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| Curriculum Vitae | | | |
| Personal Data | | | |
|  | Name: SAEID | |
|  | Family: **KADKHODAEI** | |
| Address: **Pajouhesh Blvd., Najafabad Rd., Isfahan, Iran** | | | |
| Email: [s\_kadkhodaei@yahoo.com](mailto:s_kadkhodaei@yahoo.com) Phone: **+98-913-1173049** | | | |
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| Google Scholar : [LINK](https://scholar.google.com/citations?user=_Oe_DSgAAAAJ&hl=en) | | [Scopus Author ID: 25958069300](http://www.scopus.com/inward/authorDetails.url?authorID=25958069300&partnerID=MN8TOARS) | |
| ResearchGate : [LINK](https://www.researchgate.net/profile/Saeid_Kadkhodaei3) | | [ResearcherID: F-7868-2010](http://www.researcherid.com/rid/F-7868-2010) | |
| Academia : [LINK](https://iut.academia.edu/SaeidKadkhodaei) | | http://qrcode.orcid.org/qrcode/eyJuYW1lIjoiU2FlaWQgS2Fka2hvZGFlaSIsImVtYWlsIjoiIiwid2Vic2l0ZSI6Imh0dHA6Ly9vcmNpZC5vcmcvMDAwMC0wMDAyLTU1MjgtMDczOCJ9/generate.pngORCID ID: [0000-0002-5528-0738](http://orcid.org/0000-0002-5528-0738) | |

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| Educational status | | | | | |
| **Area** | **Field** | **Year Ended** | **Year Started** | University / school / Institute | Certificate |
|  |  |  |  |  |  |
| Fungal Genome Editing | Biotechnology and Bioengineering | 2018 | 2017 | Isfahan University of Technology | Postdoc |
| Bioinformatics and Computational Biology | Biotechnology and Biomolecular Sciences | 2016 | 2015 | Universiti Putra Malaysia | Postdoc |
| Synthetic Biology and Genetic Engineering of Microalgae | Biotechnology and Biomolecular Sciences | 2014 | 2009 | Universiti Putra Malaysia | Ph.D. |
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| Molecular Breeding | Agricultural Engineering | 2002 | 1999 | Tabriz University | M. Sc. |
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| Medicinal Plants | Agricultural Engineering | 1998 | 1997 | Research Institute of Agricultural and Natural Resource | **Apprenticeship** research assistant |
| Horticulture | Agricultural Engineering | 1998 | 1994 | Isfahan University of Technology | B. Sc. |

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| **Research fields of interest** |
| 1. Synthetic Biology, 2. CRISPR-based Diagnostics, 3. Bioinformatics, 4. Industrial Biotechnology |

| **Chronology of academic and other relevant appointments** | |
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| Year | Description of activity |
| 2021-continued | Department head, Genomics, ABRICI, Isfahan |
| 2020 | Faculty member, department of genomics, ABRICI, Isfahan |
| 2020 | Chairman of the Board, RZH BioTech Co., Isfahan |
| 2019 | R&D manager, FTT Co., Tehran |
| 2018 | Head of biotech department, RZH Co., Isfahan |
| 2017 | Post-Doctoral researcher, Institute of Biotechnology and Bioengineering, Isfahan University of Technology |
| 2016 | Head of technical and lecturer in “Advanced Cloning and Multiple DNA Fragments Assembly Techniques” workshop, Institute of Tropical Agriculture, Universiti Putra Malaysia |
| 2016 | Co-organizer and lecturer in “Research Tools and Reference Management” workshop, Institute of Tropical Agriculture, Universiti Putra Malaysia |
| 2016 | Chairperson of the postgraduate students’ seminar, Institute of Tropical Agriculture, Universiti Putra Malaysia |
| 2015 | Scientific committee member, 2nd International Conference on Crop Improvement - Sustainability through Leading-edge Technology (ICCI 2015), Universiti Putra Malaysia (UPM), Malaysia |
| 2015 | Post-Doctoral researcher, Institute of Tropical Agriculture, Universiti Putra Malaysia |
| 2015 | R&D scientific member in SynHiTech |
| 2014 | Developer and Administrator of [BioInfoBase](http://bioinfobase.iut.ac.ir/) website (www.BioInfoBase.info) |
| 2013-2014 | Consultant on bioinformatics, genomics, synthetic biology and genetic constructs design for SynHiTech company |
| 2010-2014 | PhD candidate in Genetic Engineering and Molecular Biology of Microalgae (University Putra Malaysia) |
| 2009 | Member of Scientific Board in ABRII (Agricultural Biotechnology Research Institute of Iran), Genomics department |
| 2008 | Principal investigator in "Iranian almond DNA fingerprinting national project" |
| 2007 | Developer and Organizer of a Biotechnology Multimedia Database (ABRII digital library) |
| 2006- 2009 | Head of Genomics Laboratory at ABRII-CR (Agricultural Biotechnology Research Institute of Iran - Regional institute of Central Iran) |
| 2005 | Member of scientific and executive committee of "Research Week" on behalf of the ABRII-CR in Isfahan province |
| 2004 | Researcher in the field of molecular breeding |
| 2004 | Member of "Agriculture and Natural Resources Engineering Regulation Organization" |
| 2004 | Principal investigator in collection of the cultivated almond germplasm in Iran and establishment of the nursery |
| 2004 | Significant role in establishment of "Genomics Department in ABRII-CR" |
| 2002-2003 | Significant cooperation in establishment of ABRII (Agricultural Biotechnology Research Institute of Iran-Regional institute of Central Iran) |
| 1997-1999 | Research assistance in "Research Institute of Agriculture and Natural Resources (Isfahan province) |

