

**ACADEMIC
CURRICULUM VITAE**

1. Name - Surname: Aydin Hassani

2. Title: Associate Professor

3. Educational Background:

Degree	Department/Program	University	Year
Bachelor's	Chemistry	Urmia University	2005
Master's	Chemistry	IAUT/Urmia University	2008/2020
PhD	Chemistry-Physical Chemistry	Atatürk University	2016

4. Master's / PhD Thesis

4.1. Master's Thesis Title and Thesis Advisor(s):

Prof. Dr. Naseer Modirshahla/Assoc. Prof. Dr. Masoud Faraji

Title of M.Sc. Thesis:

- Investigation of the efficiency of Photocatalytic activity of ZnO+SnO₂ on the removal of Acid Yellow 23
- Fabrication of modified ZnO nanowires/Zn plates and their application in photocatalytic removal of organic pollutants from water solutions

4.2. PhD Thesis /Medical Specialty Thesis Title and Advisor(s):

Prof. Dr. Semra Karaca, Prof. Dr. Alireza Khataee

Title of Ph.D. Thesis:

- Synthesis of TiO₂/Montmorillonite nanocomposite and its application in photocatalytic oxidation and photocatalytic ozonation processes for degradation of pharmaceutical contaminants from aqueous solutions: Modeling and optimization of the processes

5. Academic Titles:Date of Assistant Professorship: **2017-2018**Date of Associate Professorship: **2019-2020**

Date of Professorship:

6. Supervised Master's and PhD Theses:**6.1. Master's Theses**

No.	Student's Full Name	Degree	Date	Title of Thesis and University
1	Parisa Yekan Motlagh	M.Sc.	Sept. 2017-2019	Synthesis of layered double hydroxides immobilized on ozone-modified graphene oxide and evaluation of its application in photocatalytic processes for degradation of pharmaceuticals (Advisor), Department of Applied Chemistry, Faculty of Chemistry, University of Tabriz, Tabriz, Iran

6.2. PhD Theses

No.	Student's Full Name	Degree	Date	Title of Thesis and University
1	Parisa Yekan Motlagh	Ph.D.	Sept. 2019- continuing	Synthesis of hematene and doped layered double hydroxides nanocomposites for degradation of pharmaceuticals pollutants by using advanced oxidation processes (Advisor), Department of Applied Chemistry, Faculty of Chemistry, University of Tabriz, Tabriz, Iran

