrami, K. Haghbeen*, M. Bakavoli, H. Shahbani Zahiri R. L. Legge	Rapid and direct spectrophotometric method for kinetics studies and routine assay of peroxidase based on aniline diazo substrates
56	J. Plant Process and Function. **2016**; 5 (16) :105-116	Zeinali N, Haghbeen K, Delshad M.	Water deficit effects on some physiological characteristics, sugars and proline as osmolytes in Cucumis melo var. reticulates cv. Samsoury.

57	J IRAN CHEM SOC (**2016**) 13: 957. doi:10.1007/s13738-016-0811-4	K. Haghbeen*, R L. Legge	Synthesis of a novel class of chromophoric cross-linkers
58	Separation Sci. Technol. (**2016**) 51, 9, DOI:10.1080/01496395.2016.1165251	M. Nadimifara, H. khorshidia, K. Haghbeena*, A.A. Karkhanea	A Facile and Cost Effective Method for Simultaneous Preparation of Lectin and Tyrosinase from Edible Mushroom

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59	Brazil. J Microbiol. **2016**, 47(4): 931–940	N. Aliabadi, S. Aminzadeh⁎, A.A. Karkhane, K. Haghbeen	Thermostable Chitinase from Cohnella sp. A01: Isolation and Product Optimization
60	Eur. J. Med. Chem. **2016**, 21;122:138-48. doi: 10.1016/j.ejmech.2016.06.013	S. Hassani, K. Haghbeen,* M. Fazli	Non-specific binding sites help to explain mixed inhibition in mushroom tyrosinase activities
61	Applied Biochem. Microbiol. **2016**, 52(3), 304–310	N. Gheibia, S. Hosseini Zavareh, G. R. Rezaei Behbahani, K. Haghbeen, M. Sirati-sabet, D. Ilgharid, and K. Goodarzvand Chegini	Comprehensive Kinetic and Structural Studies of Different Flavonoids Inhibiting Diphenolase Activity of Mushroom Tyrosinase
62	Trop. plant pathol. **2016**, 41(6) 350–356 DOI: 10.1007/s40858-016-0103-7	A. Ataei, M. Zamani, M. Motallebi, K. Haghbeen	Increased antifungal activity of Chit42 from Trichoderma atroviride by addition of a chitin binding domain
63	3 Biotech. **2016**, 6(2): 129. doi: 10.1007/s13205-016-0441-7	N. Mohandesi, S.O. Ranaei Siadat, K. Haghbeen, A. Hesampour	Cloning and expression of Saccharomyces cerevisiae SUC2 gene in yeast platform and characterization of recombinant enzyme biochemical properties
64	Enz. Microbial Technol. **2017**, 96, 14–22.	N. Mohandesi, K. Haghbeen,⁎ O. Ranaei, S.S. Arab, S. Hassani	Catalytic efficiency and thermostability improvement of Suc2 invertase through rational site-directed mutagenesis
65	J Functional Foods **2017**, 30, 56–62	N. Zeinalipour, K. Haghbeen*, I. Tavassolian, A.A. Karkhane, J. Ghashghaie	Enhanced production of 3-methylthiopropionic ethyl ester in native Iranian Cucumis melo L. Group Dudaim under regulated deficit irrigation
66	Biocatal. Biotransfor. (**2017**) 35(1), 1-10	S. M. Moshtaghioun, M. Dadkhah, K. Bahremandjo, K. Haghbeen*, S. Aminzadeh, R. L. Legge	Optimization of Simultaneous Production of Tyrosinase and Laccase by Neurospora crassa

67	J Applied Chem. (**2017**) 12(42)**,**167-180	Ali Aslrousta; K. haghbeen, A. Akbari, M. Fazli	Investigation of adsorption of Chromium and Copper ions on TEOS xerogel
68	J. Applied Chem. Res., (**2017**) 11(3), 84-96	K. Haghbeen,* S. Rezaeian, M. Bakavoli	A Synthetic Approach for Evaluation of Cytosinediazonium Susceptibility
69	PLOS ONE, **2017**, 12(4): e0175013	F. Zebardast Roodi, S. Aminzadeh, N. Farrokhi, A.A. Karkhane, K. Haghbeen	Cohnella amylo pullulanases: Biochemical characterization of two recombinant thermophilic enzymes
70	J. Agri. Sci. Technol. **2018**, 20 (2), 347-357	Amiri-nowdijeh, F. Fazelipour, K. Haghbeen, M. Taheri, M. Hosseini-Mazinani	Minor Olive Varieties ITom Iran with Promising Nutraceutical Properties