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| **Research activities** | | | | | | |
| **No.** | **Title of project** | From | **To** | **Venue** | **Responsibility** | |
| Collaborative | **Main Researcher** |
|  | Development of an identification kit based on molecular markers to identify and differentiate 30 Iranian alfalfa (*Medicago sativa*) accessions | 2020 | 2022 | ABRII-CR, RZH BioTech |  | \* |
|  | Improving productivity of steviol glycosides  in *Stevia rebaudiana* via induced polyploidy | 2019 | 2020 | FTT co.,  Shahed University | \* |  |
|  | Formulation and production of permanent marker for animal ear tag | 2019 | 2020 | RZH BioTech |  | \* |
|  | Genome engineering of yeast through CRISPR/Cas9 toward development of protease deficient strains | 2018 | 2019 | IBB, IUT, RZHBioTech |  | \* |
|  | Production of Hydrolyzed Keratin | 2017 | 2018 | RZHBioTech, IBB, IUT |  | \* |
|  | Purification of Stevia Sweeteners | 2017 | 2018 | IBB, IUT |  | \* |
|  | Production & purification of Cas9 endonuclease | 2017 | 2018 | IBB, IUT, RZHBioTech |  | \* |
|  | Production of DNA size markers | 2017 | 2018 | IBB, IUT, RZHBioTech |  | \* |
|  | Characterization of defense response genes and transcription factors involved in quinoline biosynthetic pathway during interaction of oil palm (*Elaeis guineensis* Jacq) with *Ganoderma boninense* | 2016 | 2018 | ITA, UPM | \* |  |
|  | Characterization of phytohormone biosynthetic pathway and immunodetection of volatile metabolites in oil palm (*Elaeis guineensis* Jacq) during interaction with *Ganoderma boninense* | 2016 | 2018 | ITA, UPM | \* |  |
|  | Metabolic engineering and construction of 3-hydroxypropionic acid-producing recombinant *Escherichia coli* strain | 2014 | 2016 | SynHiTech | \* |  |
|  | [Feasibility study of microalgae (*Dunaliella salina*) transformation as a bioreactor for production of recombinant proteins](https://civilica.com/doc/1055519/) | 2010 | 2013 | UPM  ABRII-CR |  | \* |
|  | [Optimization of genetic transformation in *Dunaliella salina*](https://civilica.com/doc/1093163/) | 2010 | 2013 | ABRII-CR | \* |  |
|  | [Evaluation of changes in the proteome of long fescue root due to drought stress and its interaction with endophytic fungus](https://civilica.com/doc/1055517/) | 2009 | 2012 | ABRII-CR | \* |  |
|  | Genetic Identification of Iranian almond germplasm using molecular markers and morphological data | 2005 | 2009 | ABRII-CR |  | \* |
|  | [Investigation on the application of silver nanoparticles and silver compounds to prevent wood rot caused by termites](https://civilica.com/doc/1056207/) | 2008 | 2010 | ABRII-CR | \* |  |
|  | [Micropropagation of male sterile onion genotypes](https://civilica.com/doc/1059631/) | 2007 | 2009 | ABRII-CR | \* |  |
|  | [Investigation on the effect of some elicitors on taxol production using immobilized cell culture system in yew plant (*Taxus Baccata* L.)](https://civilica.com/doc/1065683/) | 2007 | 2008 | ABRII-CR | \* |  |
|  | [Alfalfa synthetic seed production](https://civilica.com/doc/1066651/) | 2005 | 2007 | ABRII-CR | \* |  |
|  | **Submitted research proposals waiting for approval** | | | | |  |
|  | Development of A Cell-Free Protein Synthesis Platform: A case study on production of the fusion protein of GFP and Thaumatin | 2021 | 2023 | ABRII-CR | | |
|  | Development of a CRISPR-based Platform for Rapid Detection of Viral Diseases (X, Y, PLRV) in Potato | 2021 | 2023 | ABRII-CR | | |
|  | Development of a yeast cell platform for production of resveratrol | 2021 | 2023 | ABRII-CR | | |
|  | Study on development of a browning tolerant mushroom to increase shelf-life through genome editing | 2021 | 2023 | ABRII-CR | | |

