Curriculum Vitae

Ali Mehdinia

Chemist (h-index: 41, World's Top 2% Scientists in 2022-2024)
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Ocean expert: https://oceanexpert.org/expert/18036

Academic Background

- Ph.D in Chemistry, Tarbiat Modares University (TMU), Tehran, Iran
- M.Sc in Analytical Chemistry, Shahid Beheshti University (SBU), Tehran, Iran
- B.Sc in Chemistry, Zanjan University (ZU), Tehran, Iran

Positions & Work Experiences & Memberships

- Faculty Member, Faculty of Marine Science, Iranian National Institute for Oceanography and Atmospheric Science, Since 2008
- Director of Marine Chemistry Lab., Iranian National Institute for Oceanography and Atmospheric Science, 2009-2013
- Director of Marine Living Science group, Iranian National Institute for Oceanography and Atmospheric Science, 2013-2015.
- Head of INIOAS Central Laboratory, Iranian National Institute for Oceanography and Atmospheric Science, 2016-2022.
- Head of Ocean Science Department, Iranian National Institute for Oceanography and Atmospheric Science, 2018-2021.
- Deputy of Research and Education, Iranian National Institute for Oceanography and Atmospheric Science, 2021-2025.
- Head of ISO TC 147 (Quality of water), international technical committee of ISO in Iran, Since 2019

Teaching Experiences

- Marine pollution, Ph.D. Course, Iranian National Institute for Oceanography and Atmospheric Science, 2025 (1 Semester).
- Advanced instrumental analysis in Marine Environment, Iranian National Institute for Oceanography and Atmospheric Science, 2025 (1 Semester).

- "Sampling and Analysis of Environmental pollutants", Ph.D. Course, Iranian National Institute for Oceanography and Atmospheric Science, 2015 (1 Semester).
- "Special Topics in Analytical Chemistry", M.Sc. Course, Payam Noor University, Tehran, Iran, 2013-2015 (4 semesters)
- "Physical and Chemical Separation methods", M.Sc. Course, Payam Noor University, Tehran, Iran, 2015, (1 semester).
- "Analytical Spectroscopy", M.Sc. Course, Payam Noor University, Tehran, Iran, 2014 (1 semester).
- "Advance Analytical Chemistry", M.Sc. Course, Payam Noor University, Tehran, Iran, 2012-2014 (4 semesters).
- "Principles of Industrial water and wastewater treatment", B.Sc. Course, Azad University, Tehran, Iran, 2010-2011 (2 Semesters)
- "Instrumental Analytical Chemistry", B.Sc. Course, Azad University, Tehran, Iran, 2009-2010 (2 Semesters).
- "Environmental Chemistry", B.Sc. Course, Azad University, Tehran, Iran, 2009 (1 Semesters).
- "Analytical Chemistry I", B.Sc. Course, Azad University, Tehran, Iran, 2009 (2 Semesters)
- "Laboratory of Analytical Chemistry II", B.Sc. Course, Azad University, Tehran, Iran, 2008-2009 (2 Semesters).
- "General Chemistry I", B.Sc. Course, Azad University, Tehran, Iran, 2008-2010 (4 Semesters).
- " General Chemistry II", B.Sc. Course, Azad University, Tehran, Iran, 2008-2010 (4 Semesters).
- "Analytical Chemistry" Associate's degree course, Golrang Comprehensive Scientific and Applied University, Tehran, Iran, 2008-2010 (4 Semesters).
- "Laboratory of Analytical Chemistry" Associate's degree course, Golrang Comprehensive Scientific and Applied University, Tehran, Iran, 2008-2010 (4 Semesters).

Research Activities

Research Interest

- Environmental Analytical Chemistry
- Chromatography

Published papers

2025:

M Esmaeilzadeh, **A. Mehdinia**, Analysis of PAHs content, source identification and ecological risk assessment in surface sediments from the Caspian Sea, Marine pollution Bulletin, 211, 2025, 117472.

Jafar Azizpour, Ahmad Manbohi, Reza Rahnama, Ali Hamzepour, Kazem Darvish Bastami, Hosein Bagheri, Mehrshad Taheri, Hossein Farjami, **A. Mehdinia**, Environmental impacts of fish cage cultures in the southern

Caspian Sea, Environmental Research, 266, 2025, 120574.

A Mehdinia, MC Shevi, V Aghadadshi, DJ Vaighan, N Navid, Concentration, distribution, and risk assessment of polychlorinated biphenyl compounds in surface sediments of the Persian Gulf and the Oman Sea, Environmental Science and Pollution Research 32 (3), 2025, 1331-1344.

