

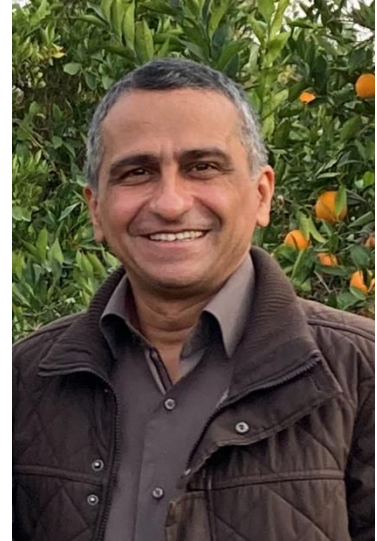
**Dr. Abdolreza Bahremand**, PhD in Engineering (Hydrology), Professor at Gorgan University of Agricultural Sciences and Natural Resources, Iran

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## Personal information

Abdolreza Bahremand  
Born in Iran on 1972

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h-index: 15

Google Scholar Profile:

<https://scholar.google.ca/citations?user=Xi87xgYAAAAJ&hl=en>

## Education

Free University of Brussels (Vrije Universiteit Brussel)

- PhD, Engineering Sciences, 2002 - 2006
- Thesis: Simulating the Effects of Reforestation on Floods using Spatially Distributed Hydrologic Modeling and GIS
- Supervisor: Florimond De Smedt

University of Tehran

- Master of Science (MSc), Watershed Management Engineering, 1995 - 1997
- Thesis: Comparison of Reservoir Flow Routing methods for Jiroft Dam
- Supervisor: Mohammad Mahdavi

University of Tehran

- Bachelor's degree, Rangeland and Watershed Management Engineering, 1991 – 1995

## Experience

Professor, Gorgan University of Agricultural Sciences and Natural Resources **September 2006 – Present (~16 years):**

Courses taught for Department of Watershed Management:

- B.Sc: Hydrology, Cartography, Hydraulics
- M.Sc: Hydrological Modeling, Rangeland Ecosystem Modeling, River Engineering, Flood Control, Rangeland Hydrology, Arid Zone Hydrology
- PhD: Advanced Hydrology, Watershed Simulation, River Management

Supervision of students theses:

- Supervised 45 MSc theses
- Supervised 10 PhD theses
- Co-supervised 5 PhD theses
- 10 research projects (principal investigator)

### Previous and Visiting Positions (including Consulting and Management)

- Visiting Professor at University of Saskatchewan, Global Institute for Water Security. September 2017 - September 2019
- Scientific Staff, Vrije Universiteit Brussel. August 2002 - September 2006
- Faculty Member, Lecturer at Azad University of Baft. September 2000 - August 2002
- Senior Engineer at Natural Resource Management Central Office of Kerman Province, Iran. April 2000 - June 2002 (2 years 3 months)
- Researcher, Hydrologist, at Soil Conservation and Watershed Management Research Institute of Iran (SCWMRI). October 1995 - March 1998 (2 years 6 months)
- Researcher, Rangeland Management at Forest and Rangeland Research Center of Iran. April 1995 - September 1995 (6 months).

## Editorial Experience

1. Editor-in-Chief of Journal of Water and Soil Conservation (Iran)
2. Associate Editor of Natural Resources Modeling (Wiley)
3. Editorial board member of Environmental Resources Research (Iran)

## Projects (Principal Researcher Receiving Grant Funding)

1. Simulation of water and energy balance for Iran's watersheds under future climate change scenarios (2020-present)
2. Hydrology report for Iran's National Flood Committee (2019)
3. Shemshak Flood Project (2019)
4. Ziyarat Flood Project (2019)
5. Bivariate flood frequency analysis for Iran using copula functions (2017)
6. Preparation of educational software for water profile computation in open channels (2015)
7. Hydrograph analysis and flow component separation for Iranian government (2012)
8. Flow simulation for HajiQuchan river utilizing the WetSpa model (2012)

## Modelling Platforms

- WetSpa
- WetSpa-Python
- MESH
- MIKESHE
- SWAT
- Hymod
- KINEROS2
- LISFLOOD-FP
- NAYS2DFLOOD
- NAYS2DH
- HEC-RAS
- HEC-HMS

## Computer Programming Languages and GIS

- Visual Basic (Excel) for data analysis
- Python (for model processing and visualization)
- R (for model processing, visualization and statistics)
- Matlab (for model processing, visualization and statistics)
- ArcGIS
- Green Kenue
- QGIS

