



Amir Sadoddin

Professor, Watershed Management Department

Gorgan University of Agricultural Sciences and Natural Resources

PERSONAL DETAILS

Name	Amir Sadoddin
DOB	16 December, 1967
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EDUCATION

PhD Studies

2002- 2006 (Watershed Management) The Australian National University

Graduate Program in Resource Management and Environmental Science

Thesis topic: Bayesian network models for integrated catchment-scale management of salinity

Supervisors: Professor Anthony John Jakeman, Dr Rebecca Kelly (Letcher) and Dr Barry Croke

Master of Science (Watershed Management)

1992-1995 Tarbiat Modarres University, Tehran, Iran Full time (course and research)

Thesis topic: Investigation on the effects of hydro-geomorphological factors on mass movements in the Chashm and Khatirkuh Watershed, Semnan (In Persian)

Supervisors: Dr Mohsen Mohseni Saravi, Dr Majid Ownegh, and Dr Jamal Ghoddosi

Bachelor of Science (Range and Watershed Management)

1986-1991 University of Guilan (Iran) + Gorgan University of Agricultural Sciences and Natural Resources (Iran) Full time.

RESEARCH INTERESTS

- Integrated assessment and management of watershed systems
- Bayesian network models for natural resource problems
- Decision support systems for natural resource management
- Nature-based solutions for natural and built ecosystems
- Watershed health and sustainability
- Water related natural risk assessment and management
- Science and policy making gap analysis for environmental problems

EMPLOYMENTS

Department of Watershed Management

Gorgan University of Agricultural Sciences and Natural Resources

Sep. 1995 - ongoing

Associate Professor (integrated watershed management, flood control, drought management, Research methods, Principles of hydrology and applied hydrology courses, and supervision of the thesis for MSc and PhD students)

Watershed Management Office

Semnan Province

July 1991 – March 1992

Contribution in the following projects:

- Farm dams

- Land preparation practices for planting
- Flood spreading techniques

ORGANISATIONAL ACTIVITIES

- Adviser, Flood Spreading Project, Research Centre of Natural Resources, Semnan Province (1994)
- Member, Watershed Management and Soil Conservation Committee, Water
- Commission, Iranian Scientific Research Centre (1997)
- Head, Watershed Management Department, Gorgan University (1999-2000)
- Member, Watershed Management Committee in Golestan Province (2000-2001)
- Dean of Faculty of Range and Watershed Management, Fisheries and Environment, (2007-2014)
- Manager, the National Mega Project of Integrated Watershed Management (2012-2019).
- Member, National Committee to Combat Desertification (2012-2013).
- National advisor, International Project on Sustainable Management of Land and Water Resources in Hable-Rud Basin (2012-2013)
- Gorgan University Council Member (2017-2022)
- Convener, The Second Panta Rhei Conference, 2017
- National Committee Member for Flood Report Development (2019)
- One-year contract with Iran Academy of Science on national water resources restoration (2023-2024)
- Think Tank of Sustainable Development and Science-based Economy in Golestan Province, Iran (2023-2024).

THESIS SUPERVISION

- Main supervisor of nine PhD and 35 MSc. theses completed.

HONORS AND AWARDS

- Gorgan University of Agricultural Sciences and Natural Resources, top student for BSc Degree (1991)
- Tarbiat Modarres University, top student for MSc. Degree (1995)
- Iranian Ministry of Sciences, Research and Technology, scholarship for doctoral study (2002)

- Research Deputy of Iran Ministry of Science, Research and Technology for Managing the National Mega Project on Integrated Watershed Management (2017)
- Book Prize for Integrated watershed assessment and management: Principles and approaches for modeling and decision making. Gorgan University of Agricultural Sciences and Natural Resources Publishing. (2018)
- Book Prize for Watershed health and sustainability assessment: Principles, approaches and assessment methods. Tarbiat Modarres University Publications. (2021)

REFERENCES

- Professor A. J. Jakeman

Professor emeritus, Centre for Resource and Environmental Studies
 Editor-in-Chief, Socio-Environmental Systems Modeling Journal
 The Australian National University
 Canberra ACT 0200, Australia
 Email: tony.jakeman@anu.edu.au

- Dr Rebecca Kelly (Letcher)