2024:

M Esmaeilzadeh, **A Mehdinia**, Origin and comprehensive risk assessment of heavy metals in surface sediments along the Caspian Sea, Marine pollution Bulletin, 205, 2024, 116587.

Vahid Aghadadashi, **Ali Mehdinia**, Mahdie Rezaei, Saeideh Molaei, Mehri Seyed Hashtroudi, Fatemeh Ahmadian, Ali Hamzehpour, Reza Rahnama, Basin scale monitoring of microplastics and phthalates in sediments from the Persian Gulf and the Gulf of Makran using GIS-based algorithms: Insights towards spatial variation and potential risk assessment, Science of The Total Environment, 927, 1 2024, 171950.

Mohammad Ali Hamzeh *, Abdolmajid Naderi Beni, Hamid A.K. Lahijani, **Ali Mehdinia**, Vahid Aghadadashi, Emad Koochaknejad, Reconstruction of the sedimentary environment of Nayband Bay during the last 1600 years; implications for relative sea level and climate change in Northern Persian Gulf, Marine Micropaleontology 186 (2024) 102321.

Reza Rahnama Haratbarr, Jafar Azizpour, Ahmad Manbohi, Kazem Darvish Bastami, Ali Hamzehpour, **Ali Mehdinia** & Mehrshad Taheri, Temporal and Spatial Distribution of Invasive Ctenophore Mnemiopsis leidyi in the Southern Part of the Caspian Sea from 2019 to 2020. Ocean Science Journal, 59,12, (2024).

Kazem Darvish Bastami, Ahmad Manbohi, **Ali Mehdinia**, Ali Hamzehpour, Sarah Haghparast, Mehrshad Taheri, Distribution of hydrogen sulfide, nitrogen and phosphorous species in inshore and offshore sediments of the south Caspian Sea, Marine Pollution Bulletin, 202, 2024, 116330.

2023:

A Manbohi, **A Mehdinia**, R Rahnama, A Hamzehpour, R Dehbandi, Distribution of microplastics in upstream and downstream surface waters of the Iranian rivers discharging to the southern Caspian Sea, Environmental Science and Pollution Research, 1-12.

A Manbohi, A Mehdinia, R Rahnama, A Hamzehpour, R Dehbandi, Sources and hotspots of microplastics of the rivers ending to the southern Caspian Sea, Marine Pollution Bulletin 188, 114562, 2023-2

MS Hashtroudi, V Aghadadashi, A Mehdinia, NS Fumani, Combining theoretical concepts and Geographic Information System (GIS) to highlight source, risk, and hotspots of sedimentary PAHs: A case study of Chabahar Bay Environmental Research 216, 114540, 2023

2022:

-S Dadkhah, **A Mehdinia**, A Jabbari, A Manbohi**,** Catalytic nanozyme Zn/Cl-doped carbon quantum dots as ratiometric fluorescent probe for sequential on-off-on detection of riboflavin, Cu^{2+} and thiamine, Scientific Reports 12 (1), 1-12**.**

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- A.A Mohammadi, S. S. Hosseiny Davarani, M. Jafari, **A. Mehdinia,** Curcumin-Melamine For Solid-Phase Microextraction of Volatile Organic Compounds from Aqueous Samples, J Chromatogr Sci.2022 doi: 10.1093/chromsci/bmac093.

- Fatemeh Bateni, **A. Mehdinia**, Lisa Lundin, Mehri Seyed Hashtroudi, (2022) Distribution, source and ecological risk assessment of polycyclic aromatic hydrocarbons in the sediments of northern part of the Persian Gulf**, C**hemosphere, 2022, 295:133859.

2021:

A. Mehdinia, Fatemeh Bateni, Davoud Jahedi Vaighan, Neda Sheijooni Fumani, Occurrence of polychlorinated biphenyl congeners in marine sediment of Makran region, Chabahr bay, Iran. (2021), Marine Pollution Bulletin, 164, 112038

A Manbohi, **A Mehdinia**, R Rahnama, R Dehbandi**,** (2021), Microplastic pollution in inshore and offshore surface waters of the southern Caspian Sea, Chemosphere, 281, 130896.

