

CURRICULUM VITAE



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Education:

Degree	Years	University	Subject
B.Sc.	1991-1995	Shahid Beheshti (Tehran)	Pure Chemistry
M.Sc.	2003-2006	Ferdowsi (Mashhad)	Organic Chemistry
Ph.D.	2009-2012	National University of Malaysia (UKM)	Chemistry- Phytochemistry

Employment and Experience:

Years	Position	Employer (Iran)
2000-2009	The Laboratory Expert	Department of Chemistry (Hakim Sabzevari University))
2012 - Current	Academic Staff (Associate Professor)	Department of Chemistry (Hakim Sabzevari University)

Teaching Experience:

- Advanced Organic Chemistry (MSc)
- Organic Synthesis (MSc)
- New Aspect in Organic Chemistry (MSc)
- Advanced Spectroscopic Methods in Organic Chemistry (MSc)
- Organic Chemistry (I, II & III)
- Organic Chemistry Spectroscopy
- Identification of Organic Compounds
- Identification of Organic Compounds from Natural Sources
- Phytochemistry
- Medicinal Chemistry
- Environmental Chemistry

Publications:

Book:

Gholizadeh, M.; **Mahdavi, B.** Safety in the Chemical Laboratories 1^{ed}. 2004; 2^{ed}. 2008, Sabzevar Tarbiat Moallem University, Sabzevar.

Gholizadeh, M.; **Mahdavi, B.** A review of Experimental Organic Chemistry 1^{ed}. 2003; 2^{ed}. 2008, Sabzevar Tarbiat Moallem University, Sabzevar.

Papers in Journals:

68) Green preparation of pd nanoparticles for treatment of gastric cancer and electrochemical sensing of bisphenol A in food, N. Li, B. Mahdavi, M. Baghayeri, *Food Measure* (2023). <https://doi.org/10.1007/s11694-023-02255-2>

67) Label-free and sensitive determination of toxic Cd(II) in environmental waters using a Fe₃O₄-PEI-Au based electrochemical aptasensor, Z. Lai, **B. Mahdavi**, M. Baghayeri, *Alexandria Engineering Journal*, **2023**, 83, 251–256

66) Photofixation of N₂ to ammonia utilizing Ni@TPP-HPA nanocomposite under visible-light illumination, S. Rostami, R. Tayebee, **B. Mahdavi**, *RSC Advances*, **2023**, 13, 31303–31313

65) Screening of the compositions of essential oils and volatiles of *Perovskia abrotanoides* Karel. along with antioxidant, antibacterial and cytotoxic impacts of its methanol extract, M. R. Kianasab, M. Mohammadhosseini, M. Nekoei, **B. Mahdavi**, T. Baheri, *Natural Product Research*, **2023**, 2260065.