## Languages

1. Persian (Farsi): Native
2. English: Fluent
3. French: Conversational

## Selected First-Author Publications

- 1) **A Bahremand**, Ahmadyousefi S, Sheikh V, Komaki C, **2020**, A Parameter Allocation Approach for Flow Simulation Utilizing the WetSpa-Python Model. *Hydrological Processes* 2020:1-18. DOI: 10.1002/hyp.13992
- 2) **A Bahremand**, HESS Opinions: Advocating process modeling and de-emphasizing parameter estimation, *Hydrology and Earth System Sciences*, **2016**, Volume (20), 1433-1445.
- 3) **A Bahremand**, F De Smedt, Predictive analysis and simulation uncertainty of a distributed hydrological model, *Water Resources Management*, **2010**, Volume (24), 2869-2880.
- 4) **A Bahremand**, F De Smedt, Distributed hydrological modeling and sensitivity analysis in Torysa Watershed, Slovakia, *Water Resources Management*, **2008**, Volume (22), 393-408.
- 5) **A Bahremand**, F De Smedt, J Corluy, YB Liu, J Poorova, L Velcicka, E Kunikova, WetSpa model application for assessing reforestation impacts on floods in Margecany–Hornad Watershed, Slovakia, *Water Resources Management*, **2007**, Volume (21), 1373-1391.
- 6) **A Bahremand**, F Smedt, J Corluy, YB Liu, J Poorova, L Velcick, E Kunikova, Application of WetSpa model for assessing land use impacts on floods in the Margecany-Hornad watershed, Slovakia, *Water Science & Technology*, **2006**, Volume (53), 37-45.
- 7) **A Bahremand**, Simulating the effects of reforestation on floods using spatially distributed hydrologic modeling and GIS, PhD thesis, **2006**, Department of Hydrology and Hydraulic Engineering, Vrije Universiteit Brussel, Brussels, Belgium.
- 8) **A Bahremand**, J Corluy, Y Liu, F De Smedt, J Poórová, L Velcická, Stream flow simulation by WetSpa model in Hornad river basin, Slovakia, *Floods from Defence to Management*. Taylor-Francis Group, London, **2005**, Volume (book chapter), 67-74.

## PhD Theses Supervised

1. **Kabir, A.**, Flow simulation using spatially distributed hydrologic modelling in Gorganrood river basin, Iran. **2010**.
2. **Saadatfar, A.**, Assessment and prediction of climate change impacts on range ecosystem production and the vulnerability of pastoral livelihood in the coming decades. **2014**.
3. **Saberchenari, K.**, Gully erosion potential zoning using Dempster-Shafer method in the Gharnaveh watershed, Golestan Province. **2017**.
4. **Ozhan, M.**, Coupling the flexible hydrologic model, WetSpa-Python, and 2-D hydraulic model, LISFLOOD-FP for flood zonation. **2017**.
5. **Rezaeigaravi, F.**, Hydrological response of homogeneous urban areas to rainfall and drainage network efficiency determination through urban runoff simulation (case study: a part of Mashhad city). **2018**.
6. **Tajiki, M.**, Improvement of operational discharge forecasting using data assimilation in a poorly gauged catchment (case study: Roudak catchment). **2019**.
7. **Heravi, H.**, Simulation of simultaneous impacts of changes in climate and land use on suspended sediment using spatially distributed hydrologic WetSpa model in Taleghan watershed, Alborz Province. **2019**.
8. **Samadi, M.**, Sediment fingerprinting using biomarkers and geochemical properties via a determining-uncertainties approach in Toul-Bane watershed, Golestan Province, Iran. **2020**.
9. **Sadeghimazidi, H.**, Identifying factors affecting the peak discharge using structural equations considering their uncertainty (case study: watersheds of the South of Iran). **2018**.
10. **Mahmoodi, Z.**, An investigation on the interaction between surface water and groundwater using the coupling of WetSpa and MODFLOW models: a case study in Arazkuse Watershed. **2021**.

