

Abbas Jafarizad (Ph.D of Nano Chemistry/ Fonder and Head of Central Lab of Sahand University of technology)

*Faculty of Chemical Engineering
Sahand University of Technology
Tabriz-IRAN
Central Laboratory,
Sahand University of Technology
Tabriz-IRAN*

Office: +98-41-3345 9146 Fax: +98-41-33444355

Email: Jafarizad@sut.ac.ir

Jafarizad.abbas@gmail.com

Last Updated: 2024.10.06

Personal Data:

Name	Surname	Date of Birth	Nationality	Sex	Marital Status
Abbas	Jafarizad	1971	Iranian	Male	Married

Educational Background:

Certificate Degree	Field of Specialization	Name of Institution Attended	Date Received
Ph.D.	Analytical Chemistry	Department of Chemistry, Ataturk University, Turkey with Cooperation Tabriz University Of	2016
M.Sc.	Organic Chemistry	Department of Chemistry, Faculty of Chemistry, University of Tabriz, Tabriz, Iran	1998
B.Sc.	Pure Chemistry	Department of Chemistry, Faculty of Chemistry, University of Tabriz, Tabriz, Iran	1996

✓ ***Title of Doctorate Thesis:***

Synthesis of Gold Nanoparticles and Their Application in Drug Delivery

Lecturing Experiences:

Title of Course	Level	Dates		Name of Institution
		From	To	
Analytical Chemistry	BSc	2005	Present	Sahand University of Technology
Organic Chemistry	BSc	2005	Present	Sahand University of Technology
Color Chemistry	BSc	2005	Present	Al-Zahra University
Polymer Chemistry	BSc	2005	Present	Al-Zahra University

Title of Course	Level	Dates		Name of Institution
		From	To	
Instrumental Analytical Chemistry	BSc	2005	Present	Sahand University of Technology
Applied Inorganic Chemistry	BSc	2005	Present	Sahand University of Technology
General Chemistry	BSc	2005	Present	Sahand University of Technology

Research Interests:

Research Interest

- ✓ Synthesis and Application of Nanoparticles
- ✓ Photo Thermal Therapy
- ✓ Environmental Protection and Remediation
- ✓ Modeling of Electrochemical Processes Using Artificial Neural Networks (ANN)
- ✓ Optimization of Electrochemical Processes Using Response Surface Design Methodology (RSM)

Instrumental Skills:

- ✓ GC
- ✓ FTIR
- ✓ HPLC
- ✓ BET
- ✓ GC-Mass
- ✓ CHN/SO
- ✓ UV
- ✓ TOC
- ✓ AAS
- ✓ TGA

Finished research projects:

Title
Platine extraction of used catalyst of Tabriz petrochemical company in the Environmental Research center, Fatehifar Esmaeil, Jafarizad Abbas, Sahand University of Technology, 2003-2004
Chemical, physical & biological analysis of Mehran river of Tabriz, Fatehifar Esmaeil, Jafarizad Abbas, 2003-2004
Study and optimization of biological systems in Tabriz Oil Refinery Company (TZORC), Fatehifar Esmaeil, Jafarizad Abbas, 2005-2006

ADVISOR: Ph.D. and M.Sc. Degrees:

Student's Full Name	Degree	Date	Title of Thesis and University
Hamed Moradkhani	PhD	2018	Ultra-low concentration CO ₂ adsorption using novel life support metal-organic frameworks (MOFs). Faculty of Chemical Engineering, Sahand University of Technology
Mina Ahsani	PhD	2018	Preparation, characterization and performance evaluation of nanocomposite antifouling poly (vinylidene fluoride) (PVDF) membranes to be used in the membrane bioreactor (MBR) systems. Faculty of Chemical Engineering, Sahand University of Technology
Hossain ahdno	M.Sc.	2014	Optimization of turbidity removal process of date liquid sugar using filter aids and enzymatic pre-treatment. Faculty of Chemical Engineering, Sahand University of Technology
Maryam Eskandary	M.Sc.	2014	Green Synthesis of GNPs by using Edible mushroom extracts and evaluation of their antimicrobial properties. Faculty of Chemical Engineering, Sahand University of Technology
bahare afzel	M.Sc.	2014	Experimental study of the effect of the nanoparticle addition on biomolecule partitioning in polymer-salt two phase aqueous system. Faculty of Chemical Engineering, Sahand University of Technology
Mojgan mohammadlou	M.Sc.	2014	Green synthesis of silver nanoparticles using pelargonium leaf extracts and their antimicrobial properties evaluation. Faculty of Chemical Engineering, Sahand University of Technology
Omid Ahmadi	M.Sc.	2014	Green synthesis of silver nanoparticles using Alovera extract and evaluation of antibacterial effect. Faculty of Chemical Engineering, Sahand University of Technology
Susan Hamzerad	M.Sc.	2015	Study of silica aerogels structures. Faculty of Chemical Engineering, Sahand University of Technology
Mehran Rajabi	M.Sc.	2017	Synthesis and characterization of core-shell Nanoparticles Based on poly (dimethylsiloxane), Faculty of Polymer Engineering, Sahand University of Technology
Shahab Kavezade	M.Sc.	2017	Synthesis and self-Assembly of PDMS-Based Amphiphilic Non-linear Block Copolymers. Faculty of Polymer Engineering, Sahand University of Technology
Lida Adybeik	M.Sc.	2017	Microfluidic-Assisted Self-Assembly of Amphiphilic Block Copolymers, Faculty of Polymer Engineering, Sahand University of Technology
Mahshid Alizadeh	M.Sc.	2018	Shaping of silica supports by using Kaolin for separation of dye, Faculty of Chemical Engineering, Sahand University of Technology
Hosna Najafi	M.Sc.	2018	Forming of Diatomite based support and its evaluation in adsorption, Faculty of Polymer Engineering, Sahand University of Technology

Publications :

Title	Journal	IF	Authors
Fe ₃ O ₄ Nanoparticles in Combination with 5-FU Exert Antitumor Effects Superior to Those of the Active Drug in a Colon Cancer Cell Model	Pharmaceutics	4.9 JCR(2023) Q1	Sidika Genc, Ali Taghizadehghalehjoughi, Yesim Yeni, Abbas Jafarizad, Ahmet Hacimuftuoglu, Dragana Nikitovic, Anca Oana Docea, Yaroslav Mezhuev, Aristidis Tsatsakis
Assessment of oxaliplatin-loaded iodine nanoparticles for chemoradiotherapy of human colorectal cancer (HT-29) cells	polymers	5 JCR(2022) Q1	Naser Rasouli, Daryoush Shahbazi-Gahreuei, Simin Hematti, Behzad Baradaran, Roya Salehi, Jaleh Varshosaz, Abbas Jafarizad
Electrospun gelatin/methylcellulose hybrid nanofibers promoted the maturation of human cutaneous tissue progenitor cells toward keratinocyte-like cells	Cellulose	5.7 JCR(2022) Q1	Roya Salehi, Leila Mohammadzadeh, Mehrdad Mahkam, Abbas Jafarizad, Reza Rahbarghazi
Investigation of Ag and magnetite nanoparticle effect on the membrane fouling in membrane bioreactor	International Journal of Environmental Science and Technology	3.519 JCR(2021) Q3	S Sabalanvand, H Hazrati, Y Jafarzadeh, A Jafarizad, S Gharibian
Preparation and characterization of hydrophilic and antibacterial silver decorated silica-grafted-poly(vinylpyrrolidone) (Ag-SiO ₂ -PVP) ... nanoparticles for polymeric	Journal of Applied Polymer Science	3.057 JCR (2021) Q2	Mina Ahsani, Reza Sabouri, Mathias Ulbricht, Hossein Hazrati, Abbas Jafarizad, Reza Yegani
Removal of neutral red dye via electro-fenton process: A response surface methodology modeling	Electrocatalysis	2.93 JCR(2021) Q3	Masoud Ebratkahan, Samin Naghsh Hamed, Mahmoud Zarei, Abbas Jafarizad, Mohammad Rostamizadeh
Microwave-assisted pyrolysis of organometallic gel prepared through ternary combination of surfactants for fabrication of nano-porous gamma ... alumina: adsorptive properties	Journal of Chemical Technology & Biotechnology	3.174 JCR(2020) Q3	Shiva Salem, Amin Salem, Mohammad H Parni, Abbas Jafarizad

