

Curriculum Vitae



Hadis Bashiri

Associated Professor

College: Faculty of Chemistry

Department: Physical Chemistry

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■ Employment information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type
University of Kashan	Associated Professor	Tenured	Full Time

■ Educational History

a. Education (Academic Preparation)

Major	Minor	Degree	University
Chemistry	Pure Chemistry	B. Sc.	Bu-Ali Sina University
Chemistry	Physical Chemistry	M. Sc.	Bu-Ali Sina University
Chemistry	Physical Chemistry	Ph. D	Bu-Ali Sina University

■ Teaching history

- 1) Physical chemistry
- 2) Surface chemistry

3) Advanced chemical kinetics

▪ Honors and Awards

Award	Awarding body	Year
Distinguished Student	Vice-Chancellor of Bu-Ali Sina University	2007
Distinguished Researcher	University of Kashan	2014
Distinguished Researcher	University of Kashan	2023
Distinguished Teacher	University of Kashan	2012
Distinguished Teacher	University of Kashan	2014
Distinguished Teacher	University of Kashan	2017
Kazem Ashtiani grant	Iran's National Elites Foundation	2011

▪ Publications:

a. Articles

Page No.	Vol. No.	Year	Author (s)	Journal name	Title	
10251-10255	112	2008	Azizian, S.; Bashiri, H.; Iloukhani, H.	J. Phys. Chem. C	Statistical Rate Theory Approach to Kinetics of Competitive Adsorption at the Solid/ Solution Interface	1
11669-11676	24	2008	Azizian, S.; Bashiri, H.	Langmuir	Adsorption Kinetics at the Solid/Solution Interface: Statistical Rate Theory at Initial Times of Adsorption and Close to Equilibrium	2
13013-13018	24	2008	Azizian, S.; Bashiri, H.	Langmuir	Description of Desorption Kinetics at the Solid/Solution Interface Based on the Statistical Rate Theory	3
28-32	335	2009	Azizian, S.; Bashiri, H., Volkov A. G.	Colloid and Surfaces A.	Derivation of Azizian-Volkov (AV)-isotherm based on statistical thermodynamics	4
36-41	146	2009	Azizian, S.; Haerifar, M.; Bashiri, H.	Chem. Eng. J.	Adsorption of methyl violet onto granular activated carbon: Equilibrium, kinetics and modeling	5
2309-2312	25	2009	Azizian, S.; Bashiri, H.	Langmuir	A New Isotherm for Multisite Occupancy Adsorption of Binary Gaseous Mixture	6