## PhD Theses (Advisory Committee)

11. **Parisay, Z.**, Developing a GIS-based hydrological model for rainfall-runoff simulation. **2020**.
12. **Hosseini, S.**, Studying the role of effective variables on vegetation patch dynamics in saline and alkaline rangelands of Gorgan plain. **2011**.
13. **Azimi, M.**, Simulation of range forage production dominated by *Artemisia spp* via SWAT model, case study: Hableh Rud river basin, Iran. **2012**.
14. **Kavianpoor, A.**, Assessing the impact of climate change on Haraz watershed rangelands water resources and its socioeconomic consequences. **2018**.

15. **Fazel, A.**, Effect of land use and size of streamside vegetation on habitat attributes and stream biota in Zarin-Gol, Kabood-val, Shirabad and Tilabad streams, Golestan province, Iran. **2017**.
16. **Kornejadi, A.**, Assessing landslide susceptibility, hazard, risk and developing management strategic plan for Owghan Watershed, Golestan Province, Iran. **2018**.
17. **Gholipour, M.**, Developing a spatial decision support system (SDSS) for dynamic land use planning using hydrological approach (case study: Golestan Province). **2019**.
18. **Khosravi, Gh.**, Hydromorphological assessment and developing a river basin management plan using a multi-scale hierarchical framework for the Tilabad Watershed (Province Golestan). **2020**.

## International Summer Schools, Courses and Workshops Attended

- 2nd Workshop on Improving the Theoretical Underpinnings of Hydrologic Models) 15/04/2018-18/04/2018, Sopron, Hungary)
- CRHM training workshop (by Dr. Kevin Shook, 13 October 2017, Saskatoon, Canada)
- 1st Workshop on Improving the Theoretical Underpinnings of Hydrologic Models (24/04/2016 - 27/04/2016, Bertinoro, Italy)
- 2016 Hydraulic Elevator Dam Training Session, 6-8th Sep, Dunhua, China
- Short International Course on Fundamental and Advanced Topics in Hydrogeology and Hydrological Simulation Cagliari (Italy) – July 27–31, 2015
- Summer school on copulas for hydrology and environmental sciences, Pau, France, July 6-10, 2015
- International Hydrocourse: Model building, inference and hypothesis testing in hydrology, 2012, Gabriel Lippmann Research Center, Luxembourg.
- Climate change training workshop at the IX international rangeland congress, April 2011, Rosario, Argentina.
- International Summer School and Workshop on Numerical methods for interactions between sediments and water, 20-24 September 2010, Paris 13 Nord University, Paris, France (presented a paper and poster in this course as well).
- International Summer School on Complex Flows, Turbulence, Morphodynamics and Ecology in Rivers, 2008, Delft University of Technology
- Water quality modelling workshop at Gorgan University of Agricultural Sciences and Natural Resources, 2008, lectured by Dr. Newham from Australia.
- Course on LaTeX in VUB, Belgium, November 2005
- Course on scientific writing in VUB, Belgium, December 2005

## Scholarships, Grants and Awards

1. A 4-year full scholarship for out-of-country PhD studies awarded by the Ministry of Science and Technology of Iran (2002-2006).  
*The scholarship was granted to the winners of a highly competitive national examination held by the Iranian Ministry of Science and Technology. The scholarship included 51 months coverage of all living and study costs.*
2. Bahar Azadi Gold Coin for achieving a unanimous vote of promotion committee (2012).  
*Awarded by a committee for the promotion from Assistant to Associate Professor.*
3. Best Student Paper of the IASME / WSEAS International Conference on Water Resources, Hydraulics & Hydrology (WHH'06) at Chalkida, Greece (May 11-13, 2006)  
*Paper Title: Parameter Sensitivity and Uncertainty Analysis of the WetSpa Model using PEST (Parameter ESTimator software)*
4. Grant for application of the MESH hydrological model, received from University of Saskatchewan (Global Institute of Water Security), 24 May 2018.
5. Achieving a unanimous vote of promotion committee (2022).  
*For the promotion from Associate Professor to Full Professor.*

## Peer-Reviewed Publications (Full List)

**Bolded text** indicates my name in the publication list. I have collaborated with many international researchers and colleagues. These publications represent my extensive scientific network of colleagues and the full scope of my research endeavours. The 18 publications indicated by starred symbols (\*) are papers presented at international conferences.