7. Publications

7.1. Articles Published in International Peer-Reviewed Journals (SCI,SSCI, AHCI, ESCI, Scopus)

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
56	Recent advances in design and engineering of MXene-based catalysts for photocatalysis and persulfate-based advanced oxidation processes: A state-of-the-art review	Chemical Engineering Journal	15.1	2024	480, Article 147920	Eghbali, P; Hassani, A ; Waclawek, S; Lin, A. K.-Y; Sayyar, Z; Ghanbari, F.
55	State-of-the-art recent applications of layered double hydroxides (LDHs) material in Fenton-based oxidation processes for water and wastewater treatment	Chemical Engineering Journal	15.1	2023	474, Article 145511	Pelalak, R; Hassani, A ; Heidari, Z; Zhou, M.
54	Facile and environmentally friendly synthesis of highly efficient two-dimensional hematene nanosheets for photocatalytic applications	Journal of Industrial and Engineering Chemistry	6.1	2023	126, 465-479	Yekan Motlagh. P; Khataee, A; Hassani, A ; Orooji. Y.
53	Heterogeneous photocatalytic activation of electrogenerated chlorine for the production of reactive oxygen and chlorine species: A new approach for Bisphenol A degradation in saline wastewater	Journal of Hazardous Materials	13.6	2023	445, Article 130626	Yaghoot-Nezhad, A; Waclawek, S; Madihi-Bidgoli, S; Hassani, A ; Lin, A. K.-Y; Ghanbari, F.
52	Sulfate radicals-based advanced oxidation processes for the degradation of pharmaceuticals and personal care products: A review on relevant activation mechanisms, performance, and perspectives	Environmental Research	8.3	2023	217, Article 114789	Hassani, A ; Scaria, J; Ghanbari, F. Nidheesh, P.V.
51	Waste to catalyst: Role of agricultural waste in water and wastewater treatment	Science of The Total Environment	9.8	2023	858, Article 159762	Kumar, M; Ambika, S; Hassani, A ; Nidheesh, P.V.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
50	Microbial electrochemical bioremediation of petroleum hydrocarbons (PHCs) pollution: Recent advances and outlook	Chemical Engineering Journal	15.1	2023	452, Article 139372	Ambaye, T. G; Vaccari, M; Franzetti, A; Prasad, S; Formicola, F; Rosatelli, A; Hassani, A ; Aminabhavi, Tejraj M; Rtimi, S.
49	Insights into the synergistic role of photocatalytic activation of peroxymonosulfate by UVA-LED irradiation over CoFe ₂ O ₄ -rGO nanocomposite towards effective Bisphenol A degradation: Performance, mineralization, and activation mechanism	Chemical Engineering Journal	15.1	2023	453, Article 139556	Hassani, A ; Eghbali, P; Mahdipour, Fayyaz; Wacławek, S; Lin, A. K.-Y; Ghanbari, F.
48	Electro-peroxone application for ciprofloxacin degradation in aqueous solution using sacrificial iron anode: A new hybrid process	Separation and Purification Technology	8.6	2022	292, Article 121026	Khavari Kashani, M. R; Kiani, R; Hassani, A ; Kadier, A; Madihi-Bidgoli, S; Lin, A. K.-Y; Ghanbari, F.
47	Recent progress on ultrasound-assisted electrochemical processes: A review on mechanism, reactor strategies, and applications for wastewater treatment	Environmental Research	8.3	2022	205, Article 112463	Hassani, A ; Malhotra, M; Ansaf, V. K; Krishnan, S; Nidheesh, P.V.
46	Nanostructured modified layered double hydroxides (LDHs)-based catalysts: A review on synthesis, characterization, and applications in water remediation by advanced oxidation processes	Current Opinion in Solid State and Materials Science	11	2022	26, Article 100965	Ansaf, V. K; Hassani, A ; Eghbali, P; Nidheesh, P.V.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
45	Fe ₂ O ₃ @multi-walled carbon nanotube activated peroxymonosulfate (PMS) under UVA-LED irradiation: performance, mechanism and environmental application	Journal of Environmental Chemical Engineering	7.7	2021	9, Article 106660	Madihi-Bidgoli, S; Asadnezhad, S; Yaghoot-Nezhad, A; Hassani, A.
44	Facile synthesis of iron(II) doped carbonaceous aerogel as a three-dimensional cathode and its excellent performance in electro-Fenton degradation of ceftazidime from water solution	Separation and Purification Technology	8.3	2021	278, Article 119559	Ahmadi, A; Zarei, M; Hassani, A ; Ebratkhan, M; Olad, A.
43	Z-scheme photocatalysts for visible-light-driven pollutants degradation: A review on recent advancements	Current Opinion in Solid State and Materials Science	11	2021	25, Article 100941	Hassani, A ; Krishnan, S; Scaria, J; Eghbali, P; Nidheesh, P.V.
42	Electrochemical activation of peroxides for treatment of contaminated water with landfill leachate: Efficacy, toxicity and biodegradability evaluation	Chemosphere	8.8	2021	279, Article 130610	Ghanbari, F; Wang, Q; Hassani, A ; Waclawek, S; Rodriguez-Chueca, J; Lin, A. K.-Y.
