Curriculum Vitae

Dr. Abdulvahed KHALEDI DARVISHAN

PERSONAL INFORMATION

First Name:	Abdulvahed
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Birthdates:	September 28, 1980
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ACADEMIC EMPLOYMENT

Current Position *Dec 2019 - Present*	**Associate Professor** Tarbiat Modares University, Department of Watershed Management Tehran, Iran
Feb 2013 – Dec 2019	**Assistant Professor** Tarbiat Modares University, Department of Watershed Management Tehran, Iran
Apr 2012 – Sep 2012	**Sabbatical Researcher** Warsaw University of Life Sciences (WULS) - SGGW, Department of Water Engineering and Environmental Restoration Warsaw, Poland

EDUCATION

Feb 2009 – Jan 2013	**Tarbiat Modares University** Ph.D., Department of Watershed Management Thesis: Effects of Initial Soil Moisture Content on Runoff and Soil Erosion Processes
Sep 2003 – Jan 2005	**Tarbiat Modares University** M.A., Department of Watershed Management Thesis: Downstream Changes of River Bed Sediment Morphometry
Sep 1999 – Jul 2003	**Razi University** B.A., Department of Rangeland and Watershed Management

MAIN SPECIALIZATION

- Soil Erosion
- Sediment Fingerprinting

RESEARCH INTERESTS

- Soil Erosion and Sediment Yield Modelling
- Sediment Fingerprinting and Source Identification
- Sediment Budgeting
- Application of Image Processing Techniques in Soil Erosion Studies and Sediment Morphometry
- Designing and Construction of Rainfall Simulators

RESPONSIBILITIES and MEMBERSHIP

- Head of the Department of Watershed Management Engineering, Faculty of Natural Resources, Tarbiat Modares University, July 2025 for two years.
- Councilor of the World Association of Soil and Water Conservation (WASWAC), Sep. 2023 for two years.
- Member of the World Association of Soil and Water Conservation (WASWAC), 2023-2028.
- Vice President of the Watershed Management Society of Iran (WMSI), from Mar. 2023.
- Member of the Board of Directors, Watershed Management Society of Iran (WMSI), from 2020.
- Executive secretary, 3rd International Youth Forum of World Association of Soil and Water Conservation, Faculty of Natural Resources, Tarbiat Modares University, Iran, October 16-21, 2021.
- Member of the Asian Council of Science Editors
- Member of the Editorial Board of the Journal "Soil Erosion and River Channel Processes"
- Member of the Editorial Board of Journal of Watershed Engineering and Management
- Member of the Editorial Board of Journal of Watershed Management Science and Engineering
- Member of the Editorial Board of Extension and Development of Watershed Management
- Member of the organizing committee of Agrosym International Symposium in Bosnia and Herzegovina (2016 to 2021)
- Member of the Editorial Board of AGROFOR International Journal
- Member of the scientific committee of GEA (Geo-Eco-Eco-Agro) international conference in Montenegro (2020 and 2025)
- Member of the scientific committee of NIKITINSKIE READINGS international conference in Russia (2019 and 2023)

PUBLICATIONS

Books - Written

Khaledi Darvishan, A., Jafarpour, A., Janizadeh, S., Ebrahimi, Z., Avand, M., Farzi, P., Jafari, F., Ayobi Ayoblu, S., Katebi Kord, A., 2020. "Application of SWOT Analysis in Strategic Watershed Management", New Approaches in Applied Management of Watershed. Gorgan University of Agricultural Sciences & Natural Resources, 267 p.

Sadeghi, S.H., Hazbavi, Z., Gholami, L., **Khaledi Darvishan, A.,** 2017. *Soil and Water Conservation using Amendments*. Tarbiat Modares University, 467 p.

Books - Translated

Gholami, L., Amani, M., **Khaledi Darvishan, A.,** Safavian, A., 2019. Manual on small earth dams: a guide to siting, design and construction (Translated). Sari Agricultural Sciences & Natural Resources University. 179 p.

Books and Proceedings - Edited

Khaledi Darvishan, A., Sadeghi, S.H.R., Moosavi, V., (Eds), 2021. Proceeding of the 3rd International Youth Forum on Soil and water Conservation, 16-21 October 2021, 100 p.

Sadeghi, S.H.R., **Khaledi Darvishan, A.,** 2010. Proceedings of 6th National Seminar on Watershed Management and 4th National Seminar on Soil Erosion and Sediment, 28-29 April 2010, 262 p.

