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Education

- ✓ B.Sc, Applied Chemistry, University of Kashan - 2003
- ✓ MS, Analytical Chemistry, Arak University - 2007
- ✓ PhD, Analytical Chemistry, University of Kashan - 2013
- ✓ PhD, Analytical Chemistry, University of Kashan - 2013

Courses

- | | |
|---|---|
| 1. General Chemistry1 | 2. General Chemistry 2 |
| 3. Analytical Chemistry 2 | 4. general chemistry |
| 5. analytical chemistry | 6. methods of physicochemical separation |
| 7. Analytical Electrochemistry 1 | 8. Analytical Chemistry 1 |
| 9. Analytical molecular spectroscopy | 10. Analytical Nanochemistry |
| 11. New electrochemical procedures | 12. methods of surface analysis and nano structures |
| 13. Nanoelectrochemistry | 14. Nanomaterials in Sensors and Biosensors |
| 15. Methods of Surface Analysis and Nano Structures | 16. Analytical Electrochemistry2 |
| 17. Application of Nanomaterials in Separation and Extraction | 18. New methods of drug and food analysis |
| 19. Advanced analytical spectroscopy | 20. Industrial electro chemical |

Thesis

Master Thesis

1. Green synthesis of nanostructured new compounds using *Maclura pomifera* extract for electrochemical study and sensitive analysis of methylparaben in real samples

نازنین سنگري, [Asma Khoobi]

نیمسال دوم سال تحصیلی 1404-1405

2. Design of a nanostructured electrochemical green sensor for the detection of bisphenol A in food, biological and environmental samples using the ability of chemometric methods

زهرا بادغن, [Asma Khoobi]

نیمسال اول سال تحصیلی 1404-1405

3. Application of multivariate optimization methods in green synthesis of nanostructured compounds as new electrocatalysts in fuel cells

هانیه برقي جهرمي, [Asma Khoobi, Mashaallah Rahmani, Mojtaba Lashkari]

نیمسال اول سال تحصیلی 1404-1405

4. Synthesis and characterization of metal oxide-based nanostructures by green method as new catalytic materials in electrochemical hydrogen storage

نرگس دوستي, [Asma Khoobi]

نیمسال دوم سال تحصیلی 1403-1404

5. Green synthesis of nanostructured compounds as new nanocatalysts in electrochemical energy storage

مهرگان گنجي, [Asma Khoobi, Mashaallah Rahmani, Niloufar Akbarzadeh- Torbati, Khatereh Abdi]

نیمسال اول سال تحصیلی 1403-1404

6. "Designing of new electrode materials based on nanostructured compounds for energy storage"

مهدي اکبري, [Asma Khoobi]

نیمسال اول سال تحصیلی 1403-1404

7. The use of visible-near-infrared hyperspectral imaging along with machine learning methods in order to detect food fraud and authenticity, as well as the development of new methods of hyperspectral da

صادق صیدنواز, [Asma Khoobi, Nematollah Omidikia]

نیمسال اول سال تحصیلی 1403-1402

8. Preparation and application of modified metal-organic frameworks with different functional groups as new nanostructured adsorbents for extraction, pre-concentration and measurement of trace amounts of

مرضيه شريفی راد, [Asma Khoobi, , Massoud Kaykhaii, , Ebrahim Mollashahi, Mashaallah Rahmani]

نیمسال اول سال تحصیلی 1403-1402

9. Designing a nanostructured electrochemical sensor using natural compounds for analysis of some antioxidants in real samples

فائزه ستوده ملاشاهي, [Asma Khoobi, Mashaallah Rahmani, , Alireza Nowroozii]

نیمسال دوم سال تحصیلی 1401

10. "Synthesis and characterization of nanostructured compounds as new electrode materials in hydrogen storage and electrochemical supercapacitors"

زهرا کردي تمنداني, [Asma Khoobi, Mahdi Shabani nooshabadi, Haniye Ansarinezhad, Mashaallah Rahmani, Zahra Yavari, Maryam Shateriyan, Nasrin Soltani]

نیمسال دوم سال تحصیلی 1401

11. Preparation and application of modified metal-organic frameworks with different functional groups as new nanostructured adsorbents for extraction, pre-concentration and measurement of trace amounts of