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71	International J. Environ. Sci Technol. **2018**, 15(8): 1679-1686	F. Mirazizi, A. Bahrami, S. Soleimani Asl, A. Zaribafan, K. Haghbeen*, S. Aminzadeh	Evaluation of oxidative enzymes for efficient degradation of aniline and phenolic pollutants
72	Extremophiles, **2018**, 22(2): 315-326	K. Khalili Ghadikolaei, J. Gharechahi, K. Haghbeen, K. Akbari Noghabi, G. Hosseini Salekdeh, H. Shahbani Zahiri	A cold-adapted endoglucanase from camel rumen with high catalytic activity at moderate and low temperatures: an anomaly of truly cold-adapted evolution in a mesophilic environment
73	J Iran Chem Soc. **2018**, 15 (5), 1097-1106	A. Hashem Nia, S. Rezaeian, H. Eshghi, K. Haghbeen, M. Bakavoli, M. Ramezani	Synthesis and evaluation of apoptosis induction levels of carbamate-and thiocarbamate-functionalized multi-walled carbon nanotubes
74	International J Biol Macromol. **2018**, 114, 821-829	S. Hassani, B. Gharechaei, S. Nikfard, M. Fazli, N. Gheibi, R. Hardré, R. L Legge, K. Haghbeen	New insight into the allosteric effect of L-tyrosine on mushroom tyrosinase during L-dopa production
75	International J Biol Macromol **2018**, 116, 64-70	Z. Emruzi, S. Aminzadeh, A. Karkhane, J. Alikhajeh, K. Haghbeen, D. Gholami	Improving the thermostability of Serratia marcescens B4A chitinase via G191V site-directed mutagenesis
76	Ecotoxicology and environmental safety **2018**, 164, 455-466	S. Shahryari, H. Shahbani Zahiri, K. Haghbeen, L. Adrian, K. Akbari Noghabi	High phenol degradation capacity of a newly characterized Acinetobacter sp. SA01: Bacterial cell viability and membrane impairment in respect to the phenol toxicity
77	Applied Biochem. Biotechnol., **2019**, 187 (3), 744-752	E. Khosravi, A. Mousavi, M. Farhadpour, J. Ghashghaie, F. Ghanati, K. Haghbeen	Pyrrolizidine Alkaloids-Free Extract from the Cell Culture of Lithospermum officinale with High Antioxidant Capacity
78	J. Marine Sci. Technol. **2019**, 18(2) ; 66-75	Nateghzadeh M., Matroodi S., Haghbeen K.	Comparative Antioxidant Activities and Polyphenolic Content of Marine actinomycetes from Deylam nearshore sediments
79	Heliyon **2019**,5 (9), e02543	M Shafiei, F Afzali, AA Karkhane, SM Ebrahimi, K Haghbeen	Cohnella sp. A01 laccase: thermostable, detergent resistant, anti-environmental and industrial pollutants enzyme

80	International J. Farm Sci., **2020**,10 (3and4), 98-103	ST Goojgi, A Mousavi, K Haghbeen, K Piri	Morphological changes of Hyoscyamus niger calli resulting from somaclonal variation using ISSR markers
81	Spectrochimica Acta Part A: Mol. Biomol. Spectroscopy **2020**, 229, 117897	P Mohammadnejad, SS Asl, S Aminzadeh, K Haghbeen	A new sensitive spectrophotometric method for determination of saliva and blood glucose
82	Mol. Biol. Res. Commun. **2020**, 9 (1), 23	S Yousefian, T Lohrasebi, M Farhadpour, K Haghbeen	Production of phenolic acids in hairy root cultures of medicinal plant Mentha spicata L. in response to elicitors
83	Plant Cell, Tissue and Organ Culture (PCTOC) **2020**,142, 285-297	S Yousefian, T Lohrasebi, M Farhadpour, K Haghbeen	Effect of methyl jasmonate on phenolic acids accumulation and the expression profile of their biosynthesis-related genes in Mentha spicata hairy root cultures

