

CURRICULUM VITAE

Dr. Ali Ehsani

Professor of Physical Chemistry (Electrochemistry)



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Scopus Author ID: 36139388000

Personal Information

Date of Birth: February 06, 1977

Place of Birth: Qom, Iran

Citizenship: Iran

Marital Status: Married

Job Position: Academic staff, Professor in Physical chemistry (Electrochemistry)

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Education

Ph.D. in Electrochemistry: K. N. Toosi University of Technology, Tehran, Iran, April. 2012.

Title: Electrosynthesis and electrochemical study of POAP and its relevant nanocomposite semiconducting films

M.Sc. in physical Chemistry: K. N. Toosi University of Technology, Tehran, Iran, November 2002.

B.Sc. in chemistry: Zanjan University, 1999.

Professional Experience

1. Teaching assistant (during Ph.D. program), General and surface Chemistry, K. N. Toosi University of Technology, Tehran, Iran, 2010-2012
2. Assistant Professor of physical Chemistry, University of Qom, Qom, Iran, 2012-2016.
3. Associate Professor of physical Chemistry, University of Qom, Qom, Iran, 2016-2020.
4. Full Professor of physical Chemistry, University of Qom, Qom, Iran, 2020-present

Courses Taught

1. Advanced physical Chemistry
2. Statistical Thermodynamics
3. Advanced chemical kinetics
4. Advanced electrochemistry
5. Solid state electrochemistry
6. Physical chemistry
7. Surface chemistry
8. Corrosion
9. Industrial electrochemistry
10. General Chemistry
11. General and physical Chemistry Laboratories

Current Research Interests

1. Surface chemistry and impedance spectroscopy
2. Fuel Cell (electrocatalyst)
3. Corrosion

4. Conductive polymer
5. Electrosynthesis
6. Nanocomposite
7. Anomalous diffusion and fractal object
8. Electrochemical capacitors
9. Battery
10. Semiconductor

Honors & Awards

- ✓ ***ISI (Web of Science) scientist (top 1%), Nov 2020 till now.***
- ✓ ***Scopus scientist (top 2%), Nov 2021 till now.***
- ✓ **Research Excellence Award in 2023, Iranian top researcher festival.**
- ✓ Distinguished researcher in Qom university, 20¹⁴, Awarded by the Director of the Qom university
- ✓ **Research Excellence Award in 2023, Qom Province**
- ✓ **Teaching (Distinguished Teacher) Excellence Award in 20¹³, University of Qom.**
- ✓ Distinguished researcher in Qom university, 20¹³, Awarded by the Director of the Qom university
- ✓ Distinguished researcher in Qom university, 20¹², Awarded by the Director of the Qom university

- ✓ Distinguished researcher in Qom university, 20۲1, Awarded by the Director of the Qom university
- ✓ Distinguished researcher in Qom university, 20۲۰, Awarded by the Director of the Qom university
- ✓ **Research Excellence Award in 20۲۰, Iranian Electrochemical Society.**
- ✓ **Research Excellence Award in 2019, Qom Province**
- ✓ Distinguished researcher in Qom university, 2019, Awarded by the Director of the Qom university.
- ✓ Distinguished researcher in Qom university, 201۸, Awarded by the Director of the Qom university.
- ✓ Distinguished teacher in Qom university, 2017, Awarded by the Director of the Qom university.
- ✓ Distinguished researcher in Qom university, 2016, Awarded by the Director of the Qom university.
- ✓ **Research Excellence Award in 2015, Qom Province**
- ✓ Distinguished researcher in Qom university, 2014, Awarded by the Director of the Qom university.
- ✓ Distinguished researcher in Qom university, 2013, Awarded by the Director of the Qom university.
- ✓ Selected as a best presentation in 7th Iran Fuel Cell seminar, March 2014, Awarded by His Excellency the chairman of the Seminar, Qeshm-Iran.
- ✓ Distinguished Ph.D. student in K. N. Toosi university of Technology, 2010, Awarded by the Director of the K. N. Toosi university of Technology.