ABRII-CR: Agricultural biotechnology research Institute of Iran-Central region

RZH BioTech Co.: Rayan Zistfanavari Hermes

FTT Co.: Faravardehaye Taame Tabiat

IUT: Isfahan University of technology

IBB: Institute of Biotechnology and Bioprocess engineering, IUT

UPM: Universiti Putra Malaysia

ITA: Institute of Tropical Agriculture

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|  | **Co-supervisor or advisor of thesis** | | | | |
| **No.** | **Title** | **Name of student** | **BSc/MSc/PhD** | **Year of Viva** |  |
|  | Feasibility study of microalgae (*Dunaliella salina*) transformation as a bioreactor for production of Phytase | Hassan Zadabbas | PhD | ongoing |  |
|  | Characterization of phytohormone biosynthetic pathway and immunodetection of volatile metabolites during plant-microbe interaction | Nazri Bahahri | PhD | 2020 |  |
|  | Characterization of defense response genes and transcription factors involved in quinoline biosynthetic pathway during plant-microbe interaction | Shafika Sakeh | PhD | 2020 |  |
|  | Genome editing of red cabbage for enhancement of heat tolerance | Mahdi Moradpour | PhD | 2021 |  |
|  | Identification of functionally important sequence variants in key Vitamin E genes from oil palm germplasm for development of DNA-based markers | Sulaiman Rufai Babura | PhD | 2019 |  |
|  | Enhancement of salt tolerance through doubled haploidy induction in wheat | Abbas Latif | PhD | 2019 |  |
|  | Characterization and pathogenicity of *Rhizoctonia* spp isolated from various crop species in different Agro-ecosystem in Malaysia | Osamah Rashid | MSc | 2019 |  |
|  | Effect of mixotrophic condition on microalgae *Dunaliella* sp. growth and protein content | Johari Latif | BSc | 2014 |  |
|  | Optimization of growth media to improve b-carotene in microalgae *Dunaliella* sp. | Hidayah Rahman | BSc | 2012 |  |
|  | Effect of growth media on chlorophyll content of microalgae *Dunaliella* sp. | Shatila Zoraini | BSc | 2012 |  |
|  | Genetic identification and selection of self-compatible almond genotypes through molecular approach | Masoud Shahmoradi | MSc | 2010 |  |
|  | Genetic identification of Iranian almond cultivars using SSR markers | Mina Elahy | MSc | 2008 |  |
|  | Identification, cloning and characterization of the phenylalanine amino mutase gene from *Taxus baccata* involved in Taxol production | Abolghasem Abbassi | MSc | 2007 |  |
|  | Study on genetic diversity of some Iranian almond cultivars using DNA markers | Ali Fatthi | MSc | 2006 |  |