41	Insights into paracetamol degradation in aqueous solutions by ultrasound-assisted heterogeneous electro-Fenton process: Key operating parameters, mineralization and toxicity assessment	Separation and Purification Technology	8.3	2021	266, Article 118533	Ghanbari, F; Hassani, A ; Waclawek, S; Wang, Z; Matyszczyk, G; Lin, A. K.-Y; Dolatabadi, M.
40	Enhanced electro-peroxone using ultrasound irradiation for the degradation of organic compounds: A comparative study	Journal of Environmental Chemical Engineering	7.7	2020	8, Article 104167	Ghanbari, F; Zirrahi, F; Lin, A. K.-Y; Kakavandi, B; Hassani, A.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
39	Acetaminophen removal from aqueous solutions through peroxymonosulfate activation by CoFe ₂ O ₄ /mpg-C ₃ N ₄ nanocomposite: Insight into the performance and degradation kinetics	Environmental Technology & Innovation	7.1	2020	20, Article 101127	Hassani, A. ; Eghbali, P.; Kakavandi, B.; Lin, A. K.-Y. Ghanbari, F.
38	Facile fabrication of mpg-C ₃ N ₄ /Ag/ZnO nanowires/Zn photocatalyst plates for photodegradation of dye pollutant	Journal of Photochemistry and Photobiology A: Chemistry	4.3	2020	400, Article 112665	Hassani, A. ; Faraji, M.; Eghbali, P.
37	In-situ electro-generation and activation of hydrogen peroxide using a CuFeNLDH-CNTs modified graphite cathode for degradation of cefazolin	Journal of Environmental Management	8.7	2020	267, Article 110629	Ghasemi, M.; Khataee, A.R.; Gholami, P.; Soltani, R.D.C.; Hassani, A. ; Orooji, Y.
36	TiO ₂ nanoparticles removal by electrocoagulation using iron electrodes: Catalytic activity of electrochemical sludge for the degradation of emerging pollutant	Journal of Molecular Liquids	6	2020	310, Article 113217	Ghanbari, F.; Zirrahi, F.; Olfati, D.; Gohari, F; Hassani, A.
35	ZnFe-LDH/GO nanocomposite coated on the glass support as a highly efficient catalyst for visible light photodegradation of an emerging pollutant	Journal of Molecular Liquids	6	2020	302, Article 112532	Yekan Motlagh, P; Khataee, A.R.; Hassani, A. ; Sadeghi Rad, T.
34	Facile hydrothermal synthesis of novel Fe-Cu layered double hydroxide/biochar nanocomposite with enhanced sonocatalytic activity for degradation of cefazolin sodium	Journal of Hazardous Materials	13.6	2020	381, Article 120742	Gholami, P; Dinpazhoh, L; Khataee, A.R.; Hassani, A. ; Bhatnagar, A.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
33	Editorial note-Special Issue on “Ultrasonic Nanotechnology: New insights into industrial and environmental Applications”	Ultrasonics Sonochemistry	8.4	2020	65, Article 104878	Khataee, A.R.; Rahim Pouran, Sh; Hassani, A.
32	Fabrication of NiFe layered double hydroxide/reduced graphene oxide (NiFe-LDH/rGO) nanocomposite with enhanced sonophotocatalytic activity for the degradation of moxifloxacin	Chemical Engineering Journal	15.1	2019	375, Article 122102	Khataee, A.R.; Sadeghi Rad, T.; Nikzat, S; Hassani, A. ; Aslan, M. H; Kobya, M; Demirbaş, E.
31	Strontium titanate nanocubes assembled on mesoporous graphitic carbon nitride (SrTiO ₃ /mpg-C ₃ N ₄): Preparation, characterization and catalytic performance	Journal of Molecular Liquids	6	2019	290, Article 111208	Eghbali, P.; Hassani, A. ; Sündü, B.; Metin, Ö.
30	Fabrication of ZnFe-layered double hydroxides with graphene oxide for efficient visible light photocatalytic performance	Journal of the Taiwan Institute of Chemical Engineers	5.7	2019	101, 186-203	Yekan Motlagh, P; Khataee, A.R.; Sadeghi Rad, T.; Hassani, A. ; Joo, S.W.
29	Sonocatalytic removal of methylene blue from water solution by cobalt ferrite/mesoporous graphitic carbon nitride (CoFe ₂ O ₄ /mpg-C ₃ N ₄) nanocomposites: Response surface methodology approach	Environmental Science and Pollution Research	5.8	2018	25, 32140-32155	Hassani, A. ; Eghbali, P; Metin, Ö.
28	Sonochemical synthesis of WS ₂ nanosheets and its application in sonocatalytic removal of organic dyes from water solution	Ultrasonics Sonochemistry	8.4	2018	48, 329-339	Khataee, A.R.; Eghbali, P.; Haddad Irani-Nezhad, M; Hassani, A.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
27	Photocatalytic ozonation of ciprofloxacin from aqueous solution using TiO ₂ /MMT nanocomposite: Nonlinear modeling and optimization of the process via artificial neural network integrated genetic algorithm	Process Safety and Environmental Protection	7.8	2018	116, 365-376	Hassani, A.; Khataee, A.R.; Fathinia, M; Karaca, S.
