

Curriculum Vitae



Personal Data:

Name	Surname	Date of Birth	Nationality	Sex	Marital Status
Vahid	Nourani	1975	Iranian	Male	Married

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+98-41-33392409	+98-41-33344287	nourani@tabrizu.ac.ir ; vnourani@yahoo.com ; vahid.nourani@neu.edu.tr

ORCID ID : [0000-0002-6931-7060](https://orcid.org/0000-0002-6931-7060)

Academic Positions: (Last One First)

Title of Position	Field of Specialization	Date		Name of Institution
		From	To	
Visiting Prof. (JSPS Fell.)	Hydrology	March 2025	Jan. 2026	DPRI, Kyoto University
Visiting Prof. (PIFI Fell.)	Hydrology	Jan 2025	March 2025	CAS, Beijing
Visiting Prof.	Hydrology	Feb. 2023	June 2023	DPRI, Kyoto University
Visiting Prof. (PIFI Fell.)	Hydrology	2022	2023	CAS, Beijing
Adjunct Professor	Civil Eng.	2016	present	Near East University, N. Cyprus
Honorary Adjunct Professor	College of Eng., IT & Environment	2022	2026	Charles Darwin University, Australia
Professor	Civil Eng.	2014	present	Tabriz University, Iran
Associate Prof.	Civil Eng.	2010	2014	Tabriz University, Iran
Visiting Associate Prof.	Civil Eng.	2010	2011	University of Minnesota, USA
Assistant Prof.	Civil Eng.	2006	2010	Tabriz University, Iran
Visiting Researcher	Hydrology Eng.	Apr. 2004	Sep. 2004	Tohoku University, Japan

Educational Background: (Last One First)

Certificate Degree	Field of Specialization	Name of Institution Attended	Date Received
Ph.D.	Civil Eng. , Hydrology	Shiraz University and Tohoku University	Jan.2006
M.Sc.	Civil Eng. , Hydraulic Structures	Tabriz University	2000
B.S.	Civil Eng.	Tabriz University	1998

Title of Post-Graduate Thesis:
Comparison of Trial Load and Finite Elements Methods in Arch Dams Analysis

Title of Doctorate Thesis:
Application of Liquid Analog Model to Flood Flow Routing

Research Interests:
Rainfall-runoff modeling ,Artificial intelligence in hydrology,
Hydroinformatics,Numerical methods in water sciences,Geostatistics, Stochastic hydrology, GIS

Teaching Experiences: (Last One First)

Title of Course	Level	Dates		Name of Institution
		From	To	
Special topics in water engineering	Ph.D.	2008	present	Tabriz University
Advanced computational hydraulics	Ph.D.	2006	present	Tabriz University
Advanced mathematics	M.Sc.	2006	present	Tabriz University
Advanced hydrology	M.Sc.	2005	present	Tabriz University
Numerical methods in water engineering	M.Sc.	2007	present	Tabriz University
Application of GIS In Civil Eng.	M.Sc., PhD	2007	present	Tabriz University and Near East Univ.
Engineering hydrology	B.S.	2006	present	Tabriz University
Fluid mechanics	B.S.	2008	present	Tabriz University
Special topics in water and soil	Ph.D.	2010	present	Tabriz University, Faculty of Agri.
Water Resources Management	M.Sc.	2010	present	Tabriz Univ. of Medicine
Advection - Dispersion modeling of pollution	M.Sc.	2014	present	Tabriz University
Hydroinformatics and AI applications	M.Sc., PhD	2014	present	Tabriz University and Near East Univ., Silesia Univ..
Hydrological Modeling	M.Sc., PhD	2022	2023	CAS, Beijing
Soft Computing in Civil Eng.	M.Sc., PhD	2022	2023	Kyoto University

Administrative Responsibilities: (Last One First)

Job Title	Place of Work	Date		Name of Institution
		From	To	
Vice Dean	Faculty of Civil Eng.	2018	2021	Univ. of Tabriz, Faculty of Civil Eng.
Director	Center of Excellence in Hydroinformatics	2019	present	Univ. of Tabriz
Director	Institute of Environment	2024	present	Univ. of Tabriz
Head of Department	Water Resources Eng.	2014	2018	Univ. of Tabriz, Faculty of Civil Eng.
Head of Hydraulic Lab.	Water Resources Eng.	2006	2012	Univ. of Tabriz, Faculty of Civil Eng.

Master and Doctorate Thesis Supervision:

No	Full Name of Student	Level	Title of Thesis
	Ali Danandehmehr	Postdoc scholar	
	Soghra Andaryani	Postdoc scholar	
	Mohammad Javad Alizadeh	Postdoc scholar	
	Hessam Najafi	Postdoc scholar	
	Mina Sayahfard	Postdoc scholar	
	Nardin Jabbarian	Postdoc scholar	
	Elnaz Sharghi	Ph.D.	Liquid Analog Model for laboratory simulation of Seepage
	Alireza Babaian	Ph.D.(Sahand Univ.)	Numerical and experimental investigation of earthen dam breach
	Taher Rajaei	Ph.D.(Khaje Nasir Univ.)	Artificial Intelligence approach for sediment modeling
	Rezagoli Ejlali	Ph.D.	A hybrid black box model for quantity and quality modeling of groundwater
	Mehdi Komasi	Ph.D.	Genetic programming-Wavelet conjunction model for rainfall-runoff modeling
	Farzad Saidi	Ph.D.	Theoretical and experimental system identification of rainfall-runoff process
	Amin Mohebi	M.Sc.	Gravity concrete dam shape optimization by ACO
	Yusef Gafari	M.Sc.	Gravity concrete dam shape optimization by GA
	Simin Shahradfar	M.Sc.	Optimal design of open channel section by heuristic approaches
	Kamran Salehi	M.Sc.	Application of ANFIS and Wavelet to Rainfall-runoff modeling
	Mojtaba Valipour	M.Sc.	Nonlinear modeling of rainfall-runoff in GIS environment
	Elnaz Sharghi	M.Sc.	Sattarkhan earthen dam seepage analyze by ANN
	Samira Rumianfar	M.Sc.	ARIMA-ANN hybrid modeling of rainfall-runoff
	Vahid Sepehri	M.Sc.	Gorgnrood runoff analyze by GIS
	Javad Khajemohamadi	M.Sc.	Parameters estimation of Nash's model by GA
	Mehdi Komasi	M.Sc.	A combined wavelet-ANN multivariate model for rainfall-runoff process
	Leila Malekani	M.Sc.	Fuzzy logic approach for Ligvanchai watershed rainfall-runoff modeling
	Hadi Delafroz	M.Sc.	Application of GIS tools for geomorphological rainfall-runoff modeling
	Mehdi Kord	M.Sc.	A complex aquifer hydraulic parameters estimation by GA
	Ahad Nourpor	M.Sc.	Investigation of water temperature effect on sediment load via ANN
	Mohamad Soltannejad	M.Sc.	Evapotranspiration estimation of Ligvanchai watershed using ANN
	Nima Sabokrohi	M.Sc.(Polytechnic Univ)	Amameh watershed runoff modeling by TOPMODEL in GIS
	Rahim Karimzadeh	M.Sc.	Prediction of Ligvanchai watershed precipitation by Time series models