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| **Publications** | | |
| **Edition** | | |
|  | **Title of Book** | **Year of publish** | |
| 1 | Genome Editing Using CRISPR Technology and Its Applications in Biosciences (in Persian)-Tarbiat Modarres University Publication | 2021 | |
| 2 | Cis/Transgene Optimization: Systematic discovery of novel gene expression elements using bioinformatics and computational biology approaches-Springer | [2018](https://link.springer.com/book/10.1007/978-3-319-90391-0) | |
| 3 | An Introduction to Synthetic biology: Design and Assembly of Genetic Constructs (eBook-in English) | 2015 | |
| 4 | Molecular Farming (in Persian) | 2010 | |
| 5 | An Introduction to Genetic Engineering Techniques (eBook-in Persian) | 2009 | |
| 6 | An Introduction to Molecular Markers (eBook-in Persian) | 2009 | |
| 7 | GLP (Good Laboratory Practice) (as a joint editor-in Persian) | 2006 | |
| 8 | Sorghum (as scientific and literary editor-in Persian) | 2009 | |
| 9 | Glossary of Plant Tissue Culture (as scientific and literary editor-in Persian) | 2004 | |
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| **Scientific Journals** |
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1. [Talei D, Khayam Nekouei M, Kadkhdodaei S. 2022. Evaluation of genetic diversity of Nain Havandi plant masses based on protein and SRAP markers](https://biot.modares.ac.ir/). JMBS. In Press.
2. [Pirbaluty AM, Mehrban H, Kadkhodaei S, Ravash R, Oryan A, Ghaderi-Zefrehei M and Smith J. 2022. Network Meta-Analysis of Chicken Microarray Data following Avian Influenza Challenge—A Comparison of Highly and Lowly Pathogenic Strains. Genes, 13(3), p.435. https://doi.org/10.3390/genes13030435](https://www.mdpi.com/2073-4425/13/3/435)
3. Hosseini MS, Ebrahimi M, Abadia J, Kadkhodaei S, et al. 2022. [Growth, phytochemical parameters and glycyrrhizin production in licorice (*Glycyrrhiza glabra* L.) grown in the field with saline water irrigation](https://www.sciencedirect.com/science/article/abs/pii/S0926669021012097). Industrial Crops and Products 177, 114444. https://doi.org/10.1016/j.indcrop.2021.114444
4. [Bande F, Arshad SS, Bejo MH, Omar AR, Moeini H, **Kadkhodaei S**, et al.. Development and immunogenic potentials of chitosan-saponin encapsulated DNA vaccine against avian infectious bronchitis coronavirus. 2020. Microbial Pathogenesis. 149. 104560.](https://www.sciencedirect.com/science/article/pii/S0882401020309268?via%3Dihub) [10.1016/j.micpath.2020.104560](https://doi.org/10.1016/j.micpath.2020.104560)
5. [Talei D, Khayam Nekouei M, Mardi M, **Kadkhdodaei S**. 2020. Improving productivity of steviol glycosides in Stevia rebaudiana via induced polyploidy. Journal of Crop Science and Biotechnology. 23(4). https://doi.org/10.1007/s12892-020-00038-5](file://C:\Users\Hi\Downloads\Talei%20D,%20Khayam%20Nekouei%20M,%20Mardi%20M,%20Kadkhdodaei%20S.%20Improving%20productivity%20of%20steviol%20glycosides%20in%20Stevia%20rebaudiana%20via%20induced%20polyploidy.%202020.%20Journal%20of%20Crop%20Science%20and%20Biotechnology.%2023(4).%20https:\doi.org\10.1007\s12892-020-00038-5)
6. [Khayam Nekouei M, Moazam M, Mardi M, **Kadkhdodaei S**. 2020. Development of SSR Markers Associated with Biosynthesis Pathway of Steviol Glycosides in Stevia through De Novo Transcriptome Assembly. . JMBS. 2020; 11 (2) :185-191](http://journals.modares.ac.ir/article-22-36061-fa.html)
7. [Monfared HH, Chew JK, Azizi P, Xue GP, Ee S, **Kadkhodaei S**, Hedayati P, Ismail I, Zainal Z. 2020. Overexpression of a Rice Monosaccharide Transporter Gene (OsMST6) Confers Enhanced Tolerance to Drought and Salinity Stress in *Arabidopsis thaliana*. Plant Mol Biol Rep. doi:10.1007/s11105-019-01186-x](https://link.springer.com/article/10.1007/s11105-019-01186-x?wt_mc=Internal.Event.1.SEM.ArticleAuthorOnlineFirst&utm_source=ArticleAuthorOnlineFirst&utm_medium=email&utm_content=AA_en_06082018&ArticleAuthorOnlineFirst_20200105#article-info)
8. [Bahari MNA, Sakeh NM, Abdullah SNA, Ramli RR, **Kadkhodaei S**. 2018. Transciptome profiling at early infection of Elaeis guineensis by Ganoderma boninense provides novel insights on fungal transition from biotrophic to necrotrophic phase. BMC plant biology 18 (1), 377.](https://bmcplantbiol.biomedcentral.com/articles/10.1186/s12870-018-1594-9) doi:10.1186/s12870-018-1594-9
9. [**Kadkhodaei S**, Hashemi F, Rezaei M, et al. 2018. Conceptual Models. In: Cis/Transgene Optimization. SpringerBriefs in Systems Biology. Springer, Cham. doi:10.1007/978-3-319-90391-0\_4](https://link.springer.com/chapter/10.1007/978-3-319-90391-0_4)
10. [**Kadkhodaei S**, Hashemi F, Rezaei M, et al. 2018. Outcomes Assessment. In: Cis/Transgene Optimization. SpringerBriefs in Systems Biology. Springer, Cham. doi: 10.1007/978-3-319-90391-0\_3](https://link.springer.com/chapter/10.1007/978-3-319-90391-0_3)
11. [**Kadkhodaei S**, Hashemi F, Rezaei M, et al. 2018. Systematic Strategies. In: Cis/Transgene Optimization. SpringerBriefs in Systems Biology. Springer, Cham. doi: 10.1007/978-3-319-90391-0\_2](https://link.springer.com/chapter/10.1007/978-3-319-90391-0_2)