26	Monodisperse cobalt ferrite nanoparticles assembled on mesoporous graphitic carbon nitride (CoFe ₂ O ₄ /mpg-C ₃ N ₄): A magnetically recoverable nanocomposite for the photocatalytic degradation of organic dyes	Journal of Magnetism and Magnetic Materials	2.7	2018	456, 400-412	Hassani, A.; Eghbali, P.; Ekicibil, A.; Metin, Ö.
25	Preparation of magnetite nanoparticles by high-energy planetary ball mill and its application for ciprofloxacin degradation through heterogeneous Fenton process	Journal of Environmental Management	8.7	2018	211, 53-62	Hassani, A.; Karaca, M.; Karaca, S.; Khataee, A.R.; Açışlı, Ö.; Yılmaz, B.
24	Enhanced removal of basic violet 10 by heterogeneous sono-Fenton process using magnetite nanoparticles	Ultrasonics Sonochemistry	8.4	2018	42, 390-402	Hassani, A.; Karaca, C.; Karaca, S.; Khataee, A.R.; Açışlı, Ö.; Yılmaz, B.
23	Heterogeneous sono-Fenton-like process using magnetic cobalt ferrite-reduced graphene oxide (CoFe ₂ O ₄ -rGO) nanocomposite for the removal of organic dyes from aqueous solution	Ultrasonics Sonochemistry	8.4	2018	40, 841-852	Hassani, A.; Çelikdağ, G.; Eghbali, P.; Sevim, M.; Karaca, S.; Metin, Ö.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
22	Degradation of mixture of three pharmaceuticals by photocatalytic ozonation in the presence of TiO ₂ /montmorillonite nanocomposite: Simultaneous determination and intermediates identification	Journal of Environmental Chemical Engineering	7.7	2017	5, 1964-1976	Hassani, A.; Khataee, A.R.; Karaca, S; Fathinia, M.
21	Sonocatalytic degradation of ciprofloxacin using synthesized TiO ₂ nanoparticles on montmorillonite	Ultrasonic Sonochemistry	8.4	2017	35, 251-262	Hassani, A.; Khataee, A.R.; Karaca, S.; Karaca, C.; Gholami, P.
20	Heterogeneous photocatalytic ozonation of ciprofloxacin using synthesized titanium dioxide nanoparticles on montmorillonite support: Parametric studies, mechanistic analysis and intermediates identification	RSC Advances	3.9	2016	6, 87569-87583	Hassani, A.; Khataee, A.R.; Karaca, S.; Fathinia, M.
19	Ultrasonic assisted adsorption of textile dyes using modified nanoclay: Central composite design optimization	Korean Journal of Chemical Engineering	2.7	2016	33, 178-188	Hassani, A.; Soltani, R.D.C.; Kıranşan, M.; Karaca, S.; Karaca, C; Khataee, A.R.
18	Ab initio study of structure pyridinium-based ionic liquids and derivatives	Quantum Matter	-	2016	5, 53-57	Azamat, J.; Najafiasl, M.; Jahanbin, J.; Hassani, A.
17	Adsorption of two cationic textile dyes from water with modified nanoclay: A comparative study by using central composite design	Journal of Environmental Chemical Engineering	7.7	2015	3, 2738-2749	Hassani, A.; Khataee, A.R.; Karaca, S.; Karaca, M.; Kıranşan, M.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
10	Preparation of cetyltrimethylammonium bromide modified montmorillonite nanomaterial for adsorption of a textile dye	Journal of the Taiwan Institute of Chemical Engineers	5.7	2014	45, 2565-2577	Kıranşan, M.; Soltani, R.D.C.; Hassani, A. ; Khataee, A.R.; Karaca, S.
9	Removal of methylene blue from aqueous solution using by untreated lignite as potential low-cost adsorbent: Kinetic, thermodynamic and equilibrium approach	Journal of Water Process Engineering	7	2014	2, 10-21	Gürses, A.; Hassani, A. ; Kıranşan, M.; Açışlı, Ö.; Karaca, S.
8	Optimization of comparative removal of two structurally different basic dyes using coal as a low-cost and available adsorbent	Journal of the Taiwan Institute of Chemical Engineers	5.7	2014	45, 1597-1607	Hassani, A. ; Alidokht, L; Khataee; A.R.; Karaca, S.
7	Adsorption of a cationic dye from aqueous solution using Turkish lignite: Kinetic, isotherm, thermodynamic studies and neural network modeling	Journal of Industrial Engineering Chemistry	6.1	2014	20, 2615-2624	Hassani, A. ; Vafaei, F.; Karaca, S.; Khataee; A.R.
6	Response surface analysis of removal of a textile dye by a Turkish coal powder	Advances in Environmental Research	-	2013	2, 291-308	Khataee, A.R.; Alidokht, L; Hassani, A; Karaca, S.
5	Modeling of adsorption isotherms and kinetics of remazol red RB adsorption from aqueous solution by modified clay	Desalination and Water Treatment	1.273	2013	51, 2756-2739	Karaca, S.; Gürses, A.; Açışlı, Ö.; Hassani, A. ; Kıranşan, M.; Yıkılmaz, K.
4	Effects of operational parameters on decolorization of C.I. Acid Red 88 by UV/H ₂ O ₂ process: Evaluation of electrical energy consumption	Clean- Soil Air Water	1.7	2012	40, 298-302	Modirshahla, N.; Behnajady, M. A.; Rahbarfam, R.; Hassani, A.