- ✓ Distinguished electrochemistry Ph.D. Student in Iranian Electrochemical Society, 2011, Awarded by the Director of the Iranian electrochemical Society.
- ✓ First ranking Ph.D. student of chemistry, K. N. Toosi University of technology, 2012.
- ✓ Selected as a best presentation in 6th Iran electrochemistry seminar, ,August 2010, Awarded by His Excellency the chairman of the Seminar, Kish-Iran.
- ✓ -Selected as a best poster in 9th Iranian nano conference, March 2011, Awarded by His -Excellency the chairman of the Seminar, Amirkabir university of Technology-Iran.
- ✓ Selected as a best researcher and granted travel award by Romanian Society of Electrochemistry, 3th regional symposium of electrochemistry-East Europe, May-2012, Bucharest, Romania.

✓ **Selected as reviewer for the following International Scientific Journals**

- *Electrochimica Acta*
- *Journal of power sources*
- *Journal of Electroanalytical chemistry*
- *ACS Sustainable Chemistry & Engineering*
- *Synthetic Metals*
- *Material chemistry and physics*
- *Corrosion Science*
- *Journal of Industrial and Engineering Chemistry*
- *Electroanalysis*
- *Journal of Molecular Liquid*
- *Analyst*
- *Ionics*
- *Applied surface science*
- *Journal of Colloid and Interface Science*
- *Colloids and Surfaces A: Physicochemical and Engineering Aspects*
- *RSC Advances*

- *Jacobs Journal of Materials Science*
- *Research on chemical intermediates*
- *Materials Science and Engineering B*
- *Pharmaceutical Nanotechnology*
- *Nanochemistry Research*
- *African Journal of Pure and Applied Chemistry*
- *Iranian journal of Material Science and Engineering*
- *Chemistry International*
- *Journal of Alloy and Compound*
- *Journal of the Taiwan Institute of Chemical Engineers*
- *IEEE Sensors Journal*
- *Material @design*
- *Chemical Engineering Journal*
- *Journal of Adhesion Science and Technology*
- *The Journal of Physical Chemistry*
- *Plastics, Rubber and Composites: Macromolecular Engineering*
- *The Chemical Record*
- *Chem ElectroChem*
- *International Journal of Energy Research*
- *Advanced Ceramics Progress*
- *Journal of Physics and Chemistry of Solids*
- *ACS Omega*
- *ACS Applied Materials & Interfaces*
- *Journal of The Electrochemical Society*
- *Journal of Energy storage*
- *Journal of Molecular Structure*

- *Physical Chemistry C*
- *Ceramics International*
- *Surface and Coatings Technology*
- *Colloids and Surfaces A: Physicochemical and Engineering Aspects*
- *Journal of Physics and Chemistry of Solids*
- *Langmuir*
- *Solid state Science*
- *Scientific Report*
- *Inorganic Chemistry Communication*
- *Solid state Communication*

Membership

- ✓ International Society of Electrochemistry
- ✓ Iranian society of Electrochemistry
- ✓ Iranian Chemical Society

Thesis Supervised (MSc): 85 thesis

Theses Supervised and Advised (Ph.D):

1. M. Dashti Najafi, *Amirkabir University of Technology* (Ph.D)
2. F. Boorboor Ajdari, *Amirkabir University of Technology* (Ph.D)
3. M. Shahrivari, *Kharazmi University* (Ph.D)
4. M. Naseri, *Alzara University* (Ph.D)
5. M. Bigdeloo, *Amirkabir University of Technology*(Ph.D)
6. S. Sadeghi. *PayameNoor University* (Ph.D)
7. Atefeh Omid, *Kashan University*(Ph.D)
8. Samira Doostikhah, *Kashsn university* (Ph.D)

International M.SC student:

12 students from Iraq

Postdoctoral Researcher:

Mahdieh Korepazane Moftakhar (2019-2020).

Monireh Atarod (Sep 2021- Sep 2022)

Zahra Rezaei (February 2022-Febuarary 2023)

S. Mahdi Atashzar (Sep 2023- Sep 2024).

M. Dashti Najafi (Feb 2025-Feb 2026)

Tahereh Molaei (March 2025-2026)

Editor in Chief:

Advances in energy and materials journal

Published Book:

✓ ***Graphene Surfaces: particles and catalyst, Elsevier, 2018.***

- ✓ *Electrochemistry and corrosion science, 2019.*
- ✓ *Analytical Microextraction Techniques, 2020.*
- ✓ *Electrochemical Supercapacitors, 2020.*
- ✓ *The troubleshooting and maintenance Guide for gas chromatographers(2023)*

List of ISI Publications

206) Amirhossein Andooz, **Ali Ehsani**, Mehdi Nabatian, Sadegh Rastegar, Zahra Ansari Cheshmeh, Synergistic integration of Nickel-Mercaptobenzothiazole functionalized graphene oxide with vanadium MXenes for a high-performance supercapacitor electrode, *Journal of Energy Storage*, 149 (2026)120467.