Peer-Reviewed Journal Articles (Published in English)

1. **Khaledi Darvishan, A.,** Pourbakhshi, S. and Riahi Bakhtiari, A., 2026. Comparative contribution of planted and natural forest to sediment yield using biological indicators of TOC and n-alkanes. International Journal of Sediment Research, *In Press, Corrected Proof.* https://doi.org/10.1016/j.ijsrc.2025.09.005
2. Sedighi, F., **Khaledi Darvishan, A.,** Zare, M.R., Parvizi, Y. and Goli Jirandeh, A., 2026. High resolution analysis of erosion/sedimentation map and management effects: Integrating ^{137}Cs and drone-based sediment connectivity approaches. Soil and Tillage Research, 260: 107142. https://doi.org/10.1016/j.still.2026.107142
3. Kalehhouei, M., Sadeghi, S.H. and **Khaledi Darvishan, A.,** 2026. Variability of splash and interrill erosion under simulated downward wind-driven rainfall. Soil and Tillage Research, 260: 107127. https://doi.org/10.1016/j.still.2026.107127
4. Liu, Q., Sun, W., **Khaledi Darvishan, A.,** Gholami, L., Wang, Y., Cui, H., Wei, W., Zhang, H. and Liu, S., 2026. 12-Year straw and manure amendments control rill scouring through enhanced humification and aggregate stabilization. Soil and Tillage Research, 257: 106957. https://doi.org/10.1016/j.still.2025.106957
5. Sadeghi, S.H., Behnia, N., Chamani, R., Moosavi, V., Khiavi, A.N., Shoushtari, M.H., Nouri, H., Sadeghi, P., Kalehouei, M., Gharemahmudli, S., Tavosi, M., Zabihi Silabi, M., **Khaledi Darvishan, A.,** Vafakhah, M., Moradi Rekabdar Kolaei, H., 2026. National watershed health diagnosis: A pressure-state-response assessment of Iran's 3rd-order watersheds. Ecological Indicators, 183, p.114572. https://doi.org/10.1016/j.ecolind.2025.114572

6. Akbari Emamzadeh, F., **Khaledi Darvishan, A.,** Nosrati, K., Vafakhah, M., Collins, A.L., 2025. Intra-storm variations in the contributions of geological formations to suspended sediment: a comparison between Bayesian and FingerPro sediment fingerprinting methods. Environmental Science and Pollution Research, 30: 112-124. https://doi.org/10.1007/s11356-025-37330-2

7. Zaki, S.A., Sadeghi, S.H., Vafakhah, M. and **Khaledi Darvishan, A.,** 2025. Decoding suspended sediment dynamics in representative watersheds of Iran's Caspian Sea Basin. Hydrological Sciences Journal, 1–15. https://doi.org/10.1080/02626667.2025.2578242

8. Beiranvandi, V., **Khaledi Darvishan, A.,** Sadeghi, S.H.R., 2025. Use of geochemical tracers to determine the sources for Riverine sediment with different sizes in a forest-agricultural watershed, northern Iran. Environmental and Sustainability Indicators, 28, 100951. https://doi.org/10.1016/j.indic.2025.100951

9. Akbari Emamzadeh, F., **Khaledi Darvishan, A.,** Vafakhah, M., Nosrati, K., Collins, A.L., 2025. Variable spatio-temporal source contributions during storm hydrographs revealed by composite fingerprinting. Journal of Hydrology: Regional Studies, 61: 102662, https://doi.org/10.1016/j.ejrh.2025.102662

10. Zabihi, M., Moradi, H.R., **Khaledi Darvishan, A.**, Gholamalifard, M., 2025. Sensitivity analysis of climatic factors in water yield modeling in the Talar watershed; an ecosystem service perspective. Water and Soil Management and Modeling (Special Issue: Climate Change and Effects on Water and Soil), 5: 101-120. https://doi:10.22098/mmws.2025.17808

11. Naderi Marangalo, N., Sadeghi, S.H., Erfanzadeh, R. and **Khaledi Darvishan, A.,** 2025. Deciphering runoff and soil loss processes during various phenological stages of Trifolium pratense at small plot scale. Soil Science Society of America Journal, 89(4): e70100. https://doi.org/10.1002/saj2.70100