No	Title	Journal Name	Impact factor 2022	Date	Volume, Page No.	Authors
3	Effect of operational parameters on decolorization of Acid Yellow 23 from wastewater by UV irradiation using ZnO and ZnO/SnO ₂ photocatalysts	Desalination	9.9	2011	271, 187-192	Modirshahla, N.; Hassani, A. ; Behnajady, M. A.; Rahbarfam, R.
2	Volatile Organic Compounds (VOCs) removal of polluted air streams using ozone in the presence of porous silica bed	Australian Journal of Basic and Applied Sciences	2.500	2011	5, 1738-1743	Hassani, A.; Keyvanfar, M.; Hassani, A.
1	Improvement of biological penicillin production from Penicillium chrysogenum using molasses as carbone source	Chemical Engineering Transactions	0.97	2011	24, 853-858	Hassani, A.; Yegani, R.; Hassani, A.

7.2. Articles Published in Other International Peer-Reviewed Journals

7.3. Papers Presented at International Scientific Conferences and Published in Conference Proceedings

No	Title	Title and Place of Assembly	Date	Authors
23	Enhanced photocatalytic degradation of pharmaceuticals from an aqueous environment using Lanthanum-doped NiAl layered double hydroxide	19 th Asian Chemical Congress	July 8-14, 2023	Yekan Motlagh, P; Khataee, A.R; Hassani, A.
22	Synthesis of two-dimensional hematene nanosheets by exfoliation methods and its applications for photocatalytic degradation of tetracycline	21 st ICS International Chemistry Congress	July 26-28 2022	Yekan Motlagh, P; Khataee, A.R; Hassani, A.
21	Synthesis of La-doped NiAl LDHs nanocomposite as a highly efficient visible-light-driven catalyst for degradation of an emerging pollutant	21 st ICS International Chemistry Congress	July 26-28 2022	Yekan Motlagh, P; Khataee, A.R; Hassani, A.

No	Title	Title and Place of Assembly	Date	Authors
20	Synthesis of CoFe ₂ O ₄ /mpg-C ₃ N ₄ nanocomposites and its application in photocatalytic removal of malachite green from water solution	14 th International Nanoscience and Nanotechnology Conference (NanoTR-14), Izmir, Turkey	September 22-25 2018	Hassani, A.; Eghbali, P.; Metin, Ö.
19	Sonocatalytic removal of a textile dye using synthesized CoFe ₂ O ₄ -rGO nanocomposite	13 th International Nanoscience and Nanotechnology Conference (NanoTR-13), Antalya, Turkey	October 22-25 2017	Eghbali, P.; Çelikdağ, G.; Hassani, A.; Sevim, M.; Karaca, S.; Metin, Ö.
18	Heterogeneous Fenton process by magnetite Nanostructures prepared by high energy planetary ball Mill for ciprofloxacin removal from aqueous solutions	3 rd International Multidisciplinary Symposium on Drug Research and Development, Erzurum, Turkey	October 5-7 2017	Karaca, M; Hassani, A.; Açıslı, Ö.; Karaca, S.; Yılmaz, B.
17	Synthesis of TiO ₂ /Montmorillonite nanocomposite for efficient sonocatalytic degradation of antibiotic ciprofloxacin	International Nanoscience and Nanotechnology for Next Generation (NaNNG), Antalya, Turkey	October 20-22 2016	Hassani, A.; Khataee, A.R.; Karaca, C. ; Karaca, S.; Gholami, P.
16	Heterogeneous photocatalytic ozonation of ciprofloxacin using TiO ₂ /MMT nanocomposite: Artificial neural network approach	19 th Conference of Physical Chemistry, Guilan, Iran	September 13-15 2016	Hassani, A.; Khataee A.R., Fathinia, M.
15	Removal of toluene from polluted air streams using ozone in the presence of porous silica bed	12 th National Congress of Chemical Engineering (UKMK), Izmir, Turkey	August 23-26 2016	Hassani, A.; Hassani, A.; Keyvanfar, M.
14	Heterogeneous photocatalytic ozonation of ciprofloxacin in the presence of titanium dioxide/montmorillonite nanocomposite	12 th International Nanoscience and Nanotechnology Conference (NanoTR-12), Kocaeli, Turkey.	June 3-5 2016	Hassani, A.; Karaca, S; Khataee, A.R.; Fathinia, M.
13	Modeling of photocatalytic process on synthesized TiO ₂ -montmorillonite nanocomposite: Artificial neural networks modeling	6 th International Conference on Nanostructures (ICNS6), Kish, Iran	March 7-10 2016	Hassani, A.; Khataee, A. R.; Karaca, S.
12	Preparation and characterization of TiO ₂ /MMT nanocomposite with enhanced photocatalytic activity for treatment of pharmaceutical wastewater	International Nanoscience and Nanotechnology for Next Generation (NaNNG), Antalya, Turkey	October 29-31 2015	Hassani, A.; Khataee, A. R.; Karaca, S.