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84	Curr Pharm Biotechnol. **2020**, doi: 10.2174/1389201021666201104145439.	M Kheyrollah, F Sabouni, M Farhadpour, K Haghbeen	Neuroprotective effect of Lithospermum officinale callus extract on inflamed primary microglial cells
85	Msystems **2021**, 6 (1), doi.org/10.1128/mSystems.01175-20	S Shahryari, M Talaee, K Haghbeen, L Adrian, H Vali, HS Zahiri,	New Provisional Function of OmpA from Acinetobacter sp. Strain SA01 Based on Environmental Challenges
86	Plant Cell, Tissue and Organ Culture (PCTOC), **2021**, 146, 375–386	P Mohammadnejad, SS Asl, Z Rasoulian, S Aminzadeh, J Ghashghaie	A potent peroxidase from solid cell culture of Ocimum basilicum with high sensitivity for blood glucose determination
87	J Food Biochem, **2021**,45 (11), e13949	N Ghorbanian, A Mousavi, MJ Marefatjoo, NS Ghofrani, T Lohrasebi, K. Haghbeen	Toward more specific inhibitor for Solanum tuberosum polyphenol oxidase through a structural insight into its activities and inhibition
88	International Journal of Biological Macromolecules, **2021**, 187(30), 373-385	Z. K. Mazraeh Shahi, Z. Takalloo, J. Mohamadzadeh, R. H Sajedi, K. Haghbeen, S. Aminzadeh	Thermophilic iron containing type superoxide dismutase from Cohnella sp. A01
89	The protein journal, **2021**, 40 (5), 689-698	NS Ghofrani, M Sheikhi, …, K. Haghbeen	New Insight into the Interactions of Arbutin with Mushroom Tyrosinase
90	J Environmental Science and Health, Part A, **2021**, 56 (10), 1131-1137	Z Javaheri Safa, A Olya, M Zamani, M Motalebi, R Khalili, K Haghbeen	Biodegradation of cyanide to ammonia and carbon dioxide by an industrially valuable enzyme from the newly isolated Enterobacter zs
91	J Iranian Chemical Society, **2021**,1-12	F Haghbeen, N Ghorbanian, G Hajatpour, …, H Eshghi, K Haghbeen	Introducing a potential lead structure for the synthesis of more specific inhibitors of tyrosinases and catechol oxidases

92	Iranian Journal of Genetics and Plant Breeding, 10(1): 39-46, **2021**	Tavakoli M., Mousavi A.,and Haghbeen K.	Evaluation of somaclonal variation of Arnebia pulchra (Boraginaceae) calli versus seeds using ISSR Marker
93	Phytochemistry, **2022**, 194, 113022	SS Asl, AA Karkhane, JZ Amirzakaria, KA Noghabi, J Ghashghaie	Structure and activity of a novel robust peroxidase from Alkanna frigida cell culture
94	Biotechnology Letters, **2022**,1-8	ST Goojgi, M Tavakoli, K Haghbeen, A Mousavi, K Piri	A novel spray bioreactor for the proliferation of plant callus; Hyoscyamus niger and Arnebia pulchra
95	Scientific Reports 12 (1), 10301. **2022**	S Mohammadi, H Tarrahimofrad, S Arjmand, J Zamani, K Haghbeen, ...	A Expression, characterization, and activity optimization of a novel cellulase from the thermophilic bacteria Cohnella sp. A01
96	Journal of Food Biochemistry 46 (10), e14279. **2022**	N Taherkhani, A Hekmat, H Piri, K Haghbeen	Structural and inhibitory effects of fulvic and humic acids against tyrosinase
97	Applied Chemistry 17 (63), 151-164, **2022**	F Mirazizi, M Bakavoli, K Haghbeen, M Ebrahimi	Influential parameters on the substrate selectivity of laccase and tyrosinase
98	Journal of Inflammatory Diseases Volume 0, Issue 0 (5-**2023**)	N Taherkhani, A Hekmat, H Piri, K Haghbeen	Humic and Fulvic acids induced thermodynamic and structural instability of tyrosinase with antiproliferative effect on A375 melanoma cancer cell line
99	Biotechnology and Bioprocess Engineering DOI 10.1007/s12257-023-0049-9. **2023**	Reyhane Zamani, Sayyed Shahryar Rahpeyma	Enhancing the Thermostability of Cellulase from Clostridium thermocellumvia Salt Bridge Interactions
100	Journal of Cleaner Production 406, 137126, **2023**	M Golbabaie, A Khosronejad, AA Baharanchi, MJ Marefatjoo	Enzymatic remediation of water resources by a durable and potent peroxidase from the cell culture of Origanum vulgare
101	Sustainable Environmental Research **2023**, 33 (1), 28	M Golbabaie, B Gharachei, F Mirazizi, AA Baharanchi, A Khosronejad, AA Karkhanie K Haghbeen	Efficient degradation of various recalcitrant azo dyes in aqueous medium by immobilized Origanum vulgare peroxidase
102	International Journal of Horticultural Science and Technology 11 (3), 353-368, **2024**	H Sheikhi, M Delshad, S Aliniaeifard, K Haghbeen, M Bababalar, R Nasiri	Enhancing Growth and Nutritional Quality in Greenhouse-grown 'Little Gem'Lettuce using LED Supplemental Lighting