205) Suha Kadhim Owayez, Mohammad Bigdeloo, , Atefeh Omidi-Dargahi,Hamid Mohammad Shiri, **Ali Ehsani**, Facile synthesis, sustainability, and remarkable electrochemical performance of FGO (4, 4-diaminobenzophenone)/Co-MOF as electrode in symmetric supercapacitor, *Synthetic Metals* 319 (2026) 118184.

204) Nastaran Sadat Ghaemi, Mahboubeh Amiri, Mojtaba Moharramnejad, Sahar Yarahmadi, Javad Nabavi, Mahdi Kahvand, Mehrnaz Shahi, **Ali Ehsani**, A review of recent developments of biopolymers as combined biomedical platforms over the past decade, *Polymer Bulletin* (2026) 83:559. <https://doi.org/10.1007/s00289-026-06613-0>.

203) Mohammad Saadat, Alireza Iravani, Amir Karim, Mohsen Ramazanzade Mohammadi, Mojtaba Moharramnejad, Rahime Eshaghi Malekshah, Mehrnaz Shahi, **Ali Ehsani**, Keggin-Type POMs Immobilized on Fe₃O₄@SiO₂ as Efficient Catalysts for Oxidative Desulfurization: Experimental and Monte Carlo Studies. *Top Catal* (2026). [tps://doi.org/10.1007/s11244-025-02258-x](https://doi.org/10.1007/s11244-025-02258-x).

202) **Ali Ehsani**, and Mohammad Bigdeloo, Conjugated polymer-based nanocomposites for supercapacitor application **Book chapter**. DOI: <https://doi.org/10.1016/B978-0-443-29011-4.00019-5>.

201) Samira Doostikhah, Mehdi Shabani-Nooshabadi, **Ali Ehsani**, Vanadium organic framework, bioactive carbon and imidazolium-based ionic liquid nanocomposite: synthesis and efficient electrode materials for electrochemical supercapacitors, *Diamond and Related Materials*, 161(2026)113086. <https://doi.org/10.1016/j.diamond.2025.113086>.

200) Reza Sheikhhakbari-Mehr, Seyyed Mahdi Atashzar, **Ali Ehsani**, Mohammad Reza Tabrizi Amjad, Macrocyclic plant extract (*Oenothera biennis* L.) as an effective green corrosion inhibitor for aluminum surface: a computational (QTAIM calculations) and electrochemical investigation , *Journal of Molecular Liquids* 439 (2025) 128794, <https://doi.org/10.1016/j.molliq.2025.128794>.

199) Maryam Khayatkashani, Safaa Abdulkadhim Almansarawi, Ebrahim Honarmand, Fateme Sadat Sadeghi, **Ali Ehsani**, Layth S. Jasim and Masoud Salavati-Niasari, Electrochemical detection of chlorogenic acid in green coffee beans by a carbon paste electrode modified with MWCNTs and Cr-MOF, *RSC Adv*, 15(2025) 41314. DOI <https://doi.org/10.1039/D5RA05186J>.

198) Ali Farzaneh, Mohammadreza Babazadeh, **Ali Ehsani**, Hossein Ganjidoust, Mojtaba Hadi , Batch experimental studies on Acid Blue 25 dye removal by synthesized chitosan containing sodium alginate and halloysite nanotubes, *Scientific Reports* 15 (2025) 32718. <https://doi.org/10.1038/s41598-025-17781-w>

197) Mohammad Reza Tabrizi Amjad , Suha Kadhim Owayez , **Ali Ehsani**, Hassan Zandi Recent advances in conventional and AI-assisted electrochemical biosensing systems for Cancer and disease diagnostics: Nanomaterials and real-time health monitoring, *Microchemical Journal*, 217 (2025) 114999. <https://doi.org/10.1016/j.microc.2025.114999>

196) Atefeh Omid-Dargahi, Mohammad Reza Saadati-Gullojeh, Mohammad Bigdeloo, Hamid Mohammad Shiri, Ali Ehsani, Electrochemical measurement and preparation of MnCo₂O₄/g-C₃N₄/POAP nanocomposite and its performance as a supercapacitor electrode, *Inorganic Chemistry Communications*, 180(2025)114877. <https://doi.org/10.1016/j.inoche.2025.114877>.