244-249	51	2010	S. Azizian, A. Eftekhari Bafrooei, H. Bashiri	Kinetics and Catalysis	Kinetics of Catalytic Oxidation of Benzoin to Benzil by Alumina Supported Active MnO ₂	7
5732-5739	115	2011	Bashiri, H.	J. Phys. Chem. C	Desorption Kinetics at the Solid/Solution Interface: A Theoretical Description by Statistical Rate Theory for Close-to-Equilibrium Systems	8
80-85	2(5)	2012	Bashiri, H.	Phys. Chem.	A new theoretical study of desorption kinetics at solid/solution interface by statistical rate theory	9
575	575	2013	Bashiri, H.	Chem. Phys. Lett.	A New Solution of Langmuir Kinetic Model for Dissociative Adsorption at Solid Surfaces	10
281-291	39(3)	2014	H. Bashiri, H. M. Jalali, H. Rasa	Progress in kinetics and mechanism	Determination of Intracellular Levels of Reactive Oxygen Species Using the 2,7-Dichlorofluorescein Diacetate Assay by Kinetic Monte Carlo Simulation	11
623-634	32(8)	2014	H. Bashiri, A. Shajari	Adsorption Science & Technology	Theoretical Study of Fractal-Like Kinetics of Adsorption	12
1594	134	2015	H. Bashiri, S. Orouji	Theoretical Chemistry Accounts	A new isotherm for multilayer gas adsorption on heterogeneous solid surfaces	13
474-479	20	2016	H. Bashiri, M. Rafiee	J. Saudi Chem. Soc.	Kinetic Monte Carlo simulation of 2,4,6-thrichloro phenol ozonaton in the presence of ZnO nanocatalyst	14
109-119	41(2)	2016	S. Eris, H. Bashiri	Progress in kinetics and mechanism	Kinetic Study on the Adsorption of Dyes onto Activated Carbon	15
982-986	89(6)	2014	H. Bashiri, M. Rafiee	Russ. J. Phys. Chem. A	Study of 4-Nitro Phenol Ozonation in the Presence of ZnO Nanocatalyst by Kinetic Monte Carlo Simulation	16
127	4	2014	H. Bashiri, S. Eris	J. Nanostructure (JNS)	Non-Dissociative Gas Adsorption with Different Chemisorption Geometries on Nanoporous Surfaces	17
59-63	50	2015	H. Moradmand Jalali, H. Bashiri, , H. Rasa	Materials Science and Engineering C	Study of photo-oxidative reactivity of sunscreening agents based on photo-oxidation of uric acid by kinetic Monte Carlo simulation	18
628-634	203(5)	2016	H. Bashiri, S. Eris	CHEM ENG COMMUN	Statistical Thermodynamic Study of Gas Adsorption with Different Adsorption Geometries on Homogeneous Solid Surface	19
105-110	509	2016	H. Bashiri, S. Mohamadi	APPL CATAL A-GEN	Hydrogen Sulfide Decomposition on Ni Surface: A Kinetic Monte Carlo Study	20
25-35	9(1)	2018	H. Bashiri, A. Shajari	Iranian Journal of Mathematical Chemistry	Fractal-Like Kinetics Study of Adsorption on Multi-walled Carbon Nanotube	21
10-15	223	2016	H. Bashiri, N. Pourbeiram	Journal of Molecular Liquids	Biodiesel production through transesterification of soybean oil: A kinetic Monte Carlo study	22
213-219	42(2)	2016	F. Fotouhi-Far, H. Bashiri, M. Hamadanian,	Propellants, Explosive and Pyrotechnique	Study of Deactivation of Pd(OH) ₂ /C Catalyst in Reductive Debenzylation of Hexabenzylhexaazaisowurtzitane	23
1086-1090	642(19)	2016	F. Fotouhi-Far, H. Bashiri, M. Hamadanian, M. H. Keshavarz	Z. Anorg. Allg. Chem.	A New Method for Assessment of Performing Mechanical Works of Energetic Compounds by the Cylinder Test	24