- 64) Novel biosynthesis of gold nanoparticles for multifunctional applications: Electrochemical detection of hydrazine and treatment of gastric cancer, K. Yan, L. Yan, W. Kuang, A. Kaffash, **B. Mahdavi**, M. Baghayeri, W. Liu, *Environmental Research*, **2023**, 238: 117081
- 63) A new formulation of Ni/Zn bi-metallic nanocomposite and evaluation of its applications for pollution removal, photocatalytic, electrochemical sensing, and anti-breast cancer, J. Li, **B. Mahdavi**, M. Baghayeri, B. Rivandi, M. Lotfi, M. M. Zangeneh, A. Zangeneh, R. Tayebee, *Environmental Research*, **2023**, 233: 116462
- 62) First principal study of the optoelectronic properties of pyrazinamide drug, H. A. Rahnamaye, M. Azadparvar, **B. Mahdavi**, R. Golestani, M. Khalid, Z. Choopani, *Optical and Quantum Electronics*, **2023**, 55:714
- 61) *In Vivo* Coagulation Effects of *Thymus vulgaris* Leaves Extract in Mice. Z. S. Mashkani, J. Vatandoost, T.Hajjar, **B. Mahdavi**, *Avicenna Journal of Pharmaceutical Research*, **2023**; 4(1):1058
- 60) On the Role of UV-generated ROS in the Desorption of Cephalexin from CQDs-based Drug-loadable Platform, Z. Khajavi, A. Ghasedi, **B. Mahdavi**, E. Koushki, *Journal of Photochemistry and Photobiology A: Chemistry*, **2023**, 114813.
- 59) DFT study of sertraline hydrochloride antidepressant drug, H. A. R. Aliabad, **B. Mahdavi**, M. Azadparvar, R. Golestani, Z. Choopani, *Journal of Molecular Modeling*. **2023**, 29,144.
- 58) *In vivo* evaluation of *Polygonum bistorta* extract effect on blood coagulation factors, M. Moiedie, J. Vatandoost, T. Hajjar, **B. Mahdavi**. *Trends in Phytochemical Research*. **2023**, 7(1) 51-57.
- 57) Novel green synthesis of tin nanoparticles by medicinal plant: Chemical characterization and determination of cytotoxicity, cutaneous wound healing and antioxidant properties, M.Shu, **B. Mahdavi**, A. Balciunaitien, S Goorani, A. A. Mahdavi, *Micro Nano Lett.* **2023**;18: e12157.
- 56) Antioxidant, antimicrobial and anti-prostate cancer activity of the extracts from different parts of *Etilingera velutina* (Ridl.) R. M. Sm (Zingiberaceae). **B. Mahdavi**, M. Mohammadhosseini. *Trends in Phytochemical Research*, **2022**, 6, 353-362.
- 55) The Coagulant Effect of the *Medicago sativa* L. Hydroalcoholic Extract: An in vivo Study on Mice Z. S. Mashkani, J.Vatandoost, T. Hajjar, **B. Mahdavi**. *Herbal Medicines Journal*, **2022**, in press
- 54) *Euphorbia granulata* Forssk: Evaluation of antioxidant activity, cytotoxicity, and apoptosis induction in breast cancer cells. **B. Mahdavi**, H. Zare, M. Qorbani, H. Atabati, M. R. V. Kakhki, A. Raoofi, V. Ebrahimi. *South African Journal of Botany*, **2022**, 150, 576-582.
- 53) Preparation and characterization of a novel magnetized nanosphere as a carrier system for drug delivery using *Plantago ovata* Forssk. Hydrogel combined with mefenamic acid as the drug model. **B. Mahdavi**, S. Hosseini, M. Mohammadhosseini, M. Mehrshad. *Arabian Journal of Chemistry*, **2022**, 15, 104128.
- 52) Palladium nanoparticles decorated Chitosan-Pectin modified Kaolin: It's catalytic activity for Suzuki-Miyaura coupling reaction, reduction of the 4-nitrophenol, and treatment of lung cancer, M. Shahriari, M. A. H. Sedigh, M. Shahriari, M. Stenzel, M. M. Zangeneh, A. Zangeneh, **B. Mahdavi**, M. Asadnia, J. Gholami, B. Karmakar, H. Veisi. *Inorganic Chemistry Communications*, **2022**, 141: 109523.
- 51) Nanocomposite Fe₃O₄@GO-NH as a Reusable Heterogeneous Catalyst for the Three-component Synthesis of 2-Amino-4H-chromenes, E. Rezaei-Seresht, S. Noroozi, **B. Mahdavi**, *Organic Preparations and Procedures International*, **2022**, <https://doi.org/10.1080/00304948.2022.2034463>