195) Peyman Khodaei kahriz, Ali Akbar Heidari, **Ali Ehsani**, Hossein Mahdavi, Khalil Farhadi, Mohammad Bigdeloo, Phenylenediamine and 4,4'-methylenedianiline functionalized rGO as high-performance materials for improving pseudocapacitance performance and cyclic stability of conductive polymer *Synth Met*, 312(2025)117880.

194) Mohammad Reza Saadati-Gullojeh, Mojgan Ghanbari, **Ali Ehsani**, Forat H. Alsultany, Hadil Hussain Hamza, Masoud Salavati-Niasari, Pechini synthesis and characterization of Ni₃TiO₅/NiTiO₃ nanocomposites and their application as nano-photocatalyst for degradation of water-soluble organic pollutants under visible light, *Surface Interface*, 66(2025) 106604.

193) Sajjad Gharanli, Azar Gharib, Mojtaba Moharramnejad, Amir Karim, Rahimeh Eshaghi Malekshah, Farideh Karimi, **Ali Ehsani**, Taraneh Sayah, Mehrnaz Shahi, Zahra Ghehsareh, Sodio C.N. Hsu, Environmentally friendly nickel-based nanocomposites for energy storage: A review of supercapacitor and battery-type mechanisms. *Journal of Energy Storage*, 122 (2025) 116509.

192) Somayeh Jafari, Mohammad Dashti Najafi, **Ali Ehsani**, Hanieh Pourjafar, Zahra Zahedi, Masoud Jamal Yousefi, Ternary layer MOF-on-MOF (Bi-V-Bi) immobilized on graphene oxide as advanced and most efficient electrode materials in supercapacitors application, *Journal of Energy Storage* 122 (2025) 116684.

191) Atefeh Omid-Dargahi, Mohammad Bigdeloo, **Ali Ehsani**, Mohammad Ali Bigdeloo, Enhancing electrochemical energy storage performance of graphene oxide with 1,5-naphthalene diamine in supercapacitors application, *Synthetic Metals*, 312 (2025) 117855.

190) Zahra Rezaei, **Ali Ehsani**, Seyyed Mahdi Atashzar, Mohammad Reza Tabrizi Amjad, Mixed metal organic frameworks (Zn-Mn-BTC) as a highly efficient material to improve pseudocapacitance performance of conductive polymer: Computational and electrochemical investigation, *Materials Research Bulletin* 187 (2025) 113379.

189) Zahra Ghehsareh, Taraneh Sayah, Mojtaba Moharramnejad, Amin Rahimitabar, **Ali Ehsani**, Green guardians: A comprehensive review of environmentally friendly corrosion inhibitors from plant extract to ionic-liquids in industrial applications, *Progress in Organic Coatings*, 201 (2025) 109146.

188) Zahra Ghehsareh, Taraneh Sayah, Mojtaba Moharramnejad, Amin Rahimitabar, Ali Hossein Amini, Mehrnaz Shahi, Naeimeh Shahrestani, **Ali Ehsani**, Charging the future: The revolution of covalent organic frameworks in the path to batteries and supercapacitors, *Journal of Energy Storage*, 114 (2025) 115746.

187) Somayeh Jafari, Seied Mahdi Pourmortazavi, **Ali Ehsani**, Hamed Zandavar, Somayeh Mirsadeghi, Fe₃O₄-Cu-BTC/MWCNTs modified electrodes for real-time chlorine monitoring in aqueous solution, *Microchim Acta* **192**, 117 (2025). <https://doi.org/10.1007/s00604-025-06969-6>.

186) Mohammad Reza Saadati-Gullojeh, Masoud Salavati-Niasari, Mojgan Ghanbari, **Ali Ehsani**; Supercapacitor, electrochemical measurement and sun light driven nano-photocatalytic applications of Co₂TiO₄/CoTiO₃ nanocomposites synthesized from Pechini sol-gel method, *Results in Engineering*, 25(2025)103846.