12. [Ahmadi F, Abdullah SNA, **Kadkhodaei S**, Ijab S, Abdul Aziz M, Rahmane Z, Alwee SS. 2018. Functional characterization of the gene promoter for an Elaeis guineensis phosphate starvation-inducible, high affinity phosphate transporter in both homologous and heterologous model systems. *Plant Physiology and Biochemistry*, 127, 320–335. doi: 10.1016/j.plaphy.2018.04.004](https://www.sciencedirect.com/science/article/pii/S0981942818301621?via%3Dihub)
13. [Tan JS, Abbasiliasi S, **Kadkhodaei S**, Tam YJ, Tang T-K, Lee Y-Y, Ariff AB. 2018. Microtiter miniature shaken bioreactor system as a scale-down model for process development of production of therapeutic alpha-interferon2b by recombinant Escherichia coli. *BMC Microbiology* 18. doi: 10.1186/s12866-017-1145-9](https://bmcmicrobiol.biomedcentral.com/articles/10.1186/s12866-017-1145-9)
14. [Movahedi A, Zhang J, Sun W, **Kadkhodaei S**, Mohammadi K. 2018. Plant small RNAs: definition, classification and response against stresses. *Biologia* 1-10. doi: 10.2478/s11756-018-0034-5](https://link.springer.com/article/10.2478/s11756-018-0034-5)
15. [Abbasiliasi S, Tan JS, Ibrahim TAT, Ramanan RN, **Kadkhodaei S**, Mustafa S, Ariff AB. 2018. Kinetic modeling of bacteriocin-like inhibitory substance secretion by Pediococcus acidilactici Kp10 and its stability in food manufacturing conditions*. Journal of Food Science and Technoogyl.* doi: 10.1007/s13197-018-3037-x](https://link.springer.com/article/10.1007/s13197-018-3037-x)
16. [Yeng S, Abbasiliasi S, Keong C, **Kadkhodaei S**, Shamzi M, Hashim R, Shun J. 2018. Extraction of fresh banana waste juice as non-cellulosic and non-food renewable feedstock for direct lipase production. *Renewable Energy* 126:431–436. doi: 10.1016/j.renene.2018.03.050](https://www.sciencedirect.com/science/article/pii/S0960148118303616)
17. [**Kadkhodaei S**, Memari HR, Abbasiliasi S, Rezaei MA, Movahedi A, Tan JS, Ariff AB. 2016. Multiple overlap extension PCR (MOE-PCR): An effective technical shortcut to high throughput synthetic biology. *RSC Advances*. *Royal Society of Chemistry*. DOI: 10.1039/C6RA13172G.](http://pubs.rsc.org/-/content/articlelanding/2016/ra/c6ra13172g/unauth#!divAbstract)
18. [Sofijan H, Joo Shun T, Abbasiliasi S, Mustafa S, Puspaningsih N, **Kadkhodaei S**, Ariff AB. 2016. Recovery and partial purification of thermophilic β-xylosidase derived from recombinant Bacillus megaterium MS941 by aqueous two-phase system. *Separation Science and Technology*. DOI: 10.1080/01496395.2016.1268159](https://www.tandfonline.com/doi/abs/10.1080/01496395.2016.1268159)
19. [Bande F, Arshad SS, Bejo MH, **Kadkhodaei S**, Omar AR. 2016. Prediction of B-cells and T-cells epitopes in the spike glycoprotein of M41 and CR88 avian infectious bronchitis virus strains for application in peptide vaccine. *Advances in Bioinformatics*, DOI:10.1155/2016/5484972.](https://www.hindawi.com/journals/abi/2016/5484972/abs/)
20. [Bamaiyi PH, Izreen MS, Khatijah M, Eizzati BH, Bainum CR, Farhana MK, Norfaizul MN, **Kadkhodaei S**, Khan GK. 2016. Isolation and polymerase chain reaction identification of bacteria from the 2014–2015 flood of Kota Bharu, Kelantan, Malaysia.*Asian Biomedicine*, 10:6, 549–565. DOI: 10.5372/1905-7415.1006.525](https://content.sciendo.com/view/journals/abm/10/6/article-p549.xml)
21. [Abbasiliasi S, Tan JS, **Kadkhodaei S**, Nelofer R, Ibrahim TAT, Mustafa S, Ariff AB. 2016. Enhancement of BLIS production by *Pediococcus acidilactici* kp10 in optimized fermentation conditions using an artificial neural network. *RSC Advances.* 6 (8), 6342-6349.](http://pubs.rsc.org/-/content/articlelanding/2016/ra/c5ra22879d/unauth#!divAbstract)
22. [**Kadkhodaei S**, Barantalab F, Taheri S, Foroughi M, Hashemi FG, Shabanimofrad MR, et al. 2015. BioInfoBase: A Bioinformatics Resourceome. *arXiv*: *Cornel University Library*. 1607.02974v1.](https://arxiv.org/abs/1607.02974)
23. [**Kadkhodaei S**, Abbasiliasi S, Tan JS, Fard Masoumi HR, Mohamed MS, Rahim R, Ariff AB. 2015. Enhancement of protein production by microalgae *Dunaliella salina* under mixotrophic condition using response surface methodology. *RSC Advances*. DOI: 10.1039/C5RA04546K.](http://pubs.rsc.org/-/content/articlelanding/2015/ra/c5ra04546k/unauth#!divAbstract)
24. [Movahedi A, Zhang J, Gao P, Yang Y, Wang L, Yin T, **Kadkhodaei S**, Ebrahimi M, Zhuge Q. 2014. Expression of the chickpea CarNAC3 gene enhances salinity and drought tolerance in transgenic poplars. *Plant Cell, Tissue and Organ Culture*. 1-14.](https://link.springer.com/article/10.1007/s11240-014-0588-z)
25. [Mohamed MS, Tan JS, **Kadkhodaei S**, Mohamad R, Mokhtar MN, Ariff AB. 2014. Kinetics and modeling of microalga *Tetraselmis* sp. FTC 209 growth with respect to its adaptation toward different trophic conditions. *Biochemical Engineering Journal.* 88:30–41.](https://www.sciencedirect.com/science/article/pii/S1369703X1400093X)