	Naime Abolvaset	M.Sc.	Multi reservoir water resources management optimization GP
	Omid Kalantari	M.Sc.	A geomorphological ANN model for watershed sediment forecasting
	Arash Roghani	M.Sc.	TOPMODEL application for event based modeling of rainfall-runoff process
	Mohamadreza Mosavi	M.Sc.	Using WMS for rainfall-runoff modeling
	Frhad Tagizadeh	M.Sc.	Cokriging application to estimation permeability coefficient
	Nazila Kardan	M.Sc.	Dam outlet optimization by GA
	Mina Sayahfard	M.Sc.	Sensevity analysis of evapotranspiration parameters by ANN
	Behnaz Amini	M.Sc.	Extraction of hysteresis curves of hydrological processes by ANN
	Ehsan Entezari	M.Sc.	Using ANN and RBF methods for space-time modeling of rainfall
	Mehdi Hajizadeh	M.Sc.	Non-linear cascade reservoirs model for rainfall-runoff simulation
	Aida Hosseini Baghanam	M.Sc.	Conjunction of ANN, wavelet and SOM methods for precipitation modeling
	Tohid Rezapour	M.Sc.	Entropy concept for ANN-based modeling of rainfall-runoff process
	Masoumeh Parhizkar	M.Sc.	Application of clustering methods to select inputs of ANN model in rainfall-runoff modeling
	Farzad Soumi	Ph.D.	left
	Faege Nyazi	Ph.D.	development of geomorphologic rainfall-runoff models based on watershed landuse\cover changes and urbanization
	Nasrin Nezamdost	M.Sc.	Trend analysis of runoff process by compounding Mann-Kendall's and discrete wavelet transform
	Safa Mokhtaryan	M.Sc.	Effect of DEM Resolution in Extraction of Hydro-Geomorphologic Parameters
	Maryam Khosravi	M.Sc.	Application of Wavelet Transform to Preprocess High Resolution DEM for Hydrological Applications
	Aida Yahyavi	M.Sc.	Wavelet-based de-noising for ANN-based modeling of sediment load
	Farzad Hassannejad	M.Sc.	Improvement of artificial neural network modeling for rivers streamflow forecasting based on wavelet denoising method
	Masoud Mehrvand	M.Sc.	Multi Station and Multi Resolution Rainfall-Runoff Modeling via ANN
	Navid Vakili	M.Sc.	Using geostatistical and neural network analysis of spatiotemporal forecasting of underground levels variations : case study in tabriz plain
	Ahad Kashefeyeh	M.Sc.	Implication of geostatics tool to optimize position of boreholes
	Gholamreza Andalib	M.Sc.	Sediment Load Estimation in the Ajichay Basin Stations Using Artificial Neural Networks and Support Vector Machines
	Farhad alizadeh	M.Sc.	Spatial estimation of suspended sediment load of Ajichay basin
	Sevil Ranjbar	M.Sc.	Change Detection Of Hydrological Processes Using Wavelet-Entropy Complexity Measure Case Study : Urmia Lake

	Faranak Totonchi	M.Sc.	Selection of the Robust Streamflow Forecasting Model Using wavelet-Entropy Complexity Criterion
	Sadeg Vanda	M.Sc.	Application of ensemble clustering to improve ensemble forecasting of hydrological processes
	Saleh Mohsenzadeh	M.Sc.	Application of PSIAC and modified PSIAC to estimate sediment yield of Aji-Chay basin via GIS"
	Hamed Mollazadeh	M.Sc.	Application of time series ensemble clustering to improve forecasting of hydrological processes
	Reza Zayerfar	M.Sc.	Rainfall-runoff modeling via integrated artificial neural networks
	Reza Samadzadeh	M.Sc.	The Hydraulic Simulation of the Effects of New Dikes to Reduce the Evaporation Area; Case study: Urmia Lake, Iran
	Reza Shahidi	M.Sc.	Spatial temporal estimation of Aji Chay rainfall stations by employing geostatistical tools
	Saideh Hajizadeh	M.Sc.	Change-Point detection in hydrological time series, Case study : Urmia lake
	Farzad Yusef poor	M.Sc.	Multivariate Optimization of Rain-gage Network using geostatistical methods (case study: Ajichay Basin)
	Gholamreza Andalib	PhD	Watershed change detection using hybrid conceptual model-artificial intelligence
	Shahram Mousavi	PhD	Simulation of contaminant transport in porous media using artificial intelligence-meshless interpolation hybrid model
	Mehdi Golipour	PhD	
	Afshin Partovian	PhD(Najaf Abad IAU)	Noise injection–denoising technique to improve artificial intelligence-based modeling of hydrological processes.
	Masoud Parvan	M.Sc.	Investigation of overcoming and salinity of groundwater incoastal aquifers
	Mahsa Gasemzadeh	M.Sc.	Investigating the effect of hydroclimatological parameters on Urmia lake water level
	Narges Azad	M.Sc.	Assessment of Changes in Hydrological Processes Using Hybrid Mann-Kendall and Wavelet Transform (Urmia Lake Watershed)
	Elnaz Pezeshki	M.Sc.	Estimation of unknown groundwater pumping rate using a data assimilation algorithm
	Amir Moulajo	M.Sc.	Applying The Data Mining Techniques to Forecast Long-Term Hydro-Climatological Processes Using Sea Surface Temperature
	Mahsa Jalali	M.Sc.	Application of artificial intelligence approach and remotely sensed imagery for soil moisture evaluation
	Hessam Najafi	M.Sc.	Comparison of Different Seasonal Models For Forecasting Hydrological Processes
	Said Soleimani	M.Sc.	Catchment clustering based on hydro-climatological features
	Reza Dashti	M.Sc.	Optimum Operation of Eleviyan Reservoir via Improved Harmony Search Algorithm
	Farid Abbasi	Ph.D.	Development of distributed decision making model for smart water grid design based on exchange mechanism
	Vahab Naderi	Ph.D.	Fractal characterization of pore Self-compacting lightweight concrete containing silica fume
	Nima Farbodfam	Ph.D. (Roudhen IAU)	Time space rainfall time series disaggregation by AI-wavelet

	Saber Sharifi	Ph.D. (Urmia Univ.)	Climatological impacts of large-scale sprinkler irrigation schemes.
	Tohid Rezapour	PhD	left
	Zahra Razagzadeh	M.Sc.	Application of feature extraction methods for AI-based investigation of climate change effects on hydro climatological parameters
	Abi Rostamzadeh	M.Sc.	Longitudinal dispersion coefficient estimation of Ajichay and its pollution modeling affected by tannery industry
	Behnam Sedagat	M.Sc.	Flow Routing Using Haar Wavelet Colocation Method
	Saman Pourbayrami	M.Sc.	Using Multiple Linearization Conceptual Model and Artificial Neural Network (ANN) for Flow Routing
	Armin Farshbaf	M.Sc.	Spatio-Temporal disaggregation of rainfall using rain-gauge and radar derived data
	Ali Davanlo	M.Sc.	Hybrid Data Mining Models for Hydrological Forecasts Show original message
	Faranak Kohansal	M.Sc.	Comparison of climate change impact on precipitation in Van and Urmia lakes in different scenarios of climate change
	Parisa Asghaeri	M.Sc.	Using data processing tools to improve performance of AI-methods predicting effluent parameters from wastewater treatment plant
	Ehsan Fromandi	M.Sc.	Eco-environmental quality evaluation using remotely sensed imagery and soft computing
	Hessam Najafi	Ph.D.	
	Mina Sayahfard	Ph.D.	
	Sani I Abba	PhD (NEU)	Wastewater treatment plant performance analysis using artificial intelligence – an ensemble approach
	Selin Uzelaltinbulat	PhD (NEU)	Spatiotemporal Precipitation Modeling by Artificial Intelligence Based Ensemble Approach
	Jazulli Abdollahi	PhD (NEU)	Ensemble Modeling of Evapotranspiration

Publications:

A: Books

Title	Type of Work		Publisher	Date of Publication
	Translation	Compilation		
Advanced Mathematics in Civil Engineering		***** in Persian	Gotenberg, Tehran	2011
“ Application of Meta-Heuristic Optimization Approaches to Investigate Velocity Profile Effect on Optimal Design of Open Channels” in Hydraulic Engineering: Structural Applications, Numerical Modeling and Environmental Impacts		Book Chapter In English	NOVA Publication, USA Editors: Gerhard Hirsch and Bernd Kappel	2010
“Quantity and Quality Modeling of Groundwater by Conjugation of ANN and Co-Kriging Approaches” in Wate Resources Management and Modeling		Book Chapter In English	InTech Publication, Austria Editor: P.C. Nayak	March 2012
“Evaluation of wavelet-based de-noising approach in hydrological models linked to Artificial Neural Networks” in Computational Intelligence Techniques in Earth and Environmental Sciences		Book Chapter In English	Springer Editors: Islam, T., Srivastava, P.K., Gupta, M., Zhu, X.	Feb.2014
“Implication of feature extraction methods to improve performance of hybrid wavelet-ANN rainfall-runoff model” in Case Studies in Intelligent Computing – Achievements and Trends		Book Chapter In English	Taylor and Francis Editors: Issac,B., Israr, N	Sept. 2014
Basics of Hydroinformatics		In Persian	Univ of Tabriz Press	Oct. 2015
“Conjunction of SOM-Based Clustering Method and Hybrid Wavelet-ANFIS Approach For Groundwater Level Prediction” in Application of Artificial Intelligence Methods in Geosciences and		Book Chapter In English	OMICS Editor: Ata Nadiri	Dec. 2015
Advanced Mathematics in Civil Engineering Second Edition		In Persian	Gotenberg, Tehran	Dec. 2016