A de novo theranostic nanomedicine composed of PEGylated graphene oxide and gold nanoparticles for cancer therapy	Journal of Materials Research	2.9 JCR(2020) Q3	Hadi Samadian, Rahim Mohammad-Rezaei, Rana Jahanban-Esfahlan, Bakshshali Massoumi, Mojtaba Abbasian, Abbas Jafarizad, Mehdi Jaymand
Fe3O4 Magnetic Nanoparticles/Graphene Oxide Nanosheets/Carbon Cloth as an Electrochemical Sensing Platform	Iranian Journal of Chemical Engineering (IJChE)	ضریب ISC=0.063 Q3(Sci mago)	A Jafarizad*(corresponding Author), H Hazrati, AM Jabbari
Adsorption of organic compounds on the Fe3O4 nanoparticles for forestalling fouling in membrane bioreactor	Journal of Water and Environmental Nanotechnology	0.333 SJR(2024) Q3	Sedigh Sabalanvand, Hossein Hazrati, Abbas Jafarizad, Yoones Jafarzadeh
Synthesis and characterization of gold nanoparticles using Hypericum perforatum and Nettle aqueous extracts: A comparison with turkevich method	Environmental Progress & Sustainable Energy	1.596 JCR (2018) Q3	Abbas Jafarizad, Khadijeh Safaee, Behrouz Vahid, Alireza Khataee, Duygu Ekinci
Evaluation of the saponin green extraction from Ziziphus spina-christi leaves using hydrothermal, microwave and Bain-Marie water bath heating methods	Green Processing and Synthesis	JCR(2018) 1.128 Q3	Mahdiyeh Mohaddes-Kamranshahi, Hoda Jafarizadeh-Malmiri, Mohammad Simjoo, Abbas Jafarizad
Facile and rapid auto-combustion synthesis of nano-porous γ -Al2O3 by application of hexamethylenetetramine in fuel composition	Journal of Physics and Chemistry of Solids	2.752 JCR (2018) Q2	Shiva Salem, Amin Salem, Mohammad Hosein Parni, Abbas Jafarizad
Microwave accelerated green synthesis of gold nanoparticles using gum Arabic and their physico-chemical properties assessments	Zeitschrift für Physikalische Chemie	0.975 JCR (2018) Q4	Maryam Eskandari-Nojehdehi, Hoda Jafarizadeh-Malmiri, Abbas Jafarizad
PEGylated graphene oxide/Fe3O4 nanocomposite: Synthesis, characterization, and evaluation of its performance as de novo drug delivery nanosystem	Bio-medical materials and engineering	0.993 JCR(2018)Q4	Abbas Jafarizad, Ali Taghizadehgh-Alehjougi, Morteza Eskandani, Maryam Hatamzadeh, Mojtaba Abbasian, Rahim Mohammad-Rezaei, Maryam Mohammadzadeh, Başak Toğar,
High efficient decolorization of Reactive Red 120 azo dye over reusable Fe-ZSM-5 nanocatalyst in electro-Fenton reaction	Separation and Purification Technology	3.927 JCR(2017) Q1	Mohammad Rostamizadeh*(corresponding Author), Abbas Jafarizad*(