26. [Tan JS, Abbasiliasi S, Lin YK, Mohamed MS, Kapri MR, **Kadkhodaei S**, Tam YJ, Rahman RNZRA, Ariff AB. 2014. Primary recovery of thermostable lipase 42 derived from recombinant *Escherichia coli* BL21 in aqueous two-phase flotation. *Separation and Purification Technology*. 133:328–334.](https://www.sciencedirect.com/science/article/pii/S1383586614003967)
27. [Abbasiliasi S, Tan JS, Ibrahim TAT, **Kadkhodaei S**, Ng HS, Vakhshiteh F, Ajdari Z, Mustafa S, Ling TC, Rahim RA, Ariff AB. 2014. Primary recovery of a bacteriocin-like inhibitory substance derived from Pediococcus acidilactici Kp10 by an aqueous two-phase system. *Food Chemistry*. 151:93–100.](https://www.sciencedirect.com/science/article/pii/S0308814613016427)
28. [Ghaderi-Zefrehei M, Memari H, **Kadkhodaei S**. 2010. Multilevel modeling in human microarray time course gene expression data. 1-5. doi: 10.1109/ICBME.2010.5705026.](https://ieeexplore.ieee.org/abstract/document/5705026/)
29. [Ebrahimi M, Pezashki A, Nekouei MK, **Kadkhodaei S**. 2013. Investigation effect of kind and concentration of sodium alginate encapsulation in germination and growth of alfalfa artificial seed. *Agronomy Journal (Pajouhesh & Sazandegi)*. 101: 48-59.](http://www.magiran.com/view.asp?Type=pdf&ID=1244652&l=en)
30. [**Kadkhodaei S**, Nekouei MK, Shahnazari M, Etminani H, Imani A, Ghaderi-Zefrehei M, Elahy M, Ariff AB. 2011. Molecular tagging of agronomic traits using simple sequence repeats: Informative markers for almond (*Prunus dulcis*) molecular breeding. *Australian Journal of Crop Science.* 5:1199–1209.](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=50&SID=C1ihoyJoAJi23gZFzmi&page=1&doc=1)
31. **[Kadkhodaei S](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=59&SID=C1ihoyJoAJi23gZFzmi&page=1&doc=1)**[, Shahnazari M, Nekouei MK, Ghasemi M, Etminani H, Imani A, Ariff AB. 2011. A comparative study of morphological and molecular diversity analysis among cultivated almonds (](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=59&SID=C1ihoyJoAJi23gZFzmi&page=1&doc=1)*[Prunus dulcis](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=59&SID=C1ihoyJoAJi23gZFzmi&page=1&doc=1)*[).](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=59&SID=C1ihoyJoAJi23gZFzmi&page=1&doc=1) *[Australian Journal of Crop Science.](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=59&SID=C1ihoyJoAJi23gZFzmi&page=1&doc=1)* [5:82–91.](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=59&SID=C1ihoyJoAJi23gZFzmi&page=1&doc=1)
32. [**Kadkhodaei S**, Elahy M, Nekouei MK, Imani A, Shahnazari M, Mardi M, Javanmard A, Ariff AB. 2010. A panel of cultivate specific marker based on polymorphisms at microsatellite markers for Iranian cultivated Almonds (*Prunus dulcis*). *Australian Journal of Crop Science.* 4:730–736.](http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=F3ePS7VjlOUt5frbBBg&page=1&doc=1)
33. [Pezeshki A, Ebrahimi M, Nekouei MK, **Kadkhodaei S**. 2010. Effects of several plant growth regulators, carbon source and amino acids on somatic embryos obtained from embryogenic cell suspension culture of alfalfa (*Medicago sativa* L.). *Iranian Journal of Rangelands and Forests Plant Breeding and Genetic Research*. 18(1):63-73.](http://www.sid.ir/En/Journal/ViewPaper.aspx?ID=185584)
34. [Ebrahimi M, Nekouei MK, Kadkhodaei S. 2009. Study of Some Factors Influencing Embryogenesis and Maturation of Soybean (Glycine max) Somatic Embryos. *Journal of Water and Soil Science*. 12(46): 167-176.](https://jstnar.iut.ac.ir/article-1-1116-en.html&sw=)
35. [Fathi A, Ghareyazi B, Haghnazari A, Ghaffari MR, Pirseyedi SM, **Kadkhodaei S**, Naghavi MR, Mardi M. 2008. Assessment of the genetic diversity of almond (*Prunus dulcis*) using microsatellite markers and morphological traits. *Iranian Journal of Biotechnology.* 6(2):98-106.](http://www.ijbiotech.com/article_7036_0.html)
36. [**Kadkhodaei S**, Aghdaei SRT, Grigorian V, Moghadam M, Hashemi SMM. 2006. A study on genetic variation among some wild almond species using RAPD markers. *Acta Hortic* 93–98.](https://gl03-sc.giga-lib.org/record/display.uri?eid=2-s2.0-33846483729&origin=resultslist&featureToggles=FEATURE_NEW_METRICS_SECTION:1)
37. Siahmard M, Daneshvar MH, Memari HR, Ardekani MR, **Kadkhodaei S**. 2012. Cloning of human gama INF in an expression vector for microalgae transformation. *Modern Genetics Journal*. [4](http://www.genetics.ir/%D8%B4%D9%85%D8%A7%D8%B1%D9%87%202-%D8%AA%D8%A7%D8%A8%D8%B3%D8%AA%D8%A7%D9%86%201391):10.
38. **Kadkhodaei S**, Aghdaei RT. 2002. Optimizing DNA extraction procedure in case of *Amygdalus* spp.: A simple and inexpensive method for nucleic acid isolation from plants with high polysaccharides and polyphenolic compounds. *Iranian Journal of Rangelands and Forests Plant Breeding and Genetic Research*. 10(10):15-27.
39. **Kadkhodaei S**, Tabaei Aghdaei SR, Gerigourian V, Moghadam Mohammad M. 2002. Genetic diversity analysis among wild almond populations of Esfahan province using RAPD markers. *Iranian Journal of Horticultural Science and Technology*. 3(4):25-36.