185) Mojtaba Moharramnejad, Amir Karim , Sajjad Gharanli, Rahime Eshaghi Malekshah, Ali hossein Amini, Mohammad Saber Sharifi, Zahra Salmanivand Basmenj, Zahra Salariyeh, Maliheh Mohammadkhani, Mehrnaz Shahi, Maryam Nasr Azadani, Sona Tabaghchi, Mohammad Saadat, **Ali Ehsani**, Jebiti Haribabu, Sodio C.N. Hsu, *Microchemical Journal* 208 (2025) 112498

184) Akram Hosseinian, Mohammad Bigdeloo, Ali Ehsani, Mojtaba Moharramnejad2, Electrochemical performance of the bithiazole- based electrode in supercapacitor system, *J Mater Sci: Mater Electron* (2024) 35:2118.

183) Samira Doostikhah, Mehdi Shabani-Nooshabadi, **Ali Ehsani**, Mohammad Bigdeloo, Electropolymerization of an Ultra-thin Film on bimetallic nanocomposite:Enhanced performance, perfect stability for supercapacitors, *Materials Research Bulletin*, 2025 (183) 113211.

182) Mojtaba Moharramnejad, Taraneh Sayah, , Zahra Ghehsareh, Mahsa Mohammad Rezaei, Farideh karimi, Ali hossein Amini, Rahime Eshaghi Malekshah, Mehrnaz Shahi, Babak Mirtamizdoust, **Ali Ehsani**, Jebiti Haribabu, Sodio C.N. Hsu, *Journal of Drug Delivery Science and Technology*, 102 (2024) 106320.

181) Mostafa Kiamehr, Elahesadat Miri, **Ali Ehsan**, Green Synthesis of Azodicarbonamide (ADCA) Foaming Agent via Electrosynthesis of Hydrazodicarbonamide (Biurea), **Organic Chemistry Research** 10(1) (2024) 67-69.

180) Mohammad Bigdeloo, **Ali Ehsani**, Esrafil Asgari, Hassan Alamgholiloo, Designing of SiO₂ immobilized Co-based from ZIF-67 for high-performance supercapacitors, *Inorganic Chemistry Communications* 170 (2024) 113321.

179) Somayeh Jafari, Seied Mahdi Pourmortazavi, **Ali Ehsani**, Somayeh Mirsadeghi, CuO- ZIF- 8 modified electrode surface as a new electrochemical sensing platform for detection of free chlorine in aqueous solution, *Scientific Reports*, 14 (2024) 18961.

178) M Hadi, M Khonjouki, H Mostaanazadeh, **A Ehsani**, Electrocatalytic Oxidation of Ethylene Glycol on Metal-Organic Framework (Ni-BTC)/Multi-Walled Carbon Nanotubes Composite Electrode, *Analytical and Bioanalytical Electrochemistry* 16 (7), 671-682.

177) Mohammad Dashti Najafi, **Ali Ehsani**, Mehdi Nabatian, Zainab Hamza, Nariman Neekzad, Advanced supercapacitor electrodes: Synthesis and electrochemical characterization of graphene oxide-bismuth metal-organic framework composites for superior performance, *Electrochimica Acta*, 498 (2024) 144636

176) **Ali Ehsani**, Fatemeh Soltani, Mehdi Kalhor, Amirhossein Andooz, Mohammad Dashti Najafi, Mehdi Nabatian, Enhanced pseudocapacitance performance of conductive polymer in the presence of synthesized mesoporous MnO₂@Zeolite-Y, *Electrochimica Acta* 491 (2024) 144301 .

175) Sajjad Gharanli, Rahime Eshaghi Malekshah, Mojtaba Moharramnejad, **Ali Ehsani**, Mehrnaz Shahi, Ali Hassani Joshaghani, Ali hossein Amini, Jebiti Haribabu, Erman Salih ISTIFLI, Firoozeh Kavosh Tehrani ,

Recent progress in designing heterogeneous COFs with the photocatalytic performance, *Molecular Catalysis* 560 (2024) 114127.

174) Mohammad Bigdeloo, **Ali Ehsani**, Sara Sarabadani, Hamid Mohammad Shiri, Recent advances in utilizing graphene-based materials for flexible supercapacitor electrodes, *Journal of Energy Storage* 80 (2024) 110242.

173) Atefeh Omid-Dargahi, Hossein Dehghani, **Ali Ehsani**, Electrochemical performance of NiCo₂O₄/functionalized graphene oxide with phenylalanine and tryptophane as efficient electrodes to enhance capacitance properties in supercapacitors, *Journal of Energy Storage*, 76 (2024) 109824.