103	New Journal of Chemistry **2024**, 48 (33), 14791-14800	Nazanin Noroozi-Shad, Hossein Sabet-Sarvestani, Vahid Moghimi, Toktam Afrough, Kamahldin Haghbeen, Hossein Eshghi	Quinoxaline derivatives as potent compounds against both 3CL pro and PL pro enzymes of SARS-CoV-2 virus: an insight from experimental and theoretical approaches
104	International Journal of Biological Macromolecules **2024**, 279, 135135	Faezeh Hasani, Hossein Tarrahimofrad, Zohreh Javaheri Safa, Naser Farrokhi, Ali Asghar Karkhane, Kamahldin Haghbeen, Saeed Aminzadeh	Expression optimization and characterization of a novel amylopullulanase from the thermophilic Cohnella sp. A01

Supervised research theses (1)

* National Research Institute for Genetic Engineering and Biotechnology (**NIGEB**)

** Science and Research Unit of Azad University (**SRU-AU**)
*** Iran University of science and Technology (**IUST**)
**** Islamic Azad University (**IAU**)
***** Payam Noor University (**PNU**)

1	Shikonin production by selected cell-lines of Iranian *Arnebia euchroma* (**A. Meshkat**)- **SRU-AU**	MSc	March 2002
2	Spectroscopic and calorimetric examination of inhibition of oxidase activity of tyrosinase (**B. Zamani**) – **Birjand Un.**	MSc	March 2002
3	Biosynthesis pathway of shikalkin in *Arnebia euchroma* **(S. Pourmolaei) - SRU-AU**	MSc	Jan. 2003
4	Purification and assessment of tyrosinase from edible mushroom **(S. Sharifi) - SRU-AU**	MSc	Jan. 2003
5	Study on rosmarinic acid production by the *Lithospermum officinale* callus (**E. Pourazizi**) - **SRU-AU**	MSc	July 2003
6	Biosynthetic pathway of shikalkin in the *Lithospermum officinale* root (**F. Ghafarri**) - **SRU-AU**	MSc	2004
7	Thermodynamic of *Agaricus bisporus* tyrosinase activities (**F. Karbasi**) – **IBB, Tehran Un.**	PhD	July 2004
8	Molecular & biochemical aspects of cholesterol oxidase production in *Rhodococcus erythropolis* ATCC4277 – **(B. Nazari) – Tehran Un.**	MSc	Sep 2004
9	Evalution of enzymatic activity of *Arnebia euchroma* callus for biotransformations **(M. Ghiami Hoor)- IUST**	MSc	May 2005
10	PEGylation technology consideration on Bovine Serum Albumin (**E. Mobedi**) **CCERCI**.	MSc	June 2005
11	Tyrosinase efficiency enhancement through immobilization on solid phase **(R. Agharafeie) – IUST**	MSc	April 2005
12	Examining the effects of some metal ions and synthetic ligands on the activity and active structure of mushroom tyrosinase – (**N. Gheibi**) – **IBB, Tehran of Un**.	PhD	2005
13	*Agrobacterium* effect on the *Arnebia euchroma* callus (**K. Rahimi**)- **Tabriz Un.**	MSc	May 2005

Supervised research theses (2)