Email: rebecca@isnrm.com.au

- Professor Barry Croke

Research Fellow, Leadership Group Member, Institute for Water Futures
 Mathematical Sciences Institute, ANU College of Science
 Email: barry.croke@anu.ac.ir

- Professor Mohsen Mohseni Saravi

Faculty of Natural Resources
 University of Tehran
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 Karaj, Iran
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- Professor Majid Ownegh

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 Gorgan University of Agricultural Sciences and Natural Resources
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WORKSHOPS

- Soil and Water Conservation in Arid areas. 2000, Yangling, China
- Integrated Water Resources Management. 2007. Gorgan, Iran. 8 May
- The R User. 2008. Dortmund. Germany. 12-14 August
- Water Quality Assessment & Modelling. 2008. Gorgan, Iran. 13-16 December.
- Integration Watershed Management (IWM). 2009. Gorgan University of Agricultural Sciences and Natural Resources-Iran. 25 January (In Persian)
- The Socio-Economic and Environmental Impacts of Drought. 2009. Venice, Italy. 5-7 October.
- Workshop on Metrics and Methodologies of Estimation of Extreme Climate Events. 2010. UNESCO headquarters, Paris. 27-29 September
- Application of Bayesian Model in Natural Resource Management. 2010. Tarbiat Modarres University, Natural Resources & Marine Sciences, Noor, Iran. 27 November.
- R Workshop. 2013. Gorgan University of Agriculture Science and Natural Resource, Gorgan, Iran. March.
- The First Workshop of Integrated Watershed Management. 2012. Identification of the objectives and implementation steps. Gorgan University of Agriculture Science and Natural Resource, Iran. 5 and 6 December.
- The Second Workshop of Integrated Watershed Management. 2013. Workplan identification. Klack Education Center for Natural Resources, Iran. 23 and 24 December.
- The Third Workshop of Integrated Watershed Management. 2013. Workplan identification. Guilan University, Iran. 24 and 25 April.
- The Forth Workshop of Integrated Watershed Management. 2013. Projects framework development. Shiraz University, Iran. 19 and 20 June.
- The Fifth Workshop of Integrated Watershed Management. 2013. Projects framework development. Sari University of Agriculture Science and Natural Resource, Iran. 8 and 9 July.
- NaDiMaDialogue #19 2022. A framework for integrated assessment of economic flood damages (direct, indirect, tangible and intangible). 30 June.
- Integrated watershed management: opportunities and challenges. 2022. Iran Academy of Science.
- Role of watershed and aquifer management in restoring water resources in Iran. 2024. National Academy of Science. 21 February.
- Watershed management: Spatial planning dimensions and requirements. 2024. Iran Planning and Budget Organisation. 21 August.

BOOKS

- Bayesian Network Models for Integrated Catchment-scale Management of Salinity. 2010. LAP LAMBERT Academic Publishing AG & Co. KG, 227p.
- **Sadoddin, A.**, and Babaei, A. 2010. How to write a better thesis? Gorgan University of Agricultural Sciences and Natural Resources Publishing. 213 p. (in Persian).
- **Sadoddin, A.**, and Babaei, A. 2017. How to write a better thesis? Second Edition, Gorgan University of Agricultural Sciences and Natural Resources Publishing. 213 p. (in Persian).
- **Sadoddin, A.**, Shahabi, M., Bai, M., 2017. Integrated watershed assessment and management: Principles and approaches for modeling and decision making. Gorgan University of Agricultural Sciences and Natural Resources Publishing. 170 p. (in Persian).
- Sadeghi, H.R., **Sadoddin, A.**, Asadi Nalivan, O., Hazbavi, Z., Zare Gharizi, A., Moayeri, M. H., 2020, Watershed health and sustainability assessment: Principles, approaches and assessment methods. Tarbiat Modarres University Publications. 218 p. (in Persian).