A Manbohi, **A Mehdinia**, R Rahnama, R Dehbandi, A Hamzehpour, (2021), Spatial distribution of microplastics in sandy beach and inshore-offshore sediments of the southern Caspian Sea, Marine Pollution Bulletin 169, 112578

V Aghadadashi, **A Mehdinia**, S Molaei, (2021), Normal alkanes in sediments from the Persian Gulf: spatial pattern and implications for autochthonous, allochthonous, and petroleum-originated contaminants, Environmental Monitoring and Assessment 193 (6), 1-18

M Rezaei, **A Mehdinia**, A Saleh, S Modabberi, MRM Daneshvar, (2021), Environmental assessment of heavy metal concentration and pollution in the Persian Gulf, Modeling Earth Systems and Environment 7 (2), 983-1003.

A Mehdinia, A Mollazadeh-Moghaddam, A Jabbari, (2021), Fabrication of Silver–2–Aminoterephthalic Acid Coordination Polymer-Coated Fe_3O_4 for Effective Removal of Lead from Aqueous Media, International Journal of Environmental Research, 1-14.

A Mehdinia, F Bateni, DJ Vaighan, NS Fumani, (2021), Occurrence of polychlorinated biphenyl congeners in marine sediment of Makran region, Chabahr bay, Iran, Marine Pollution Bulletin 164, 112038.

AA Moahammadi, SSH Davarani, M Jafari, **A Mehdinia**, Preparation and evaluation of a new solid-phase microextraction fiber based on polythionine for analysis of phthalate esters in aqueous samples, Journal of the Iranian Chemical Society 18 (2), 385-391.

S Dadkhah, **A Mehdinia**, A Jabbari, A Manbohi, (2021) Nicotinamide-Functionalized Carbon Quantum Dot as New Sensing Platform for Portable Quantification of Vitamin B12 in Fluorescence, Uv-Vis and Smartphone Triple Mode, In Press.

2020:

Mehdinia, A., Dehbandi, R., Hamzepour, A., Rahnama, R., (2020) Identification of microplastics in the sediments of southern coasts of the Caspian Sea, north of Iran, Environmental Pollution 258, 113738.

Kor, K., **Mehdinia, A.,** (2020) Neustonic microplastic pollution in the Persian Gulf, Marine Pollution Bulletin, 150, 110665.

Mehdinia, A., Heydari, S., Jabbari A., (2020) Synthesis and characterization of reduced graphene oxide-Fe_3O_4@polydopamine and application for adsorption of lead ions: Isotherm and kinetic studies, Materials Chemistry and Physics 239, 121964.

Mehdinia, A., Niroumand R., Jabbari, A., (2020) Removal of lead and copper ions from environmental water samples by nanorattle magnetic polypyrrole, International Journal of Environmental Science and Technology, 17, 2721–2730 (2020).

Mehdinia, A., Mashkani, M., Jabbari, A., Niroumand, R., Ghenaatian, H.R., Fereidouni, N., Nabid, M.R. (2020) Extraction of trace amounts of cadmium in fish and mollusk by Fe_3O_4@N-carbon quantum dots as adsorbent, Journal of Food Measurement and Characterization, 14, 725–734 .

Mehdinia, **A.**, Salamat, M., Jabbari, A. (2020), Amino-Modified Graphene Oxide/Fe_3O_4 for Dispersive Solid-Phase Extraction of Cadmium Ions in Rice, Lentil and Water Samples, Journal of analytical science, 36(3):317-322.

2019:

Mehdinia, A., Mirzaeipour, R., Jabbari A., (2019) Nanosized Fe3O4–curcumin conjugates for adsorption of heavy metals from seawater samples, Journal of the Iranian Chemical Society, 16:1431–1439.

Aghadadashi, V., Molaei, V., **Mehdinia, A.**, Mohammadi, J., Moeinaddini M, Riyahi Bakhtiari, A.R., (2019) Using GIS, geostatistics and Fuzzy logic to study spatial structure of sedimentary total PAHs and potential eco-risks; An Eastern Persian Gulf case Study, Marine Pollution Bulletin 149 (2019) 110489

Aghadadashi, V., Neyestani, MR., **Mehdinia, A**., Riyahi Bakhtiari, A., Molaei, M., Farhangi, M., Esmaili, M., Rezai Marnani, H., Gerivani, H., (2019) Spatial distribution and vertical profile of heavy metals in marine sediments around Iran's special economic energy zone; Arsenic as an enriched contaminant, Marine Pollution Bulletin 138, 437–450.