14	Extraction and purification of *Neurospora crassa* tyrosinase (**M. Babaei Khalili**) – **Guillan Un.**	MSc	Feb 2006
15	The effect of thiophenol on the activity of tyrosinase (**S. Zolghadri-Jahromi**) – **IBB - Tehran of Un**.	MSc	Sep 2006
16	Study on mushroom tyrosinase inhibition by new synthetic ligands (**M. Alijanzadeh**) – **IBB, Tehran Un.**	MSc	Feb 2007
17	Functional stability of mushroom tyrosinase in medium containing water and acetonitrile (**E. Jahangeeri**) **- PNU**	MSc	March 2007
18	Study on active site of mushroom tyrosinase in secondary and tertiary structures (**R. Khoshneviszadeh**). **IAU**	MSc	
19	Study on Banana tyrosinase and its role in enzymatic browning (**F.S. Nematpour**) **SRU-AU**	PhD	Feb. 2008
20	Leuprolide acetate stability study in formulations by different spectroscopic methods - (**N. Bahmanyar**) – **IAU**	MSc	2006
21	Effects of shikonin on activation and apoptosis of inflamed microglial cells in vitro - (**M. Alizade**) – **Mashhad Un**.	MSc	Sep 2007
22	Electrophoretic pattern of cytoplasmic proteins of *Agaricus bisporus* (**A. Ansariyan**) **SRU-AU**	MSc	Feb. 2010
23	Extraction and purification of peroxidase from *Arnebia euchroma* callus (**S. Farhadi**) **SRU-AU**	MSc	Feb. 2010
24	Expression of acetyltransferase gene in tobacco (**A. Ahmadizadeh**) – **NIGEB**	MSc	Dec. 2010
25	The antioxidant ability of *Arnebia euchroma* callus in comparison with its natural root - (**N. Amin Tehrani**) – **PNU**	MSc	Sep 2010
26	Antioxidant activity of the *Lithospermum Officinalis* callus (**F. Fazelipour**) **- PNU**	MSc	Sep 2010
27	Adsorption of heavy metal ions on xerogels **(F. Broumand) – Semnan Un.**	MSc	Sep 2010
28	Studying the Tyrosinase production in *Neurospora crassa* – (**M. Dadkhah**) – **PNU**	MSc	Feb 2011

Supervised research theses (3)

29	Surveying the function and stability of laccases enzyme in non conventional media (**K. Bahremandjooy**) – **PNU**	MSc	2011
30	Simultaneous production of laccase and tyrosinase by *Neurospora crassa* (**M. Moshtaghioun**) - **NIGEB**	PhD	2011
31	Investigation of adsorption effect of metal ions Cd, Zn and Ni on TEOS & TMOS Xerogels (**M. Safarpour**) – **Semnan Un.**	MSc	Aug 2011
32	Investigation of adsorption of Chromium & Copper ions on TEOS & TMOS xerogels (**M. Naserelami**) – **Semnan Un.**	MSc	Oct 2011
33	Callus production from *Nigella sativa L.* Seeds and study of anti-inflammatory effects of the extracted oli from seed and callus on Rat brain mix cells - (**M. Alemi**) – **NIGEB**.	MSc	Sep 2011
34	Ontogeny of L-gulonolactone oxidase enzyme gene expression in Persion sturgeon, Acipenser persicus (**A. Akbarzadeh**) **TehranUn.**	Ph.D	Sep 2011
35	Surveying drought stress on melons (**N. Zeinali**)- **Tehran Un.**	PhD	Feb 2012
36	Assisted adsorption of Metal ions on TEOS xerogel by oxalic acid (**E. Kianejad**) – **Semnan Un.**	MSc	Feb 2012
37	Investigation of adsorption metal ions Cd^{2+} and Ni^{2+} on Alominum (**S. Sadeghian**) – **Semnan Un.**	MSc	Sep 2012
38	Hairy roots induction in *Arnebia euchroma* by *Agrobacterium* rhizogenesis **(T. Ezati)** – **NIGEB**	MSc	Feb 2012
39	Surveying the Inhibition of the Cresolase and Catecholase Activities of Tyrosinase at low concentrations of Kojic acid , 2-ketohexanoic acid and pyruvic acid - (**Y. Tahmasebi**) – **NIGEB**	MSc	Sep 2012
40	Evaluation of the efficiency of phenols and aromatic compounds removal from drinking water resources by advanced oxidation and enzymatic processes - (**A. Zaribafan**) – **Shahid Chamran Un.**	MSc	Feb 2012
41	Extraction and purification of lectin from the edible button mushroom (Agaricus bisporus) and evaluation of its hemagglutinin activity in the presence of ABO blood groups cells – (**H. Khorshidi**) - **NIGEB**	MSc	Feb 2012
42	Investigation of adsorption effect of Chlorophenol pollutants on TEOS & TMOS Xerogels in the presence of metal ions - (**A. Ghasemi**) – **Semnan Un**.	MSc	Sep 2012