329-338	5(2)	2017	H. Bashiri, N. Pourbeiram	Phys. Chem. Res.	Kinetic Monte Carlo Study of Biodiesel Production through Transesterification of Brassica Carinata Oil	25
1-6	671	2017	H. Bashiri, A. Hassani Javanmardi	Chemical Physics Letters	A new rate equation for desorption at the solid/solution interface	26
1489-1494	47(11)	2017	F. Fotouhi-Far, H. Bashiri, M. Hamadanian, M. H. Keshavarz	Inorganic and Nano-Metal Chemistry	Increment of activity of Pd(OH)2/C catalyst in order to improve the yield of high performance 2,4,6,8,10,12-hexanitrohexaazaisowurtzitane (HNIW)	27
4024-4030	5(4)	2017	H. Bashiri, A. Hassani Javanmardi	Journal of Environmental Chemical Engineering	Analytical solution of Langmuir behavior of Statistical Rate Theory: Adsorption at solid/solution interface	28
720-728	475	2019	Marzieh Rafiee, Hadis Bashiri	Applied Surface Science	Dynamic Monte Carlo simulations of the reaction mechanism of hydrogen production from formic acid on Ni(1 0 0)	29
337-353	14 (20)	2019	H. Bashiri, S. Nesari	Journal of Applied Chemisrty	Removal of Alizarin yellow from water by activated carbon prepared from microwave radiation of rice husk: Thermodynamic, equilibrium and kinetic study	30
1575-1586	30 (10)	2019	M. Sarabandan, H. Bashiri, S. M. Mousavi	KOREAN J CHEM ENG	Removal of crystal violet dye by an efficient and low cost adsorbent: Modeling, kinetic, equilibrium and thermodynamic studies	31
357-368	54(4)	2019	M. Sarabandan, H. Bashiri, S. M. Mousavi	CLAY MINER	Adsorption of crystal violet dye by a zeolite-montmorillonite nano-adsorbent: modelling, kinetic and equilibrium studies	32
16-22	52 (1)	2019	Mohamadi, S., Bashiri, H.	INT J CHEM KINET	Kinetic Study of Hydrogen Sulfide Decomposition on Pt(111) Surface	33
240-248	37(2)	2020	H. Bashiri, S. Nesari, M. Sarabandan	KOREAN J CHEM ENG	Microwave Assistant production of a High Performance Adsorbent from Rice Husk	34
105942	137	2020	Marzieh Rafiee, Hadis Bashiri	CATAL COMMUN	Catalytic decomposition of formic acid on Cu(100): Optimization and dynamic Monte Carlo simulation	35
114729	262	2020	Marzieh Rafiee, Hadis Bashiri	MATER SCI ENG B-ADV	Application of response surface methodology and dynamic Monte Carlo simulation to study the hydrogen production from formic acid on Ni(100)	36
100709	21	2020	Zahra Shams Ghamsari, Hadis Bashiri	Surfaces and Interfaces	Hydrogen production through photoreforming of methanol by Cu(s)/TiO ₂ nanocatalyst: Optimization and simulation	37
112596	398	2020	Simon Yves Tameu Djoko, Serges Djepang, Hadis Bashiri, Estella Tamungang Njoyim, Mojtaba Arabameri, Reinhard Schomäcker, Arnaud Kamdem Tamo, Samuel Laminsi, Minoo Tasbihi, Michael Schwarze	J PHOTOCHEM PHOTOBIO A	Urea and green tea like precursors for the preparation of g-C ₃ N ₄ based carbon nanomaterials (CNMs) composites as photocatalysts for photodegradation of pollutants under UV light irradiation	38
16-27	56	2021	Malihe Sarabada, Hadis Bashiri, Seyed Mahdi Mousavi	Clay Minerals	Modelling, kinetics and equilibrium studies of crystal violet adsorption on modified montmorillonite by sodium dodecyl sulfate and hyamine surfactants	39
297-305	57(2)	2021	Farshad Fotouhi-Far, Hadis Bashiri, Masood Hamadanian,	Protection of Metals and Physical	A New Approach for the Leaching of Palladium from Spent Pd/C Catalyst in HCl-H ₂ O ₂ System	40