12. Kamari Yekdangi, F., **Khaledi Darvishan, A.**, Aghabeigi Amin, S. 2025. Prioritization of factors affecting annual soil erosion and sediment yield using combined G2-GeoDetector approach. Modeling Earth Systems and Environment, 11, 284. https://doi.org/10.1007/s40808-025-02484-y

13. Kalehhouei, M., Sadeghi, S.H., **Khaledi Darvishan, A.** Hasanzadeh, N., 2025. In-depth dynamic analysis of raindrop characteristics under varying intensities using image processing. Hydrological Sciences Journal, 1-11. https://doi.org/10.1080/02626667.2025.2508892

14. Ghaderi Dehkordi, N., **Khaledi Darvishan, A.,** Zare, M.R. Porto, P., 2025. Erosional History by Combining $^{210}Pb_{ex}$ and ^{137}Cs Methods with Sediment Fingerprinting and Measurements. Scientific Reports, 15: 18165. https://doi.org/10.1038/s41598-025-02512-y

15. Havasi, M., Sadeghi, S.H., **Khaledi Darvishan, A.,** Erfanzadeh, R., 2025. Controllability of runoff and soil loss in laboratory plots across different growth stages of Agropyron desertorum. Journal of Hydrology, 661(A): 133470. https://doi.org/10.1016/j.jhydrol.2025.133470

16. Komaki, N., Riyahi Bakhtiari, A., **Khaledi Darvishan, A.,** 2025. International pellet watch; origins and monitoring of oil markers in surface sediments and plastic resin pellets in southern Caspian Sea, Iran. Science of The Total Environment, 964: 178531. https://doi.org/10.1016/j.scitotenv.2025.178531

17. Haji, Kh., **Khaledi Darvishan, A.,** Mostafazadeh, R., 2025. Assessment of the G2 model estimations and comparing it with erosion plots and observed sediment data in the Southern Caspian Sea river basins. Journal of Hydrology: Regional Studies, 57: 102179. https://doi.org/10.1016/j.ejrh.2025.102179

18. Ghaderi Dehkordi, N., **Khaledi Darvishan, A.,** Zare, M.R., Porto, P., 2025. Temporal Changes in the Average Contribution of Land Uses in Sediment Yield Using the ^{137}Cs Method and Geochemical Tracers. Water, 17(1): 73. https://doi.org/10.3390/w17010073

19. Mohammad Jafari Dehkordi, S., Riahi Bakhtiari, A., Vafakhah, M., **Khaledi Darvishan, A.,** 2025. Origin of Tar Balls Along the Beaches of Genaveh Region, Persian Gulf. Archives of Environmental Contamination and Toxicology, 88: 55-75. https://doi.org/10.1007/s00244-024-01105-6

20. Zarei, R., **Khaledi Darvishan, A.,** Porto, P. and Zare, M.R., 2024. Using radiotracers and topographic metrics for sediment budgeting at pixel and hillslope scales: A case study from western Iran. Ecological Indicators, 167, 112711. https://doi.org/10.1016/j.ecolind.2024.112711

21. Haji, K., **Khaledi Darvishan, A.,** Mostafazadeh, R. 2024. Soil erosion and sediment sourcing in the Hyrcanian forests, Northern Iran: an integration approach of the G2loss model and sediment fingerprinting technique. Modeling Earth Systems and Environment, 10: 1897–1914. https://doi.org/10.1007/s40808-023-01879-z

22. Karimi, N., Gholami, L., **Khaledi Darvishan, A.,** Kavian, A. 2024. Tracing suspended and bed sediments during high and low water periods using geochemical characteristics - Case study: Vazrood watershed, northern Iran. Journal of Mountain Science, 21(2): 470-483. https://doi.org/10.1007/s11629-023-8117-3

23. Sadeghi, S.H., Chamani, R., Silabi, M.Z., Tavosi, M., Katebikord, A., **Khaledi Darvishan, A.,** Moosavi, V., Sadeghi, P.S., Vafakhah, M. and Rekabdarkolaei, H.M., 2023. Watershed health and ecological security zoning throughout Iran. Science of The Total Environment, p.167123. https://doi.org/10.1016/j.scitotenv.2023.167123.

24. Kalehhouei, M., Sadeghi, S.H., **Khaledi Darvishan, A.,** 2023. Changeability of runoff and soil loss from inclined mid-sized plots under simulated upward wind-driven rain. Catena, 221, 107453. https://doi.org/10.1016/j.catena.2023.107453.