Supervised research theses (4)

43	Induction and growth of Onosma dasytrichum callus (**S. Bagheri**) – **PNU**	MSc	Aug. 2012
44	Study on Organogenesis Ability of the *Arnebia euchroma* Callus (**M.J. Marefatjoo**) - **IAU**	MSc	Aug. 2012
45	Investigation of adsorption organic pigments on TEOS Xerogel absorbent – (**A. Mohebbi**) – **Semnan Un**.	MSc	Oct 2012
46	Adsorption of metal cations on ormosils of TMOS (**A. Zarghami**) – **Semnan Un.**	MSc	Sep 2013
47	Examining the kinetic and Thermodynamic stability of the immobilized mushroom tyrosinase on the modified xerogels (**B. Gharehchei**) – **Semnan Un.**	MSc	March 2013
48	Study the kinetic of L-dopa production by free and immobilized mushroom tyrosinase (**S. Nikfard Zakelebari**) – **Semnan Un.**	MSc	March 2013
49	Examining the adsorption and desorption of bi-valent metal cation (Cu(II)) on the ormosils derivatized from teraethoxy-ortho-silane - **(N.Shakarami)**- **Semnan Un.**	MSc	Sep 2013
50	Studying the interaction of Lectin and Tyrosinases of edible mushroom Agaricus bisporus - (**M. S. Nadimi far**) **NIGEB**	MSc	March 2014
51	Studying Shikalkin production by the callus of Iranian *Arnebia euchroma in the presence of* Methyl jasmonate , Salicylic acid and Rhizoctonia solani as elicitors - (**P. Arghavani**) **NIGEB**	MSc	Feb 2014
52	Determination of optimum condition for *Origanum vulgare* callus induction and study of anti-inflammatory effects of plant extract on rat brain mix glial cell culture (**S. Javadian**) **IAU**.	MSc	Jan. 2013
53	Degradation of diazo dyes by Neurospora crassa laccase (**A. Bahrami**) **IUST**	MSc	Nov. 2013
54	Surveying Influential Parameters on the Production invertase by saccharomyces cerevisiae(**M. Ghasemi**) – **Semnan Un**.	MSc	March 2015
56	Study on in vitro optimization of *Arnebia euchoma* root proliferation and its pigment production (**F. Ghaseminasab**) **PNU**	PhD	Feb 2015
57	Examination of antioxidant capacity of Nonea caspica and Melissa officinalis Calli - (**Z. Rsoulian**) – **PNU**	Msc	Aug 2015

Supervised research theses (6)			
58	Functionalization of multi-wall cabon nanotube and their biological evaluation Synthesis of new heterocyclic system7,8-dihydro-6H benzotetrazolo thiadiazines and derivatives Synthesis of substituted tetrahydropyridine with novel catalyst preyssler heteropolyacid supported on the surface of nano magnetic silica Synthesis of new derivatives of benzo[g]pteridine (**Sh. Rezaeian**) – **Mashhad Un**.	PhD	March 2015
59	Evaluation of the surface hydrophobicity of the porous polymers on the concentration of alkyphenols in aqueous medium - (**M. Baharlouie Yancheshmeh**) – **IAU**.	MSc	Feb 2016
60	Evaluation of polyphenoloc contents and antioxidant activity in cell suspention cultures and optimization of genomic DNA and RNA extractions in *Lithospermum officinale L.* (**N. Faridi**) **NIGEB**	MSc	March 2016
61	Cloning and expression of Invertase – coding gene in *Pichin pastoris* and biochemical characterization of the enzyme using rational mutagenesis (**N. Mohandesi**) **NIGEB**.	PhD	Oct. 2016
62	Enzymatic oxidation of diazo dyes (**F. Mirazizi**) – **Mashhad Un**.	PhD	Aug 2016
63	Study of apple (Malus domestica Borkh.) tyrosinase inhibition by som of biological componds - (**S. Kompanisaeid**) – **Kharazmi Un**.	MSc	Sep 2016
64	Inhibition of mushrrom tyrosinase by carboxylic acids (**S. Hassani**) - **Semnan University**	PhD	Aug 2016
65	Diversity of Gene Clusters for Polyketide in actinomycetes (**M. Nateghzadeh**) – **Khoramshahr Marine Science University**	MSc	Jan 2017
66	Flavonoids production in *Nonea caspica* callus (**A. Hamzepour**) - **PNU**	MSc	Aug 2017
67	Activities of Oxidoreductases during proliferation of Lithospermum officinale callus (**N. Soltani**) - **NIGEB**	MSc	Feb 2017
68	PPO activity and phenolic metabolites production in Onosma dasytrichum callus (**M. Sheikhi**) - **NIGEB**	MSc	Feb 2017
69	Effects of Lithospermum officinale callus extract on activation and apoptosis of inflammated microglial cells in vitro – **(M. Kheyrollah) - Esfahan Un.**	MSc	Sep 2017