**Manuscripts under review process:**

1. Valdiani A, Javanmard A, Mahmood M, Etemad A, **Kadkhodaei S**. Pig-tailing versus stutters: an effective strategy to improve microsatellite genotyping in rice (*Oryza sativa* L.) cultivars. *Biotechnology Letters.*

**Manuscripts under submission process:**

1. **Kadkhodaei S**, Memari HR, Tan JS, Abbasiliasi S, Movahedi A, Ariff AB. Universal artificial matrix attachment region (MAR): A potential upstream factor to enhance transgene expression.

|  | **Congresses / Scientific talks** | | | |
| --- | --- | --- | --- | --- |
|  | **Title of seminar** | **Time of**  **Presentation** | **Regional – National**  **International/**  **Country** | **Title of lecture** |
|  |
|  | National Conference on chocolate, coffee and natural sweeteners-Keynote paper | 2019 | National / Iran | Stevia, the prospect of using natural sweeteners to promote community health |
|  | 2nd International Conference on Research in Life-Sciences & Healthcare (ICRLSH) | 2018 | International / Budapest | Development of SSR Markers Associated with Biosynthesis Pathway of Steviol Glycosides in Stevia through De Novo Transcriptome Assembly |
|  | 2nd International Biotechnology Congress of Iran | 2017 | International / Iran | Transcriptome Profiling of Drought Stress in Rice (*Oryza sativa*) Using cDNA-AFLP |
|  | International Conference on Agricultural and Food Engineering (Cafei2016) | 2016 | International / Malaysia | Molecular approach for enhancing phosphate uptake in oil palm |
|  | Invited scientific talk | 2016 | National / Iran | Cis/transgene optimization through bioinformatics approaches |
|  | The NanoMITe Annual Symposium (NMAS 2016) | 2016 | National / Malaysia | Characterization of Defense Response Genes During Early Interaction of Oil Palm *(Elaeis Guineensis* Jacq*.)* with *Ganoderma Boninense* |
|  | 3rd Plant Genomics Congress Asia | 2016 | International / Malaysia | *In silico* analysis of oil palm phosphate-starvation-inducible PHT1 gene |
|  | International Association for Plant Biotechnology, IAPB Congress, Melbourne, Australia | 2014 | International / Australia | Downstream optimization of microalgae mixotrophic cultivation using response surface methodology for increasing protein production |
|  | International Association for Plant Biotechnology, IAPB Congress | 2014 | International / Australia | BioInfoBase: A bioinformatics resourceome |
|  | International Association for Plant Biotechnology, IAPB Congress, Melbourne, Australia | 2014 | International / Australia | cDNA-AFLP transcriptomic profiling of upland and lowland rice (*Oryza sativa*) under water deficit |
|  | The 13th Iranian & The Second International Congress of Microbiology | 2012 | International / Iran | Cloning of bialaphos resistant gene in expression vector for gene transformation to *Dunaliella salina* |
|  | International Conference on Biomedical Engineering and Technology. IPCBEE vol.11 © IACSIT Press, Singapore | 2011 | International / Malaysia | Construction of an expression vector for production of tissue plasminogen activator (t-PA) in a transgenic microalgae bioreactor |
|  | The 1st Iranian Students Scientific Conference in Malaysia | 2011 | International / Malaysia | Expression vector for production of recombinant proteins in a transgenic microalgae bioreactor |
|  | 17th Iranian Conference of Biomedical Engineering, ICBME 2010 | 2010 | International / Iran | Multilevel modeling in human microarray time course gene expression data |
|  | 2nd International Biotechnology & Biodiversity Conference (BIOJOHOR 2010) | 2010 | International / Malaysia | Construction of a specific expression vector for development of a transgenic *Dunaliella salina* bioreactor |
|  | 3rd Iranian Conference on Bioinformatics | 2010 | National / Iran | Potential of Microsoft Excel in developing bioinformatics softwares |
|  | 5th International Symposium on Pistachios and Almonds | 2009 | International / Turkey | A study on the presence of self-compatibility alleles in Iranian wild almonds (*Amygdalus* spp.) using specific allele amplification |
|  | 5th International Symposium on Pistachios and Almonds | 2009 | International / Turkey | Assessment of the genetic diversity of almond (*Prunus* *dulcis*) using microsatellite markers and morphological traits |
|  | 5th International Symposium on Pistachios and Almonds | 2009 | International / Turkey | Development of a molecular identification key for the most important Iranian almond cultivars through DNA fingerprinting |
|  | 5th International Symposium on Pistachios and Almonds | 2009 | International / Turkey | Development of a molecular identification database for Iranian cultivated almonds (*Prunus dulcis*) |
|  | 5th International Symposium on Pistachios and Almonds | 2009 | International / Turkey | Identification of candidate alleles as informative markers for some traits of almond (*Prunus dulcis*) |
|  | 5th International Symposium on Pistachios and Almonds | 2009 | International / Turkey | Karyotype analysis of three wild Iranian almond species (*Amygdalus* spp.) |
|  | 5th International Symposium on Pistachios and Almonds | 2009 | International / Turkey | Phenotypic diversity and morphological characterization of some important Iranian almonds |
|  | 6th Iranian National Congress of Biotechnology | 2009 | National / Iran | Identification, cloning and characterization of the phenylalanine amino mutase gene from *Taxus baccata* involved in Taxol production |
|  | 18th EUCARPIA General Congress | 2008 | International / Spain | ABRIISTAT 30: molecular data analysis software for genetic diversity studies |
|  | 10th Iranian Genetic Congress | 2008 | National / Iran | DNA fingerprinting of Iranian important fruit trees |
|  | 10th Iranian Genetic Congress | 2008 | National / Iran | Karyotype analysis of some Iranian wild almonds |
|  | 10th Iranian Genetic Congress | 2008 | National / Iran | Identification of informative markers for some fruit traits of almond |
|  | 5th Iranian National Congress of Biotechnology | 2007 | National / Iran | Introduction of Agricultural Biotechnology Multimedia Database |
|  | 5th Iranian National Congress of Biotechnology | 2007 | National / Iran | Genetic identification of Iranian almond cultivars using molecular markers |
|  | 5th Iranian National Congress of Biotechnology | 2007 | National / Iran | Effects of some factors on quality and quantity of somatic embryos obtained from alfalfa (*Medicago* *sativa* L.) suspension culture |
|  | 5th Iranian National Congress of Biotechnology | 2007 | National / Iran | Optimization of alfalfa (*Medicago* *sativa* L.) somatic embryo encapsulation stage in order to production of synthetic seed |
|  | 5th Iranian National Congress of Horticulture | 2007 | National / Iran | Study of heat requirement for flowering among the most important almond cultivars |
|  | 5th Iranian National Congress of Horticulture | 2007 | National / Iran | Genetic variation among some Iranian and foreign almond cultivars using SSR markers |
|  | 14th National & 2nd International Conference of Biology | 2007 | International / Iran | A study on some factors affecting somatic embryogenesis in soybean (*Glycine max* L.) |
|  | 14th National & 2nd International Conference of Biology | 2007 | International / Iran | Application of activated charcoal in DNA extraction procedures in order to remove polyphenolic compounds from plants tissues |
|  | IV International Symposium on Pistachios and Almonds | 2006 | International / Iran | A preliminary study on genetic diversity of some almond cultivars using RAPD markers |
|  | IV International Symposium on Pistachios and Almonds | 2006 | International / Iran | A simple and inexpensive method for nucleic acid isolation from plants with high polysaccharides and polyphenolic compounds |
|  | 4th Iranian national congress of Biotechnology | 2005 | National / Iran | Evaluation of genetic diversity of some almond cultivars using molecular and morphological data |
|  | 1st National congress of genetic resources | 2003 | National / Iran | A study on almond genetic resources in Isfahan province |