PUBLICATIONS

- Heshmatpour A., Saravi, M., **Sadoddin, A.**, and Erfanian, M. 2002. The efficiency of geomorphologic and geomorpho-climatic instantaneous unit hydrograph models for estimating flood discharge, Journal of Natural Resources. 55 (1): 3-22. (In Persian)
- **Sadoddin, A.**, Letcher, R. A., Jakeman, A. J., and Newham, L. T. H. 2005. A Bayesian decision network approach for assessing the ecological impacts of salinity Management. Mathematics and Computers in Simulation. 69 (1-2): 162-176. (ISI)
- Mostafazadeh, R., Bahreman, A., **Sadoddin, A.** 2009. Simulating the direct runoff hydrograph using Clark instantaneous unit hydrograph. (Case study: the Jafar-Abad Watershed, Golestan Province), Journal of Water and Soil Conservation. 16 (3): 105-122.(In Persian)
- Halili, M.Gh., **Sadoddin, A.**, Mosaedi, A., and Salman-Mahini, A. 2009. Fuzzy multi-criteria decision making for surface water resources management in the Bustan Dam-Golestan Province, Journal of Water and Soil Conservation. 16 (4): 105-122. (In Persian)
- Halili.M.Gh, **Sadoddin. A.**, Mosaedi, A., and Salman-Mahini, A. 2009. Multiple-criteria decision making to manage surface water resources in a multiple reservoir system, the Boostan Dam-Golestan Province. Journal of Watershed Management Science & Engineering,4 (11):34-25 (In Persian).
- **Sadoddin. A.**, Sheikh. V.B., Mostafazadeh. R., and Halili, M. Gh. 2010. Analysis of vegetation-based management scenarios using MCDM approach in the Ramian Watershed, Golestan Province-Iran International. Journal of Plant Production. IJPP. 4(1):51-62. (ISI)

- Akhzary, D., **Sadoddin, A.**, and Noora, N. 2010. Prediction of vegetation management impacts on the risk of wind erosion (Case study: south of the Varamin Plain, Iran), *Journal of Water and Soil Conservation* 17 (1):63-80. (In Persian)
- Saberi, N., Salman-Mahini, A. R., Merkarimi, H., **Sadoddin, A.**, and Abdi, O. 2010. Application of geostatistics in assessment of N and P pollution in the East of Gorgan-Iran. *Journal of Zagros Landscape*. (In Persian).
- Rahmani, R., **Sadoddin, A.**, and Ghorbani, S. 2011. Measuring and modelling precipitation components an oriental beech stand of the Hyrcanian region, Iran. *Journal of Hydrology*. 404: 294-303.(ISI)
- Keshtkar, A. R., Mahdavi, M., Salajegheh, A., Ahmadi, H., **Sadoddin, A.**, and Ghermezcheshmeh, B. 2011. Exploring the relationship between land use and surface water quality using multivariate statistics in arid and semi-arid regions. *The Desert Journal*. 16: 33-38.
- Zare Garizi, A., Sheikh, V., and **Sadoddin, A.** 2011. Assessment of seasonal variations of chemical characteristics in surface water using multivariate statistical methods. *Int. J. Environ. Sci. Tech.* 8 (3):581-592.(ISI)
- Pahlavani, H. Bahremand, A., Dehghan., A. A., and **Sadoddin, A.** 2011. Assessment efficiency of artificial natural works in simulation for intelligent estimation flood hydrograph in Jafar-Abad in the Gorgan. *Journal of Water and Soil Conservation*. 1: 6. (Scientific short report).
- Karimi, A., Ownegh, M., **Sadoddin, A.**, and Najafi Nejad, A. 2011. Landslide hazard zonation using logistic regression and GIS for the Chehel-chai Watershed, Golestan Province, Iran. *Journal of Forest and Rangeland*. (In Persian)
- Karimi Sangchini, E., Ownegh, M., **Sadoddin, A.**, and Mashayekhan, A. 2011. Probabilistic landslide risk analysis and mapping (Case Study: the Chehel-Chai Watershed, Golestan Province, Iran). *Journal of Rangeland Science*. 2 (1): 425-437
- **Sadoddin, A.**, Akhzary, D., and Sheikh, V. B. 2012. Prediction of vegetation management impacts on the risk of wind erosion (Case study: south of the Varamin Plain, Iran), *Desert Journal*. 13 pp. (In Persian).
- Bai, M., **Sadoddin, A.**, and Salman-Mahini, A. R. 2013. Predicting of the implementing ecological management scenarios on landscape structure for Chehel-Chai Watershed in Golestan Province-Iran. *Journal of Geographic Space*. (In Persian).
- Mostafazadeh, R. **Sadoddin, A.**, Bahremand, A. Sheikh, V. B, and Nazarnajad, H. 2010. Assessing hydrologic effects of Jafar-Abad Watershed management project in Golestan project using HEC-HMS model. *Journal of Water and Watershed* (2):83-93.(In Persian).
- Zare Garizi, A., Sheikh, V., and **Sadoddin, A.** Modeling the spatial pattern of land-cover change, using logistic regression (Case study: the Chehel-Chai Watershed, Golestan Province). *Journal of Iran Water Research* (In Persian).