- 50) Anti-breast carcinoma effects of green synthesized nickel nanoparticles from *Alhagi sparsifolia* leaf aqueous extract: A pre-clinical trial study, Q. Ren, S. Goorani, **B. Mahdavi**, K. Rashidi, M. M. Zangeneh, *Archive of Medical science*, **2022**, DOI: <https://doi.org/10.5114/aoms/145112>.
- 49) *Calendula officinalis* green-mediated silver nanoparticles: Formulation, characterization and assessment of colorectal cancer activities green-mediated silver nanoparticles. Y. Xu, **B. Mahdavi**, M. M. Zangeneh, A. Zangeneh, M. Qorbani, S. Paydarfard, *Archive of Medical science*, **2021**, DOI: <https://doi.org/10.5114/aoms/142350>
- 48) Anti-leukemia properties of cadmium nanoparticles in the in vitro and in vivo condition: A chemobiological study, Y. Miao, **B. Mahdavi**, M. M. Zangeneh, *Archive of Medical science*, **2021**, DOI: <https://doi.org/10.5114/aoms/142465>.
- 47) The Genus *Haplophyllum* Juss.: Phytochemistry and Bioactivities—A Review, M. Mohammadhosseini, A. Venditti, C. Frezza, M. Serafini, A. Bianco, **B. Mahdavi**, *molecules*, **2021**, 26154664.
- 46) Characterization of essential oils and volatiles from the aerial parts of *Mentha pulegium* L. (Lamiaceae) using microwave-assisted hydrodistillation (MAHD) and headspace solid phase microextraction (HS-SPME) in combination with GC-MS, M. Mohammadhosseini, A. Venditti, **B. Mahdavi**, *Natural Product Research*, **2021**, 1960523.
- 45) Profiling of the essential oil compositions from the flowers and leaves of *Tanacetum fisherae* Aitch. & Hemsl., an endemic plant in Kerman province, Iran, M. Mohammadhosseini, A. Venditti, **B. Mahdavi**, M. R. Kianasab, R. Shirazi, *Natural Product Research*, **2021**, 1924711.
- 44) An overview of the genus *Aloysia* Paláu (Verbenaceae): Essential oil composition, ethnobotany and biological activities, M. Mohammadhosseini, C. Frezza, A. Venditti, **B. Mahdavi**, *Natural Product Research*, **2021**, 1907576.
- 43) Bone Marrow Mesenchymal Stem Cell Condition Medium Loaded on PCL Nanofibrous Scaffold Promoted Nerve Regeneration After Sciatic Nerve Transection in Male Rats, A. Raofi, Y. Sadeghi, A. Piryaei, E. Sajadi, A. Aliaghaei, A. Rashidiani-Rashidabadi, F. Fadaei-Fatabadi, **B. Mahdavi**, M. A. Abdollahifar, A. Mousavi-Khaneghah, *Neurotoxicity Research*, **2021**, 39, 1470-1486.
- 42) Antidiabetic effect of *Sophora pachycarpa* seeds extract in streptozotocin-induced diabetic mice: a statistical evaluation, **B. Mahdavi**, T. Hajar, A. Ghodsi, M. Mohammadhosseini, M. Mehmandost, E. Talebi, *Journal of Investigative Medicine*, **2021**, 1818.
- 41) Green synthesis of NiONPs using *Trigonella subenervis* extract and its applications as a highly efficient electrochemical sensor, catalyst, and antibacterial agent, **B. Mahdavi**, S. Paydarfard, E. Rezaei-Seresht, M. Baghayeri, Marzieh Nodehi, *Applied Organometallic Chemistry*, **2021**, e6264.
- 40) Green synthesis of NiO nanoparticles using *Calendula officinalis* extract: Chemical characterization, antioxidant, cytotoxicity, and anti-esophageal carcinoma properties, Y. Zhang, **B. Mahdavi**, M. Mohammadhosseini, E. Rezaei-Seresht, S. Paydarfard, M. Qorbani, M. Karimian, N. Abbasi, H. Ghaneialvar, E. Karimi, *Arabian Journal of Chemistry*, **2021**, 14, 103105
- 39) Simulation of adsorption and release of doxepin onto ZIF-8 including in vitro cellular toxicity and viability, X. Dou, M. Keywanlu, R. Tayebbe, Behnam Mahdavi, *Journal of Molecular Liquids*, **2021**, 115557.
- 38) Chemical Composition, Antioxidant, Antimicrobial and Anti proliferative Activities of Essential Oil and Extract of the Fruits of *Etlinger sayapensis*, M. Li, **B. Mahdavi**, A. Yaacob Wan, B. D. Laily, *J. Essential Oil Bearing Plants*, **2020**, 23 (5), 931 – 943

