



صدیقه عباسی

دانشیار

دانشکده: مهندسی شیمی و مواد

گروه: شیمی

سوابق تحصیلی			
دانشگاه	رشته و گرایش تحصیلی	سال اخذ مدرک	مقطع تحصیلی
شهید باهنر کرمان	مهندسی شیمی-گرایش صنایع شیمیایی معدنی	۱۳۸۴	کارشناسی
فردوسی مشهد	مهندسی شیمی-گرایش صنایع غذایی	۱۳۸۷	کارشناسی ارشد
فردوسی مشهد	مهندسی شیمی	۱۳۹۳	دکترای تخصصی

سوابق اجرایی

مدیریت پژوهش و فناوری

معاونت آموزشی-پژوهشی-دانشجویی

مشاور ریاست در امور بانوان و خانواده

دبیر چهار دوره همایش علمی تحت حمایت ISC

زمینه های تدریس

ترمودینامیک پیشرفته- کارشناسی ارشد

راکتور پیشرفته- کارشناسی ارشد

طراحی و تحلیل راکتور بستر سیال- کارشناسی ارشد

ریاضی مهندسی- کارشناسی

ترمودینامیک- کارشناسی

سینتیک و طراحی راکتور- کارشناسی

موازنه- کارشناسی

کنترل فرایندها در مهندسی شیمی - کارشناسی

انتقال حرارت 1- کارشناسی

انتقال حرارت 2- کارشناسی

1. S Abbasi, Investigation the changes in the concentration of dye organic pollutant using magnetic titania nanoparticles incorporated on surface of graphene oxide, *Applied Water Science*, مجلد ۱۴، شماره صفحات ۱۸، ۲۰۲۴.
2. S Abbasi, F Farahbod, M Imani, A Koroushavi, The study of kinetic reaction of the photocatalytic elimination of methyl orange in the presence of magnetic composite of Fe³O₄-ZnO based on graphene oxide, *Journal of advanced materials and technologies* مجلد ۹، شماره صفحات ۴، ۲۰۲۰.
3. Kakhki, N Farzaneh, S Abbasi, Improved Electrocatalytic Activity of Pt-SrCoO₃-MS Ekrami Nanoparticles Supported on Reduced Graphene Oxide for Methanol Electrooxidation, *Journal of Advanced Materials and Technologies* مجلد ۸، شماره صفحات ۵۸، ۲۰۱۹-۴۹.
4. S Abbasi, Investigation of the enhancement and optimization of the photocatalytic activity of modified TiO₂ nanoparticles with SnO₂ nanoparticles using statistical method, *Materials Research Express* مجلد ۵، شماره صفحات ۰۶۶۳۰۲، ۲۰۱۸.
5. S Abbasi, Anchored titania on magnetic two-dimensional carbon nanostructures for improving the degradation of organic pollutants: Effect of titania nanoparticle content, *Journal of Alloys and Compounds*, Vol. 989, pp. 174365, 2024.
6. S Abbasi, M Tahari, M Imani, Prediction of pollutant removal from aqueous solutions using magnetic photocatalysts, *Applied Water Science*, Vol. 13, 2024.
7. S Abbasi, D Dastan, MB Tahir, M Elias, L Tao, Z Li, Evaluation of the dependence of methyl orange organic pollutant removal rate on the amount of titanium dioxide nanoparticles in MWCNTs-TiO₂ photocatalyst using statistical methods and Duncan's multiple range test, *International journal of environmental analytical chemistry* 104 (9), 2180-2194, 2024.
8. Z Zhao, Z Wu, Y Zhao, J Liu, S Abbasi, Z Li, First principles calculations on the structures, electronic and magnetic properties of the TM_n@W₁₂O₃₆ (TM=Mn, Fe, Co and Ni, n = 1-4) clusters, *International Journal of Modern Physics B*, Vol. 38, 2024.
9. Z Li, SQ Yang, JH Yin, JC Li, S Abbasi, Structures, Electronic, And Magnetic Properties Of Transition Metal-Inserted H₂dbp Clusters, *Surface Review and Letters (SRL)*, Vol. 31, pp. 1-9, 2024.
10. S Abbasi, Magnetic photocatalysts based on graphene oxide: synthesis, characterization, application in advanced oxidation processes and response surface analysis, *Applied Water Science*, Vol. 13, pp. 128, 2023.
11. AH Navidpour, S Abbasi, D Li, A Mojiri, JL Zhou, Investigation of Advanced Oxidation Process in the Presence of TiO₂ Semiconductor as Photocatalyst: Property, Principle, Kinetic Analysis, and Photocatalytic Activity, *Catalysts*, Vol. 13, pp. 232, 2023.
12. S Abbasi, Studying the destruction of pollutant in the presence of photocatalysts based on MWCNTs with controlled values of TiO₂ nanoparticles, *Applied Water Science*, Vol. 13, pp. 100, 2023.
13. Z Li, G Xue, J Li, Z Zhao, S Abbasi, Structures, electronic properties and dipole magnitudes of first-row transition metal-substituted Zn₂₄S₂₄ clusters, *Research on Chemical Intermediates*, Vol. 49, pp. 1879-1890, 2023.
14. Y He, L Tao, J Li, M Wu, P Poldorn, D Dastan, S Abbasi, S Nie, X Yin, Atomic-level insights into selective adsorption of H₂ and CO on SnO₂/CoO heterojunctions, *Materials Today Nano*, Vol. 22, pp. 100334, 2023.
15. Z Zhao, Z Li, S Yang, X Shen, S Abbasi, Density functional theory calculation on structures, electronic and magnetic properties of the FemOnC₇₀ and FemOn@C₇₀ (m= 1-3, n= 1-4) clusters, *Solid State Communications*, Vol. 362, pp. 115088, 2023.
16. S Abbasi, The Degradation Rate Study of Methyl Orange Using MWCNTs@TiO₂ as Photocatalyst, Application of Statistical Analysis Based on Fisher's F Distribution, *Journal of cluster science*, Vol. 33, pp. 593-602, 2022.