- Zare Garizi, A., Sheikh, V., and **Sadoddin, A.** Long-term trend analysis of water quality variables for the Chehel-chai River (Golestan Province). *Journal of Geographic Space*. 6 (10): 155-165.(In Persian).
- Kalteh, A., Sheikh, V.B., **Sadoddin, A.**, and Noora Nader. Application of physically – based LISEM model in the Kechik Experimental Catchment, Golestan, Iran .*Journal of Watershed Management*. 1 (2): 65-83. (In Persian).
- Zare Garizi, A., Sheikh, V., **Sadoddin,A.**, and Mahini, A. 2012. Simulating the spatiotemporal changes of forest extent for the Chehel-chai Watershed (Golestan Province), using integrated CA-Markov model. *Iranian Journal of Forest and Poplar Research*. *Iranian Journal of Forest and Poplar Research*. 20 (2): 273-285. (In Persian).
- Bai, M., **Sadoddin, A.**, and Salman-Mahini, A. R. 2013. Using multi criteria decision making technique in evaluation of structural landscape characteristics in the Chehel-chai Watershed, Golestan Province, Iran. *Journal of Natural Environment of Iran*. 65 (4): 431-150. (In Persian).
- Samanmanesh, H., **Sadoddin, A.**, and Najafi Nejad, A. Regional flood analysis by Fuzzy (c- mean) cluster analysis for some of the river basins of the Fars Province– Iran. (Under review), (In Persian)
- Rahimi, M., Ownegh, M., **Sadoddin, A.**, and Salman-Mahini, A. R. 2012. Land use planning for sustainable development of Chehl-chai Watershed of Golestan Province. *Journal of Environmental Researches*. 3 (6): 27-36.(In Persian)
- Keshtkar, A. Salajegheh, R.,**Sadoddin,A.**, and Allan, M. G. 2013. Application of Bayesian networks for sustainability assessment in catchment modeling and management (Case study: The Hable-rud River catchment. *Ecological Modelling*. 268: 48–54. (ISI)
- **Sadoddin, A.**, Letcher (Kelly), R., Jakeman, T., Croke, B., and Newham, L. 2013. A Bayesian decision support system model: dryland salinity management application. *The International Journal of Environmental Resources Research*. 1(1): 16 p.
- Zare Garizi, A., Sheikh, V., **Sadoddin,A.**, and Salman-Mahini, A. 2012.Simulating the spatiotemporal changes of forest extent for the Chehel-chai Watershed (Golestan Province), using integrated CA-Markov model. *Iranian Journal of Forest and Poplar Research*. 20 (2).273-285.(In Persian)
- Mohajerani, H., Kholghi, M., Mosaedi, A., **Sadoddin, A.**, and Meftah, M. 2013. Quantitative Management of Groundwater Using Bayesian Decision Network. *Journal of Water and Soil*. 26 (6): 1522-1534.(In Persian)
- Mofidipoor, N., Sheikh, V., Ownegh, M., and **Sadoddin, A.** 2013.The analysis of relationship between meteorological and hydrological droughts in the Atrak Watershed. *Journal of Watershed Management*. 3 (4): 12 p.(In Persian).
- Adhami, M., Najafi Nejad, A., **Sadoddin, A.**, and Abghari, H. 2013. Analysis of long_term changes in flow and sediment in some of the hydrometer stations in Golestan Province. *Journal of Regional Geographical Environment*. 2 (3): 21- 38.(In Persian)