<p>“Investigating the Impacts of DEM Type, Resolution, and Noise on Extracted Hydro-Geomorphologic Parameters of Watersheds via GIS” in Emerging Trends in Open Source Geographic Information Systems</p>		<p>Book Chapter In English</p>	<p>IGI Global Editors: Prakash, Srivastava, Singh</p>	<p>May 2018</p>
<p>LESSONS FROM GROUNDWATER QUANTITY AND QUALITY PROBLEMS IN THE GÜZELYURT COASTAL AQUIFER, NORTH CYPRUS</p>		<p>Book Chapter In English</p>	<p>NOVA Publication, USA</p>	<p>June, 2018</p>
<p>“Emotional ANN (EANN): A New Generation of Neural Networks for Hydrological Modeling in IoT” In Artificial Intelligence in IoT</p>		<p>Book Chapter In English</p>	<p>Springer Editor: Fadi Al-Turjman</p>	<p>Feb 2019</p>
<p>“Long-term solid waste quantity prediction using AI-based models, considering climate change impact - A case study” In Soft Computing Techniques in Solid Waste and Wastewater Management</p>		<p>Book Chapter In English</p>	<p>Elsevier Editors: Rama Karri R, Gobinath Mohammad, Hadi Dehghani</p>	<p>Sep. 2021</p>
<p>“Application of Integral Transforms in Flood Studies” In Flood Handbook</p>		<p>Book Chapter In English</p>	<p>Taylor and Francis Editors: <i>Saeid Eslamian, Faezeh Eslamian</i></p>	<p>March 2022</p>
<p>“Historical changes in hydroclimatic extreme events over Iran” In Climate Impacts on Extreme Weather</p>		<p>Book Chapter In English</p>	<p>Elsevier Editors: S. Eslamian F. Eslamian</p>	<p>June 2022</p>
<p>“Artificial Intelligence-based model fusion approach in hydroclimatic studies” In Handbook of HydroInformatics</p>		<p>Book Chapter In English</p>	<p>Elsevier Editors: S. Eslamian F. Eslamian</p>	<p>Dec. 2023</p>
<p>“Emotional artificial neural network: A new ANN model in hydroinformatics” In Handbook of HydroInformatics</p>		<p>Book Chapter In English</p>	<p>Elsevier Editors: S. Eslamian F. Eslamian</p>	<p>Dec. 2023</p>

<p>“Fuzzy-based large-scale teleconnection modeling of monthly precipitation” In Handbook of HydroInformatics</p>		<p>Book Chapter In English</p>	<p>Elsevier Editors: S. Eslamian F. Eslamian</p>	<p>Dec. 2023</p>
<p>“Metrics of the water performance engineering modeling” In Handbook of HydroInformatics</p>		<p>Book Chapter In English</p>	<p>Elsevier Editors: S. Eslamian F. Eslamian</p>	<p>Dec. 2023</p>
<p>“Combining Artificial Intelligence and Systems Thinking Tools to Predict Climate Change” In Advanced Systems for Environmental Monitoring, IoT and the application of Artificial Intelligence</p>		<p>Book Chapter In English</p>	<p>Springer Editors: Jamal Mabrouki, Mourade Azrou</p>	<p>Feb. 2024</p>
<p>“Application of soft-computing in sediment and erosion modeling” In Handbook of Climate Change Impacts on River Basin Management: Technology, Innovations and Management Practices</p>		<p>Book Chapter In English</p>	<p>CRC Press Editors: Saeid Eslamian, Mir Bintul Huda, Nasir Ahmad Rather, Faezeh A. Eslamian</p>	<p>May 2024</p>
<p>“Management of Emerging Pollutants with a Circular Economy Approach: Lessons from Developed Countries and a Case Study in Northern Cyprus” In: Emerging Pollutants: Protecting Water Quality for the Health of People and the Environment</p>		<p>Book Chapter In English</p>	<p>Springer Editors: Sarantuyaa Zandaryaa Ali Fares Gabriel Eckstein</p>	<p>April 2025</p>
<p>“Climate Monitoring for Water Resources Management: Enhanced Prediction of Precipitation and Temperature Utilizing Ensemble Machine Learning” In: Applications of AI in Water Resources Management and Sustainability.</p>		<p>Book Chapter In English</p>	<p>Springer Editors: Sabu Joseph Sukanya S</p>	<p>April 2026</p>
<p>“Clustering-Enhanced ANN and Emotional ANN Models for Groundwater Level Prediction in the Tabriz Plain Aquifer” In: Application of Artificial Intelligence in Hydrogeological Research</p>		<p>Book Chapter In English</p>	<p>Springer Editors: P. Li V. Elumalai J. Wu B. Paneerselvam</p>	<p>May 2026</p>
<p>“Groundwater Quality Assessment Via Using Shallow and Deep Learning Methods as FFNN, ANFIS and CNN” In: Application of Artificial Intelligence in Hydrogeological Research</p>		<p>Book Chapter In English</p>	<p>Springer Editors: P. Li V. Elumalai J. Wu B. Paneerselvam</p>	<p>May 2026</p>

B: Papers ISC indexed (in Persian with English abstract)

No.	Title of Paper	Authors	Place of Publication	Date of Publication
1	Suspended Sediment Load Estimation Using Geostatistics, Case Study: Talkherood River of Tabriz(in Farsi)-	Nourani,V.,Bidokhti,N. T,Abedini,M.,J., Rakhshanderoo,G.R.	Iran Water Res. Research Journal	2005 Vol. 1(2)
2	Application of Liquid Analog Model for Hydrology Education; 1: Rainfall-Runoff Modeling (in Farsi)	Nourani,V.,Hassanzadeh,Y., Monadjemi,P.	J. Tabriz Univ. Faculty of Eng	2006 Vol. 32 (3)
3	Estimation of hydraulic parameters of confined aquifers using Genetic Algorithm optimization technique(in Farsi)	Mogaddam,A, Nourani,V.,Kord,M.	Iran Water Res. Research Journal	2008 Vol. 3(3)
4	Modeling of Tabriz plain rainfall using ANNs (in Farsi)	Mogaddam,A, Nourani,V.,Nadiri,A.O.	J. Agric. Sci.	2008 Vol.18(1)
5	Ann potential in multi-station modeling of suspended load in comparison with sediment rating curve method	Alami,M.T. , Nourani , V. ,Nazmara , H.	J. Agric. Sci.	2009 Vol.19(2)
6	Estimation of hydraulic parameters of Unconfined aquifers using Genetic Algorithm optimization technique(in Farsi)	Mogaddam,A, Nourani,V.,Kord,M.	Water and Wastewater Journal	2009 Vol.5(1)
7	Neural-Kriging model for time-space modeling of groundwater	Mogaddam , A.A. , Nourani,V., Nadiri , A.O.	Iran Water Res. Research Journal	2009 Vol.5(1)
8	A geomorphological unit hydrograph based on liner reservoir	Nourani, V., Alami,M.T. ,Delafrouz , H. , Sepehri , V.	Iran Water Res. Research Journal	2009 Vol. 4(3)
9	Artificial neural networks application to sensitivity analysis of effective parameters on suspended sediment load; case study: Ligvanchay River	Aminfar,M.H.,Nourani, V.,Nourpor,A.	J. Civil & Env. Eng.,Tabriz Univ.	2009 Vol.39(2)
10	Rainfall-runoff modeling by ANFIS and ANN approaches	Nourani, V. Keynejad, M.A. Malekani, L.	J. Civil & Env. Eng.,Tabriz Univ.	2010 Vol. 34(4)
11	Peak discharge estimation of dam breach by ANN	Nourani,V. Hakimzadeh, H. Babaian, A.,R.	J. Civil & Env. Eng.,Tabriz Univ.	2011 Vol.40(3)
12	Cokriging application to estimation permeability coefficient	Moradi, Gh. Nourani,V. Taghizadeh, F.	J. Civil & Env. Eng.,Tabriz Univ.	2012 Vol.42(3)
13	Application of GA to optimize dam outlet	Nourani, V. Keynejad,M.A. Kardan, N.	J. Civil & Env. Eng.,Tabriz Univ.	2011 Vol.40(3)
14	A hybrid Goal Programming method and ANFIS for Optimal Operation of a Multi-Objective Two-Reservoir Systems	Nourani,V., Abolcavast,N., Salehi, K.	Iran Water Res. Research Journal	2013 Vol.8(2)
15	Drought forecasting by SPI via ANFIS	Komasi,M. Alami,M.T. Nourani,V.	Water and Wastewater Journal	2013 Vol.24(88)
16	Inputs sensitivivy analysis of ANN for evapotranspiration forecasting	Nourani.V. Sayah Fard,M.	Water and Wastewater Journal	2013 Vol.24(87)
17	Land use impact on parameters of Nash's conceptual rainfall-runoff model	Fakherifard, Ah. Nourani, V. Nyazi,F	Irrigation and Water Eng. Journal	2015 Vol.5(9)
18	Change Detection of Hydrological Processes Using Wavelet-Entropy Complexity Measure	Nourani,V. Ranjbar,S. Tootonchi, F.	J. Civil & Env. Eng.,Tabriz Univ.	2015 Vol. 45(3)
19	Spatial clustring for ANFIS based groundwater quality modeling	Aalmai,M.T. Nourani,V. Daneshvar,F.	Water and Wastewater Journal	2016 Vol.27(3)