25. Mirchooli, F., Dabiri, Z., Strobl, J., **Khaledi Darvishan, A.,** Sadeghi, S.H., 2023. Spatial and Temporal Dynamics of Rangeland Ecosystem Services Across the Shazand Watershed, Iran. Rangeland Ecology & Management, 90, 45-55. https://doi.org/10.1016/j.rama.2023.05.005.

26. Mohammadi, M., **Khaledi Darvishan, A.,** Bahramifar, N., Alavi, S.J., 2023. Spatio-temporal suspended sediment fingerprinting under different land management practices. International Journal of Sediment Research, 38(4): 481-493. https://doi.org/10.1016/j.ijsrc.2023.02.003.

27. Kalehhouei, M., Sadeghi, S.H., **Khaledi Darvishan, A.,** 2023. Changes in raindrop properties due to wind blowing using image processing. Catena, 221, 106789. https://doi.org/10.1016/j.catena.2022.106789

28. Sedighi, F., **Khaledi Darvishan, A.,** Golosov, V., Zare, M.R., Spalevic, V., 2022. Influence of land use on changes of sediment budget components: western Iran case study. Turkish Journal of Agriculture and Forestry, 46(6): 838-851. https://doi.org/10.55730/1300-011X.3046

29. **Khaledi Darvishan, A.,** Katebikord, A., Mohamad Amini, H., Gholami, L., Filipovic, M., Spalevic, V., 2022. Evaluation of Synthetic–Colour–Contrast Aggregates for Soil Splash Measurement. Journal of Environmental Protection and Ecology, 23(8): 3433–3439.
30. Sadeghi, S.H., Vafakhah, M., Moosavi, V., Pourfallah Asadabadi, S., Sadeghi, P.S., **Khaledi Darvishan, A.,** Bagheri Fahraji, R., Mosavinia, S.H., Majidnia, A., Gharemahmudli, S., Moradi Rekabdarkolaei, H.R., 2022. Assessing the health and ecological security of a human induced watershed in central Iran. Ecosystem Health and Sustainability, 8(1): 2090447. https://doi.org/10.1080/20964129.2022.2090447
31. Sadeghi, S.H., Mirchooli, F. and **Khaledi Darvishan, A.,** 2022. Spatiotemporal Dynamic of Environmental Indices of Watershed Sustainability in Connection with Land-use Change. Ecosystem Health and Sustainability, 8(1): 2024454. https://doi.org/10.1080/20964129.2021.2024454
32. Gholami, L., Hasanzadeh, N., **Khaledi Darvishan, A.,** Younesi, H., 2022. Individual and combined application of powder and soluble nanoclay and biochar on hydrological responses and soil loss at plot scale. Arabian Journal of Geoscience, 15, 50. https://doi.org/10.1007/s12517-021-08242-5
33. Haji, Kh., **Khaledi Darvishan, A.,** Mostafazadeh, R., 2022. Identification of Erosion Critical Areas Based on Soil Erodibility and Terrain Influence Factors in the Iranian Part of the Caspian Sea Basin. Agriculture and Forestry, 68(2): 35-47.
34. Mohammadi, M., **Khaledi Darvishan, A.,** Dinelli, E., Bahramifar, N., Alavi, S.J., 2022. How does land use configuration influence on sediment heavy metal pollution? Comparison between riparian zone and sub-watersheds. Stochastic Environmental Research and Risk Assessment, 36: 719-734.
35. Mirchooli, F., Sadeghi, S.H., **Khaledi Darvishan, A.,** Strobl, J. 2021. Multi-dimensional assessment of watershed condition using a newly developed barometer of sustainability. Science of the Total Environment, 791: 148389.
36. Abdollahi, Z., Sadeghi, S.H., **Khaledi Darvishan, A.,** 2021. Detailed procedure for outdoor measurement of raindrop size distribution using photogrammetry. Journal of Hydrology and Hydromechanics, 69(2): 171-179.
37. Mohammadi, Sh., Balouei, F., Haji, Kh., **Khaledi Darvishan A.,** Karydas, C.G. 2021. Country-scale spatio-temporal monitoring of soil erosion in Iran using the G2 model. International Journal of Digital Earth, 14(8): 1019-1039.
38. Mohammadi, M., **Khaledi Darvishan, A.,** Spalevic, V., Dudic, B., Billi, P. 2021. Analysis of the Impact of Land Use Changes on Soil Erosion Intensity and Sediment Yield Using the IntErO Model in the Talar Watershed of Iran. Water, 13(6): 881.
39. Gholami, L., **Khaledi Darvishan, A.,** Spalevic, V., Cerda, A., Kavian, A. 2021. Effect of storm pattern on soil erosion in damaged rangeland; field rainfall simulation approach. Journal of Mountain Science, 18(3): 706-715.
40. Sedighi, F., **Khaledi Darvishan, A.,** Zare, M.R., 2021. Effect of Watershed Geomorphological Characteristics on Sediment Redistribution. Geomorphology, 375: 107559.
41. Sedighi, F., **Khaledi Darvishan, A.,** Golosov, V., Zare, M.R., 2020. Relationship between precipitation and inventories of fallout radionuclides (^{137}Cs and ^{210}Pb) in the undisturbed soils around the world: A review. Eurasian Soil Science, 53(9): 332-1341.