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| **Patent / Invention** | | | |
| Development of an online bioinformatics database - "**BioInfoBase: A Bioinformatics Resourceome**" | | | |
| Development of a series of "**Microalgae specific expression vectors and high throughput synthetic biology method of construction**" – Malaysian Patent – 2014 (PI-2014701850) | | | |
| Development of a "**Molecular Marker Data Analysis Software for Genetic Diversity Studies (ABRIISTAT)**" – Iran High Council of Informatics – 2007 | | | |
| Development of a "**Biotechnology Multimedia Data Base - BMDB**" – Iran High Council of Informatics - 2007 | | | |
| Development of an "**Almond Orchard Management Multimedia software** " - Iran High Council of Informatics - 2006 | | | |
| DNA sequence submission to NCBI: 70 Including: | | | |
| *dBAR:* *Dunaliella salina* synthetic construct BAR (bar) gene, complete cds. Accession no. **KF780168.1** | | | |
| *dGFP-C3: Dunaliella salina* synthetic construct GFP-C3 gene, complete cds. Accession no. **KF780167.1** | | | |
| *Elaeis guineensis* ethylene responsive transcription factor (CBF3) gene, complete cds. Accession no. **KC312892.1** | | | |
| *Monascus* sp. F ZA-2013 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence: accession no. **KC756830**.1 | | | |
| *Monascus* sp. S ZA-2013 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence: accession no. **KC756833**.1 | | | |
| *Monascus* sp. R ZA-2013 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence: accession no. **KC756832**.1 | | | |
| *Monascus* sp. M ZA-2013 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence: accession no. **KC756831**.1 | | | |
| Klebsiella pneumoniae subsp. rhinoscleromatis strain kp3a2 16S ribosomal RNA gene, partial sequence: accession no. **KR027940.1** | | | |
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| **Honors / Awards** | | | | |
| Type | **Year** | **Encourager** | | |
| **Shahid Chamran PostDoc Fellowship** | 2017 | National Elites Foundation | | |
| **Gold Medal** in the Invention, Research and Innovation Exhibition (PRPI 2014) – for development of **High throughput synthetic biology method through multiple overlap extension PCR –** Malaysia | 2014 | UPM vice chancellor | | |
| **Bronze Medal** in the Invention, Research and Innovation Exhibition (PRPI 2014) – Malaysia | 2014 | UPM vice chancellor | | |
| The **Distinguished PhD student** among the Iranian students of Malaysian universities in Basic Sciences | 2013 | Embassy of I.R.IRAN in Malaysia | | |
| **International Graduate Research Fellowship (IGRF)** | 2011 | Universiti Putra Malaysia | | |
| Prize for the **Best Book of the Year** (Graduate Students) | 2010 | Ministry of Culture  Iranian Students Book Agency | | |
| Prize for the **Distinguished Researcher** in ABRII-CR (Agricultural Biotechnology Research Institute of Iran) | 2009 | Head of the Institute | | |
| Prize for the **Distinguished Researcher** in ABRII-CR (Agricultural Biotechnology Research Institute of Iran) | 2008 | Head of the Institute | | |
| Certificate of appreciation for **Developing Biotechnology Related Softwares** | 2007 | Iranian Biotechnology Society | | |
| **Community / Professional Services** | | |

* **Editor**

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| **Journal Name - Publisher** | **Year** |
| **Frontiers in Plant Science** - Frontiers Media | 2022 |

* **Journal reviews**

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| **Journal Name - Publisher** | **Year** |
| **Iranian Journal of Plant Biology** - University of Isfahan | 2017 |
| **Computational Biology and Chemistry** – Elsevier | 2016 |
| **Critical Reviews in Biotechnology** – Taylor & Francis | 2015-2017 |
| **Scientia Horticulturae** – Elsevier | 2014 |

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| * **Workshop, Conference & Exhibition Organizing** | | |
| **Title – Institution - Country** | | **Year** |
| **Digital Tools for Researchers** - IUT (Isfahan University of Technology) – Iran | | 2018 |
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| **Synthetic biology and multiple DNA fragments assembly techniques** - IUT (Isfahan University of Technology) – Iran | | 2017 |
| **Advanced cloning and multiple DNA fragments assembly techniques** - UPM (Universiti Putra Malaysia) – Malaysia | | 2016 |
| **Reference Management and Research Tools** - UPM (Universiti Putra Malaysia) – Malaysia | | 2016 |
| **2nd International Conference on Crop Improvement** - UPM (Universiti Putra Malaysia) – Malaysia | | 2015 |
| **Genetic constructs and synthetic biology** – Payam Noor University of Markazi Province | | 2015 |
| **Genetic constructs: design and assembly**– Shahid Chamran University of Ahvaz- Iran | | 2015 |
| **Synthetic biology: from *in* *silico* design to assembly of genetic constructs** – NIGEB (National Institute of Genetic Engineering and Biotechnology)- Iran | | 2015 |
| **Bioinformatics –** UPM (Universiti Putra Malaysia) – Malaysia | | 2013 |
| **Mendeley -** UPM (Universiti Putra Malaysia)- Malaysia | | 2012 |
| **Virtual Genetic Engineering –** UPM (Universiti Putra Malaysia) – Malaysia | | 2011 |
| **Molecular markers and their application in crop breeding** –ABRII (Agricultural Biotechnology Research Institute of Iran) – Iran | | 2008 |
| **Bioinformatics –** ABRII (Agricultural Biotechnology Research Institute of Iran) - Iran | | 2008 |
| **Research Week** – ABRII (Agricultural Biotechnology Research Institute of Iran) - Iran | | 2005 |