- 37) HPLC phenolic profile and induction of apoptosis by *Linum usitatissimum* extract in LNCaP cells by caspase3 and Bax pathways, X. Zhou, N. Huang, W. Chen, T. Xiaoling, **B. Mahdavi**, A. Raofi, D. Mahdian, H. Atabati, *AMB Express* **2020**,10:203
- 36) Comparison of Major Constituents and Antioxidant Activity of *Polygonum cuspidatum* Root with *Polygonum afghanicum* Root. E. Rezaei-Seresh, **B. Mahdavi**, M. Parandvarmanesh, H. Rezaei-Seresh, A. Ovliyaei. *Innovation in food science and technology* **2020**,
- 35) Nanostructural Cu-Doped ZnO Hollow Spheres as an Economical and Recyclable Catalyst in the Synthesis of 1H-pyrazolo[1,2-b]phthalazine-5,10-diones and Pyrazolo[1,2-a][1,2,4]triazole-1,3-diones, B. Maleki, R. Nejat, H. Alinezhad, S. M. Mousavi, **B. Mahdavi**, M. Delavari, *Organic Preparation and Procedures International*, **2020**, 52(4), 328-339
- 34) Chemical Composition and Bioactivity of Essential Oil and Extracts of *Salvia limbata* C.A. Mey (Lamiaceae), **B. Mahdavi**, S. Ghezi, B. Maleki, *Current Bioactive Compounds*, **2020**,16(9): 1299 - 1305
- 33) Chemical Composition, Antimicrobial, Hemolytic, and Antiproliferative Activity of Essential Oils from *Ephedra intermedia* Schrenk & Mey, J. Ni, **B. Mahdavi**, S. Ghezi, *J. Essential Oil Bearing Plants*. **2019**, 22 (6) 1562 – 1570.
- 32) Synthesis and biological evaluation of novel hybrid compounds derived from gallic acid and the 2-aminothiophene derivatives, B. Mahdavi, S.M. Hosseini-Tabar, E. Rezaei-Seresht, H. Rezaei-Seresht, F. Falanji, *Journal of the Iranian Chemical Society*, **2020**,17, 809–815
- 31) Chemical characterization and anti-hemolytic anemia potentials of tin nanoparticles synthesized by a green approach for bioremediation applications, **B. Mahdavi**, M. M. Zangeneh, A. Zangeneh, S. Paydarfar1, R. Moradi, *Applied Organometallic Chemistry*, **2020**, e5433
- 30) Assessment of antioxidant, cytotoxicity, antibacterial, antifungal, and cutaneous wound healing activities of green synthesized manganese nanoparticles using *Ziziphora clinopodioides* Lam leaves under in vitro and in vivo condition, . **B. Mahdavi**, S. Paydarfard, M. M. Zangeneh, S. Goorani, N. Seyedi, A. Zangeneh, *Applied Organometallic Chemistry*, **2019**, e5248
- 29) *Ziziphora clinopodioides* Lam leaves aqueous extract mediated synthesis of zinc nanoparticles and their antibacterial, antifungal, cytotoxicity, antioxidant, and cutaneous wound healing properties under in vitro and in vivo conditions **B. Mahdavi**, S. Saneei, M. Qorbani, M. Zhaleh, A. Zangeneh, M. M. Zangeneh, E. Pirabbasi, N. Abbasi, H. Ghaneialvar *Applied Organometallic Chemistry*, **2019**,e5164
- 28) Preparation, characterization, and assessment of cytotoxicity, antioxidant, antibacterial, antifungal, and cutaneous wound healing properties of titanium nanoparticles using aqueous extract of *Ziziphora clinopodioides* Lam leaves N. Seydi, **B. Mahdavi**, S. Paydarfard, A. Zangeneh, M. M. Zangeneh, F. Najafi, A. R. Jalalvand, E. Pirabbasi, *Applied Organometallic Chemistry*, **2019**, e5009
- 27) Chemical Composition, Antioxidant, Antibacterial, Cytotoxicity, and Hemolyses Activity of Essential Oils from Flower of *Matricaria chamomilla* var. *Chamomilla*, **B. Mahdavi**, F. Ghorat, M. S. Nasrollahzadeh, M. Hosseini-tabar, H. Rezaei-Seresht, *Anti-Infective Agents*, **2019**, 18(3): 224 - 232
- 26) Green and selective iodination of diamondoid adamantane by β -cyclodextrin as a molecular reactor, E. Rezaei-Seresht, M. Rahmandoust, **B. Mahdavi**, *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **2019**, 95, 51–54
- 25) A new effective nano-adsorbent and antibacterial material of hydroxyapatite, M. Chahkandi1, S. R. Saadatdar, A. M. Mirzaei, **B. Mahdavi**, S. M. Hosseini-Tabar *Journal of the Iranian Chemical Society*, **2019**, 16(4), 695-705