42. Mirchooli, F., Sadeghi, S.H., **Khaledi Darvishan, A.,** 2020. Analyzing spatial variations of relationships between Land Surface Temperature and some remotely sensed indices in different land uses. Remote Sensing Applications: Society and Environment, 19: 100359.
43. Mirchooli, F., Kiani-Harchegani, M., **Khaledi Darvishan, A.,** Falahatkar, S. and Sadeghi, S.H., 2020. Spatial distribution dependency of soil organic carbon content to important environmental variables. Ecological Indicators, 116: 106473.
44. Zabihi, M., Moradi, H., Gholamalifard, M., **Khaledi Darvishan, A.** and Fürst, C., 2020. Landscape Management through Change Processes Monitoring in Iran. Sustainability, 12(5): 1753.
45. El Mouatassime, S., Boukdir, A., Karaoui, I., Skataric, G., Nacka, M., **Khaledi Darvishan, A.,** Sestras, P. and Spalevic, V., 2019. Modelling of soil erosion processes and runoff for sustainable watershed management: Case study Oued el Abid Watershed, Morocco. Agriculture & Forestry, 65(4): 241-250.
46. **Khaledi Darvishan, A.,** Mohammadi, M., Skataric, G., Popović, S.G., Behzadfar, M., Sakuno, N.R.R., Mincato, R.L. and Spalevic, V., 2019. Assessment of Soil Erosion, Sediment Yield and Maximum Outflow, Using Intero Model (Case Study: S8-Inta Shirindarreh Watershed, Iran). Agriculture & Forestry, 65(4): 203-210.
47. Fakhari, M.A., Lotfalian, M., Hosseini, S.A. and **Khaledi Darvishan, A.,** 2019. Using Wood-Shred, Rice-Straw and Brush-Wood-Dams with Planting Seedlings to Runoff and Erosion Control in a Forest Road Fill Slope. Croatian Journal of Forest Engineering 40(2): 327-339.
48. Aliramayee, R., **Khaledi Darvishan, A.** and Arabkhedri, M., 2019. Investigating the hydrological response and nutrient loss in rainfed lands in northeast of Iran using rainfall simulator. Agriculture & Forestry, 65(2): 99-112.
49. Mohammadi, M., **Khaledi Darvishan, A.** and Bahramifar, N., 2019. Spatial distribution and source identification of heavy metals (As, Cr, Cu and Ni) at sub-watershed scale using geographically weighted regression. International Soil and Water Conservation Research. 7 (3): 308-315.
50. Nikolic, G., Spalevic, V., Curovic, M., **Khaledi Darvishan, A.,** Skataric, G., Pajic, M., Kavian, A. and Tanaskovik, V., 2019. Variability of Soil Erosion Intensity Due to Vegetation Cover Changes: Case Study of Orahovacka Rijeka, Montenegro. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 47(1): 237-248.
51. **Khaledi Darvishan, A.,** Derikvandi, M., Aliramaee, R., Khorsand, M., Spalevic, V., Gholami, L. and Vujacic, D., 2018. Efficiency of Intero Model to Predict Soil Erosion Intensity and Sediment Yield in Khamsan Representative Watershed (West of Iran). AGROFOR International journal, 3(2): 22-31.
52. Sadeghi S.H.R., Gharemahmudli S., Kheirfam H., **Khaledi Darvishan A.,** Kiani Harchegani M., Saeidi P., Gholami L. and Vafakhah M., 2018. Effects of type, level and time of sand and gravel mining on particle size distributions of suspended sediment. International Soil and Water Conservation Research, 6: 184-193.
53. Gholami, L., Hasanzadeh, N. and **Khaledi Darvishan, A.**, 2018. Effect of Sawdust on Splash Erosion in Laboratory Condition. Agriculture & Forestry, 64(1): 51-56.