			Mohammad Hossein Keshavarz	Chemistry of Surfaces		
2689-2702	18	2021	Zahra Falaki, Hadis Bashiri	Journal of the Iranian Chemical Society	Preparing an adsorbent from the unused solid waste of Rosewater extraction for high efficient removal of Crystal Violet	41
2123-2128	37	2021	H. Bashiri, A. Hassani Javanmardi	Langmuir	Investigation of Fractal-like Characteristics According to New Kinetic Equation of Desorption	42
11844-11850	37	2021	H. Bashiri, A. Hassani Javanmardi	Langmuir	Complete Analytical Solution of the Statistical Rate Theory: Desorption from Solid/Solution Interfaces	43
798-814	98	2022	M. Arabameri, H. Bashiri	Photochemistry and Photobiology	Introduction of the Effective Photon Concentration Variable for Studying the Mechanism of Crystal Violet Photodegradation	44
12975-12987	47	2022	Ghasem Pahlevanpour, Hadis Bashiri	International Journal of Hydrogen Energy	Kinetic Monte Carlo simulation of hydrogen production from photocatalytic water splitting in the presence of methanol by 1 wt% Au/TiO ₂	45
39139-39163	29	2022	Mojtaba Arabameri, Hadis Bashiri	Environmental Science and Pollution Research	A new approach to study the degradation of the organic pollutants by A-doped MxOy/B photocatalysts	46
10407	15	2022	Aazam Jafarinejad, Hadis Bashiri, Masoud Salavati-Niasari	Arabian Journal of Chemistry	Sonochemical synthesis and characterization of CuInS ₂ nanostructures using new sulfur precursor and their application as photocatalyst for degradation of organic pollutants under simulated sunlight	47
7-20	57	2022	Malihe Sarabandan, Hadis Bashiri, Seyed Mahdi Mousavi	Clay Minerals	Efficient removal of crystal violet from solution by montmorillonite modified with docosyl-trimethylammonium chloride and sodium dodecyl sulfate: modelling, kinetics and equilibrium studies	48
1121-1131	62	2023	Khim Hoong Chu, Mohd Ali Hashim, Hadis Bashiri, Jean Debord, Michel Harel, Jean-Claude Bollinger	Ind. Eng. Chem. Res.	The Flory–Huggins Isotherm and Water Contaminant Adsorption: Debunking Some Modeling Fallacies	49
3440-3455	48(9)	2023	Aazam Jafarinejad, Masoud Salavati-Niasari, Rozita Monsef, Hadis Bashiri	International Journal of Hydrogen Energy	Flower-shaped magnetically recyclable ZnS/ZnIn ₂ S ₄ /Fe ₂ O ₃ nanocomposites towards decolorization of colored pollutants	50
123500	313	2023	Khim Hoong Chu, Hadis Bashiri, Mohd Ali Hashim, Mohd Yunus Abd Shukor, Jean-Claude Bollinger	Separation and Purification Technology	The Halsey isotherm for water contaminant adsorption is fake	51
125473	245	2023	Elaheh Tajari, Hadis Bashiri	International Journal of Biological Macromolecules	Gasoil removal from aqueous solution using magnetic metal-organic framework adsorbent based on the cellulosic fibrous of <i>Prosopis farcta</i> plant	52
105159	152	2023	Ghasem Pahlevanpour, Hadis Bashiri	Journal of the Taiwan Institute of Chemical Engineers	Photocatalytic hydrogen production by Ni/TiO ₂ (0.5 wt%): Kinetic Monte Carlo simulation	53
14652	1237	2024	Hadis Bashiri, Alireza Hassani	Computational and Theoretical	A theoretical description for competitive adsorption at the Solid/Solution interface	54

			Javanmardi, Zeinab Soltani	Chemistry		
9192	14	2024	Hamideh Hajloo Hadis Bashiri	Scientific Reports	Optimizing Cr(VI) reduction to Cr(III) using Pd-CNTs nanocatalyst: kinetic Monte Carlo simulation and experimental design insights	55
14746	15	2025	Hamideh Hajloo Hadis Bashiri	Scientific Reports	Theoretical insights in catalytic reduction of Cr(VI) using Pd/Fe nitrogen doped mesoporous carbon	56
124231	256	2026	Ghorbanali Fanaee Mohammad Barati Hadis Bashiri	Renewable Energy	Process optimization, kinetics, thermodynamics and kinetic Monte Carlo modeling of catalyzed biodiesel production in supercritical medium	57
39851	15	2025	Elaheh Tajari, Hadis Bashiri	Scientific Reports	Synthesis and efficiency of the cellulose@Fe ₃ O ₄ @ZIF-8 carbon aerogel magnetic in the removal of Gasoil from aqueous solutions	58