- 24) Synthesis, Antioxidant and Antibacterial Activity of Azo Dye-Stilbene Hybrid Compounds E. Rezaei-seresht, **B. Mahdavi**, M. Salimi, *Pigment & Resin Technology*, **2019**, 48(1), 84-88
- 23) Poly(aminohippuric acid)–sodium dodecyl sulfate/functionalized graphene oxide nanocomposite for amplified electrochemical sensing of gallic acid, M. Baghayeri, A. Amiri, E. Hasheminejad, **B. Mahdavi**, *Journal of the Iranian Chemical Society*, **2018**,15(9), 1931-1938
- 22) Phytochemical Study of Medicinal Smokes from *Etlingera brevilabrum* Leaves **B. Mahdavi**, W.A. Yaacob, Laily B. Din, *Journal of Herbal Medicine*, **2018**, 13, 52-62
- 21) Antioxidant and Antimicrobial Activity of the Extracts from Different Parts of *Etlingera sayapensis* (Zingiberaceae) **B. Mahdavi**, W.A. Yaacob, Laily B. Din, *Sanis Malaysiana*, **2017**, 46(9), 1565-1571
- 20) Green synthesis of silver nanoparticles using water extract of *Salvia leriifolia*: Antibacterial studies and applications as catalysts in the electrochemical detection of nitrite M. Baghayeri, **B. Mahdavi**, Z. Hosseinpor, S. Farhadi, *Applied Organometallic Chemistry*, **2017**, e4057
- 19) Chemical composition, antioxidant, and antibacterial activity of essential oils from *Etlingera Sayapensis* A.D. Poulsen & Ibrahim **B. Mahdavi**, W.A. Yaacob, Laily B. Din, *Asian Pacific Journal of Tropical Medicine*, **2017**,10(8), 819–826
- 18) Chemical compositions of essential oils from *Etlingera brevilabrum*: A comparative analysis using GC×GC/TOFMS **B. Mahdavi**, *Trends in Phytochemical Research*, **2017**,1(1), 15-22
- 17) Comparing larvicidal effect of methanol extract of the aerial parts of oleander (*Nerium oleander* L.) and henbane (*Hyoscyamus niger* L.) plants on *Culex* spp larvae, A. Baharshahi, M. R. Vaezi- Kakhki, **B. Mahdavi**, M. Behravan, *Pars Journal of Medical Sciences*, **2017**, 14(4), 25- 33
- 16) Contents of Aerial Parts of *Salvia leriifolia* Benth, Z. Hosseinpoor, **B. Mahdavi**, E. Rezaei-Seresht, *Journal of Chemical Health Risks*, **2016**, 6(3), 185–194
- 15) Chemical Composition, Antioxidant, and Antibacterial Activity of Essential Oils from *Etlingera brevilabrum*, **B. Mahdavi**, W.A. Yaacob, Laily B. Din, I. Nazlina & Lee Y. Heng, *Records of Natural Products* **2016**, 10(1), 22-31.
- 14) Chemical Composition of Essential Oils from Aerial Parts of *Ferula gummosa* (Apiaceae) in Jajarm Region, Iran Using Traditional Hydrodistillation and Solvent-Free Microwave Extraction Methods: A Comparative Approach, M. Mohammadhosseini, **B. Mahdavi** & M. Shahnama, *J. Essential Oil Bearing Plants*, **2015**,18(6), 1321–1328
- 13) *Sclerorhachis Platyrachis* (Boiss.) Podlech Ex Rech. F.: an Indigenous Medicinal Plant from Northeastern Iran; Essential Oil Composition, Total Flavonoid Content and Antioxidant Activity, H. Akhlaghi, S. Akhlaghi, **B. Mahdavi**, H.Rezaei, *Journal of Chemical Health Risks*, **2015**, 5(2), 129–135
- 12) Characterization of Chemical Composition and Antioxidant Properties of *Trachyspermum ammi* Seed as a Potential Medicinal Plant, H. Akhlaghi, **B. Mahdavi**, H.Rezaei, *Journal of Chemical Health Risks*, **2014**, 4(4), 9–16
- 11) Chemical constituents of the aerial parts of *Etlingera brevilabrum* (Zingiberaceae), **B. Mahdavi**, *Der Pharma Chemica*, **2014**, 6(2), 360-365
- 10) Characterization and Chemical composition of the Volatile Oils from Aerial Parts of *Eryngium bungei* Biess. (Apiaceae) Using Traditional Hydrodistillation, Microwave Assisted Hydrodistillation and Head Space Solid Phase Microextraction Methods Prior to GC and GC/MS Analyses: A Comparative Approach M. Mohammadhosseini, **B. Mahdavi**, H.Akhlaghi, *J. Essential Oil Bearing Plants*, **2013**, 16(5), 613-623