- Mohammadiavar, M., **Sadoddin, A.**, Barani, H., and Mahboobi, M. 2013. Predicting the community acceptance level of the vegetation - based management scenarios for the Chehel-Chai Watershed Golestan Province, Iran. *Journal of Water and Soil Conservation*. 20 (2): 11 p.
- Bai, M., **Sadoddin, A.** Predicting the impacts of management scenarios on landscape structure for the Chehel-Chai Watershed in Golestan Province, Iran. 2013. *Journal of Geographic Space*. (In Persian).
- Nikobazl, A., Salman-Mahini, A., and **Sadoddin, A.** 2013. Bayesian theory and application of environmental impact assessment. *Journal of Applications and Development* 3 (6): 57-66. (In Persian).
- **Sadoddin, A.**, Alvandi, E., 2014. The feasibility study on the use of compensatory MADM techniques to prioritise the management scenarios for the Chel-chai Watershed, Golestan Province-Iran. *Journal of the Watershed Management Research (Pajouhesh & Sazandegi)*. No 105 pp:67-79. (In Persian)
- Abdolazadeh, A., Ownegh, M., **Sadoddin, A.**, and Mostafazadeh, R. 2014. Development of a landslide management plan under normal and critical scenarios for the Ziarat Watershed, Golestan Province. *Watershed Management Research (Pajouhesh & Sazandegi)*. No 104 pp: 75-84. (In Persian).
- Silakhori, E., Ownegh, M., **Sadoddin, A.**, and Filekesh, E. 2014. Comparing efficiency of Iranian desert hazard assessment models, namely MICD and IMDPA (Case study: Sabzevar region). *J. of Water and Soil Conservation*, Vol. 21(4): 1-28. (In Persian).
- Silakhori, E., Ownegh, M., and **Sadoddin, A.**, 2014. Assessing desertification hazard and risk in Sabzevar region using MICD Model. *Journal of Emergency Management*.3(1): 89-99. (In Persian).
- Silakhori, E., Ownegh, M., and **Sadoddin, A.**, 2015. Developing desertification management plan in Sabzevar region. *J. of Water and Soil Conservation*. 21(6): 51-71. (In Persian).
- **Sadoddin, A.**, Alvandi, E., and Sheikh, V. 2015. Development of decision support system to implement participatory and integrated management of the Chehel-Chai Watershed- Golestan Province-Iran. *Journal of Watershed Management*. 6(11): 124-136 (In Persian).
- Nikoubazrad, E., Salmak Mahini, A., and **Sadoddin, A.**, 2015. Environmental impacts assessment of compost plants using a Bayesian approach: case study Golestan province. *Iranian Journal of Natural Recourses*. 2 (68): 305-319.(In Persian).
- Mostafa, M., Shataee Jouibary, Sh., Lotfalian, M., and **Sadoddin, A.**, 2015. Investigation methods evaluation of forest road network according to graph theory. *J. of Conservation and Utilization of Natural Resources*. 4(2): 41-63. (In Persian).
- Kornejadi, A., Ownegh, M., and **Sadoddin, A.**, 2015. Landslide risk and hazard zonation, Case study: the Ziarat Watershed- Golestan Province. *Journal of Emergency Management*.4(1): 51-62. (In Persian).
- Sadeghi, H. R., Mostafazadeh, R., and **Sadoddin, A.**, 2015. Response of sedimentographs and sediment rating loops to land use type and spatial pattern. *Watershed Engineering and Management*. 7(1): 15-26. (In Persian).