172) Somayeh Jafari, Seied Mahdi Pourmortazavi, **Ali Ehsani**, Somayeh Mirsadeghi, Cobalt-based metal-organic framework-functionalized graphene oxide modified electrode as a new electrochemical sensing platform for detection of free chlorine in aqueous solution, *Analytical Biochemistry*, 681(2023)115334. doi: 10.1016/j.ab.2023.115334.

171) Mojtaba Moharramnejad, **Ali Ehsani**, Mehrnaz Shahi, Sajjad Gharanli, Hossein Saremi, Rahime Eshaghi Malekshah, Zahra Salmanivand Basmenj, Saba Salmani, Mohammad Mohammadi, MOF as nanoscale drug delivery devices: Synthesis and recent progress in biomedical applications, *Journal of Drug Delivery Science and Technology*, 81(2023)104285.

170) Mojtaba Moharramnejad, Mohammadreza Babazadeh, **Ali Ehsani**, SM. Mahdian, MOF-derived carbon and transition metals as high efficient electrocatalysts and active materials in energy storage devices: An introduction and review to it in recent studies, *Inorganic and Nano-metal chemistry*, 55(2025)273-306.

169) Rahime Eshaghi Malekshah, Mojtaba Moharramnejad, Sajjad Gharanli, Mehrnaz Shahi, **Ali Ehsani**, Jebiti Haribabu, Hassan Ouachtak, Babak Mirtamizdoust,* Khanita Kamwilaisak, Mika Sillanp Hadi Erfani, MOFs as Versatile Catalysts: Synthesis Strategies and Applications in Value-Added Compound Production, *ACS Omega* 8(2023) 31600–31619.

168) **A. Ehsani**, M. Moftakhar, Enhanced electrochemical pseudocapacitance performance of poly tyramine composite on the surface of polyethylene glycol modified electrode, *Plastics, Rubber and Composites*, Volume 52 (7) (2023)415-419.

167) **Ali Ehsani**, Zahra Rezaei, Seyyed Mahdi Atashzar, Fatemeh Soltani, Optimized geometric structure of Zn-BTC/POAP and Fe-BTC/POAP systems as electroactive materials in pseudocapacitors, *Journal of Energy Storage* 70 (2023) 108058.

166) Mahdi Sanavi Fard, **Ali Ehsani**, Fariba Soleimani, Treatment of synthetic textile wastewater containing Acid Red 182 by electro-Peroxone process using RSM, *Journal of Environmental Management* 344 (2023) 118379.

165) Hamidreza Parsimehr, Parya Kazemzadeh, **Ali Ehsani**, Waste-to-Wealth: Wheat-Based Porous Electrodes for Electrochemical Energy Storage Devices, *ECS Advances*, 2(2023) 020503.

164) Mojtaba Moharramnejad, Rahime Eshaghi Malekshah, Zahra Salariyeh, Hossein Saremi, Mehrnaz Shahi, **Ali Ehsani**, The synthetic strategies of COFs, for drug delivery, photo/sono-dynamic, photo/microwave thermal and combined therapy, *Inorganic Chemistry Communications*, 153 (2023) 110888.

163) Mojtaba Moharramnejad,b, Rahime Eshaghi Malekshah, **Ali Ehsani**, Sajjad Gharanli, Mehrnaz Shahi, Saeed Alvani Alvan, Zahra Salariyeh, Maryam Nasr Azadani, Jebiti Haribabu, Zahra Salmanivand Basmenj, Ali Khaleghian, Hossein Saremi, Zahra Hassani, Elham Momeni, *Advances in Colloid and Interface Science*, *Advances in Colloid and Interface Science* , 316 (2023) 102908.

162) Mojtaba Moharramnejad, **Ali Ehsani**, Rahime Eshaghi Malekshah, Mehrnaz Shahi, Hamidreza Haghighi Qezelje, Mehrban Nekoeifard, Elham Azarash, and Hamidreza Parsimehr ,Cobalt-based electroactive compounds: synthesis and their electrochemical and pseudocapacitance performance, *J Mater Sci: Mater Electron* (2023) 34:499.

161) Mohammad Bigdeloo, Elaheh Kowsari, **Ali Ehsani**, Seeram Ramakrishna, Amutha Chinnappan, Activated carbon derived from fennel flower waste as high-efficient sustainable materials for improving cycle stability and capacitance performance of electroactive nanocomposite of conductive polymer, *Journal of Energy Storage*, 55 (2022) 105793.