- 9) Unexpected Reduction of C-Cl Bond to C-H Bond by hydrazine-Mediated Reaction During the Synthesis of Alkylbenzimidazoles Derivatives, **B. Mahdavi**, M. Rahimizadeh, M. Bakavoli, E. Rezaei-Seresht, and M. Fatemi, *Jordan J. of Chemistry*, **2013**, 8(1), 63-69
- 8) Antifungal Properties of Phenyl Fatty Hydroxamic Acids and Their Copper Complexes Synthesized Based on Canola and Palm Kernel Oils, M. J. Haron, H. Jahangirian, M. H. S. Ismail, R. R. Moghaddam, M. Rezayi, K. Shameli, Y. Gharayebi, Y. Abdollahi, M. Peyda, **B. Mahdavi**, *Asian Journal of Chemistry*, **2013**, 25(8), 4183-4188.
- 7) Antioxidant Activity of Consecutive Extracts of the Base, Stem and Leaves of *Etlingera brevilabrum*, **B. Mahdavi**, W.A. Yaacob, Laily B. Din & H. Jahangirian, *Asian Journal of Chemistry*, **2013**, 25(7), 3937-3941
- 6) Antimicrobial Activity of Consecutive Extracts of *Etlingera brevilabrum*, **B. Mahdavi**, W.A. Yaacob, Laily B. Din & I. Nazlina, *Sanis Malaysiana*, **2012**, 41(10), 1233-1237.
- 5) Essential oil composition of three air-dried parts of *Etlingera brevilabrum*, **B. Mahdavi**, W.A. Yaacob, Laily B. Din and M.A. Siti Aisha, *J. Essential Oil Bearing Plants*, **2012**, 15(4), 539-544
- 4) Benzyl and Methyl Fatty Hydroxamic Acids Based on Palm Kernel Oil as Chelating Agent for Liquid-Liquid Iron (III) Extraction, J. Haron, H. Jahangirian, S. Silong, N. A. Yusof, A. Kassim, R. Rafiee-Moghaddam, **B. Mahdavi**, M. Peyda, Y. Abdollahi, *International Journal of Molecular Science*, **2012**, 13, 2148-2159
- 3) Antibacterial effect of phenyl fatty hydroxamic acids synthesized from canola oil, H. Jahangirian, J. Haron, S. Silong, N. A. Yusof, K. Shameli, S. Eissazadeh, R. Rafiee-Moghaddam, **B. Mahdavi**, M. Jafarzade, *Journal of Medicinal Plants Research*, **2011**, 5, 4826-4831.
- 2) Selective Protection of Alcohols as 2-Tetrahydropyranyl Acetals Using Keggin $H_3PW_{12}O_{40}$ Effect of Different Reaction Parameters, R. Tayebbe, **B. Mahdavi**, *Asian Journal of Chemistry*, **2009**, 21, 1565-1568
- 1) The Effect of Magnetic Water on Growth and Quality Improvement of Poultry, M. Gholizadeh, H. Arabshahi, M. Saeidi, **B. Mahdavi**, *Middle-East Journal of Scientific Research* **2008**, 3 (3), 140-144

Papers in Seminars:

- 35) Green synthesis of Ag nanoparticles using *Cyperus rotundus* aqueous extract, E. Arghiyani, **B. Mahdavi**, E. Rezaei-Seresht, M. Al-Reza, S. Kashki, The International Congress of Natural Remedial Products, Isfahan, Iran, **2023**
- 34) Encapsulation of eucalyptus essential oil using β -cyclodextrin and evaluation of its water solubility M. Hadadian, R. Allahyari, **B. Mahdavi**, E. Rezaei-Seresht, The International Congress of Natural Remedial Products, Isfahan, Iran, **2023**
- 33) Investigation of water solubility of encapsulated rosemary essential oil in β -cyclodextrin, Reza Allahyari, M. Hadadian, **B. Mahdavi**, E. Rezaei-Seresht, The International Congress of Natural Remedial Products, Isfahan, Iran, **2023**
- 32) Characterization of the chemical profiles of essential oils of *Perovskia abrotanoides* Karel., an endemic plant to Golestan province, M. R. Kianasab, M. Nekoei, **B. Mahdavi**, M. Mohammadhosseini, International Conference on Biology of Medicinal Plants, Qom, Iran, **2023**.
- 31) GC-MS analysis of the hydrodistilled essential oils from the aerial parts of (*Cannabis sativa* L.), a plant growing wild in Bandar Torkaman, Golestan Province, Iran, M. R. Kianasab, M. Nekoei, **B. Mahdavi**, M. Mohammadhosseini, International Conference on Biology of Medicinal Plants, Qom, Iran, **2023**.