Supervised research theses (7)			
70	Evaluation of inhibition of polyphenol oxidase in potato plant (*Solanom tuberosum*) (**N. Ghorbanian**) - **NIGEB**		March 2018
71	Investigation on peroxidase performance from ocimum Bassilicum`s calluse for detection of cholesterol and Glucose in natural samples (**P. Mohammadnejad**) - **NIGEB**		Feb 2018
72	Competetive biosynthetic routes of phenolic acids in medicinal plants "*Lithospermum officinale* and *Onosma dasytrichum*" (**S. Nezami**) - **NIGEB**		Feb 2019
73	Investigation of the effective factors on callus propagation and expression of some key genes during cell cycle of medicinal plant; *Lithospermum officinale* L. (**E. Khosravi**) - **SRU-AU**	PhD	Aug 2018
74	Computational Analysis of strong inhibitors of mushroom tyrosinase at low and high concentrations in the presence of p-coumaric acid (**S. Shamaie**) - **NIGEB**	MSc	Aug 2019
75	Production of neurospora crassa tyrosinase by gene expression in E. coli and evaluation of enzyme activity (**G. Hajatpour**) - **NIGEB**	MSc	Aug 2019
76	Effect of methyl jasmonate on phenolic acids accumulation and the expression profile of their biosynthesis-related genes in *Mentha spicata* hairy root cultures (**E. Yousefian**) - **SRU-AU**	PhD	Aug 2020
77	Function of OmpA from *Acinetobacter* sp. Strain SA01 Based on Environmental Challenges (**E. Shahriyari**) - **SRU-AU**	PhD	Feb 2021
78	Study of peroxidase isozyme in *Alkanna frigida* (**S. Soleimani Asl**) - **NIGEB**	PhD	Sep 2021
79	Investigation on feeding strategy of the influential nutrients for propagation of Arnebia pulchra cells in a spray bioreactor (**M. Tavakoli**) - **NIGEB**	PhD	Sep 2022
80	Optimization of total alkaloids production in *Papaver orientale* callus (**S. Tahmasbi**) - **NIGEB**	PhD	Sep 2022
81	Physicochemical studies on peroxidase of *Origanum vulgare* callus with emphasize on potential environmental applications for removal of phenolic pollutants (**M. Golbabaei**) - **NIGEB**	PhD	July 2023
82	Evaluation of radish (*Raphanus sativus*) peroxidase coupled reactions with glucose oxidase, cholesterol oxidase, and urease in comparison to the reactions of HRP obtained from the solid cell culture of *Armoracia rusticana* (**Ali Khosrownejad**) - **NIGEB**	PhD	Current

Supervised research theses (7)			
83	Studying polyphenol oxidase gene expression in Vitis vinifera cv. Bidaneh Sefid and the parameters influencing its activity during berry growth (**J. Marefatjoo**) – **Malayer University**	PhD	Current
84	Ecophysiological impact on saffron (*Crocus sativus* L.) plant secondary metabolites (**M. Nikzad**) - **NIGEB**	postdoc	current
85	Anthocyanin production in the solid cell culture of *Daucus carota* ssp. sativus (**H. Shojaee**) - **NIGEB**	MSc	Current
86	Investigation of the polyamines in the cell culture of the medicinal plant; *Lithospermum officinale* L. (**H. Sheikhi**)	Postdoc	Current
87	Production of peroxidase from Onosma dasytricha cell culture to be used in acrylamide polymerization (**M. Nour**) - **NIGEB**	MSc	Current
88	In silico studies on inhibition of *Vitis vinifera* polyphenol oxidase. (**S. Khoshnam**)	PhD	Current
89	Investigating the role of peroxidase in the production of phenolic metabolites in plant cell culture of *Nonea Caspica*. (**N. Mehdizadeh** – **Lorestan University**	PhD	Current