- S Abbasi, Response surface methodology for photo degradation of methyl orange using .17
magnetic nanocomposites containing zinc oxide, *Journal of cluster science*, Vol. 32, pp.
.805-812, 2021
- S Abbasi, Improvement of photocatalytic decomposition of methyl orange by modified .18
MWCNTs, prediction of degradation rate using statistical models, *Journal of materials science:
Materials in electronics*, Vol. 32, pp. 14137-14148, 2021
- K Shan, F Zhai, ZZ Yi, XT Yin, D Dastan, F Tajabadi, A Jafari, S Abbasi, Mixed conductivity and .19
the conduction mechanism of the orthorhombic CaZrO₃ based materials, *Surfaces and
Interfaces*, Vol. 23, pp. 100905, 2021
- MS Ekrami, & Kakhki, S Pouyamanesh, S Abbasi, G Heidari, H Beitollahi, Enhanced .20
Electrocatalytic Performance of Pt Nanoparticles Incorporated CeO₂ Nanorods on Polyaniline-
Chitosan Support for Methanol Electrooxidation, *Journal of Cluster Science*, Vol. 32, pp.
.363-378, 2021
- S Abbasi, M Hasanpour, F Ahmadpoor, M Sillanpää, D Dastan, A Achour, Application of the .21
statistical analysis methodology for photodegradation of methyl orange using a new
nanocomposite containing modified TiO₂ semiconductor with SnO₂, *International journal of
environmental analytical chemistry*, Vol. 101, pp. 208-224, 2020
- S Abbasi, Adsorption of dye organic pollutant using magnetic ZnO embedded on the surface .22
of graphene oxide, *Journal of inorganic and organometallic polymers and materials*, Vol. 30, pp.
.1924-1934, 2020
- A Koroushavi, ZH Allah Jashoei, S Abbasi, Synthesis of MWCNT@ Ag and application of it for .23
investigation of the nanofluids viscosity variation based on the 2-level factorial
design, *Geosystem Engineering*, Vol. 23, pp. 112-122, 2020
- S Abbasi, F Ahmadpoor, M Imani, MS Ekrami, & Kakhki, Synthesis of magnetic .24
Fe₃O₄@ZnO@graphene oxide nanocomposite for photodegradation of organic dye
pollutant, *International journal of environmental analytical chemistry*, Vol. 100, pp. 225-240, 2020
- AH Navidpour, M Fakhrzad, M Tahari, S Abbasi, Novel photocatalytic coatings based on tin .25
oxide semiconductor, *Surface Engineering*, Vol. 35, pp. 216-226, 2019
- S Abbasi, MS Ekrami, & Kakhki, M Tahari, The influence of ZnO nanoparticles amount on the .26
optimisation of photo degradation of methyl orange using decorated MWCNTs, *Progress in
industrial ecology, an international journal*, Vol. 13, pp. 3-15, 2019
- S Abbasi, Photocatalytic activity study of coated anatase-rutile titania nanoparticles with .27
nanocrystalline tin dioxide based on the statistical analysis, *Environmental monitoring and
assessment*, Vol. 191, pp. 206, 2019
- M Fakhrzad, AH Navidpour, M Tahari, S Abbasi, Synthesis of Zn₂SnO₄ nanoparticles used for .28
photocatalytic purposes, *Materials Research Express*, Vol. 6, pp. 095037, 2019
- MS Ekrami, & Kakhki, S Abbasi, N Farzaneh, Design of experiments methodology to .29
investigate methanol electrooxidation on Pt nanoparticles supported novel functionalized
reduced graphene oxide, *Bioanal. Electrochem*, Vol. 10, pp. 1548-1561, 2018
- S Abbasi, An experimental investigation on the effect of acid treatment of MWCNTs on the .30
viscosity of water based nanofluids and statistical analysis of viscosity in prepared
nanofluids, *Iranian Journal of Chemical Engineering*, Vol. 15, pp. 72-81, 2018
- MS Ekrami, Kakhki, N Farzaneh, S Abbasi, H Beitollahi, SA Ekrami, Kakhki, An investigation of .31
methyl viologen functionalized reduced graphene oxide: chitosan as a support for Pt
nanoparticles towards ethanol electrooxidation, *Electronic Materials Letters*, Vol. 14, 2018
- A Ghaderi, S Abbasi, F Farahbod, Synthesis, characterization and photocatalytic performance .32
of modified ZnO nanoparticles with SnO₂ nanoparticles, *Materials Research Express*, Vol. 5, pp.
.065908, 2018
- MS Ekrami, & Kakhki, S Abbasi, N Farzaneh, Statistical analysis of the electrocatalytic activity .33
of Pt nanoparticles supported on novel functionalized reduced graphene oxide-chitosan for