54. Zabihi, M., Mirchooli, F., Motevalli, A., **Khaledi Darvishan, A.**, Pourghasemi, H.R., Zakeri, M.A., and Sadighi, F. 2018. Spatial modelling of gully erosion in Mazandaran Province, northern Iran. Catena, 161: 1-13.
55. Spalevic, V., Radanovic, D., Skataric, G., Billi, P., Barovic, G., Curovic, M., Sestras P. and **Khaledi Darvishan, A.**, 2017. Ecological-Economic (Eco-Eco) Modelling in the Mountainous River Basins: Impact of Land Cover Changes on Soil Erosion. Agriculture & Forestry, 63(4): 9-25.
56. Vujacic, D., Barovic, G., Djekovic, V., Andjelkovic, A., **Khaledi Darvishan, A.,** Gholami, L., Jovanovic, M. and Spalevic, V., 2017. Calculation of Sediment Yield Using the River Basin and Surface and Distance Models A Case Study of the Sheremetski Potok Watershed Montenegro. Journal of Environmental Protection and Ecology, 18(3): 1193-1201.
57. **Khaledi Darvishan A.**, Behzadfar M., Spalevic V., Kalonde P., Ouallali A., and Mouatassime E.S. 2017. Calculation of sediment yield in the S2-1 watershed of the Shirindareh river basin, Iran. Agriculture & Forestry, 63(3): 23-32.
58. Spalevic, V., Lakicevic, M., Radanovic, D., Billi, P., Barovic, G., Vujacic, D., Sestras, P., AND **Khaledi Darvishan, A.**, 2017. Ecological-Economic (Eco-Eco) Modelling in the River Basins of Mountainous Regions: Impact of Land Cover Changes on Sediment Yield in the Velicka Rijeka, Montenegro. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 45(2): 602-610.
59. Katebikord, A., **Khaledi Darvishan, A.**, and Alavi, J. 2017. Changeability of Soil Erosion Variables in Small Field Plots from Different Rainfall Durations with Constant Intensity. Journal of African Earth Sciences, 129: 751-758.
60. Gholami, L., **Khaledi Darvishan, A.**, and Kavian, A. 2016. Wood chips as soil conservation in field conditions. Arabian Journal of Geosciences, 9(19): 729: 1-11.
61. **Khaledi Darvishan, A.**, Gholami, L., Hadi Ghorghi, J., Spalević, V., Katebikord, A. and Mohamad Amini, H. 2016. Effect of Exclosure on Runoff, Sediment Concentration and Soil Loss in Erosion Plots. AGROFOR International journal, 1(1): 49-57.
62. **Khaledi Darvishan, A.**, Homayonfar, V. and Sadeghi, S.H.R., 2016. The impact of standard preparation practice on the runoff and soil erosion rates under laboratory conditions. Solid Earth 7(5): 1293-1302.
63. Sadeghi, S.H.R., Sharifi Moghadam, E. and **Khaledi Darvishan, A.**, 2016. Effects of subsequent rainfall events on runoff and soil erosion components from small plots treated by vinasse. Catena, 138: 1-12.
64. Sadeghi, S.H.R., Gholami, L., Sharifi Moghadam, E., **Khaledi Darvishan, A.** and Homaee, M., 2015. Scale Effect on Runoff and Soil Loss Control Using Rice Straw Mulch under Laboratory Conditions. Solid Earth, 6: 1–8.
65. **Khaledi Darvishan A.,** Banasik K., Sadeghi S.H.R., Gholami L. and Hejduk L. 2015. Effects of rain intensity and initial soil moisture on hydrological responses in laboratory conditions. International Agrophysics, 29(2): 165-173.
66. Sadeghi, S.H.R., Gholami, L., Homaee, M. and **Khaledi Darvishan, A.**, 2015. Reducing sediment concentration and soil loss using organic and inorganic amendments at plot scale. Solid Earth, 6: 445-455.