20	Dam-Break Flood Waves Analysis and the Floodplain Mapping Using Mathematical Model (Case Study: Vanyar Dam)	Hassanzadeh,Y., Nourani,V. Sepehri,V. Delafrouz,H Hassanzadeh,M. Almaspour,F	Soil and Water Sci. Journal	2015 Vol.25(4)
21	Sediment Management by Multi-objective Operation of Sefidrud Dam with Respect to Hydropower Generation and Environmental Issues	Hajiabadi,R. Zarghami,M. Nourani,V.	J. Civil & Env. Eng.,Tabriz Univ.	2016 Vol. 46(1)
22	Investigation of land use effects in geomorphological unit hydrograph of linear reservoirs	Fakherifard, Ah. Nourani, V. Nyazi,F	Water and Soil Journal	2016 Vol. 30(2)
23	Improvement of ANN-based river flow modeling using wavelet (Case Studt:Gamasyab River)	Solgi,A. Radmanesh,H Zarei,H. Nourani,V.	Water Research Journal	2016 Vol 11
24	Investigation of effect of hydrometeorological parameters of Ajichai on Urmia Lake's water level using Man-Kandall wavelet	Nourani,V. Azad,N. Ghasemzadeh,M. Sharghi,E.	Hydrogeomorphology Journal	2016 Vol. 2(7)
25	Improvement of AI-based rainfall-runoff models via noise jittering method	Partovian,A. Nourani,V. Alami,M.T.	Water Resources Eng.	2018 Vol.11(36)
26	Investigation of dominant effects on the groundwater level recession using wavelet-entropy criterion	Komasi,M. Sharghi,S. Nourani, V.	Hydrogeomorphology Journal	2016 Vol.3(9)
27	Evaluation of Differential Evolution Algorithm in Optimum Operating of Eleviyan Single-Reservoir Dam System	Dashti,R. Sattari,M.T. Nourani,V.	J Water and Soil Resources Conservation	2017 Vol.6(3)
28	Using the Association Rules to Forecast the Maximum Monthly Precipitation of Tabriz Synoptic Station	Moulajo,A. Nourani,V., Sattari,M.T.	J of Civil and Env. Researchs	2016 Vol.2(1)
29	The Hydraulic Simulation of the Effects of New Dikes to Reduce the Evaporation Area; Case study: Urmia Lake, Iran	Samadzadeh Fahim, R. Zarghami,M. Nourani,V.	Iran Water Res. Research Journal	2018 Vol. 14(2)
30	Evaluating the uncertainties in the semi-rigidity of connections of the pier base to optimization of finite element model updating	M. Gholipour Feizi, V. Nourani, A. Mojtahedi, M. Barghian	Modares Mechanical Engineering	2016 Vol.16(12)
31	Noise effect on prediction of flow in porous media via ANN	Mousavi., Sh Nourani,V. Alami,M.T.	Journal of Environmental Science and Technology	2019 Vol.21(5)
32	A robust finite element model updating method for pier's structure with uncertainties in connections using particle swarm optimization algorithm	M. Gholipour Feizi, A. Mojtahedi, V. Nourani, M. Barghian	Journal of Structural and Construction Engineering	2017 Vol.4(1)
33	A Hybrid Decision Tree/Association Rules Approach for Long-Term Precipitation Forecasting	Nourani,V. Sattari,M.T. Moulajo,A.	Journal of Water and Irrigation Management	2017 Vol. 6(2)
34	Investigating Chloride concentration of groundwater by AI-wavelet coherency method	Mousavi,Sh. Nourani,V. Alami,M.T.	Civil Eng. J (Tarbyat Modaress Univ.)	2018 Vol.(17)
35	Investigating the Effect of Hydroclimatological Parameters on Trend in Variance of Water Level Fluctuations Using Wavelet Transform, (Case Study: Urmia Lake)	Ghasemzadeh,M. Nourani,V. Sharghi,E.	Water and Soil Science Journal	2019 Vol. 28(3)
36	Hydroclimatic Phenomena Modeling Using Wavelet-Holtwinters Model	Nourani,V. Sharghi,E. Najafi,H.	Iran Water Res. Research Journal	2018 Vol. 14
37	Spatial-temporal disaggregation of rainfall time series using wavelet-artificial neural network hybrid model	Farbodfam,N Nourani,V. Aminnejad,B.	Iran Water Res. Journal	2019 Vo. 14

38	Multi-station nitrate prediction via artificial intelligence and soft computing tools	Sharghi,E. Nourani,V. Andalib,G	J. Civil & Env. Eng.,Tabriz Univ.	2018 Vol.47(4)
39	Monthly sediment load prediction for Ajichai River via MPSIAC and cascade models	Nourani,V. Mohsenzadeh,S.	Hydrogeomorphology Journal	2017 Vol 3(11)
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Research Activities:

Title of Project	Place of Work	Dates	
		From	To
A combined neural-wavelet model for prediction of ligvanchai precipitation	Tabriz Univ.	2007	2008
Vanyar Dam breach and break analysis	Tabriz Univ.	2006	2008
Rainfall-runoff modeling based on linear reservoir concept	Tabriz Univ.	2008	2009
Artificial Intelligence applications to rainfall-runoff modeling	Tabriz Univ.	2009	2010
Geomorphologic ANN model for sediment modeling	Tabriz Univ.	2012	2013
Rainfall forecasting of Ardabil watershed	Tabriz Univ.	2013	2014
Bed and suspended sediment load modeling of Ajichai River	Tabriz Univ.	2014	2015
Time-space modeling of Nahand watershed sediment load	East Azarbaijan Water Org.	2012	2014
Investigating possibility of establishing relationship among Ajichay watershed runoff, suspended sediment load and bed load	East Azarbaijan Water Org.	2013	2015
Urmia Lake rescue project	National Urmia Lake rescue Org.	2015	2017
Iran-Indai Research Project	Iraninan Ministry of Sciences	2019	2021
One Belt-One road Project	China MoS	2022	2023
Research Project	Nankai Univ., China	2022	2023
project consulting for greentech company	Beijing	2022	2023

DPRI	Kyoto	2023	2023
Iran-China Joint project	Beijing	2024	---

Papers Presented at National and International Scientific Assemblies:

Title of Paper	Title and Place of Assembly	Date
A combined neural wavelet model for prediction of Ligvanchai watershed precipitation	9 th Int. Precipitation Conf. (France, Paris)	2007
Application of a threshold conditional neuron in rainfall-runoff modeling (in Farsi)	3 rd National Civil Eng. Conf. (Tabriz)	2007
Multi station suspended sediment load estimation by ANN(in Farsi)	3 rd National Civil Eng. Conf. (Tabriz)	2007
Tabriz aquifer groundwater level estimation via ANN(in Farsi)	3 rd National Civil Eng. Conf. (Tabriz)	2007
Using ANN in parameters effects on suspended sediment load(in Farsi)	3 rd National Civil Eng. Conf. (Tabriz)	2007
Groundwater level forecasting by ARIMA model (in Farsi)	1st National groundwater symposium (Behbahan)	2007
Numerical modeling for simulation of the flow around a bridge pipe(in Farsi)	7 th Int. River Eng. Conf., (Ahvaz)	2007
Hydraulic parameters estimation of confined aquifer by GA(in Farsi)	25 th geography Conf. (Tehran)	2006
Evaluation of ANNs ability for complex aquifer modeling(in Farsi)	25 th geography Conf. (Tehran)	2006
Rainfall-Runoff Modeling of South-western Iran by TOPMODEL	15 th Congress of Asia and Pacific Division of AHER (India)	2006
Time-space water level prediction model for complex aquifers	Hydro Predict 2008 (Czech)	2008
Genetic Algorithm and Its Application in Statistical Analysis of Flood Flows	2nd Int. Conf. on Water Economics, Statistics and Finance (Greece)	2009
Spatiotemporal water levels forecasting by time series – geostatistics as a hybrid model (in Farsi)	26 th geography Conf. (Tehran)	2007
A 3-D seepage analysis model for earthen dams(in Farsi)	3 rd National Water Res. Manage. Conf. (Tabriz)	2008
An ANN-ARIMA combined model for rainfall-runoff modeling(in Farsi)	3 rd National Water Res. Manage. Conf. (Tabriz)	2008
Investigation of the temperature effect on suspended sediment load via ANFIS(in Farsi)	3 rd National Water Res. Manage. Conf. (Tabriz)	2008
Optimal design of concrete gravity dam using HBMO(in Farsi)	3 rd National Water Res. Manage. Conf. (Tabriz)	2008
Topographic data processing for rainfall-runoff modeling(in Farsi)	3 rd National Water Res. Manage. Conf. (Tabriz)	2008

Water supply network optimization by GA(in Farsi)	3 rd National Water Res. Manage. Conf. (Tabriz)	2008
Nash's model optimal parameters obtained by GA(in Farsi)	3 rd National Water Res. Manage. Conf. (Tabriz)	2008
Rainfall-runoff modeling using ANFIS and ANN-wavelet models(in Farsi)	4 th National Civil Eng. Conf. (Tehran Univ.)	2008
Rainfall-runoff modeling using ANN-wavelet model(in Farsi)	4 th National Civil Eng. Conf. (Tehran Univ.)	2008
ACO method for gravity dams optimization(in Farsi)	Dam Eng. National Conf. (Zanjan)	2009
Honey Bee Mating Optimization (HBMO) Implementation in Concrete Gravity Dam Layout Optimization(in Farsi)	Long term behaviour of dams (Graz, Austria)	2009
Using of adaptive neuro-fuzzy inference system for rainfall-runoff modeling	8th International Congress on Civil Engineering Shiraz University, Shiraz, (Shiraz)	2009
Sensitivity analysis of Dam breach parameters(in Farsi)	8th International Congress on Civil Engineering Shiraz University, Shiraz, (Shiraz)	2009
Meshless RBF method for earth dam seepage analysis(in Farsi)	8th International Congress on Civil Engineering Shiraz University, Shiraz, (Shiraz)	2009
ANFIS-wavelet hybrid model for runoff forecasting(in Farsi)	8th International Congress on Civil Engineering Shiraz University, Shiraz, (Shiraz)	2009
FIS and ANFIS models for suspended sediment load forecasting(in Farsi)	8th International Congress on Civil Engineering Shiraz University, Shiraz, (Shiraz)	2009
Comparative study on calibration methods of Nash's rainfall-runoff model;Case study:Ammameh watershed	7 th. Int. Conf. on Environment, Ecosystems and Development (Spain)	2009
Using artificial neural networks (anns) for sediment load forecasting of Talkherood river mouth	3 rd Int. Conf. on Estuaries & Coasts (Japan)	2009
Using of ANFIS for rainfall-runoff modeling (in Farsi)	5 th. National Conf. on Civil Engineering (Univ. of Mashad)	2010
Investigation of permeability variation effect in numerical modeling of Zonouz Dam seepage (in Farsi)	5 th. National Conf. on Civil Engineering (Univ. of Mashad)	2010
A hybrid ARIMA-ANN model for rainfall-runoff-sediment process modeling of Aharchai watershed (in Farsi)	5 th. National Conf. on Civil Engineering (Univ. of Mashad)	2010
Permeability change driving effect on embankment dams Case Study: The Zonouz embankment dam	WATER AND GEOSCIENCE (Univ. Cambridge, UK)	2010

Numerical investigation of bridge pier breach due to different flow regimes	Iranian 9 th . Conf. in Haydraulic (Tarbyat Modares Univ.)	2010
Sensevity analysis of evapotranspiration process's parameters by ANN	4 th. National Water Res. Manage. Conf. (Amir Kabir Univ.)	2011
Using ANN and RBF methods for space-time modeling of rainfall	6 th. National Conf. on Civil Engineering (Semnan Univ.)	2011
Non-linear cascade resorvires model for rainfall-runoff simulation	6 th. National Conf. on Civil Engineering (Semnan Univ.)	2011
Application of artificial intelligence tools to estimate peak outflow from earth dam breach	Int. Conf. on Adv. Civil Eng. (India)	2011
Wavelet-based DEM regularization methodology aimed at improving distributed rainfall-runoff modeling	Community Surface Dynamic Modelin System (Colorado, USA)	2011
Continues wavelet transform for extraction of topographic features from high-resolution digital elevation model	9th WSEAS Int. Conf. (EED '11) Montreux, Switzerland	2011
Investigating the ability of Artificial Neural Network (ANN) models to estimate missing rain-gauge data	9th WSEAS Int. Conf. (EED '11) Montreux, Switzerland	2011
Space pre-processing of satellite data for ANN-based rainfall runoff process	9th WSEAS Int. Conf. (EED '11) Montreux, Switzerland	2011
Slope stability analysis of Zounous earth dam by ANN	First Int. Conf. Dams and Hydro-power Tehran	2012
Conjugation of Artificial Neural Network and Geostatistics Approaches for Groundwater Modeling	12th WSEAS Int. Conf. on Computer Applications in Science and Engineering Singapore	2012
Wavelet-based feature extraction of rainfall-runoff process via Self-Organizing Map	12th WSEAS Int. Conf. on Computer Applications in Science and Engineering Singapore	2012
ANN-based groundwater level forecasting employing SOM clustering approach	12th WSEAS Int. Conf. on Computer Applications in Science and Engineering Singapore	2012
Application of information contentto extract wavelet-based feature of rainfall-runoff process	12th WSEAS Int. Conf. on Computer Applications in Science and Engineering Singapore	2012
ANN-Wavelet approach for satellite data pre-processing in rainfall-runoff modeling	9th Int. Congress on Civil Engineering, Isfahan, Iran	2012
Geomorphological-ANN Based Modeling for Estimation of Suspended Sediment Load	Nordic water, XXVII Nordic Hydrological Conf., Finland	2012

Landslide susceptibility mapping with analytical hierarchical process and GIS techniques (case study: Zonouz, East Azerbaijan, Iran)	10th Int. Cong. Advances in Civil Eng., Middle East Technical University, Turkey	2012
Groundwater Level Forecasting Using a Clustering Approach and Wavelet Neural Network Modeling	39th IAH Congress(International Association of Hydrogeologists) Canada	2012
Slope stability of concrete dams	2th National Conf. of Dam Eng.	2010
Dam breach and break modeling of Vanyar erthen dam	8th Int. River Eng. Conf. Ahvaz	2010
GIS-based flood mapping of Goorganroud	8th Int. River Eng. Conf. Ahvaz	2010
Reservoirs sedimentation by GSTARS	8th Int. River Eng. Conf. Ahvaz	2010
Water-Electricity demand investigation for Tabriz	7 th. National Conf. on Civil Engineering (Zahedan Univ.)	2013
Improvement of steel frames using rigids connections	7 th. National Conf. on Civil Engineering (Zahedan Univ.)	2013
Improves SARIMAX model for hydrological modeling	7 th. National Conf. on Civil Engineering (Zahedan Univ.)	2013
Rainfall-runoff modeling based on SOM and wavelet pre-processing techniques	8 th. Int. Conf. Water Res., Hydraulics & Hydrology,Rhodes, Greece	2013
Effect of DEM type and resolution in extraction of hydro-geomorphologic parameters	8 th. Int. Conf. Water Res., Hydraulics & Hydrology,Rhodes, Greece	2013
Appraisal to utilization of wavelet denoising approach in ANN-based hydrological models	8 th. Int. Conf. Water Res., Hydraulics & Hydrology,Rhodes, Greece	2013
Using ANNand ANFIS for modeling and sensivity analysis of effective rainfall	8 th. Int. Conf. Water Res., Hydraulics & Hydrology,Rhodes, Greece	2013
SOM-ANN-based Rainfall-runoff Modelling using Data of Multiple Stations	35th Hydrology and Water Resources Symposium Perth, Australia	2014
Comparision of LiDAR and USGS DEMs in extracting hydro-geomprphologic features of watersheds	5th National Water Res. Manage. Conf. (Tehran)	2014