Aghadadashi, V., **Mehdinia, A.**, Riyahi Bakhtiari, A, Mohammadi, J., Moradi, M., (2019) Source, spatial distribution, and

toxicity potential of Polycyclic Aromatic Hydrocarbons in sediments from Iran's environmentally hot zones, the Persian Gulf, Ecotoxicology and Environmental Safety 173, 514–525.

2018:

Mehdinia, A., Bateni, F.**,** (2018) Predicting efficiency of different chemical extraction methods in risk assessment of trace metals in sediment of the Persian Gulf, 1595-160.

Rostami, S., **Mehdinia, A.**, Jabbari A., Kowsari, E., Niroumand, R., Booth, T.J., (2018) Colorimetric sensing of dopamine using hexagonal silver nanoparticles decorated by task-specific pyridinum based ionic liquid, Sensors & Actuators: B. Chemical 271, 64–72.

Basiri, S., **Mehdinia, A.**, Jabbari, A., (2018) A sensitive triple colorimetric sensor based on plasmonic response quenching of green synthesized silver nanoparticles for determination of Fe^{2+} hydrogen peroxide, and glucose, Colloids and Surfaces A 545, 138–146.

Mehdinia, A., Jahedi Vaighan, D., Jabbari, A., (2018) Cation Exchange Superparamagnetic Al-Based Metal Organic Framework (Fe_3O_4/MIL-96(Al)) for High Efficient Removal of Pb(II) from Aqueous Solutions, ACS Sustainable Chem. Eng. 6, 3176−3186

Basiri, S., **Mehdinia, A.**, Jabbari, A., (2018) Green synthesis of reduced graphene oxide-Ag nanoparticles as a dual-responsive colorimetric platform for detection of dopamine and Cu^{2+}, Sensors and Actuators B 262, 499–507.

Borazjani, M., **Mehdinia, A.**, Jabbari, A., (2018) A cortisol nanocomposite-based electrochemical sensor for enantioselective recognition of mandelic acid, J Solid State Electrochem 22:355–363.

Mashkani, M., **Mehdinia, A.**,Jabbari, A., Bide, Y., Nabid, MR., (2018) Preconcentration and extraction of lead ions in vegetable and water samples by N-doped carbon quantum dot conjugated with Fe_3O_4 as a green and facial adsorbent, Food Chemistry 239, 1019–1026.

2017:

Borazjani, M., **Mehdinia, A.**, Jabbari, (2017) An enantioselective electrochemical sensor for simultaneous determination of mandelic acid enantiomers using dexamethasone-based chiral nanocomposite coupled with chemometrics method, J Electroanal Chem 805 83–90.

Borazjani, M., **Mehdinia, A.**, Jabbari, (2017) Betamethasone-based chiral electrochemical sensor coupled to chemometric methods for determination of mandelic acid enantiomers. J Mol Recognit. Dec;30(12)

Mehdinia, A., Ramezani, M., Jabbari, A., (2017) Preconcentration and determination of lead ions in fish and mollusk tissues by nanocomposite of Fe_3O_4 graphene oxide@polyimide as a solid phase extraction sorbent, Food Chemistry 237 1112–1117.

Mehdinia, A., Shoormeij, Z., Jabbari, A., (2017) Trace determination of lead (II) ions by using a magnetic nanocomposite of the type Fe_3O_4/TiO_2/PPy as a sorbent, and FAAS for quantitation, Microchim Acta 184:1529–1537.

Asiabi, M., **Mehdinia, A.**, Jabbari, A. (2017) Spider-web-like chitosan/MIL-68(Al) composite nanofibers for high-efficient solid phase extraction of Pb(II) and Cd(II), Microchim Acta, 184: 4495–4501.

Mehdinia, A., Rostami, S., Dadkhah, S., Sheijooni, Fumani (2017) Simultaneous screening of homotaurine and taurine in marine macro-algae using liquid chromatography–fluorescence detection, IRAN CHEM SOC 14:2135–2142.

Rostami, S., **Mehdinia, A.**, Jabbari, A. (2017) Seed-mediated grown silver nanoparticles as a colorimetric sensor for detection of ascorbic acid, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 180, 204–210.

Mehdinia, A., Jebeliyan, M. Baradaran Kayyal, T., Jabbari, A., (2017) Rattle-type Fe_3O_4@SnO_2 core-shell nanoparticles for dispersive solid-phase extraction of mercury ions, Microchim Acta (2017) 184:707–713.