67. Gholami L., Banasik K., Sadeghi S.H.R., **Khaledi Darvishan A.** and Hejduk L. 2014. Effectiveness of Straw Mulch on Infiltration, Splash Erosion, Runoff and Sediment in Laboratory Conditions. Journal of Water and Land Development. 22: 51–60.
68. Sadeghi, S.H.R., Gholami, L., **Khaledi Darvishan, A.** and Saeidi, P., 2014. A Review of the Application of the MUSLE Model World-Wide. Hydrological Sciences Journal, 59(1-2): 365-375.
69. **Khaledi Darvishan, A.,** Sadeghi, S.H.R., Homaee, M. and Arabkhedri, M., 2014. Measuring Sheet Erosion using Synthetic Color-Contrast Aggregates. Hydrological Processes, 28(15): 4463-4471.
70. Sadeghi, S.H.R., Abdollahi, Z. and **Khaledi Darvishan, A.,** 2013. Experimental Comparison of Some Techniques for Estimating Natural Raindrop Size Distribution on the South Coast of the Caspian Sea, Iran. Hydrological Sciences Journal, 58(6): 1374-1382.
71. Sadeghi, S.H.R., Gholami, L. and **Khaledi Darvishan, A.,** 2013. Suitability of MUSLT for Storm Sediment Yield Prediction in Chehelgazi Watershed, Iran. Hydrological Sciences Journal, 58(4): 892-897.
72. **Khaledi Darvishan, A.,** Sadeghi, S.H.R., Homaee, M. and Arabkhedri, M., 2012. Potential Use of Synthetic Color-Contrast Aggregates and a Digital Image Processing Technique in Soil Splash Measurements, IAHS Publication, No. 356: 364-368.
73. **Khaledi Darvishan, A.,** Sadeghi, S.H.R. and Gholami, L., 2010. Efficacy of Time-Area Method in Simulating Temporal Variation of Sediment Yield in Chehelgazi Watershed, Iran. Annals of Warsaw University of Life Sciences, 42(1): 51-60.

Peer-Reviewed Journal Articles (Published in Persian)

1. Akbari Ememzadeh, F., **Khaledi Darvishan, A.,** Vafakhah, M., Nosrati, K. 2026. Analysis of the relationship between land use contributions to sediment yield with landscape metrics and soil erosion factors in the Kasilian watershed. Water and Soil Management and Modelling, 6(1): 94-108.
2. Derakhti, S., Gholami, L., Kavian, A., **Khaledi Darvishan, A.** 2026. Analytical comparison of soil particle size distribution in different land uses/covers of the Vaz watershed using laser granulometry. Water and Soil Management and Modelling, 6(1): 77-93.
3. Hadi Ghorghi, J., Derakhti, S., Abdullahi, Z., Gholami, L., **Khaledi Darvishan, A.** 2025. Comparative Evaluation of Soil Erosion and Sediment Yield Estimation in the Dowlatabad Watershed Using the EPM, MPSIAC, and IntErO Models. Desert Ecosystem Engineering, 14(48): 25-40.
4. Ahmadi S, Kavian A, Soleimani K, Shahidi K, **Khaledi Darvishaan A.** 2025. Assessment and Prediction of Land Use Changes Using a Modeling Approach in a Geographic Information System Environment (Case Study: Talar Watershed). Iranian Journal of Watershed Management Science and Engineering, 19(68): 17-31.
5. Derakhti, S., Gholami, L., Kavian, A., **Khaledi Darvishan, A.** 2025. Evaluation of Heavy Metal Contamination in Different Land Uses of the Vaz Watershed. Irrigation and Water Engineering, 15(4): 1-22.