مرضيه شريفی راد, [Asma Khoobi, , Massoud Kaykhaii, , Mashaallah Rahmani, Ebrahim Mollashahi]

نیمسال دوم سال تحصیلی 1401

12. Preparation of an electrochemical nanostructured modified sensor using green chemistry for analysis of pollutants in real samples using multivariate optimization method

شریفه هرمزی جنگی, [Asma Khoobi, , Mashaallah Rahmani, Ebrahim Mollashahi]

نیمسال دوم سال تحصیلی 1401

13. Preparation and application of modified metal-organic frameworks with different functional groups as new nanostructured adsorbents for extraction, pre-concentration and measurement of trace amounts of

مرضيه شريفی راد, [Asma Khoobi, , Massoud Kaykhaii, , , Ebrahim Mollashahi]

نیمسال اول سال تحصیلی 1401-1402

14. Preparation and application of modified metal-organic frameworks with different functional groups as new nanostructured adsorbents for extraction, pre-concentration and measurement of trace amounts of

مرضيه شريفی راد, [Asma Khoobi, , Massoud Kaykhaii, , Mashaallah Rahmani, Ebrahim Mollashahi]

نیمسال اول سال تحصیلی 1401-1402

15. Synthesis of dysprosium nanostructures using natural compounds to preparation of a new electrochemical sensor for analysis of levetiracetam in the presence of mefenamic acid

محمد باقری, [Asma Khoobi, Mashaallah Rahmani, , Alireza Nowroozi]

نیمسال دوم سال تحصیلی 00-01

16. Green synthesis of holmium nanostructures for determination of levofloxacin, prednisolone and paracetamol: Electrochemical study of some Covid 19 drugs in human blood plasma samples

محمد ابراهیمی پارسا, [Asma Khoobi, , Mashaallah Rahmani, Ebrahim Mollashahi]

نیمسال اول سال تحصیلی 00-01

Journals Papers

2027

1. Halloysite-Based Nanostructures as Efficient Materials for Hydrogen Storage

Mehregan Ganji, Asma Khoobi

advanced journal of chemistry-section b: natural products and medical chemistry Volume: (9) 1 - 13

2026

2. Multivariate optimization strategy for designing a green nanostructured electrocatalyst toward voltammetric oxidation of a non-steroidal anti-inflammatory drug: environmental and biological studies

Mohammad Bagheri, Asma Khoobi

Applied Water Science Volume: (16) 1 - 8

3. The Role of Green Electrode Materials and Multivariate Optimization Methods in Nanostructured Fuel Cells

Hanieh Barghi jahromi, Asma Khoobi

advanced journal of chemistry-section b: natural products and medical chemistry Volume: (8) 361 - 384

4. Investigating the Introduction of Nanocomposites Based on Carbon Nanotubes and Polymer Materials in the Field of Glucose Determination

Hanieh Barghi jahromi, Asma Khoobi

Volume: (35) 124 - 145

2025

5. The promoted photodegradation of mixture of textile dyes under visible-light using CdS-SiO₂-TiO₂/TiO₂ nanotube arrays heterojunction - Studying photocatalyst properties and determinants influencing efficiency

Maryam Karimi-Shamsabadi, Mohsen Behpour, Asma Khoobi

Journal of Water Process Engineering Volume: (70) 1 - 20

6. Energy efficiency enhancement of ethanol electrooxidation based on zinc molybdate nanostructures in direct fuel cells

Asma Khoobi

Sensing and Bio-Sensing Research Volume: (47) 1 - 8

7. Porous Nanostructured Compounds in Voltammetric Measurement of Heart Drugs

Kiarash Kateb dahmardeh, Asma Khoobi, MOHAMMAD AMIN GAZORY

Volume: (23) 23 - 51

8. اندازه گیری های کروماتوگرافی داروهای ضدصرع با استفاده از جاذب های نانوساختار

MOHAMMAD AMIN GAZORY, Asma Khoobi, Kiarash Kateb dahmardeh

Volume: (24) 121 - 148

9. Designing an Electrochemical Sensor Based on Ferrite Nanostructures for Analysis of Heavy Metal Mercury Ions in Agricultural Sources from Saffron to Soil Samples