- Sadeghi, HR., Mostafazadeh, R., Sadoddin, A. 2015, Changeability of simulated hydrograph from a steep watershed resulted from applying Clark's IUH and different time–area histograms. *Environmental Earth Sciences* 74 (4): 3629-3643.
- **Sadoddin, A.**, Shahabi, M., and Sheikh, V.B. 2016. A Bayesian decision model for drought management in rainfed wheat farms of North East Iran. *International Journal of Plant Production* 10 (4), 1735-8043 (Online). (ISI).
- Jafari Shalamzari, M., Sheikh, V.B., **Sadoddin, A.**, and Abedi Sarvestani, A. 2016. Public Perception and acceptability toward domestic rainwater harvesting in Golestan, limits to up-scaling. *Ecopersia*. 1437-1454.
- Jafari Shalamzari, M., **Saadodin, A.**, Sheikh, V.B., and Abedi Sarvestani, A. 2016. Analysis of adaptation determinants of domestic rainwater harvesting systems (DRWHs) in Golestan Province, Iran. *Environmental Resources Research*. 4(1): 27-43.
- Dahmardeh Ghaleno, M.R., Sheikh, V.B., **Sadoddin, A.**, and Sabouhi M. 2016. Optimal cropping pattern for water resources management in Sistan region of Iran using the goal programming method. *Ecopersia*. 4(4), 1555-1567.
- Abdolazadeh, A., Ownegh, M., **Sadoddin, A.**, and Mostafazadeh, R. 2016. Suitability assessment of rural settlement land-use using a systematic model for the Ziarat Watershed, Gorgan. *Journal of Geography and Regional Development*. 13(2).
- Davudirad, A. A., Sadeghi, H. R., and **Sadoddin, A.**, 2016. Impact of development plans on hydrological changes in the Shazand Watershed, Iran. *Land Degradation & Development*. 27: 1236–1244. (ISI).
- Akbari, M., Ownegh, M., Asgari, H., **Sadoddin, A.**, and Khosravi, H. 2016. Drought monitoring based on the SPI and RDI indices under climate change scenarios (Case Study: Semi-arid areas of West Golestan Province). *Ecopersia*. 4 (4), 1585-1602.
- Mohammadi, M., Sheikh, V. B., and **Sadoddin, A.**, 2016. Modeling the effects of land use changes on flood hydrograph (A case study: Jafarabad Watershed, Golestan Province). *J. of Water and Soil Conservation*. 22 (5), 171-185. (In Persian).
- Akbari, M., Ownegh, M., Asgari, H., **Sadoddin, A.**, and Khosravi, H. 2016. Desertification risk assessment and management program. *Global J. Environ. Sci. Manage*, 2(4): 365-380.
- Sangchini, E.K., Ownegh, M., and **Sadoddin, A.**, 2016. Land slide hazard management for two normal and critical scenarios in the Chehel-Chai Watershed, Golestan Province. *Journal of Watershed Management Research*. 7 (13): 173- 181. (In Persian).
- Davudirad, A. A., Sadeghi, H. R., and **Sadoddin, A.**, 2016. Monitoring temporal and spatial changes in land use in the Shazand Watershed. *Iranian Journal of Ecohydrology*. 2 (4): 405-415. (In Persian).
- Akbari, M., Ownegh, M., Asgari, H., **Sadoddin, A.**, and Khosravi, H. 2016. Soil erosion risk assessment using the CORINE model (Case Study: Semi-arid region in Golestan Province). *Desert Ecosystem Engineering Journal*. 12 (5): 63-78. (In Persian).

- Akbari, M., Ownegh, M., Asgari, H., **Sadoddin, A.**, and Khosravi, H. 2016. Design and development of an early warning system for desertification and land degradation, *Environmental Resources Research*, 12(4):111-130.
- **Sadoddin, A.**, Sheikh, V.B., Ownegh, M., Najafi Nejad, A., and Sadeghi, H.R., 2016. Development of a National Mega Research Project on the Integrated Watershed Management for Iran. *Environmental Resources Research*. 4(2): 231- 238.
- Sangchini, E.K., Ownegh, M., and **Sadoddin, A.**, Tahmasebipour, N., and Rezaei, H., Impact assessment of Vegetation management scenarios on the volume of flood and water pollutants of Hable-rud watershed using (L-THIA) model. *Journal of Pajouhesh-Sazandeghi*. (In press).
- Mohajerani, H., Kholghi, M., Mosaedi, A., Farmani, R., **Sadoddin, A.**, and Casper, M. 2017. Application of Bayesian decision networks for ground water resources management under the conditions of high uncertainty and data scarcity. *Water Resource Manage.* 31:1859–1879. (ISI).
- Sangchini, E.K., Ownegh, M., and **Sadoddin, A.**, Tahmasebipour, N., and Rezaei, H. 2017. The application of a system dynamics model to predict the effects of vegetative management scenarios on the ecological structure of landscape for Hable-rud Watershed. *Watershed Engineering and Management*. 9(3): 58–70. (In Persian)
- Mostafa, M., Shataee Jouibary, Sh., Lotfalian, M., and **Sadoddin, A.**, 2017. Watershed road network analysis with an emphasis on fire fighting management. *Journal of Environmental Engineering and Landscape Management*. 25(04): 342–353.(ISI).
- Mostafazadeh, R., **Sadoddin, A.**, Bahremand, A., Sheikh, V., Zare Garizi, A., 2017. Scenario analysis of flood control structures using a multi-criteria decision making technique in Northeast Iran. *Natural Hazards*. 87(3), 1827-1846 (ISI).
- Gohardoust, A., **Sadoddin, A.**, Ownegh, M., and Najafinejad, A., 2017. Identify hazard areas using land use planning approach (Case Study: the Chehelchay Watershed - Golestan). *Iranian Journal of Range and Desert Research*. 24(3): 524- 536.(In Persian).
- Mostafa, M., Shataee Jouibary, Sh., Lotfalian, M., and **Sadoddin, A.**, 2017. Evaluation of network connection of roads of mountainous watershed using graph theory in the Chehel-chai Watershed. *Journal of Watershed Management Research*. 8(15): 259- 267. (In Persian).
- Islami, I., **Sadoddin, A.**, Barani, H., Asgharpourmasouleh, A., and Akhbari, M., 2017. Modeling socio-ecological structure of local communities participation for managing livestock drinking water using the agent- based approach, *Applied Ecology and Environmental Research*. 15(3): 1173-1192.(ISI).
- Mirdashtvan, M., Najafinejad, A., Malekian, A., and **Sadoddin, A.**, 2017. Downscaling the contribution to uncertainty in climate-change assessments: representative concentration pathway (RCP) scenarios for the South Alborz Range, Iran. *Meteorological Applications*, Published online in Wiley Online Library.(ISI).