Wavelet-based trend analysis of hydrological processes at different time scales	5th National Water Res. Manage. Conf. (Tehran)	2014
Investigation of the effect of high resolution DEM noise in hydrological modeling	7 th. National Conf. on Civil Engineering (Babol Univ.)	2014
Spatial Estimation of Hydraulic Conductivity Using Multivariate Geostatistical Model. Case Study: Tabriz Subway Domain	vth International Field Workshop for Young Hydrogeologists (Poland)	2014
Optimal operation of multi-objective two reservoir systems	Int. Symp. on Dams in Global Environmental Challenges (Indonesia)	2014
Using Wavelet-Entropy Complexity Measure for Change Detection of Runoff Time Series	11th International Congress on Advances in Civil Engineering (Istanbul)	2014
Spatial analysis of Nahandchay watershed sedimentation via rainfall-runoff-sediment modeling	13 th. Hydraulic Conf. (Tabriz)	2014
Experimental investigation of flow pattern around steeped spillway	13 th. Hydraulic Conf. (Tabriz)	2014
Landslide susceptibility of Tabriz using AHP model via GIS	1 st National Geotechnic Eng. Conf. (Tehran)	2014
Wavelet Based Artificial Intelligence Approaches for Prediction of Hydrological Time Series	First Australasian Conference on Artificial Life and Computational Intelligence (Newcastle, Australia)	2015
Implication of ANN and SVM methods for Ajichai river sediment modeling	10 th Int. Cong. On Civil Eng. (Tabriz Univ.)	2015
Comparison of different geostatistical interpolator for rainfall modeling, Case Study: Ajichai	10 th Int. Cong. On Civil Eng. (Tabriz Univ.)	2015
Selection of the Robust Streamflow Forecasting Model Using Wavelet-Entropy Complexity Criterion	10 th Int. Cong. On Civil Eng. (Tabriz Univ.)	2015
Computational simulation of flow and energy dissipation in stepped spillways	10 th Int. Cong. On Civil Eng. (Tabriz Univ.)	2015
A new method for landslide susceptibility zonation using ANN and GIS; (Case study: North of Tabriz plain)	10 th Int. Cong. On Civil Eng. (Tabriz Univ.)	2015

Investigation of land use effects on Nash model parameters	European Geosciences Union General Assembly (Vienna)	2015
Wavelet-entropy for hydrological processes impact on river system	Vienna Technical Univ. (Vienna)	2015
Investigation of hydroclimatic parameters on Urmya lake waater level	6th National Water Res. Manage. Conf. (Sharkord)	2016
Multi-station calibration of Nash's rainfall-runof model	6th National Water Res. Manage. Conf. (Sharkord)	2016
Investigation of NDVI trend and UH parameters of rainfall-runoff model	6th National Water Res. Manage. Conf. (Sharkord)	2016
Rainfall-runoff modeling using ANFIS model and comparison with ANN, time series and multi variate linear regression models	9 th. National Conf. on Civil Engineering (Mashad Univ.)	2016
Application of hybrid wavelet-SVM and GP in hydrological time series prediction (Case study: Aji-chay watershed)	9 th. National Conf. on Civil Engineering (Mashad Univ.)	2016
Application of association rules in investigation of regional precipitation	9 th. National Conf. on Civil Engineering (Mashad Univ.)	2016
Numerical solution of diffusion equation by collocation haar wavelet	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Assessment of Hydro-Climatologic Parameters Impacts on Urmia Lake Level Using Hybrid Wavelet-Mann Kendall	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Solving Richards equation using nudging data assimilation algorithm	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Use of nudging data assimilation algorithm to estimate unknown pumping rate	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Optimal Operation of Single-Reservoir system via Modified Algorithm Harmony Search (Case Study: Eleviyan Reservoir)	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016

Smart water grid as an approach to usage management in basins	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Evaluation of Wavelet Denoising Performance via an ANN-Based Rainfall-Runoff modeling	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Investigation of effect of hydrometeorological parameters on Urmia Lake's water level using wavelet coherence measure	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Comparison of Different Seasonal Models For Rainfall-Runoff modeling	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Exploring Effects of Wavelet debug in the process of identifying change point in the hydrologic time series of basin, Urmia lake	2nd International Conference on Civil,Architectural and Urban management (Amir Kabir Univ.)	2016
Temporal Chloride Modeling of Groundwater by Conjunction of Artificial Intelligence and Wavelet Transform Coherence Approaches	9th GeoSymposium of Young Researchers Silesia 2016 (Poland)	2016
Co-kriging and SOM pre-processing tools for groundwater quality modeling via ANN	1 st Int. Conf on Water, Enviroment and Sustainable Development (Ardabil Univ.)	2016
Semi-distributed geomorphologic rainfall-runoff modeling via multi-station optimization	4 th . International Congress on Civil Engineering , Architecture and Urban Development, Shahid Beheshti University , Tehran ,	2016
AI-based (ANN and SVM) statistical downscaling methods for precipitation estimation under climate change scenarios	EGU General Assembly 2017 (Vienna)	2017
Flow Routing Using Haar Wavelet Colocation Method	16 th Iranian Hydraulic Conf. (Ardabil)	2017
Using Multiple Linearization Conceptual Model and Artificial Neural Network (ANN) for Flow Routing	16 th Iranian Hydraulic Conf. (Ardabil)	2017
Application of feature extraction methods for AI-based investigation of climate change effects on hydro climatological parameters	16 th Iranian Hydraulic Conf. (Ardabil)	2017
Investigation of climate change on temperature and rainfall of Tabriz Station	16 th Iranian Hydraulic Conf. (Ardabil)	2017

Risk Assessment of Earth Dam Overtopping Using System Dynamics and Monte Carlo Simulation (case study: Hajilarchay Dam)	4th International Conference on long-Term Behavior and Environmentally Friendly Rehabilitation Technologies of Dams	2017
Groundwater risk assessment by lwpi due to landfill leachate impact	International conference On new approach to groundwater vulnerability , poland	2018
Comparative Analysis of Artificial Intelligence Based Methods for Prediction of Precipitation. Case Study: North Cyprus	13th International Conference on Theory and Application of Fuzzy Systems and Soft Computing — ICAFS-2018 Poland	2018
Prediction bound estimation for ANN based hydrological models	11 th. National Conf. on Civil Engineering (Shiraz Univ.)	2019
Integral transformation in water resources Eng	11 th. National Conf. on Civil Engineering (Shiraz Univ.)	2019
Lessons from artificial recharge "a case study of jafakende watershed"	2nd Int. conf. water problems in Mediterranean countries N Cyprus (NEU)	2019
Estimation of artificial neural network prediction bounds in hydrology	2nd Int. conf. water problems in Mediterranean countries N Cyprus (NEU)	2019
A novel approach for precipitation modeling using artificial intelligence based ensemble models	2nd Int. conf. water problems in Mediterranean countries N Cyprus (NEU)	2019
Improving novel extreme learning machine using PCA algorithms for modeling the performance of municipal wastewater treatment plant	2nd Int. conf. water problems in Mediterranean countries N Cyprus (NEU)	2019
Markovian based modeling for wave height forecasting	2nd Int. conf. water problems in Mediterranean countries N Cyprus (NEU)	2019
Evaluating the efficiency of genetic algorithm (GA) in optimizing reservoir operation rules with considering environmental water demand	2nd Int. conf. water problems in Mediterranean countries N Cyprus (NEU)	2019
Artificial intelligence models for estimation of monthly global solar radiation: performance comparison of ANN and ANFIS models	2nd Int. conf. water problems in Mediterranean countries N Cyprus (NEU)	2019
Spatiotemporal Precipitation Modeling by AI Based Ensemble Approach	10th Int. Conf. on Theory and Application of Soft Computing, Computing with Words and Perceptions (Prague)	2019