No	Title	Title and Place of Assembly	Date	Authors
11	Synthesis of cetyltrimethylammonium bromide modified montmorillonite nanomaterial for adsorption of an herbicide from contaminated water	30 th European Conference on Surface Science, Antalya, Turkey	September 1-5 2014	Khataee, A.R.; Hassani, A. ; Karaca, S.; Shirzad-Siboni, M.
10	Central composite design optimization of textile dye adsorption onto nanoclay	30 th European Conference on Surface Science, Antalya, Turkey	September 1-5 2014	Hassani, A. ; Khataee, A.R.; Karaca, S.; Kıranşan, M.
9	Flow-injection chemiluminescence determination of vancomycin using CuO nanoparticles enhanced luminol-hydrogen peroxide system	9 th Nanoscience and Nanotechnology Conference, Erzurum, Turkey	June 24-28 2013	Khataee, A.R.; Hasanzadeh, A.; Iranifam, M.; Fathinia, M.; Mousavi, S. A.; Hassani, A.
8	Prediction of the forming mechanism of poly (ethylene-oxide)/montmorillonite nanocomposites from nitrogen adsorption isotherms	9 th Nanoscience and Nanotechnology Conference, Erzurum, Turkey	June 24-28 2013	Karaca, S.; Gürses, A.; Kıranşan, M.; Yıkılmaz, K.; Hassani, A.
7	Preparation and characterization of poly(ethylene-oxide)/clay-silica nanocomposites	9 th Nanoscience and Nanotechnology Conference, Erzurum, Turkey	June 24-28 2013	Karaca, S.; Gürses, A.; Kıranşan, M.; Yıkılmaz, K.; Hassani, A.
6	Investigation of kinetics and thermodynamic of methylene blue adsorption onto pyrolysed lignite sample at different conditions	26 th National Chemistry Congress, Mugla, Turkey	October 1-6 2012	Karaca, S.; Gürses, A.; Hassani, A. ; Kıranşan, M.; Açışlı, Ö.
5	Modeling of adsorption isotherms and kinetics of remazol red RB adsorption from aqueous solutions onto modified clay	26 th National Chemistry Congress, Mugla, Turkey	October 1-6 2012	Karaca, S.; Gürses, A.; Açışlı, Ö.; Hassani, A. ; Kıranşan, M.; Yıkılmaz, K.
4	Enhancement photocatalytic activity of ZnO with coupling SnO ₂ in the removal of a model contaminant from textile industry	12 th Iranian Chemical Engineering Congress, Tabriz, Iran	October 20-23 2008	Modirshahla, N.; Behnajady, M.A.; Hassani, A.
3	Photocatalytic degradation of a model contaminant in the presence of nanocatalysts ZnO and SnO ₂ powders under UV irradiation	2 nd International Congress on Nanoscience and Nanotechnology, Tabriz, Iran	October 28-30 2008	Modirshahla, N.; Behnajady, M.A.; Hassani, A.

No	Title	Title and Place of Assembly	Date	Authors
2	Investigation of the efficiency of SnO ₂ coupling on photocatalytic activity of ZnO	8 th International Scientific Conference, Varna, Bulgaria	Jun 16-20 2008	Modirshahla, N.; Behnajady, M.A.; Hassani, A.
1	Efficiency of the photocatalytic activity of ZnO/SnO ₂	Third National Conference on Nanotechnology, Shiraz, Iran	February 6-9 2007	Modirshahla, N.; Behnajady, M.A.; Hassani, A.

7.4. National/international Books or Book Chapters

No	Title	Publisher	Year	Authors
1	Activated Carbon Fiber for Environmental Protection; Book Chapter in: Activated Carbon Fiber and Textiles	Elsevier, the Netherlands	2017, Pages 245-280	Hassani, A; Khataee, A.R.
2	Application of Biochar in Advanced Oxidation Processes; Book Chapter in: Non-Soil Biochar Applications	NOVA Science Publisher, Inc. USA	2018, Pages 85-126	Hassani, A; Khataee, A.R.
3	Carbon nanomaterials for removal of pharmaceuticals from wastewater; Book Chapter in: Nanomaterials for Water Treatment and Remediation	CRC Taylor & Francis, USA	2021, 37 pages	Hassani, A.; Khataee, A.R.
4	Hybrids layered double hydroxides as catalysts for the removal of synthetic dyes from wastewater; Book Chapter in: Advances in eco-friendly and sustainable technologies for the treatment of textile wastewater	Elsevier, the Netherlands	2023, 111-153	Hassani, A.; Yekan Motlagh, P.; Khataee, A.R.
5	Biochar-based activation of peroxides for advanced oxidation treatment of water and wastewater; Book Chapter in: Biochar Amendments for Environmental Remediation	CRC Taylor & Francis, USA	2024, Inpress	Hassani, A.; Zidan, A; Ghanbari, F; Sayyar, Z.