- Ebrahimi, P., Salajegheh, A., Mohseni Saravi, M., Malekian, A., **Sadoddin, A.**, 2018. Watershed health prediction based on surface water quality variables (case study: the Taleghan Watershed), *Geography and Sustainability of Environment*, 8(26): 1-13.
- **Sadoddin, A.**, Ownegh, M., Sheikh, V., Najafinejad, A., Sadeghi, S.H.R., Zare Garizi, A., 2018. River basin/watershed governance and planning, *Journal of Extension and Development of Watershed Management*, 6(22), 39-44.
- Teimouri, M., Sheikh, V., **Sadoddin, A.**, 2018. Evaluation and comparison of water quality using grey relational analysis and NSFWQI for the Shirin-darreh dam reservoir, *Iranian Journal of Health and Environment*. 11 (2): 169-182 (In Persian).
- Sadeghi, S. H., Davudirad, A., **Sadoddin A.**, Paimozd, Sh., 2018. Trend of changes in land degradation index in Shazand Watershed, Markazi Province. *Watershed Engineering and Management*. 9(4): 383-397.(In Persian).
- Mehria, A., Salman-Mahini, A., Mikaeili, A.R., Mirkarimi, H., **Sadoddin. A.**, 2018. Investigation of likely effects of land use planning on reduction of soil erosion rate in river basins: Case study of the Gharesoo River Basin. *CATENA*. 167, 116-129(ISI).
- Mehria, A., Salman-Mahini, A., Mikaeili, A.R., Mirkarimi, H., **Sadoddin. A.**, 2018. Integration of anthropogenic threats and biodiversity value to identify critical sites for biodiversity conservation. *Geocarto International*. 66(4): 1- 17.(ISI).
- Islami, I., **Sadoddin, A.**, Barani, H., Asgharpour-Masoule, A., Akhbari, M., 2018. Analytical network process to prioritize the influencing parameters on local participation: the development of livestock drinking water resources. *Industrial Engineering and Management Systems*. 17(2): 318- 326.(ISI).
- Adeli, B., Kangarani, H., Sadoddin, A., Bazrafshan, O., Armin, M., 2018. Using the WQI method and the Man-Kendall test to assess the qualitative and quantitative status of groundwater aquifers (case study: Sarkhoon plain, Hormozgan province), *Iranian Journal of Ecohydrology* (In Persian).
- Khosravi, Gh., **Sadoddin, A.**, Ownegh, M., Bahremand, A., Mostafavi, H. 2019 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*. (in Persian).
- Teimouri, M., Sheikh, V., **Sadoddin, A.**, Evaluation of reservoir eutrophication level of the Shirin-darreh dam using entropy-based fuzzy approach, *Environmental Researches*. (Accepted).
- Asadi Nalivan, O., **Sadoddin, A.**, Karami, Gh., Sheikh, V., 2019. Groundwater quality assessment with an emphasis on potential siltation and corrosion for the Hable-rud river basin. *Iranian Journal of Watershed Management Science and Engineering*. 43(12):70-79 (In Persian).
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