Borazjani, M., **Mehdinia, A.**, Ziaei, E., Jabbari, A., Maddah, M.,(2017) Enantioselective electrochemical sensor for R-mandelic acid based on a glassy carbon electrode modified with multi-layers of biotin-loaded overoxidized polypyrrole and nanosheets of reduced graphene oxide, Microchim Acta 184:611–620.

Asiabi, M., **Mehdinia, A.**, Jabbari, A., (2017) Electrospun biocompatible Chitosan/MIL-101 (Fe) composite nanofibers for solid-phase extraction of 9-tetrahydrocannabinol in whole blood samples using Box-Behnken experimental design, JournalofChromatographyA, 1479, 71–80.

Aghadadashi, V., **Mehdinia, A**., Molaei, S., Origin, toxicological and narcotic potential of sedimentary PAHs and remarkable even/odd n-alkane predominance in Bushehr Peninsula, the Persian Gulf, Marine Pollution Bulletin 114 (2017) 494–504.

Basiri, S., **Mehdinia, A.**, Jabbari, A., (2017) Biologically green synthesized silver nanoparticles as a facile and rapid label-free colorimetric probe for determination of Cu2+ in water samples, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 171, 297–304.

2016:

Mehdinia∗, A., Einollahi, S., Jabbari, A., (2016) Magnetite nanoparticles surface-modified with a zinc(II)-carboxylate Schiff base ligand as a sorbent for solid-phase extraction of organochlorine pesticides from seawater, **Microchimica Acta**, 183:2615–2622.

Mehdinia∗, A., Haddad, H., Mozaffari, Sh. (2016) Polyimide-coated magnetic nanoparticles as a sorbent in the solid-phase extraction of polycyclic aromatic hydrocarbons in seawater samples, **Journal of Separation Science**, 39(17):3418-27.

- **Mehdinia∗, A.**, Basiri, S., Jabbari, A. (2016) A novel label-free method for determination of inorganic mercury in environmental aqueous media using BSA-modified silver nanoparticles, **International Journal of Environmental Science and Technology**, 13:2663–2674.

- **Mehdinia∗, A.**, Mashkani, M., Jabbari, A., (2016) Polythionine coated magnetic nanoparticles as a robust and high effective sorbent for mercury determination in environmental water samples, **International Journal of Environmental Analytical Chemistry**, 96(11): 1091–1104.

- Shegefti, S., **Mehdinia∗, A.**, Shemirani, F. (2016) Preconcentration of cobalt (II) using polythionine-coated Fe_3O_4 nanocomposite prior its determination by AAS, **Microchimica Acta**, 183:1963–1970.

- Ziyaadini, M., **Mehdinia∗, A.**, Khaleghi, L., Nasiri, M. (2016) Assessment of concentration, bioaccumulation and sources of polycyclic aromatic hydrocarbons in zooplankton of Chabahar Bay, **Marine Pollution Bulletin**, 107: 408–412.

- Dadkhah, S., Ziaei, E., **Mehdinia∗, A.**, Baradaran Kayyal, T., Jabbari, A (2016) A glassy carbon electrode modified with amino-functionalized graphene oxide and molecularly imprinted polymer for electrochemical sensing of bisphenol A, **Microchimica Acta**, 183 (6):1933–1941.

- **Mehdinia∗, A.**, Rouhani, S., Mozaffari, S. (2016) Microwave-assisted synthesis of reduced graphene oxide decorated with magnetite and gold nanoparticles, and its application to solid-phase extraction of organochlorine pesticides, **Microchimica Acta**, 183:1177–1185.

- Khodaee, N., **Mehdinia∗, A.**, Esfandiarnejad, R., Jabbari, A. (2016) Ultra trace analysis of PAHs by designing simple injection of large amounts of analytes through the sample preconcentration on SPME fiber after magnetic solid phase extraction, **Talanta** 147, 59–62.

- Aghadadashi, V., **Mehdinia∗, A.** (2016) Occurrence, spatial deposition and footprint of polybrominated diphenyl ethers in surficial sediments of Bushehr peninsula, the Persian Gulf., **Marine Pollution Bulletin** 112, 211–217.

- Ghane, M., Moradi,* M., Kabiri, K., **Mehdinia, A.**, (2016) Investigation and validation of MODIS SST in the northern

Persian Gulf, **Advances in Space Research**, 57, 127–136.

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Running projects as Manager:

- Biotic and abiotic retention zones for microplastics at river-sea interface" (55% progress, jointly project with Shirshov institute of oceanology)
- Evaluation of Blue Carbon in Mangroves of the Persian Gulf, Iranian National Science Foundation, (90% progress).