b. Papers Presented in Conferences

Place	Year	Author (s)	Congress	Title of Article
Esfahan university of technology	2005	Azizian, S.; Bashiri, H.	7 th Iranian Physical Chemistry Seminar	Investigation of the energetic of promoted CO oxidation by coadsorbed H ₂ O on the surface of transition metals
University of Tehran Kish International Campus	2011	Bashiri, H.	14 th Iranian Physical Chemistry Seminar	A new theoretical description by statistical rate theory for close to equilibrium desorption systems
Bu-Ali Sina University	2011	Bashiri, H.	15 th Iranian Chemistry Congress	Desorption Kinetics at the Solid/Solution Interface: A Theoretical Interpretation for Modified Pseudo First Order Kinetic Equation by Statistical Rate Theory
Bu-Ali Sina University	2011	Hadis Bashiri , Mohsen Akhtarkavian	15 th Iranian Chemistry Congress	A theoretical study of Peripentacene formation from Pentacene by kinetic Monte Carlo simulation
National academy of Science of Belarus & University of Kashan	2012	H. Bashiri, A. Shajari, S. Tahmasebi	Iran-Belarus International Conference on Modern Applications of Nanotechnology	Study of Fractal Adsorption of Pb(II) and Cd(II) on Graphene Nano Sheets
National academy of Science of Belarus & University of Kashan	2012	Hadis Bashiri , Mohsen Akhtarkavian	Iran-Belarus International Conference on Modern Applications of Nanotechnology	A Theoretical Kinetic Study of Graphene Synthesis by Kinetic Monte Carlo Simulation
University of Tehran	2012	<i>H. Moradmand Jalali, H. Rassa, Bashiri, H.</i>	15 th Iranian Physical Chemistry Seminar	Kinetic Study of Reactive Oxygen Species by Using 2,7-dichlorofluorescein Diacetate Assay
University of Tehran	2012	<i>H. Moradmand Jalali, H. Rassa, Bashiri, H.</i>	15 th Iranian Physical Chemistry Seminar	Kinetic study of reactive oxygen species production upon photo excitation of sun care agents such as TiO ₂ , ZnO and ZrO ₂
Khuzestan Science and Research Branch Islamic Azad University	2013	<i>H. Moradmand Jalali, H. Bashiri, , H. Rassa</i>	1 st National Iranian Conference of Chemistry and Chemical Engineering Sciences	A Study of the Effect of DCHF-DA Concentration on the Rate of DCF Production
Khuzestan Science and Research Branch Islamic Azad University	2013	<i>H. Moradmand Jalali, H. Bashiri, , H. Rassa</i>	1 st National Iranian Conference of Chemistry and Chemical Engineering Sciences	A Study of the Effect of ROS Concentration on the Rate of DCF Production
Yazd University	2013	<i>Setareh Eris, Hadis Bashiri</i>	The 16th Iranian Chemistry Congress	A kinetic study of non-dissociative gas adsorption with two different states of adsorbate by statistical rate theory
Yazd University	2013	<i>H. Moradmand Jalali, H. Bashiri, , H. Rassa</i>	The 16th Iranian Chemistry Congress	Kinetic Study of the Effect of Uric Acid Concentration on the Measurement of reactive oxygen species produced by sun care agents
Yazd University	2013	<i>Marzieh Rafiee, Hadis Bashiri</i>	The 16th Iranian Chemistry Congress	Study of TCP Ozonation in the Presence of ZnONanocatalyst by Using Kinetic Monte Carlo Simulation