Artificial Intelligence based and Linear Conventional Techniques for Reference Evapotranspiration Modeling	10th Int. Conf. on Theory and Application of Soft Computing, Computing with Words and Perceptions (Prague)	2019
Non-linear ensemble modeling for multi-step ahead prediction of treated COD in wastewater treatment plant	10th Int. Conf. on Theory and Application of Soft Computing, Computing with Words and Perceptions (Prague)	2019
Wavelet transform for Artificial Intelligence (AI) based modeling of hydro-climatic processes	5th International Conference on Modeling and Simulation in Civil Engineering (India)	2019
Flood Susceptibility Mapping in Densely Populated Urban Areas Using Mcdm and Fuzzy Techniques	5th International Conference on Modeling and Simulation in Civil Engineering (India)	2019
Statistical Downscaling and Projection of Future Temperature Change for Tabriz City, Iran	5th International Conference on Modeling and Simulation in Civil Engineering (India)	2019
Estimation of ANN prediction bounds for suspended sediment load	5th International Conference on Modeling and Simulation in Civil Engineering (India)	2019
Application of ANN and screening method for downscaling of climatic parameters	5th International Conference on Modeling and Simulation in Civil Engineering (India)	2019
Forecasting CO Pollutant Concentration of Tabriz City Air Using Artificial Neural Network and Adaptive Neuro-Fuzzy Inference System and its Impact on Sustainable Development of Urban	2nd International Conference of Environment: Survival and Sustainability	2019
Forecasting of NO2 and SO2 of Tabriz Air using ANN and ANFIS	5 th Int Conf on Civil, Art. Urbani, Sust. Devel.	2019
Forecasting of PM10 of Tabriz Air using ANN and ANFIS	1 st national Conf. on Health and Environment	2019
Spatial clustering of wells network for GW level modeling via ANN	6th Int. Conf. Env. Eng. and Natural Resource	2020
Are drought and climate change the main reasons for the tragedy of large saline lakes?	5th INT. CON. ENG. TECH. MANAGEMENT (Istanbul, Nisantasi Univ.)	2021
Prediction interval estimation methods for Artificial Neural Network (ANN)- based modeling of the hydro-climatic processes, a review	5th INT. CON. ENG. TECH. MANAGEMENT (Istanbul, Nisantasi Univ.)	2021

Identification of dominant predictors for statistical downscaling of precipitation using wavelet coherence -a case study of tabriz city, iran	5th INT. CON. ENG. TECH. MANAGEMENT (Istanbul,Nisantasi Univ.)	2021
Prediction of climate change impacts on rasht city precipitation with use of emotional artificial neural network	5th INT. CON. ENG. TECH. MANAGEMENT (Istanbul,Nisantasi Univ.)	2021
Investigation of water quality by hydro chemical diagrams	5th INT. CON. ENG. TECH. MANAGEMENT (Istanbul,Nisantasi Univ.)	2021
Assessment of water resources contamination near landfill using lwpi measure	CONTAMINATED SITES (Slovakia)	2022
Lysimeter research – new experiments	CONTAMINATED SITES (Slovakia)	2022
Electrical conductivity estimation in lysimeteric test at a landfill site using transfer learning approach	CONTAMINATED SITES (Slovakia)	2022
Assessing the Performance of a Machine Learning-Based Hybrid Model in Downscaling Precipitation Data	7th International Conference on Harmony Search, Soft Computing and Applications (Korea)	2022
Spatiotemporal Clustering of Groundwater Depth in Ardabil Plain	7th International Conference on Harmony Search, Soft Computing and Applications (Korea)	2022
Multi-Step-Ahead Forecasting of Groundwater Level Using Model Ensemble Technique	7th International Conference on Harmony Search, Soft Computing and Applications (Korea)	2022
Climate Change Impact on Hydro-climatic Regimes of Metropolises: A Case Study	19th Annual Meeting of the Asia Oceania Geosciences Society (Singapour)	2022
Application of Artificial Neural Network to Improve DRASTIC-Based Groundwater Vulnerability Assessment	12th World Conference Intelligent System for Industrial Automation (Turkey)	2022
Application of Z-numbers in Hydro-Climatic Studies	16 th ICAFS (Turkey)	2023
IoT Ecosystems—the Challenge for the Smart City	WPMC 2023 (N. Cyprus)	2023

Temporal Assessment of Vulnerability to Seawater Intrusion in Shabestar Plain Aquifer: A Comparative Study of 2003, 2013 and 2021	WPMC 2023 (N. Cyprus)	2023
Evaporation Dynamics from the Perspective of High-Order Partial Deviations: A Case Study in Iran	WPMC 2023 (N. Cyprus)	2023
Validation of PML-V2 Evapotranspiration Model Over Multi-climatic Regions of Iran	WPMC 2023 (N. Cyprus)	2023
Integrated Fuzzy Logic and Data Mining Approach for Assessing Groundwater Vulnerability to Sea-Water Intrusion	ICSEGT 2024 (Baku)	2024
Assessing Uncertainty of Drought Risk in an Arid Climate in Iran	International Conference on Natural Resources and Sustainable Environmental Management (N. Cyprus)	2023
Simulating the Precipitation and Temperature of Nicosia via a Hybrid CNN-LSTM Model	International Conference on Natural Resources and Sustainable Environmental Management (N. Cyprus)	2023
Exploration of large-scale climatic teleconnections and extreme hydroclimate events in the MENA region	River Flow 2024 (UK)	2024
Optimizing Reservoir Operations with Fuzzy Logic: Addressing Uncertainty	International Conference on Intelligent and Fuzzy Systems (Turkey)	2025

Presentation in workshops:

Title of Presentation	Workshop Title	Country, Date	Collaborator
<i>Artificial Intelligence methods in hydrologic modeling</i>	<i>Multi-criteria decision making methods in water and environmental engineering</i>	<i>Univ. of Tabriz, Iran(2008)</i>	<i>Dr. Zarghami (Univ of Tabriz) and Prof. Szidarovszky (Arizona Univ.,USA)</i>
<i>Applications of ANNs to rainfall-runoff modeling</i>	<i>Hydroinformatics for rainfall-runoff modeling</i>	<i>Univ. of Tabriz, Iran(2010)</i>	<i>Prof. Mano(Tohoku Univ.,Japan)</i>

<i>Mathematical Modeling of Surface Hydrology</i>		<i>Ministry of Power, Iran</i>	
<i>Implication of wavelet transform in climate change studies</i>	<i>Climate Change</i>	<i>Univ. of Tabriz, Iran(2015)</i>	<i>Prof. Moradkhani (Portland state Univ., USA)</i>
<i>Temporal chloride modeling of groundwater by conjugation of artificial intelligence and wavelet transform coherence</i>	<i>One-day Joint Workshop-cum-Seminar on Soft Computing Methods in Water Resources Engineering</i>	<i>ITU, North Cyprus</i>	<i>Dr. Ali Danandehmehr</i>

Awards, Honorary Degrees, Medals and Positions:

Title of Award, Medal, Position	Issuing Authority	Country	Year
<i>Ph.D. scholarship</i>	<i>Ministry of Science</i>	<i>Iran</i>	<i>2001</i>
<i>Abroad Research Scholarship</i>	<i>Ministry of Science</i>	<i>Iran</i>	<i>2004</i>
<i>Outstanding researcher award</i>	<i>Tabriz University</i>	<i>Iran</i>	<i>2008</i>
<i>Best paper award</i>	<i>7 Int. Conf. Environment, Ecosystems and Development</i>	<i>Spain</i>	<i>2009</i>
<i>Abroad Research Scholarship</i>	<i>Univ. of Tabriz</i>	<i>Iran</i>	<i>2010</i>
<i>Outstanding researcher award</i>	<i>Tabriz University</i>	<i>Iran</i>	<i>2011</i>
<i>Invited Plenary Speaker</i>	<i>9 Int. Conf. Environment, Ecosystems and Development</i>	<i>Swiss</i>	<i>2011</i>
<i>Nominated in Marquis Who's Who in the World 2012</i>	<i>Marquis Who's Who</i>	<i>USA</i>	<i>2012</i>
<i>Best paper award</i>	<i>12 Int. Conf. Applied Computer Science</i>	<i>Singapore</i>	<i>2012</i>
<i>Invited Plenary Speaker</i>	<i>8 th. Int. Conf. Water Res., Hydraulics & Hydrology</i>	<i>Greece</i>	<i>2013</i>
<i>Invited Plenary Speaker</i>	<i>12 Int. Conf. Applied Computer Science</i>	<i>Singapore</i>	<i>2012</i>
<i>Most Cited paper in journal "Engineering Applications of Artificial Intelligence"</i>	<i>Nourani, et a.l, 2009, "A combined neural-wavelet model for prediction of Ligvanchai watershed precipitation" Vol. 22</i>	<i>Elsevier</i>	<i>2013</i>
<i>Outstanding researcher award</i>	<i>Tabriz University</i>	<i>Iran</i>	<i>2013</i>