Asma Khoobi, Sharifeh Hormozi jangi

JOURNAL OF THE ELECTROCHEMICAL SOCIETY Volume: (172) 1 - 6

10. Highly selective solid phase extraction of clonazepam from water using a urea modified MOF prior to HPLC analysis

Marzieh Sharifirad, Asma Khoobi, Mostafa Khajeh, Massoud Kaykhaii, Ali Reza Oveisi

Scientific Reports Volume: (15) 1 - 18

11. Green simple synthesis and characterization of cerium nanostructures: Investigation of the extract effect on the nanostructures properties

Zahra Kordi tamandani, Asma Khoobi, Mehdi Shabani-Nooshabadi, Hanieh Ansarinejad4

Challenges in Nano and Micro Scale Science and Technology Volume: (13) 51 - 54

2024

12. Synthesis of a novel $\text{HoFeO}_3/\text{Ho}_3\text{Fe}_5\text{O}_{12}$ nanoadsorbent for efficient absorption of ciprofloxacin from liquid-phase: Modeling and optimization using response surface methodology

Faezeh Ghadami, Movlud Valian, Fatemeh Atoof, Abrar Ryadh, Asma Khoobi, Mohammad Bagher Miranzadeh,

JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY Volume: (129) 143 - 157

13. Multivariate Optimization for Synthesis of Zinc Ferrite Nanostructures and Investigation of Their Electrocatalytic Properties in Detection of Tyrosine

Asma Khoobi

Volume: (22) 49 - 64

14. Detection of cadmium heavy metal ions using a nanostructured green sensor in food, biological and environmental samples

Sharifeh Hormozi jangi, Asma Khoobi

FOOD CHEMISTRY Volume: (458) 140307-1 - 140307-7

2023

15. A green approach: Eco-friendly synthesis of $\text{Gd}_2\text{Ti}_2\text{O}_7/\text{N-GQD}$ nanocomposite and photo-degradation and electrochemical measurement of hydroxychloroquine as a perdurable drug

Movlud Valian, Faezeh Soofivand, Asma Khoobi, Qahtan A. Yousif, Masoud Salavati-Niasari

Arabian Journal of Chemistry Volume: (16) 104401-1 - 104401-19

16. Electrochemical study for simultaneous detection of procaine hydrochloride and its metabolite in biological samples using a nanostructured strong sensor

Farzaneh Haghighian, Sayed Mehdi Ghoreishi, Abdolmohammad Attaran, Fahimeh Zeraatkar Kashani, Asma K
KOREAN JOURNAL OF CHEMICAL ENGINEERING Volume: (40) 650 - 656

17. Optimization of arsenic detection conditions using copper ferrite nanocomposite in aqueous medium via response surface methodology

Faezeh Parsayi, Asma Khoobi, Fatemeh Atoof, Rozita Monsef, Faezeh Ghadamy, Davarkhah Rabbani
MEASUREMENT Volume: (221) 113466-1 - 113466-9

18. Detection of copper(II) using a nanostructured modified electrode in biological samples

Sharifeh Hormozi jangi, Asma Khoobi
Challenges in Nano and Micro Scale Science and Technology Volume: (11) 11 - 17

19. Nanostructured Sensors Based on Carbon Nanotubes for Electrochemical Analysis of Cadmium in Food Samples

Asma Khoobi
Challenges in Nano and Micro Scale Science and Technology Volume: (11) 33 - 39

2022

20. Synthesis, characterization and electrochemical sensors application of Tb₂Ti₂O₇ nanoparticle modified carbon paste electrode for the sensing of mefenamic acid drug in biological samples and pharmaceutical industry wastewater

Movlud Valian, Asma Khoobi, Masoud Salavati-Niasari
TALANTA Volume: (247) 123593-1 - 123593-13

21. Synthesis and characterization of HoVO₄/CuO nanocomposites for photodegradation of methyl violet

Mohammad Hossein Khorasanizadeh, Morteza Hajizadeh-Oghaz, Asma Khoobi, Safaa H. Ganduh, Makarim A. M
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY Volume: (47) 20112 - 20128

22. Designing of potential materials for solar-hydro electricity generation: Preparation of novel nano-structured films via thermodiffusion and polymerization methods

