# Amin Mohammadi Purfard

# Ph. D. of Plant Biotechnology

Location: Tehran, Iran
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Date of Birth: 1987/09/14

Gender: Male

Marital Status: Married

### SUMMARY

Enthusiastic and passionate biotechnologist looking forward to learn about the emerging trends and techniques in the field. Highly adaptive to diverse working conditions. Meticulously documents observations in concise and timely manner with the focus on accuracy and maintaining a sterile and organized work environment. Demonstrates exceptional problem-solving skills by responding quickly to problems and generating effective solutions. Excellent work ethic, motivated to perform well both individually and in a team context. Maintains a thorough grasp of industry trends and research innovations. With high proficiency in Python and R programming languages and high ability to use various specialized software in the field of bioinformatics.

CO			

- Functional Genomics
- Nano Particles
- DNA, RNA and Protein Extraction
- Tissue Culture

- Plasmid Isolation
- Polymerase Chain Reaction (PCR)
- High- Performance Liquid Chromatography (HPLC)
- Transcriptomics

- SDS-PAGE
- Genetic Engineering
- Genomics
- Molecular Biology
- Bioinformatics

# SOFTWARE SKILLS

- Python (programming language)
- R (programming language)
- SnapGen

- Invitrogen Vector NTI
- Oligo
- EditSeq

- Clustal X
- SPSS
- Microsoft Office Tools

Ε	DU	CAT	NO

Timespan	Field/ Thesis	University/ Location
2012- 2018	Ph. D. of Plant Biotechnology     Biochemical Study, Subtractive Analysis and Evaluation of Salinity Stress Responsive Gene Expression in <i>Aeluropus littoralis</i> .	Sari Agricultural Sciences and Natural Resources University/ Sari, Mazandaran, Iran
2010- 2012	Master of Plant Biotechnology     Evaluation of antioxidant, antibacterial, antifungal, antiparasitic and anticancer properties of <i>Zataria multiflora</i> Boiss.	Shiraz University / Shiraz, Fars, Iran
2005- 2009	Bachelor of Agriculture and Plant Breeding	Ilam University/ Ilam, Iran

### LANGUAGE

• English (Advance)

• Persian (Native)

• Arabic (Intermediate)

	INVENTIONS	
Office	Pub. No.	Title
United States Patent and Trademark Office (USPTO)	US 11,389,558 B2	• Transparent Wound Dressings Containing Thymol Nanoparticles.
	79177	<ul> <li>Production of antibacterial transparent dressings of different Biopolymers.</li> </ul>
	80196	• Biopolymers wound dressing.
Islamic Republic of Iran Patent Office (IRIPO)	94896	• Modern Polymeric Dressing by Using of <i>Zataria multiflora</i> Nanoparticles.
	94680	• Tissue production with antimicrobial property (antibacterial, antifungal, antiparasitic and antiviral) by using of <i>Zataria multiflora</i> nanoparticles.
	95022	• Hand sanitizer gel by using of <i>Zataria</i> multiflora nanoparticles.

#### **ARTICLES**

- Improved RACE technique for the full Sequence identification and amplification of mRNA ends. <u>Amin Mohammadi</u> Purfard, Mohammad-Zaman Nouri, Ali Dehestani Kolagar., Plant Cell Biotechnology and Molecular Biology. 2017.
- Dissection of the molecular mechanism of salinity stress tolerance in halophyte plant, *Aeluropus littoralis* using *AlSOS* genes., <u>Amin Mohammadi Purfard</u>, Mohammad-Zaman Nouri, Ali Dehestani., Crop Biotech. 2017.
- Antioxidant, Antibacterial, Water Binding Capacity and Mechanical Behavior of Gelatin-Ferula Oil Film as a Wound Dressing Material., Gholamreza Kavoosi, Amin Shakiba, Mahmood Ghorbani, Seyed Mohammad Mahdi Dadfar, Amin Mohammadi Purfard., Galen Medical Journal. 2015.
- Effects of essential oil on the water binding capacity, physico-mechanical properties, antioxidant and antibacterial activity of gelatin films., Gholamreza Kavoosi, Aytak Rahmatollahi, Seyed Mohammad Mahdi Dadfar, Amin Mohammadi Purfard., Food Science and Technology. 2014.
- Antioxidant and antibacterial properties of gelatin Films incorporated with carvacrol., Gholamreza Kavoosi, Seyed Mohammad Mahdi Dadfar, <u>Amin Mohammadi Purfard</u>, Reza Mehrabi., Journal of Food Safety. 2013.
- Scolicidal effectiveness of essential oil from Zataria multiflora and Ferula assafoetida: disparity between phenolic monoterpenes and disulphide compounds., Gholamreza Kavoosi, <u>Amin Mahammadi Purfard</u>., Comp Clin Pathol. 2013.
- Mechanical, Physical, Antioxidant, and Antimicrobial Properties of Gelatin Films Incorporated with Thymol for Potential Use as Nano Wound Dressing., Gholamreza Kavoosi, Seyed Mohammad Mahdi Dadfar, <u>Amin Mohammadi</u> Purfard., Journal of Food Science. 2013.
- Microbicidal effectiveness of essential oil from *Zataria multiflora* and its main components., <u>Amin Mahammadi</u> Purfard, Gholamreza Kavoosi, Farzaneh Aram., Asian Pacific Journal of Tropical Biomedicine. 2012.
- Radical scavenging properties of essential oils from *Zataria multiflora* and *Ferula assafoetida*., Gholamreza Kavoosi, Amin Mohammadi Purfard, Faezaneh Aram., Asian Pacific Journal of Tropical Biomedicine. 2012.
- Chemical Composition, Radical Scavenging, Antibacterial and Antifungal Activities of *Zataria Multiflora* Bioss Essential Oil and Aqueous Extract., <u>Amin Mahammadi Purfard</u>, Gholamreza Kavoosi., Journal of Food Safety. 2012.

CERTIFICATION					
Certificate Provider	Year	Title of the Certificate			
Pasteur Institute of Iran The International Biotech School	2022	<ul> <li>Protein Engineering and Vaccination Course Certificate (Foundation)</li> <li>Protein Engineering and Vaccination Course Certificate (Advanced)</li> <li>Applied Microbiology Course Certificate (Advanced)</li> <li>Enzyme Engineering and Production Course Certificate (Advanced)</li> <li>Production of Cosmetic Products by Biological Methods (Advanced)</li> </ul>			

## INDUSTRIAL AND PROFESSIONAL EXPERIENCE

- Inventor and manufacturer of completely herbal hand sanitizer gel using *Trachyspermum ammi* (ajwain) nanoparticles (Bonyan Idea Organic Company- Knowledge enterprise).
- Formulator and production manager of the world's first antibacterial sterile gauze using thyme essential oil (Kaveh Bandage, Gauze & Cotton Company).
- Formulator and technician of modern polymeric dressing by using of *Zataria multiflora* nanoparticles (Atin Biopolymers Company).
- Chairman of the Board and Head of R&D (Bonyan Idea Organic Company- Knowledge enterprise).

	RESEARCH INTERESTS	
<ul><li>Nano- Biotechnology</li><li>Inventing New Methods in Biotechnology</li></ul>	<ul><li>Genetic Engineering</li><li>Agricultural Biotechnology</li><li>Medicinal Herbs</li></ul>	<ul><li>Emerging Techniques</li><li>Programming in Python</li><li>CRISPR Systems</li></ul>