<i>Invited Kenote Speaker</i>	<i>The 2nd International Conference on Civil,Architectural and Urban managment Science</i>	<i>Iran</i>	<i>2016</i>
<i>Best paper award</i>	<i>7th International Conference on Environment and BioScience</i>	<i>South Korea</i>	<i>2017</i>
<i>Outstanding researcher award</i>	<i>Tabriz University</i>	<i>Iran</i>	<i>2017</i>
<i>Outstanding researcher award</i>	<i>Near East University</i>	<i>N. Cyprus</i>	<i>2017</i>
<i>Outstanding researcher award</i>	<i>Near East University</i>	<i>N. Cyprus</i>	<i>2018</i>
<i>Among 1% outstanding scientists of the world</i>	<i>Univ. of Tabriz</i>	<i>Iran</i>	<i>2018</i>
<i>Invited Keynote Speaker</i>	<i>Application of Integral Transforms in hydro-climatic studies</i>	<i>Shiraz, Iran</i>	<i>2019</i>
<i>Invited Keynote Speaker</i>	<i>Application of Integral Transforms in hydro-climatic studies</i>	<i>N. Cyprus</i>	<i>2019</i>
<i>Invited Keynote Speaker</i>	<i>Wavelet transform for Artificial Intelligence (AI) based modeling of hydro-climatic processes</i>	<i>India,TKM CE</i>	<i>2019</i>

<i>Among 1% outstanding scientists of the world</i>	<i>Univ. of Tabriz</i>	<i>Iran</i>	<i>2019</i>
<i>Among 1% outstanding scientists of the world</i>	<i>Univ. of Tabriz</i>	<i>Iran</i>	<i>2020-</i>
<i>Among World's Top 2% Scientists</i>	<i>Stanford University</i>	<i>USA</i>	<i>2020-</i>
<i>Invited Keynote Speaker</i>	<i>Nişantaşı University</i>	<i>Turkey</i>	<i>2021</i>
<i>Editor's Choice Paper</i>	<i>Water Science & Technology Journal</i>	<i>UK</i>	<i>2021</i>
<i>Ranked 2nd in Hydrology, 16th in AI</i>	<i>ScholarGPS, based on last 5 years data</i>	<i>USA</i>	<i>2024</i>
<i>Outstanding researcher award</i>	<i>Tabriz University</i>	<i>Iran</i>	<i>2021</i>
<i>Outstanding researcher award in Eng</i>	<i>Tabriz University</i>	<i>Iran</i>	<i>2025</i>
<i>Outstanding Editor in Chief of the Selected Journal</i>	<i>Tabriz University</i>	<i>Iran</i>	<i>2025</i>

<i>Most Influential Article</i>	<i>Journal of Mountain Science</i>	<i>China-Springer</i>	<i>2024</i>
<i>Iranian Distinguished Researcher Award in Engineering</i>	<i>Iran Ministry of Science, Research and Technology</i>	<i>Iran-Tehran</i>	<i>2025</i>

Membership to Scientific Associations:

Name of Institution/Association	Position Held	Country	Year
<i>Journal of Hydrology</i>	<i>Editorial board member</i>	<i>Elsevier</i>	<i>2018-present</i>
<i>AQUA - Water Infrastructure, Ecosystems and Society</i>	<i>Editorial board member</i>	<i>IWA</i>	<i>2022-present</i>
<i>Journal of Hydroinformatics</i>	<i>Editorial board member</i>	<i>IWA</i>	<i>2024-present</i>
<i>Journal of Groundwater Science and Eng</i>	<i>Editorial board member</i>	<i>CAGS</i>	<i>2024-present</i>
<i>HydroResearch</i>	<i>Editorial board member</i>	<i>Elsevier</i>	<i>2025-present</i>
<i>Hydrology and Water Resources</i>	<i>Editorial board member</i>	<i>Scilight Press</i>	<i>2025-present</i>
<i>Scientific Reports</i>	<i>Editorial board member</i>	<i>Nature, Springer</i>	<i>2025-present</i>
<i>Water</i>	<i>Guest Editor</i>	<i>MDPI</i>	<i>2021</i>
<i>Sustainability</i>	<i>Guest Editor</i>	<i>MDPI</i>	<i>2022</i>
<i>Remote Sensing</i>	<i>Guest Editor</i>	<i>MDPI</i>	<i>2022</i>
<i>Atmospher</i>	<i>Guest Editor</i>	<i>MDPI</i>	<i>2022</i>
<i>Njp Clean Water</i>	<i>Guest Editor</i>	<i>Nature, Springer</i>	<i>2023</i>
<i>Civil Engineering Infrastructures Journal</i>	<i>Editorial board member</i>	<i>Tehran Univ</i>	<i>2021-present</i>
<i>IWRA</i>	<i>Member</i>	<i>Iran</i>	<i>2006-present</i>
<i>IAHS</i>	<i>Member</i>	<i>Europe</i>	<i>2006-present</i>
<i>J. Civil and Environ. Eng.</i>	<i>Editorial board member.Editor-in-Chief</i>	<i>Iran(Univ of Tabriz)</i>	<i>2007-present</i>
<i>Hydro-Geomorpholog Journal</i>	<i>Editorial board member</i>	<i>Iran(Univ of Tabriz)</i>	<i>2014-present</i>
<i>IAEH</i>	<i>Member</i>	<i>USA</i>	<i>2006-present</i>
<i>J. of Civil & Env. Res.</i>	<i>Editorial board member</i>	<i>Iran(Univ of Qom)</i>	<i>2015-present</i>

<i>Environment & Health Journal</i>	<i>Editorial board member</i>	<i>Iran(Medical Univ. of Tabriz)</i>	<i>2013-present</i>
<i>Iranian J of Ecohydrology</i>	<i>Editorial board member</i>	<i>Tehran Univ.</i>	<i>2021-present</i>
<i>Int. J. Soft Computing and Engineering</i>	<i>Editorial board member</i>	<i>India</i>	<i>2011-present</i>
<i>Advances in Computational Research</i>	<i>Editorial board member</i>	<i>India</i>	<i>2011-present</i>
<i>Int. J. Earth Sciences and Engineering</i>	<i>Editorial board member</i>	<i>India</i>	<i>2012-present</i>
<i>Int. J. Eng. and Advanced Technology</i>	<i>Editorial board member</i>	<i>India</i>	<i>2011-present</i>
<i>Int. J. Recent Tech. and Engineering</i>	<i>Editorial board member</i>	<i>India</i>	<i>2011-present</i>
<i>Artificial Intelligence Research</i>	<i>Editorial board member</i>	<i>Canada</i>	<i>2012-present</i>
<i>Radical J. Computer Science and Information Technology</i>	<i>Editorial board member</i>	<i>India</i>	<i>2012-present</i>
<i>Dataset Papers in Geology Journal</i>	<i>Editorial board member</i>	<i>USA</i>	<i>2012-present</i>
<i>Int. J. Soft Computing, Mathematics and Control</i>	<i>Editorial board member</i>	<i>Australia</i>	<i>2012-present</i>

Language Proficiency:

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

Reviewer for Peer-reviewed Journals:

International Journals	National Journals
Journal of Hydrology	Journal of Civil Engineering Faculty of Tabriz University
Journal of Hydrologic Engineering	Iran Water Resources Research Journal
Journal of Environmental Management	Water and Wastewater Journal
Clean	Agriculture Science
Water Resources Management	Iranian Journal of Watershed Management
Journal of Science and Technology	
Journal of Hydroinformatics	
Journal of Irrigation & Drainage Eng.	
Journal of Environmental Informatics	
Applied Mathematical Modeling	
Engineering Applications of Artificial Intelligence	

International Journal Environ. Science Technology	
Int. J. Earth Sciences and Engineering	
Scintia Iranica	
Int. J. Hydrology Science and Technology	
Journal of Hydro-environment Rsearch	
Int. Journal of Eng.	
Water Management	
Hydrology Research	
Hydrogeology Journal	
Computers and Geoscinces	
Water Resources Research	
Journal of Mountain Science	
Nural Computing and Applications	
Natural Resources Research	
Hydrological Sci. J.	
Earth Sci Informatics	