1. Tamaskani Zahedi, Ali, Barani, Hossein, Mokhtari, Shahroo, **Bahremand, Abdolreza**; 2022, Flood hazard and Risk maps using two-dimensional hydraulic model LISFLOOD-FP (Case Study: Araz Kooseh region). *Journal of Water and Soil Conservation*, 28 (4), 1-25.
2. Saeedi, Iman; Mikaeili Tabrizi, Ali Reza; **Bahremand, Abdolreza**; Salmanmahiny, Abdolrassoul; 2022, Multi-criteria prioritizing of Green Infrastructure Practices and their combinations to Control Runoff in Tehran Metropolitan. *Journal of Environmental Studies*, 48 (1).

3. Ghonchepour, D., **Bahreman, A.**; **2022**, A Review on Thermodynamics in Water Cycle Emphasizing on Entropy and Maximum Entropy Production Principle. *Journal of Water and Wastewater Science and Engineering*, DOI: 10.22112/JWWSE.2021.304851.1285.
4. Mohammadlou, M., **Bahreman, A.**, Princz, D., Kinar, N., Haghnegahdar, A., & Razavi, S.; **2022**, Objective evaluation of the Global Environmental Multiscale Model (GEM) with precipitation and temperature for Iran. *Natural Resource Modeling*, e12343. <https://doi.org/10.1111/nrm.12343>
5. Saeedi, Iman; Mikaeili Tabrizi, Ali Reza; **Bahreman, Abdolreza**; Salmanmahiny, Abdolrassoul; **2022**, A Soft Systems Methodology and Interpretive Structural Modeling Framework for Green Infrastructure Development to Control Runoff in Tehran Metropolis. *Natural Resource Modeling*, e12339. <https://doi.org/10.1111/nrm.12339>
6. Poorzaman, Saeed; Sadoddin, Amir; **Bahreman, Abdolreza**; **2022**, Flood hazard mapping using the CCHE2D numerical model in the Hable-rud River-a reach located downstream of Bone-Kuh Village, *Journal of Natural Environmental Hazards*, 31:1-16.
7. Zarghi, Abolfazl; **Bahreman, Abdolreza**; Sheikh, Vahedberdi; **2021**, Application of Parameter Allocation Approach in Hydrological Modeling with MIKE SHE Distributed-Physical Model (Case Study: Ziarat Watershed, Golestan Province), *Iran-Water Resources Research*, 16, 4, 174-189.
8. Ghonchepour, Diba; Sadoddin, Amir; **Bahreman, Abdolreza**; Croke, Barry; Jakeman, Anthony; Salmanmahiny, Abdolrassoul; **2021**, A methodological framework for the hydrological model selection process in water resource management projects, *Natural Resource Modeling*, 34, 3, e12326.
9. Khosravi, Gholamreza; **Bahreman, Abdolreza**; Teimouri, Mehdi; Ahmad Usefi, Sajad; **2021**, Numerical Simulation of the Transverse Dike (Epi) and Islands effect over Water Flow Pattern in Natural Meandering of the Tajan River, *Journal of Water and Soil Conservation*, 28, 2, 159-175.
10. **Bahreman, Abdolreza**; Ahmadyousefi, Sajad; Sheikh, Vahedberdi; Komaki, Chooghi Bairam; **2020**, A parameter allocation approach for flow simulation using the WetSpa-Python model, *Hydrological Processes*, 35:e13992. <https://doi.org/10.1002/hyp.13992>.
11. Tajiki, M; Schoups, G; Hendricks Franssen, HJ; Najafinejad, A; **Bahreman, A**; **2020**, Recursive Bayesian estimation of conceptual rainfall-runoff model errors in real-time prediction of streamflow, *Water Resources Research*, 56, 2, e2019WR025237.
12. Khaleghi, Esmail; Sadoddin, Amir; Najafinejad, Ali; **Bahreman, Abdolreza**; **2020**, Flood hydrograph simulation using the SWMM model: A semiarid zone watershed case study, Shiraz Khoshk River, Iran, *Natural Resource Modeling*, 33, 2, e12269.
13. Afsharypour, Zeynab; **Bahreman, Abdolreza**; Abdolhosseini, Mohammad; **2020**, Application of Multivariate Approach in the Analysis of Hydrological Phenomena (Case Study: Flood in Boustan Dam Watershed of Golestan Province), *Irrigation Sciences and Engineering*, 43, 2, 35-48.
14. Mahmoodi, Zeinab; **Bahreman, Abdolreza**; Abdollahi, Khodayar; Sadoddin, Amir; Kuhestani, Shapour; Komaki, Chooghi Bairam; **2020**, Investigation of Temporal and Spatial



Variations of Water Balance Components and Hydrograph Separation of Arazkouse Watershed through Groundwater Recharge Modeling using WetSpa Model, *Journal of Water and Soil Conservation*, 27, 1, 25-47.