160) Maryam Abasi Ashlagi, Behrouz Akbari-Adergani, **Ali Ehsani**, Elahe Kosari, Malak Hekmati,

Synthesizing of graphene oxide with 6-amino-2, 2'-bipyridine for designing a nanosensor to determine the heavy metal ions, *Journal of applied research in chemistry*, 16 (2)(2022).... doi: 10.30495/jacr.2022.1945657.1990

159) Mojtaba Moharramnejad, **Ali Ehsani**, Rahime Eshaghi Malekshah, Mehrnaz Shahi, Razieh Bavandpour, Hamidreza Rajabi, Seyyed Mohammadreza Mojab, Electrochemical pseudocapacitors of different compounds and nanocomposite of manganese: an introduction and review to it in recent studies, *J Mater Sci: Mater Electron*, 2022. Accepted.

158) **A. Ehsani**, M. K. Moftakhar, M. Kalhor, Mesoporous ionic liquid functionalized nanozeolite: synthesis and high efficient material to improving pseudocapacitance performance of conductive polymer *Journal of Energy Storage*, 55 A(2022) 105489.

157) **A. Ehsani**, E. Kamali Ardakani, Natural Essential Oil Compounds as Green and Excellent Corrosion Inhibitors in Different Corrosive Media: A Mini Review, *Journal of Bio- and Tribo-Corrosion*, 8(2022) 93. <https://doi.org/10.1007/s40735-022-00692-y>.

156) Hassan Alamgholiloo, Shahram Nazari, Esrafil Asgari, Amir Sheikhmohammadi, Bayram Hashemzadeh, Naser Ghasemian, Mohammad Bigdeloo, **Ali Ehsani**, Facile fabrication of Z-scheme TiO₂/ZnO@MCM-41 heterojunctions nanostructures for photodegradation and bioactivity performance, *Journal of Molecular Liquids* 364 (2022) 119990.

155) H. parsimehr, **Ali Ehsani**, Stimuli-Responsive Electrochemical Energy Storage Devices, , *The Chemical record*, 2022, Accepted. <https://doi.org/10.1002/tcr.202200075>.

154) Mojtaba Moharramnejad, Ali Ehsani, Saba salmani, Mehrnaz shahi, Rahime Eshaghi Malekshah, Zahra Sadat Robotjazi, Hamidreza Parsimehr, Zinc-based metal-organic frameworks: Synthesis and recent progress in biomedical application, *Journal of Inorganic and Organometallic Polymers and Materials*, Accepted.

- 153) **Ali Ehsani**, Mohammad Bigdeloo, Hassan Alamgholiloo, , Esrafil Asgari, Amir Sheikhmohammadi, Shahram Nazari, Bayram Hashemzadeh, Naser Ghasemian, Ternary nanocomposite of TiO₂-ZnO/MCM-41: synthesis and electrochemical performance in supercapacitors, *Journal of Energy Storage* 50 (2022) 104633.
- 152) Mohammad Bigdeloo, Elaheh Kowsari, **Ali Ehsani**, Amutha Chinnappan, Seeram Ramakrishna, Functionalized graphene oxide/activated carbon from canola waste as sustainable nanomaterials to improve pseudocapacitance performance of the electroactive conductive polymer, *Journal of Energy Storage* 50 (2022) 104279.
- 151) Mohammadreza Babazadeh, Milad Irannezhad, Hossein Abolghasemi, Seyed Behzad Hosseiniyan, **Ali Ehsani**, 3D mathematical modeling of external mass transfer effect in high-rate adsorption process, *Surfaces and Interfaces*, 29 (2022) 101771. <https://doi.org/10.1016/j.surfin.2022.101771>.
- 150) Navid Rabiee a,b, Monireh Atarod, Maryam Tavakolizadeh, Shadi Asgari, Mohsen Rezaei, Omid Akhavan, Ali Pourjavadi, Maryam Jouyandeh, Eder C. Lima f, Amin Hamed Mashhadzadeh, **Ali Ehsani**, Sepideh Ahmadi, Mohammad Reza Saeb, Green metal-organic frameworks (MOFs) for biomedical applications, *Microporous and Mesoporous Materials*, 2022, 111670.
- 149) Hamid Mohammad Shiri, Saeb Sadeghi, Reza Safari, **Ali Ehsani**, Hamid Reza brahimi, Hamid Hadi , Characterization of Electro Synthesized Perovskites Structured Ybmno₃ Nanoparticles, *New Process in Material Engineering*, 2021, 15(4), 41-50.
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