Yazd University	2013	<i>Marzieh Rafiee, Hadis Bashiri</i>	The 16th Iranian Chemistry Congress	Investigation of the Mechanism of Ozone Decomposition in the Presence of ZnONanocatalyst by Using Kinetic Monte Carlo Simulation
Yazd University	2013	<i>H. Bashiri, A. Shajari</i>	The 16th Iranian Chemistry Congress	Study of Fractal Adsorption of Pb(II) on Carbon Nanotubes
Yazd University	2013	<i>H. Bashiri, A. Shajari</i>	The 16th Iranian Chemistry Congress	Theoretical Study of Fractal-Like Kinetics of Adsorption of Fluoride on the Surface of Graphene
Yazd University	2013	<i>H. Bashiri, S. Erris</i>	The 16th Iranian Chemistry Congress	An Isotherm for Gas Adsorption with Different Forms on Solid Surfaces
Vali-e-Asr University of Rafsanjan	1-3 septe mber 2014	<i>S. Mohamadi, H. Bashiri</i>	17th Iranian Chemistry Congress	Kinetic Monte Carlo Simulation of H ₂ S Decomposition on Ni Surface
Vali-e-Asr University of Rafsanjan	1-3 septe mber 2014	<i>A.Rajaei, H. Bashiri</i>	17th Iranian Chemistry Congress	Kinetics of Multisite Occupancy Adsorption at the Gas/Solid Interface: Statistical Rate Theory
Sharif University of Technology	2018/ 02/27	<i>M. Sarabandan, S.M. Mousavi, H. Bashiri</i>	7th International Conference On Nanostructures(ICNS7)	removal of crystal violet from water using zeolite-MMT nanocomposite and modeling of experimental results by response surface methodology
Zanjan University	08/22 /2019	<i>Simon Yves DJOKO T., Hadis BASHIRI, Estella T. NJOYIM, Arab AMIRI M., Serges DJEPANG, Arnaud Kamdem T., Samuel LAMINSI, Reinhard Schomäcker</i>	22 th Iranian Physical Chemistry Conference	Urea and Green Tea Like Precursors for The Preparation Of g-C ₃ N ₄ Based Carbon Nanomaterials (CNMs) Composite: Used As Photocatalyst for Photodegradation of Pollutants Under UV-Light Irradiation
Zanjan University	08/22 /2019	<i>M. Rafiee, H. Bashiri</i>	22 th Iranian Physical Chemistry Conference	Study of mechanism of hydrogen production from formic acid decomposition on Cu(100) catalyst by using dynamic Monte Carlo
Ferdowsi University of Mashhad	2018- 07-17	<i>M. Rafiee, H. Bashiri</i>	20th Iranian Chemistry Congress	Kinetic Monte Carlo Simulation of hydrogen production from formic acid decomposition on Ni(100) catalyst
Uromieh University	2019/ 07/23	<i>M. Sarabandan, S. M. Mousavi, H. Bashiri</i>	4th Iranian Applied Chemistry Conference	Modeling and optimization of the performance of modified clinoptilolite zeolites in purple crystal dye adsorption
Iranian Chemical Science and Technologies Association	2022/ 11/17	<i>Elaheh Tajari, Hadis Bashiri</i>	5th national Congress of Chemistry and Nanochemistry from Research to Technology	Removal of floating gasoil from the surface of water and wastewater using a magnetic metal-organic framework based on the biomass of the <i>Prosopis faracta</i>
Gom University	2022/ 11/22	<i>Elaheh Tajari, Hadis Bashiri</i>	4th Iran Water & Wastewater Science & Engineering Congress	Isotherm and thermodynamics of surface adsorption of gasoil from water using biomass-based magnetic adsorbent
Azrbaijan Shahid Madani University	Augu st 27- 29, 2024	<i>Parvane kabotari, Hadis Bashiri</i>	11th International Seminar on Chemistry & Environment	The study of hydrogen production from the dissociation of methanol and ethanol on Ni(100) surface using kinetic Monte Carlo simulation
Esfahan university	19-20 Nove mber,	<i>Parvane kabotari, Hadis Bashiri</i>	24 th Iranian Physical Chemistry Conference	Study of hydrogen production from ethanol splitting on Ni(100) catalyst surface using kinetic Monte Carlo simulation

	2024			
Azrbaijan Shahid Madani University	Augu st 27- 29, 2024	<i>Ghorbanali Fanaee, Mohammad Barati, Hadis Bashiri</i>	11th International Seminar on Chemistry & Environment	Production of biofuels and optimization of related processes, with an approach to preserve the environment

▪ **Book**

Studying the rate of adsorption using statistical rate theory, Hadis Bashiri, 2024

▪ **Reviewer of Journals**

International Journal of Biological Macromolecules

Environmental Science and Pollution Research

Materials Chemistry and Physics

The Journal of Chemical Physics

Journal of Colloid and Interface Science

Journal of the Iranian Chemical Society

Industrial Crops and Products

Langmuir

Surface Science

International Journal of Hydrogen Energy

Environmental Chemistry Letters

ACS Applied Materials & Interfaces

Fuel

Journal of Molecular Liquids

International Journal of Energy Research

Chemical Engineering Journal

Journal of Industrial & Engineering Chemistry

Journal of Materials Science

Iranian Journal of Mathematical Chemistry

Advances in Materials Science and Engineering

▪ **Research Interests**

- 1) Kinetics
- 2) Photocatalysts
- 3) Wastewater treatment
- 4) Adsorption at solid/fluid interface
- 5) Kinetic Monte Carlo Simulation

6) Heterogeneous catalysts