15. **Bahreman, Abdolreza**; Jamali, Fateme; Komaki, Choobhi Bayram; **2020**, 2D Flood Simulation Using the Nays 2D Flood Model and Comparison with the Sentinel 2 Satellite Image (Case Study: Flood of March 2019 at the end of Arazkuse River, Golestan Province), *Journal of Water and Soil Conservation*, 27, 2, 223-236.
16. Khosravi, Gholamreza; Sadoddin, Amir; Ownegh, Majid; **Bahreman, Abdolreza**; Mostafavi, Hossein; **2020**, Application of a hierarchical multi-scale framework to delineating spatial units of watersheds (Case study: the Til-abad Watershed, Golestan Province), *Journal of Water and Soil Conservation*, 26, 6, 44225.
17. **Bahreman, Abdolreza**; Hatami Golmakani, Parvaneh; **2020**, Evaluation of the potential flooding of Ziarat watershed by CN-based method and WetSpa hydrological model, *Irrigation and Water Engineering*, 11, 1, 38-51.
18. Izadi, Mohammad; **Bahreman, Abdolreza**; Mohammadian Behbahani, Ali; Komaki, Chooghi Bairam; Azarakhshi, Maryam; **2020**, Investigating the Effects of Lithological Units on Runoff Coefficient (A case study of 18 watersheds in three climatic regions of the Iran), *Journal of Watershed Management Research*, 11, 21, 236-248.
19. Kaviani, Ataollah; Javidan, Narges; **Bahreman, Abdolreza**; Gyasi-Agyei, Yeboah; Hazbavi, Zeinab; Rodrigo-Comino, Jesús; **2020**, Assessing the hydrological effects of land-use changes on a catchment using the Markov chain and WetSpa models, *Hydrological Sciences Journal*, 65, 15, 2604-2615.
20. Najafinejad, Ali; Heravi, Hesam; **Bahreman, Abdolreza**; Zeinivand, Hossein; **2020**, Simulation of climate change on river hydrograph using wetspa model, case study: Taleghan watershed alborz province, *Journal of Spatial Analysis Environmental Hazards*, 7, 1, 121-134.
21. Safikhany, Sajede; Holisaz, Arashk; **Bahreman, Abdolreza**; Biniiaz, Mehdi; **2020**, Model-Based Solution for Water and Soil Resources Management: Opportunities and Threats, *Public Policy*, 6, 1, 183-202.
22. **Bahreman, Abdolreza**; Amir, Sadoddin; **2020**, Two-Dimensional Hydraulic Simulation of Floods using the LISFLOOD-FP Raster Model (A Case Study: The Shemshak Watershed, Tehran Province), *Journal of Watershed Management Research*, 11, 22, 165-174.
23. Kornejady, Aiding; Ownegh, Majid; Pourghasemi, Hamid Reza; **Bahreman, Abdolreza**; Motamedi, Manouchehr; **2020**, (Landslide susceptibility prediction using the coupled Mahalanobis distance and machine learning models (case study: Owghan watershed, Golestan province), *Researches in Earth Sciences*, 11, 2, 44214.
24. Ghasemieh, Hoda; Ghasemieh, Maryam; **Bahreman, Abdolreza**; **2020**, The introduction of landscape Evolution Models and their Applications with Emphasis on the CAESAR-Lisflood Hydrodynamic Model, *Journal of the Geographical Engineering of Territory*, 4, 7, 116-100.