Morteza Enhessari, Asma Khoobi, Ali Salehabadi, Keyvan Ozaee
INTERNATIONAL JOURNAL OF ENERGY RESEARCH Volume: (46) 16416 - 16426

2021

23. A Potential Strategy for Simultaneous Determination of Deferoxamine and Vitamin C Using MCR-ALS with Nanostructured Electrochemical Sensor in Serum and Urine of Thalassemia and Diabetic Patients

Rozhin Darabi, Mehdi Shabani-Nooshabadi, Asma Khoobi

JOURNAL OF THE ELECTROCHEMICAL SOCIETY Volume: (168) 046514-1 - 046514-8

24. Preparation of magnetic Co₃O₄/TiO₂ nanocomposite as solid-phase microextraction fiber coupled with chromatography for detection of aromatic compounds in environmental samples

Awat Ali Pouramjad, Hossein Khojasteh, Omid Amiri, Asma Khoobi, Masoud Salavati-Niasari

Arabian Journal of Chemistry Volume: (14) 103262-1 - 103262-11

25. An eco-friendly and simple sol-gel autocombustion method for synthesis of copper hexaferrite nanostructures: characterization and photocatalytic activity for elimination of water contaminations

Fateme Sanatkar, Asma Khoobi, Masoud Salavati-Niasari

ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH Volume: (28) 10791 - 10803

26. Sol-gel auto-combustion synthesis and characterization of ZnFe₂O₄ as a nanosorbent using fructose for HPLC-UV determination of betaxolol in biological samples

Asma Khoobi, Masoud Salavati-Niasari, Omid Amiri

JOURNAL OF ALLOYS AND COMPOUNDS Volume: (853) 157393-1 - 157393-11

27. Ultrasonic synthesis and characterization of SnFe₂O₄/GO nanocomposite: Application of multivariate optimization in magnetic solid-phase extraction