Previous Projects as Manager:

- Monitoring of the Environment of Marine fish cage cultures in southern Caspian Sea, Fisheries Organization of Iran, 2023.
- Abundance and types of Microplastics in the coastal sediments of southern Caspian Sea, 2023, INIOAS.
- Seasonal variation of Fatty acid composition of Zooplankton of Chabahar Bay, 2010, INIOAS.
- Identification of some chemicals extracted from soft corals of Chabahar Bay, 2010, INIOAS.
- Validity check of various extraction methods for polycyclic aromatic hydrocarbons in marine sediments, 2011, INIOAS.
- Feasibility study of existence of Homotaurine with Alzheimer treatment property in some domestic marine algae of Iran, 2011, INIOAS.
- Application of nanostructures in microbial fuel cells (MFCs) for enhancing power output of cells, 2013, INSF.
- Seasonal assessment of the physiological performance of the dominant reef builder of the coral reef of Hengam Island based on measurements of related chemical parameters, 2014, INIOAS
- Removal of toxic metal of mercury from aqueous media by Fe_3O_4 nanoparticles modified with masoporous silica, 2014, INSF.
- Environmental Data Collection and Processing of Persian Gulf, 2014, INIOAS.
- Identification of Iranian native algae with the highest amount of bioactive compound of homotaurine as a potential treatment for Alzheimer's disease, Running, INIOAS.
- Persian Gulf and Gulf of Oman Oceanographic Study, Running, INIOAS.
- Biomonitoring of Bioavailable Fractions of Some Heavy Metals in Surface Sediments of Bushehr Coasts, using the dominant mollusk species, Running, INIOAS.
- Investigation of contamination of sediments of Bushehr coastal area to the Polybrominated Diphenyl Ethers (PBDEs). Running, INIOAS.

As Project Contributor:

Projects

- Feasibility study of Marine laboratory of Iranian National Center for Oceanography in determination of PCBs and PAHs in marine sediments, 2006, INIOAS.
- Access to technical knowledge and technology of electricity production from marine sediments, 2009.
- Determination of polycyclic aromatic hydrocarbons (PAHs) in sediment of Anzali Lagoon and their toxicity effects on the Angel Fish, 2009, INIOAS.
- Technical - economic investigation of production of sodium hypochlorite and replacing it with calcium hypochlorite in Desalinization plant of Kish Island, 2010, INIOAS.
- Study of macro algae oil in the Persian Gulf and the determination of its major constituents, 2011, INIOAS.
- Assessment of the environmental impact of algal bloom occurrence in sediments of the Kish and Garzeh using measure of organic carbon and organic matter in the above areas, 2011, INIOAS.
- Environmental Data Collection and Processing of Gulf of Oman, 2014, INIOAS.
- Data collection and processing of petroleum hydrocarbon contaminants in water, sediments and biota of Persian Gulf, 2012, INIOAS.
- Determination of polycyclic aromatic hydrocarbons in sediments of the intertidal zone of North Pars Special Economic Zone, 2012, INIOAS.

Book Chapters

- Mehdinia, A., Aziz Zanjani M.O., (2015) Solid-Phase Microextraction, Book Chapter, Analytical Separation Science, First Edition. Edited by Jared L. Anderson, Alain Berthod, Verónica Pino Estévez, and Apryll M. Stalcup. 2015 Wiley-VCH
- Mehdinia, A., Mehrabi, H. (2019) Application of nanomaterials for removal of environmental pollution, Book Chapter, Industerial Application of nanomaterials, Paperback ISBN: 9780128157497, Editors: Sabu Thomas Yves Grohens Yasir Beeran Pottathara, Elsevier.
- Mehdinia, A., Rostami, S., (2020), Green Synthesis of Plasmonic Metal Nanoparticles and Their Application as Environmental Sensors, Book Chapter, Nano sensor Technologies for Environmental Monitoring, Inamuddin • Abdullah M. Asiri Editors, Springer.

US patents

- Mehdinia, A., Bahrebar, S., (2019) Carbon Nanotube based microbial fuel cells and methods for generating an electric current, Patent No. US 10, 396, 387, B2, Date 27 Aug 2019.
- Bahrebar, S, Mehdinia, A., (2018) MICROBIAL FUEL CELLS AND METHODS FOR GENERATING AN ELECTRIC CURRENT, Patent No. US 10, 164, 282, B2, Date 25 Dec 2018.