25. Samadi, Meisam; **Bahreman, Abdolreza**; Fathabadi, Abolhasan; **2020**, The Boustan Dam monthly inflow forecasting using data-driven and ensemble models in the Golestan Province, *Watershed Engineering and Management*, 11, 4, 1044-1058.
26. Mahmoudi, Z; **Bahreman, A**; Abdollahi, K; Sadoddin, A; Kouhestani, S; Komaki, C; **2020**, Investigation of temporal and spatial variations of water balance and separated hydrographs of the Arazkouse Watershed through groundwater recharge modeling using WetSpa model, *Journal of Water and Soil Conservation*, 27, 1, 25-47.
27. Kavianpoor, Amirhossein; Barani, Hossein; Sepehry, Adel; **Bahreman, Abdolreza**; Moradi, Hamidreza; **2019**, Climate change impact on quality of life indicators of pastoralists (case study: Rangelands of Haraz River Basin, Mazandaran province, Iran), *Journal of Rangeland Science*, 9, 1, 24-39.
28. Parisay, Zahra; Sheikh, Vahedberdi; **Bahreman, Abdolreza**; Komaki, Chooghi Bairam; Abdollahi, Khodayar; **2019**, An approach for estimating monthly curve number based on remotely-sensed MODIS leaf area index products, *Water Resources Management*, 33, 8, 2955-2972.
29. Rahimzadeh, Omid; **Bahreman, Abdolreza**; Noura, Nader; Mukolwe, Micah; **2019**, Evaluating flood extent mapping of two hydraulic models, 1D HEC-RAS and 2D LISFLOOD-FP in comparison with aerial imagery observations in Gorgan flood plain, Iran, *Natural Resource Modeling*, 32, 4, 44208.
30. Daraei, Sahar; **Bahreman, Abdolreza**; Karimi, Hamid; **2019**, Evaluation of the effect of land use changes on subsurface flow using WetSpa model, case study: Horo-Dehno Watershed, *Watershed Engineering and Management*, 11, 2, 392-407.
31. Saber Chenari, Kazem; **Bahreman, Abdolreza**; Berdi Sheikh, Vahed; Bairam Komaki, Chooghi; **2019**, Gully Erosion Hazard Zoning in the Gharnaveh Watershed, Golestan Province, *Journal of Engineering Geology*, 13, 1, 69-94.
32. Rezayi, Fatemeh; **Bahreman, Abdolreza**; Sheikh Vahedberdi; Dasturani, MohammadTaghi; Tajbakhsh, Mohammad; **2019**, Determination of the Most Important Parameters Affecting the Urban Runoff using SWMM Model (Case Study: Mashhad City, District 9), *Journal of Watershed Management Research*, 9, 18, 135-145.
33. Fazel, Abdolazim; Ghorbani, Rasul; **Bahreman, Abdolreza**; **2019**, Influence of Stream channel morphology and in-stream habitats on fish community in Golestan province Streams, *Journal of Applied Ichthyological Research*, 7, 3, 17-30.
34. Kavianpoor, Amirhossein; Barani, Hossein; Sepehri, Adel; **Bahreman, Abdolreza**; **2019**, Evaluating the impacts of climate change on pastoralists activities (Case study: Rangelands of Haraz river basin), *Rangeland*, 13, 1, 26-38.
35. Ahmadyousefi, Sajjad; **Bahreman, Abdolreza**; Sheikh, Vahedberdi; Komaki, Chooghi Bairam; **2019**, Determining the Snow Coefficient in order to simulate the snow melting in the Shemshak Watershed Using the WetSpa Model, *Iranian Journal of Watershed Management Science and Engineering*, 13, 47, 44204.