corresponding Author),
Soorena Gharibian

The magnetic graphene-based nanocomposite: an efficient anticancer delivery system	AIP Conference Proceedings	0.182 SJR(2018)	Abbas Jafarizad, Mehdi Jaymand, Ali Taghizadehghalehjoui, Saeed Mohammadi-Nasr, Amir Mohammad Jabbari
Mitoxantrone removal by electrochemical method: A comparison of homogenous and heterogenous catalytic reactions	Environmental Health Engineering and Management	1.2 JCR(2024)Q4	Abbas Jafarizad, Mohammad Rostamzadeh, Mahmoud Zarei, Soorena Gharibian
Green Synthesis of Gold Nanoparticles Using Aqueous Extracts of Ziziphus jujuba and Gum arabic	Journal of Cluster Science	1.715 JCR(2017) Q3	Abbas Jafarizad, Khadijeh Safae, Duygu Ekinci
Gold nanoparticles and reduced graphene oxide-gold nanoparticle composite materials as covalent drug delivery systems for breast cancer treatment	ChemistrySelect	2 WOS(2024) Q3	Abbas Jafarizad, Ayuob Aghanejad, Melike Sevim, Önder Metin, Jaleh Barar, Yadollah Omid, Duygu Ekinci
Ultrasonic Assisted Synthesis and Characterization of $x\text{CuO}/\text{CeO}_2-\gamma\text{Al}_2\text{O}_3$ Nanoatalysts	Iranian Journal of Chemical Engineering (IJChE)	ضرب ISC=0.063 Q3(Sci mago)	Esmaeil Fatehifar, Asadollah Karimi, Reza Alizadeh, Abbas Jafarizad, Mahmood Jamili
ULTRASONIC ASSISTED SYNTHESIS AND CHARACTERIZATION OF $\text{XCuO}/\text{CeO}_2-\gamma\text{Al}_2\text{O}_3$ NANOCATALYSTS	Iranian Journal of Chemical Engineering (IJChE)	ضرب ISC=0.063 Q3(Sci mago)	A Karimi, E Fatehifar, R Alizadeh, M Jamili, A Jafarizad
Biosynthesis and in-vitro study of gold nanoparticles using Mentha and Pelargonium extracts	Procedia Materials Science	SJR 2024 8.566 Q1 & Scimago 2025 Q1	A Jafarizad*(corresponding Author), K Safae, S Gharibian, Y Omid, Duygu Ekinci
Kinetic model for the isothermal activation of bentonite by sulfuric acid	Materials Chemistry and Physics	1.871 JCR (2007) Q1	H Babaki, A Salem, A Jafarizad
Synthesis of Fe_3O_4 nanoparticles and $\text{Fe}_3\text{O}_4@\text{GO}$ nanocomposites with low effects on stem cells for cancer cell therapy	2016 International Conference on Nanomaterials: Application & Properties (NAP)	SJR 0.111(2017)	Abbas Jafarizad, Soorena Gharibian, Younes Beygi Khosrowshahi

Full paper published in national and international conference and exhibitions:

Title of conference	Host	Title	Authors
6 th international biennial conference on ultrafine grained and nano structure materials	دانشگاه تهران	The magnetic graphene based nanocomposite: an efficient anticancer delivery system	Abbas jafarizad, mehdi jaymand, ali taghizadehgalejoughi, Tsaed Mohammadi naser, Amir Mohammad jabbari
2018-sino-iran bilateral symposium on nanobiotechnology and nanomedicine	دانشگاه صنعتی سهند	Synthesize, charectrization and application of NPs in cancer therapy and stem cell therapy	Abbas Jafarizad
سومین همایش ملی فناوری نانو: از تئوری تا کاربرد	موسسه آموزش عالی جامی	سنتز سبز نانو ذرات طلا به کمک عصاره برگ نعنا و بررسی اثر pH بر روی اندازه نانو ذرات	عباس جعفری زاد، مژگان محمد لو، دویگو اکینچی، اوندن متین، یدالله امید
The 22 nd Iranian seminar of organic chemistry	دانشگاه تبریز	Green synthesize of goldnanoparticles from hypericum perforatum extractand characterization and physiological stability	عباس جعفری زاد، دویگو اکینچی، محمود زارعی
5 th International conference on ultrafine grained and nanostructured materials	دانشگاه تهران	Biosynthesize and in-vitro study of gold nanoparticles using mentha and pelargonium extracts	عباس جعفری زاد، خدیجه صفائی، سورنا غریبیان، یدالله امید، دویگو اکینچی
1 st Iranian applied chemistry seminar	دانشگاه تبریز	AuNPS/RGO nanoparticles synthesize and characterization and investigation on its effect as mitoxantrone drug carrier in drug delivery on breast cancer thrupy	عباس جعفری زاد (نویسنده مسئول)، سورنا غریبیان، ایوب آقائزاد، آیدا اعظمی، یدالله امید
پانزدهمین کنگره مهندسی شیمی ایران	دانشگاه تهران	بررسی پسماندهای جامد واحد تصفیه پساب صنعت داروسازی و امکان سنجی دفع آن	اسدالله کریمی، اسماعیل فاتحی فر، یحیی محمدی، عباس جعفری زاد
دومین کنفرانس احتراق ایران	دانشگاه آزاد اسلامی مشهد	نقش کاتالیستی کربنات پتاسیم بر فرآیند گازسازی کک در حضور همتایت	لاله شیری، امین سالم، عباس جعفری زاد
2 nd international conference on environmental and computer science		Estimation of gaseous pollutants from gas sweetening plants by emissionfactors	داود کاه فروشان، اسماعیل فاتحی فر، علی الکامل، آرام زویداویفر، عباس جعفری زاد
The 6 th international chemical engineering congress & Exhibition		Synthesize of CeO2 nanocatalyst via precipitation method for total Oxide-tion of toluene	زهرا عباسی، محمد حقیقی، اسماعیل فاتحی فر، نادر راحمی، عباس جعفری زاد
همایش ملی گیاهان دارویی و داروهای گیاهی	دانشگاه شهید بهشتی تهران	سنتز سبز نانوذرات طلا به کمک عصاره برگ شمعدانی و بررسی پایداری آن در محیط PBS	عباس جعفری زاد، مژگان محمدلو، دویگو اکینچی، حافظ مقصودی، هدا جعفری زاده مالگیری
هفتمین کنگره ملی مهندسی شیمی ایران		مطاله دوبه کردن پلی آنیلین بوسیله تله چیلک پلی اتیلن گلیکول سلفونیک اسید	عباس جعفری زاد (نویسنده مسئول)، ناصر ارسلانی، علی اکبر انتظامی