6	Layered double hydroxides (LDHs)-based materials applied in advanced photocatalytic oxidation of pharmaceuticals; Book Chapter in: Advanced Materials for Pharmaceutical Wastewater Treatment	CRC Taylor & Francis, USA	2024, Inpress	Hassani, A; Eghbali, P; Ghanbari, F.
7	Pharmaceuticals: Types and Production, Book Chapter in: Advanced Materials for Pharmaceutical Wastewater Treatment	CRC Taylor & Francis, USA	2024, Inpress	Sayyar, Z; Hassani, A.
8	Metallic electrodes for pharmaceutical removal: Electrocoagulation and Electrooxidation Book Chapter in: Advanced Materials for Pharmaceutical Wastewater Treatment	CRC Taylor & Francis, USA	2024, Inpress	Ghanbari, F; Yaghoot-Nezhad, A; Lin, A. K.-Y; Hassani, A.
9	Book: Advanced Materials for Pharmaceutical Wastewater Treatment	CRC Taylor & Francis, USA	2024, Inpress	Nidheesh, P.V. Hassani, A.
10	Iron-based Fenton and Fenton-like catalysts for the removal of pharmaceuticals, Book Chapter in: Innovative and Hybrid Advanced Oxidation Processes for Water Treatment	Elsevier, the Netherlands	2024, Inpress	Hassani, A; Pourshirband, N. Eghbali, P; Sayyar, Z.
11	Activated carbon-based photocatalysts for the removal of pesticides, Book Chapter in: Pesticides in Wastewater: Removal Methods and Future Trends	Apple Academic Press, Taylor & Francis, USA	2024 Inpress	Ghorbani, P; Hassani, A; Eghbali, P; Abbasi, A.

7.5. Articles Published in National Peer-Reviewed Journals

8. Art and Design Activities

9. Projects

No	Projenin başlığı	Project No, supporter	Dates	
			From	To
1	Preparation of TiO ₂ /Montmorillonite nanocomposite and its application in the removal of organic pollutants	2013/92, Scientific Research Project (BAP), Atatürk University, Turkey	2013	2015
2	Synthesis of TiO ₂ /Montmorillonite nanocomposite and its application in photocatalytic oxidation and photocatalytic ozonation processes for degradation of pharmaceutical contaminants from aqueous solutions: Modeling and optimization of the processes	2013/308, Scientific Research Project (BAP), Atatürk University, Turkey	2013	2015
3	Preparation of ZnO/Montmorillonite nanocomposite and its application in photocatalytic ozonation process for the removal of organic pollutants	2015/117, Scientific Research Project (BAP), Atatürk University, Turkey	2015	2016
4	Synthesis and study on the performance of CoOx-FeOy@AC and CoOx-FeOy@NC for organic pollutants removal from contaminated waters	99U814, Abadan University of Medical Sciences, Iran	2020	2021
5	Investigation of Bisphenol A degradation using photoelectrooxidation with chlorine in the presence of iron oxide	1400U1226 Abadan University of Medical Sciences, Iran	2021	2023
6	Investigating the efficiency of UV/GO@FeCo/peroxymonosulfate for elimination of emerging pollutants from aqueous solutions	1400RCEC1316 Abadan University of Medical Sciences, Iran	2022	2023
7	Review on application of MXene for advanced water treatment: A voyage to the world of 2D materials	1402RCEC1682 Abadan University of Medical Sciences, Iran	2023	2024
8	A review on electrochemical treatment of contaminated water with pharmaceutical compounds using metallic electrodes	1401RCEC1537 Abadan University of Medical Sciences, Iran	2023	Continuing
9	Study on landfill leachate treatment using integrated advanced processes: A method based on green chemistry	1402RCEC1645 Abadan University of Medical Sciences, Iran	2023	Continuing

10. Administrative Responsibilities

Name of Administrative	Position Held	Country	Year
Research Center for Science, Technology and Engineering (BILTEM)	Board of Directors: Member	TRNC	2023-Continuing

11. Memberships in Scientific and Professional Organizations

Name of Institution/Association	Position Held	Country	Year
Young Researchers Club	Member	Iran	2008-2012
Iranian Chemical Society	Member	Iran	2016-Continuing
The Iranian Association of Chemical Engineering	Member	Iran	2010-2016
Iranian Nanotechnology Society, INS	Member	Iran	2008-Continuing
American Chemical Society	Member	Untied State	2019-Continuing