Asma Khoobi, Masoud Salavati-Niasari, Omid Amiri

JOURNAL OF ALLOYS AND COMPOUNDS Volume: (858) 157745-1 - 157745-16

Conferences Papers

2025

1. Graphene-based nanosorbents in solid-phase extraction of cadmium ions

Hanieh Barghi jahromi, Asma Khoobi, Kiarash Kateb dahmardeh

2. Green synthesis of graphitic carbon nitride based nanostructures for photocatalytic applications

Hanieh Barghi jahromi, Asma Khoobi

3. Multivariate optimization methods for corrosion studies based on nanostructured materials

4. Application of artificial intelligence in electrocatalytic processes

5. Education of chemistry science and nanotechnology

Zahra Badghan, Asma Khoobi

6. Investigation of the pharmacological properties of zinc oxide nanostructures synthesized by olive plant

Sharifeh Hormozi jangi, Asma Khoobi

7. The role of plant extracts in the synthesis of gold-based nanostructured compounds and their biological applications

Sharifeh Hormozi jangi, Asma Khoobi

8. Drug delivery systems based on saffron plant extract and nanostructured compounds

9. Dye-sensitized solar cells based on carbon nanotubes/zinc nanocomposites

Sharifeh Hormozi jangi, Asma Khoobi

10. The role of response surface methodology in lithium-ion batteries

Sharifeh Hormozi jangi, Asma Khoobi

11. Designing of electrochemical hydrogen storage systems based on metal nanocatalysts and response surface methodology

Sharifeh Hormozi jangi, Asma Khoobi

12. Synthesis and characterization of copper nanostructures for biological applications

Hanieh Barghi jahromi, Asma Khoobi

13. Synthesis, characterization and spectroscopic studies of magnesium nanostructures

Hanieh Barghi jahromi, Asma Khoobi

14. Green synthesis of nickel nanocomposites in corrosion studies

Hanieh Barghi jahromi, Asma Khoobi

2024

15. Nanoclay composites as efficient nanocatalysts for energy applications

16. Chemical compounds, therapeutic applications and storage conditions of *Crocus sativus* L.

7th National Conference of Saffron

Narges Dosti, Asma Khoobi

17. Optimization of Saffron Active Compounds Extraction Using Response Surface Methodology

7th National Conference of Saffron

Sadegh Seidnavaz, Asma Khoobi

18. Application of Hyperspectral Imaging for Improving Saffron Quality

7th National Conference of Saffron

Sadegh Seidnavaz, Asma Khoobi

19. The effect of silver nanostructures on the growth of saffron plant

7th National Conference of Saffron

Hanieh Barghi jahromi, Asma Khoobi

20. Nanostructured sensors based on saffron plant for electrochemical studies

7th National Conference of Saffron

Hanieh Barghi jahromi, Asma Khoobi, Kiarash Kateb dahmardeh

21. Design of nanostructured solar cells based on saffron plant

7th National Conference of Saffron

2023

23. Application of Electrochemistry for Synthesis of Quantum Dots

17th annual electrochemistry seminar of Iran

Asma Khoobi

24. Electrochemical Analysis of Anticancer Drugs

17th annual electrochemistry seminar of Iran

Asma Khoobi

25. Electrochemical Studies of Corrosion Based on Nanostructured Self-Assembled Monolayers Inhibitors

17th annual electrochemistry seminar of Iran

Asma Khoobi

26. Chemical and therapeutic properties of *Mentha piperita*

The International Congress of Natural Remedial Products

Asma Khoobi

27. Medicinal plants of Sistan and Baluchestan province

The International Congress of Natural Remedial Products

Asma Khoobi

28. Investigation of physico-chemical and medicinal properties of purslane

The International Congress of Natural Remedial Products

Asma Khoobi

29. DNA biosensors based on gold nanostructures

3 National Conference on New Biological Findings

Asma Khoobi

30. Drug delivery based on bio-based nanostructured materials in coronavirus disease

3 National Conference on New Biological Findings

Asma Khoobi

31. Cobalt nanostructures as potential materials for glucose sensors

3 National Conference on New Biological Findings

Asma Khoobi

32. Green magnetic nanostructures for solid phase extraction of pesticides

29th Iranian Organic Chemistry Conference

Sharifeh Hormozi jangi, Asma Khoobi

33. Nanostructured polymeric compounds for extraction and preconcentration of insecticides

29th Iranian Organic Chemistry Conference

Sharifeh Hormozi jangi, Asma Khoobi

2022

34. Electrochemical sensitive detection of a Beta-blocker drug using a nanostructured electrode based on a ferrite/graphene oxide nanocomposite

Asma Khoobi

35. Multivariate optimization method for designing an electrochemical selective nanostructured sensor in analysis of tyrosine

Asma Khoobi

36. Synthesis and characterization of nanostructured metal-organic frameworks functionalized with Thymus plant extract

1st National Conference of Chemistry and Medicinal Plants (NCCMP 2022)

Marzieh Sharifirad, Asma Khoobi, Mostafa Khajeh, Massoud Kaykhaii, Ali Reza Oveisi

37. Sol-gel synthesis of dysprosium nanostructures through auto-combustion method

1st National Conference of Chemistry and Medicinal Plants (NCCMP 2022)

Mohammad Bagheri, Asma Khoobi

38. Green synthesis of holmium nanostructures using a sol-gel approach

1st National Conference of Chemistry and Medicinal Plants (NCCMP 2022)

Mohammad Ebrahimiparsa, Asma Khoobi

39. Synthesis of strontium nanostructures using the sol-gel green process

1st National Conference of Chemistry and Medicinal Plants (NCCMP 2022)

Faezeh Sotoodeh molashahi, Asma Khoobi

40. Facile synthesis of barium nanostructures using barberry fruit extract

1st National Conference of Chemistry and Medicinal Plants (NCCMP 2022)

Zahra Kordi tamandani, Asma Khoobi

41. Synthesis and characterization of aluminate nanostructures using the sol-gel green process

1st National Conference of Chemistry and Medicinal Plants (NCCMP 2022)

Sharifeh Hormozi jangi, Asma Khoobi

Executive activities

مشاوره دانشجویان کارشناسی

from 1404/07/01 - to 1404/11/08

مشاوره دانشجویان کارشناسی

from 1403/11/06 - to 1404/04/06

مشاوره دانشجویان کارشناسی

from 1403/07/01 - to 1403/11/05

مشاوره دانشجویان کارشناسی

from 1402/11/21 - to 1403/04/04

مشاوره دانشجویان کارشناسی

from 1402/07/01 - to 1402/11/05

Research Project

2022