- 30) *Cyperus rotundus* aqueous extract mediates for green synthesis of Ag nanoparticles. E. Arghiyani, **B. Mahdavi**, E. Rezaei-Seresht. 21st ICS International Chemistry Congress, Tabriz, Iran, **2022**.
- 29) Green synthesis of Cu nanoparticles using *Cyperus rotundus* aqueous extract and its catalytic activity in the Biginelli Reaction, E. Arghiyani, **B. Mahdavi**, E. Rezaei-Seresht. 21st ICS International Chemistry Congress, Tabriz, Iran, **2022**.
- 28) Evaluation of antioxidant activity, TPC, and TFC of *Pinus pinea* seeds using GC/MS, F. Fardi, S. yektai, H.R.Karimi, **B. Mahdavi**, 3th International & 6th National Congress on Food Science, Tehran, Iran, **2019**.
- 27) Density Functional Theory (DFT) Study on the Optical Properties of 4-bromo-3-chlorophenol and 4-chloro-3-idophenol, R. Golestania, **B. Mahdavi**, A.A. Rahnama-Aliabad, 4th National Conference on Applied chemistry, Urumeieh, Iran, **2019**.
- 26) Radical Scavenging Activity of *Euphorbia granulata* Hexane Extract, M. Qorbani1, **B. Mahdavi**, M. Vaezi-Kakhki, 8th National Congress on Medicinal Plants, Tehran, Iran, **2019**.
- 25) Phytochemical Contents of *Euphorbia granulate*, M. Qorbani1, **B. Mahdavi**, M. Vaezi-Kakhki, 8th National Congress on Medicinal Plants, Tehran, Iran, **2019**.
- 24) Green Synthesis of Vanadium Nanoparticles Using Aqueous Extract of *Trigonella Subenervis*, S. Paydarfard, **B. Mahdavi**, E. Rezaei-Seresh, 8th National Congress on Medicinal Plants, Tehran, Iran, **2019**.
- 23) Green Synthesis of Manganese Nanoparticles Using Aqueous Extract of *Artemisia Annu*, S. Paydarfard, , E. Rezaei-Seresh, 8th National Congress on Medicinal Plants, Tehran, Iran, **2019**.
- 22) Antibacterial Activity of ethanolic and hexane extract of *Artemisia annua*, Malvandi1 F. Z., **B. Mahdavi**, 15th Iranian National Congress of Biochemistry & 6th International Congress of Biochemistry & Molecular Biology Isfahan- Iran, **2018**.
- 21) Synthesis and Antibacterial activity evaluation of two 2-Aminothiophene derivatives, **B. Mahdavi**, S. Ghalehovi, E. Rezaei-Seresht, S. M. HosseiniTabar, 20th Iranian Chemistry Congress, Mashhad, Iran, **2018**
- 20) Phytochemical Content of *Ferula latisecta* Z. Sharafi-Sirzar, **B. Mahdavi**, E. Rezaei-Seresht, 6th National Congress on Medicinal Plants, Tehran, Iran, **2017**.
- 19) Determination of Antimicrobial of methanolic Extract of *Ferula latisecta* Z. Sharafi-Sirzar, **B. Mahdavi**, E. Rezaei-Seresht, 6th National Congress on Medicinal Plants, Tehran, Iran, **2017**.
- 18) Antimicrobial Activity of *Artemisia annua* Extracts, M. Nasrollah Zadeh, **B. Mahdavi**, S. M. Hosseini-Tabar, N. Akbari, 6th National Congress on Medicinal Plants, Tehran, Iran, **2017**.
- 17) Antimicrobial Activity of Methanolic Extract of *Ephedra intermedia* S. Ebrahimi, **B. Mahdavi**, S. Ghezi, 6th National Congress on Medicinal Plants, Tehran, Iran, **2017**.
- 16) Screening of Phytochemical Contents of *Ephedra intermedia* S. Ebrahimi, **B. Mahdavi**, S. Ghezi, 6th National Congress on Medicinal Plants, Tehran, Iran, **2017**.
- 15) Phytochemical Content of Aerial Parts of *Salvia Limbata* from Sabzevar Iran, S. Ghezi, **B. Mahdavi**, B. Maleki, 24th Iranian Seminar of Organic Chemistry, Tabriz, Iran, **2016**.
- 14) Green Synthesis of Silver Nanoparticles Using Aqueous Extract of *Salvia Limbata*, S. Ghezi, **B. Mahdavi**, B. Maleki, 24th Iranian Seminar of Organic Chemistry, Tabriz, Iran, **2016**.