- .methanol electrooxidation, *Electronic Materials Letters*, Vol. 14, pp. 70-78, 2018
34. S Abbasi, MS Ekrami, & Kakhki, M Tahari, Modeling and predicting the photodecomposition of methylene blue via ZnO-SnO₂ hybrids using design of experiments (DOE), *Journal of materials science: materials in electronics*, Vol. 25, pp. 15306-15312, 2017
35. MS Ekrami, & Kakhki, J Saffari, N Farzaneh, S Abbasi, Enhanced electrocatalytic activity of Pt-M (M= Co, Fe) chitosan supported catalysts for ethanol electrooxidation in fuel cells, *Journal of Nanostructures*, Vol. 7, pp. 292-308, 2017
36. MS Ekrami, & Kakhki, N Farzaneh, S Abbasi, B Makiabadi, Electrochemical activity of Pt nanoparticles supported on novel functionalized reduced graphene oxide-chitosan for methanol electrooxidation, *Journal of Materials Science: Materials in Electronics*, Vol. 28, 2017
37. S Abbasi, M Hasanpour, Variation of the photocatalytic performance of decorated MWCNTs (MWCNTs-ZnO) with pH for photo degradation of methyl orange, *Journal of materials science: materials in electronics*, Vol. 28, pp. 11846-11855, 2017
38. S Abbasi, M Hasanpour, MS Ekrami, & Kakhki, Removal efficiency optimization of organic pollutant (methylene blue) with modified multi-walled carbon nanotubes using design of experiments (DOE), *Journal of materials science: Materials in electronics*, Vol. 28, pp. 9900-991, 2017
39. N Roozban, S Abbasi, M Ghazizadeh, The experimental and statistical investigation of the photo degradation of methyl orange using modified MWCNTs with different amount of ZnO nanoparticles, *Journal of materials science: Materials in electronics*, Vol. 28, pp. 7343-735, 2017

پایان نامه‌ها

۱. آشنایی با انواع پیل‌های سوختی و بررسی عملکرد آنها
۲. سنتز و مشخصه‌یابی نانولوله‌های کربنی آرایش یافته با نانو ذرات اکسید روی جهت بررسی فعالیت فتوکاتالیستی
۳. بررسی تغییرات میزان هدایت حرارتی نانو سیال حاوی هیبرید مس و نقره
۴. بررسی روش‌های بازیافت و جلوگیری از هدرروی هیدروکربن‌های با ارزش (LPG) در واحد تثبیت میعانات گازی پالایشگاه گاز سرخون و ارائه راهکارهای کاهش اتلاف آن‌ها در فلر
۵. مطالعه پارامترهای جریان نفت خام پس از اختلاط با نانو ذرات اکسید مولیبدن در یک خط لوله
۶. بررسی فعالیت فتوکاتالیستی نانوکامپوزیت حاوی SnO₂, ZnO, Ag
۷. بهینه‌سازی شرایط واکنش حذف کلراید توسط رزین M-500 در تصفیه دی اتانول آمین

کتاب‌ها

۱. Membrane Technology: Applications to Industrial Wastewater Treatment
۲. Industrial wastewater treatment: emerging technologies for sustainability
۳. Teach Yourself the Basics of Aspen Plus
۴. مقدمه‌ای بر نانو سیالات و بررسی خواص حرارتی، رئولوژیکی و پایداری آن‌ها
۵. فتوکاتالیست و کاربرد آن در تصفیه آب و پساب‌های صنعتی