36. \*Bahremand, A.; Mohammadlou, M.; Razavi, S.; Princz D.; 2019, Comparison of GEM and WATCH data with synoptic stations' temperature and precipitation data in Iran, 2ed annual meeting of GWF, University of Saskatchewan, 14-17 May, 2019.
37. \*Bahremand, A.; Mohammadlou, M.; Razavi, S.; Princz D.; 2019, Verification of GEM data in Iran using synoptic stations' temperature and precipitation data, World Conference on Natural Resource Modelling, Montréal, Canada, 22-24 May.
38. Tajiki, Maryam; Najafinejad, Ali; Bahremand, Abdolreza; Schoups, Gerrit; Hendricks-Franssen, Harrie-Jan; 2019, Improving River Discharge Forecasting With the Hymod Conceptual Rainfall-Runoff Model Using Data Assimilation, *Iran-Water Resources Research*, 15, 4, 137-147.
39. Khosravi, Gholamreza; Sadodin, Amir; Ownegh, Majid; Bahremand, Abdolreza; Mostafavi, Hossein; 2019, Classification and identification of changes in river flow regime using the Indicators of Hydrologic Alteration (IHA) Case study:(The Khormarud River-Tilabad Watershed-Golestan Province), *Iranian journal of Ecohydrology*, 6, 3, 651-671.
40. Parisay, Zahra; Sheikh, Vahedberdi; Bahremand, Abdolreza; ChooghiBairam, Komaki; Abdollahi, Khodayar; 2019, Comparison of Different Methods in Monthly Surface Runoff Estimation Based on the Monthly Curve Number, *Watershed Management Researches Journal*, 32, 3, 78-94.
41. Afsharypour, Zeynab; Bahremand, Abdolreza; Abdolhosseini, Mohammad; 2019, Bivariate frequency analysis of rainfall intensity and depth using copula functions (Case study: Chehelchai Watershed, GorganRood, Golestan), *Irrigation and Water Engineering*, 9, 2, 121-134.
42. Samadi, Meisam; Bahremand, Abdolreza; Salajegheh, Ali; Ownegh, Majid; Hoseializade, Mohsen; Fathabadi, Abolhasan; 2019, Sediment fingerprinting and estimation uncertainty in Toulbane watershed, Golestan province, *Journal of Range and Watershed Managment*, 72, 2, 443-461.
43. Rezayi, Fateme; Bahremand, Abdolreza; Sheikh, Vahed Berdi; Dastiurani, Mohmad Taghi; Tajbakhsh, Mohmmd; 2019, Calibration and Evaluation of the SWMM Model in Runoff Simulation in District 9 of Mashhad City, *Journal of Water and Sustainable Development*, 5, 2, 91-100.
44. Mahmoodi, Zeinab; Bahremand, Abdolreza; Abdollahi, Khodayar; 2019, A Review on Methods and Models of Surface Water and Groundwater Interaction-with Focus on Regional Integrated Models, *Journal of Water and Sustainable Development*, 5, 2, 101-116.
45. Rezayi, F; Bahremand, A; Shaikh, VB; Dasturani, MT; Tajbakhsh, M; 2019, ASSA models and GIS integration in the determination of flooding point in different return periods, *Cercetari Agronomice in Moldova*, Vol.52, No.1, pp.91-105, ref.13.
46. Samadi, Meisam; Bahremand, Abdolreza; Salajegheh, Ali; Ownegh, Majid; Hoseinalizadeh, Mohsen; Fathabadi, Abolhasan; 2019, Estimation the contribution of geological units as sources of suspended sediment yield using sediment fingerprinting approach (case study: The Toulbane watershed, Golestan Province), *Researches in Earh Sciences*, 10, 38, 1-20.

47. Ghonchepour, Diba; Sadoddin, Amir; **Bahreman, Abdolreza**; Salmanmahini, Abdolrassoul; Jakeman, Anthony; **2019**, Application of a quantitative screening approach in statistical downscaling model (SDSM) to generate climate change scenarios (Case study: the Gorganroud River Basin), *Iranian Journal of Ecohydrology*, 6, 2, 397-414.
48. Ozhan, M; **Bahreman, A**; Sheikh, V; Komaki, C; **2018**, Prediction of Floods extent with different return periods using 2-D hydraulic model, LISFLOOD-FP, *Iran-Water Resources Research*, 13, 4, 190-195.
49. Javidan, Narges; **Bahreman, Abdolreza**; Javidan, Rana; Onagh, Majid; Komaki, C; **2018**, Impacts of Land use Changes Scenarios on Water Balance Components using WetSpa Model (Case Study: Ziarat Watershed of Golestan Province), *Journal of Watershed Management Research*, 9, 17, 168-181.
50. Kornejady, Aiding; Ownegh, Majid; Rahmati, Omid; **Bahreman, Abdolreza**; **2018**, Landslide susceptibility assessment using three bivariate models considering the new topographical factor: HAND, *Geocarto international*, 33, 11, 1155-1185.
51. \***Bahreman, A**; Razavi, S; Pietroniro, A; Haghnegahdar, A; Princz, D; Gharari, S; Elshamy, M; Tesemma, Z; **2018**, The Application of MESH Land Surface-Hydrology Model in Sefidrud River Basin, Iran. First annual meeting of GWF, 2018, June 3 -6, McMaster University & Six Nations of the Grand River, Hamilton & Ohsweken, Ontario, Canada.
52. \***Bahreman, Abdolreza**; **2018**, WetSpa model application with and without calibration, EGU General Assembly Conference Abstracts, Vol. 20, EGU2018-5184, Vienna, Austria.
53. \*Ghonchepour, D; **Bahreman, A**; **2018**, Runoff simulation in an arid catchment by KINEROS2 hydrological model through parameter allocation approach, Третьи виноградовские чтения. Грани гидрологии, 277-282.
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