Abstract paper published in national and international conference and exhibitions:

Title of Conference	Host	Title	Authors
نهمین سمینار تخصصی شیمی آلی ایران	دانشگاه امام حسین (انجمن شیمی و مهندسی شیمی ایران)	سنتز و شناسایی بنزن سولفونیک اسید-تله چلیک پلی اتیلن گلیکول	عباس جعفری زاد، ناصر ارسلانی، علی اکبر انتظامی
Asian nanoform Conference		A green chemistry approach for synthesize and stabilization of gold nanoparticles with mentha extract	عباس جعفری زاد، دویگو اکینچی، خدیجه صفائی، یدالله امید
Asian nanoform Conference		In situ growth of gold nanoparticles on functionalized multi-walled carbon nanotubes	عباس جعفری زاد (نویسنده مسئول)، خدیجه صفائی، دویگو اکینچی، اکرم توکلی، هدی جعفریزاده
6 th international conference nanomaterials applications and properties	Sumy state university	Synthesize of Fe3O4 nanoparticles and fe3O4 @ GO nanocomposites with low effects stem cells for cancer cell therapy	عباس جعفری زاد
2018 sino-iron bilateral symposium on nanobiotechnology and nanomedicine	دانشگاه صنعتی سهند	Synthesize, Charecterization and Application of NPs in cancer therapy and stem cell therapy	عباس جعفری زاد

Honorary Degrees, Medals and Positions:

Title of Award, Medal, Position	Issuing Authority	Country	Year
پژوهشگر برتر دانشگاه صنعتی سهند	گرامیداشت هفته پژوهش	ایران	۱۴۰۴
دبیر اجرایی دومین کنفرانس بین المللی و پنجمین کنفرانس ملی تجهیزات و فناوری های آزمایشگاهی	گرامیداشت هفته پژوهش	ایران	۱۴۰۳
مقاله برتر ارابه کنفرانس	دومین کنفرانس ملی شیمی و محیط زیست	ایران	۱۳۹۴

References:

- ✓ Dr. Yadollah Omidi, Research Center for Pharmaceutical Nanotechnology, Faculty of Pharmacy, Tabriz University of Medical Sciences, Tabriz, Iran, E-mail: yomidi@yahoo.com, Tel: (+98) 914-310-9177
- ✓ Dr. Duygu Ekinci, Department of chemistry, Ataturk University, Erzurum, Turkey, E-mail: dekin@atauni.edu.tr , Tel: (+90) 530-118-6763, (+90) 442-231-4387

Membership to Scientific Associations:

Name of Institution/Association	Position Held	Country	Year
<i>Iranian Chemistry Society</i>	<i>Member</i>	Iran	<i>1385</i>
<i>Iranian Chemical Engineer Society</i>	<i>Member</i>	Iran	<i>1387</i>

Language Proficiency:

Language	Degree of Proficiency											
	Writing				Reading				Speaking			
	Native	Good	Fair	Poor	Native	Good	Fair	Poor	Native	Good	Fair	Poor
Farsi	*				*				*			
Turkish	*				*				*			
English		*				*				*		