- 13) Synthesis of triacetoxybenzoic acid and triacetoxybenzoyl chloride from gallic acid and study on comparison of their antibacterial activity, S. M. Hosseini Tabar, **B. Mahdavi**, E. Rezaei-Seresh, 24th Iranian Seminar of Organic Chemistry, **2016**.
- 12) Phytochemical Test to Screen of Phenolic Anthraquinone, Alkaloids, Steroids, Terpenoid, flavonoid Compounds of Aerial Part of *Salvia reuterana*, H. Farmonbar, **B. Mahdavi**, 5th National Congress on Medicinal Plants, Isfahan, Iran, **2016**.
- 11) Determination of Antioxidant Activity of Methanolic Extract of *Salvia leriifolia* Benth Z. Hosseinpoor, **B. Mahdavi**, 5th National Congress on Medicinal Plants, Isfahan, Iran, **2016**.
- 10) Studying on Total Phenolic Content and Total Flavonoid Content of *Ferula ovina* From Sabzevar, **B. Mahdavi**, E. Rezaei-Seresh, S. Riyahi Farsani, 4th National Congress on Medicinal Plants, Tehran, Iran, **2015**.
- 9) Determination of Total Phenolic and Flavonoid Content of Aerial Parts of *Salvia leriifolia* Benth. From Sabzevar –Iran, **B. Mahdavi**, E. Rezaei-Seresh, Z. Hoseinpoor, 4th National Congress on Medicinal Plants, Tehran, Iran, **2015**.
- 8) Antioxidant Activity, Total Phenolic and Flavonoid Content in *Salvia lerrifolia* from Sabzevar, M. Baghaei Nezhad, N. Mollania, S. Kazemi Noureini, **B. Mahdavi**, Kianmehr H., *International Conference on Natural Products*, Mashhad, Iran, **2013**
- 7) A Comparison on Antioxidant Activity of Two *Polygonum* Species, **B. Mahdavi**; E. Rezaei-Seresh; M. Parand Varmanesh, *International Conference on Natural Products*, Mashhad, Iran, **2013**
- 6) Antioxidant Activity and Total Phenolic Content of Methanolic Extract of the Base of *Etligeria brevilabrum*, **B. Mahdavi**; Laily B. Din; W.A. Yaacob, *International Conference on Natural Products (ICNP)*, Malaysia, **2011**
- 5) Total Phenolic Content and DPPH Radical Scavenging Activity of Pyrolytic Oils from Leaves of *Etligeria brevilabrum*, **B. Mahdavi**, W.A. Yaacob, Laily B. Din, Mohamad Amran Mohd Salleh and Rozita Omar, *International Conference on Natural Products (ICNP)*, Malaysia, **2011**
- 4) Trapping of Smokes from *Etligeria brevilabrum* Leaves to Obtain Usable Liquids, **B. Mahdavi**, W.A. Yaacob, Laily B. Din, Mohamad Amran Mohd Salleh and Rozita Omar, 13th Advances in Extraction Technology International Symposium, **2011**
- 3) Composition Analysis of Essential Oils from Rhizome and Stem of *Etligeria brevilabrum* by GC×GC/TOFMS, **B. Mahdavi**, Laily B. Din, W.A. Yaacob, M.A. Siti Aishah, 1th Iranian Students Scientific Conference in Malaysia, **2011**.
- 2) Composition Analysis by Comprehensive 2D GC with Time-of-flight Mass Spectrometry of Essential Oil from Leaves of *Etligeria brevilabrum*, **B. Mahdavi**, Laily Bin Din, W.A. Yaacob, M.A. Siti Aishah, 16th Malaysian Chemical congress, **2010**
- 1) Unexpected Reduction of 2-(1-Chloroethyl) Benzimidazoles to 2 -Ethylbenzimidazoles by hydrazine, M. Rahimizadeh, **B. Mahdavi**, M. Bakavoli, 15th Iranian Organic chemistry Conference, **2008**

Research Projects

- 1) Determination of antioxidants of several aromatic plants by HPLC and evaluation of antioxidant and biological activity of essential oils and their extracts.
- 2) Investigating of the chemical composition, antioxidant activity, antimicrobial activity and toxicity level of *Matricaria chamomilla* var. *Chamomilla* essential oil (a traditional Iranian medicine product).
- 3) The repellent effects of basil and radish plant extracts on Anopheles insects.

4) Providing a quick and easy method to analysis of Brass furnace load.

5) Studying the effect of magnetized water on poultry growth.