12. Awards

Title of Award and Position	Issuing Authority	Country	Year
Award of the thesis publication in the field of nanotechnology	Iran Nanotechnology Initiative Council	Iran	2007
Award of the thesis publication in the field of nanotechnology	Iran Nanotechnology Initiative Council	Iran	2009
Award of the article publication for journal article (ISI)	Islamic Azad University	Iran	2011
1 st Rank in Erasmus Exchange Program	Atatürk University	Turkey	2013
One of the Top Ph.D. Students	The Consulate General of the Islamic Republic of Iran in Erzurum	Turkey	2015
Outstanding Contribution in Reviewing Journal of Molecular Graphics and Modelling	Elsevier Publication	The Netherlands	2015
Outstanding Contribution in Reviewing Journal of Industrial and Engineering Chemistry	Elsevier Publication	The Netherlands	2016
Top 25 Hottest articles in Journal of Water Process Engineering for the period April to June 2014	Elsevier Publication	The Netherlands	2016

Title of Award and Position	Issuing Authority	Country	Year
Top 25 Hottest articles in Ultrasonics Sonochemistry for the period October to December 2014	Elsevier Publication	The Netherlands	2016
Top 25 Hottest articles in Comptes Rendus Chimie for the period April to June 2015	Elsevier Publication	The Netherlands	2016
Top 25 Hottest articles in Journal of the Taiwan Institute of Chemical Engineers for the period July to September 2014	Elsevier Publication	The Netherlands	2016
Top 25 Hottest articles in Journal of Environmental Chemical Engineering for the period October to December 2015	Elsevier Publication	The Netherlands	2016
High honor certificate awarding for published papers in scientific Journals (23.05.2016)	Atatürk University	Turkey	2016
High honor certificate awarding for published papers in scientific Journals (28.11.2016)	Atatürk University	Turkey	2016
Outstanding Contribution in Reviewing Journal of Hazardous Materials	Elsevier Publication	The Netherlands	2017
Outstanding Contribution in Reviewing Chemosphere	Elsevier Publication	The Netherlands	2017
Outstanding Contribution in Reviewing Journal of Environmental Management	Elsevier Publication	The Netherlands	2017
Outstanding Contribution in Reviewing Journal of Molecular Liquids	Elsevier Publication	The Netherlands	2017
Outstanding Contribution in Reviewing Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	Elsevier Publication	The Netherlands	2017
Outstanding Contribution in Reviewing Journal of Cleaner Production	Elsevier Publication	The Netherlands	2018
Young Researcher Award	Near East University	TRNC	2017
Award of the papers	Near East University	TRNC	2018
Award of the papers	Near East University	TRNC	2019

Title of Award and Position	Issuing Authority	Country	Year
Most Influential Researcher Award	Near East University	TRNC	2020
Award of the papers	Near East University	TRNC	2021
Highly Cited (Top 2%) Researchers in ISI	Elsevier	Elsevier BV, Stanford University	2020
Highly Cited (Top 2%) Researchers in ISI	Elsevier	Elsevier BV, Stanford University	2021
Highly Cited (Top 2%) Researchers in ISI	Elsevier	Elsevier BV, Stanford University	2022
Highly Cited (Top 2%) Researchers in ISI	Elsevier	Elsevier BV, Stanford University	2023

13. Undergraduate and Graduate Courses Taught in the Last Two Years

Academic Year	Semester	Course Name	Weekly Hours		Number of Students
			Theoretical	Practical	
2021 - 2022	Fall	General Chemistry	3	2	31
	Fall	Physical Chemistry and Thermodynamics	3	-	2
	Fall	Synthesis and Fabrication of Nanoengineering Systems	4	-	2
	Fall	Phase Transformation and Kinetics	3	-	2
	Fall	Characterization of Nanoengineering Systems	2	3	4
	Spring	General Chemistry	3	2	36
	Spring	Nanomaterials	3	1	1
	Spring	Instrumental Methods for Materials Science and Nanoengineering	4	-	2
Summer	General Chemistry I	3	2	7	
2022 - 2023	Fall	General Chemistry	3	2	144
	Fall	Physical Chemistry and Thermodynamics	3		1
	Fall	Phase Transformation and Kinetics	3		1
	Fall	Characterization of Nanoengineering Systems	2	3	1
	Spring	General Chemistry	3	2	42
	Spring	FOOD ENGINEERING APPLIED KINETICS	3	-	5
	Spring	REAKSİYON KİNETİĞİ	3	-	4
	Spring	Material Science II	3	-	1
	Spring	NANOENGINEERING SYSTEM DESIGN	3	-	1