6. Zabihi, M., Moradi, H., **Khaledi Darvishan, A.,** Gholamalifard, M. 2025. Spatiotemporal variations analysis of water yield ecosystem service in the Hyrcanian region of northern Iran using the InVEST model. Water and Soil Management and Modelling, 5(3): 296-308.
7. Zarei, R., **Khaledi Darvishan, A.,** Zare, M. R., Potro, P. 2025. Analysis of the Relationship between Sediment Budget Components and Topographic Metrics at the Hillslope Scale in Control Sub-watershed of the Khamsan Representative-paired Watershed. Watershed Management Research, 38(2): 118-138.
8. Ahmadi, S., Kavian, A., Soleimani, K., Shahidi, K., **Khaledi Darvishan, A.** 2025. Predicting the Effect of Climate Change on Rainfall Erosivity in the Talar Watershed of Mazandaran Province, Iran. Watershed Management Research, 38(1): 78-95.
9. Ghaderi Dehkordi, N., **Khaledi Darvishan, A.,** Zare, M. R., Porto, P. 2025. Analysis of changes in soil erosion and sediment yield in the last century in Khamsan representative-paired watershed. Watershed Engineering and Management, 17(1): 1-13.
10. Kalehhouei, M., Sadeghi, S. H., **Khaledi Darvishan, A.,** 2025. Investigating the Influence of Rain and Wind on Runoff Production and Interrill Erosion under Laboratory Conditions. Desert Ecosystem Engineering, 13(43), 75-88.
11. Zarei, R., Adami, M., **Khaledi Darvishan, A.,** 2025. Validation of the Use of Synthetic Colour-Contrast Aggregates for Estimating Splash and Surface Erosion. Watershed Management Research, 37(4): 119-134.
12. Azami, N., **Khaledi Darvishan, A.,** Gholami, L. (2024). Evaluation of sediment delivery ratio estimation methods in Khamsan Representative-Paired Watershed. Watershed Engineering and Management, 16(3): 394-414.
13. Sarooneh, F., **Khaledi Darvishan, A.,** Moosavi, V. 2024. Investigating the Monthly Variability of Soil Erosion in the Kasilian Representative Watershed using RUSLE Model. Watershed Management Research, 37(3): 54-75.
14. Gholami, L., **Khaledi Darvishan, A.,** Derakhti, S., Kiani Harchegani, M. 2024. Effects Evaluation of land use change on soil erosion using the RUSLE model in the Chardavol watershed, Ilam. Iranian Journal of Watershed Management Science and Engineering, 18 (65): 1-14.
15. Kamari Yekdangi, F., **Khaledi Darvishan, A.,** Aghabeigi Amin, S. 2024. Efficiency Assessment of G2 and IntErO Models for Annual Soil Erosion and Sediment Yield Prediction in the Kasilian Representative Watershed, Mazandaran Province. Watershed Management Research, 37(2): 57-75.
16. Haji, K., **Khaledi Darvishan, A.,** Mostafazadeh, R. 2024. Variability of monthly soil erosion by different land use/land covers of large Caspian Sea basin using G2 model. Quantitative Geomorphological Research, 12(4): 150-170.
17. Kamari Yekdangi, F., **Khaledi Darvishan, A.,** Aghabeigi Amin, S. 2024. Effect of correction points of the erodibility factor map on soil erosion estimation in G2 model. Journal of New Approaches in Water Engineering and Environment, 2(2): 158-169.
18. Chamani, R., Shekohideh, H., Zare, K., Zarei, R., Amini, H., Hemati, L., Moosavi, V., **Khaledi Darvishan, A.** 2023. Application of SWOT analysis with separation of natural and anthropogenic factors in the integrated management of the Mikhsaz Watershed, Mazandaran Province. Watershed Engineering and Management, 15(4): 588-602.

19. Kamari Yekdangi, F., Sarouneh, F., **Khaledi Darvishan, A.,** Moosavi, V., Aghabeigi Amin, S. 2023. Efficiency of different land use/land cover mapping methods in Kasilian representative watershed. Ecohydrology.10(3): 321-334.
20. Haji, Kh., **Khaledi Darvishan, A.,** Mostafazadeh, R., 2023. Spatiotemporal variations of the rainfall erosivity with considering snow cover correction coefficient in the Iranian part of the Caspian Sea Basin. Watershed Management Research, 36(3): 70-89.
21. Khatibi Roudbarsara, D., **Khaledi Darvishan, A.,** Alavi, J., 2023. Evaluation of Erosion Sensitivity of Lithological Units in Vaz Watershed, Mazandaran Province Using Fingerprinting. Journal of Water and Soil Science, 27(2): 299-311.
22. Sadeghi, S.H., **Khaledi Darvishan, A.,** Vafakhah, M., Moradi Rekabdarkolaei, H., Hazbavi, Z., Rajabi, M., Ebrahimi Gatekesh, Z., Zaki, S.A., Pourfallah Asadabadi, S., Haji, Kh., Nasiri Khiavi, A., Mumzaei, A., Kalehhouei, K., Mehri, S., Miarnaeimi, S., Pournabi, S., 2023. Conceptualization and Evaluation of Asiabrood Watershed Health, Chalus Township. Watershed Management Research, 14 (27): 15-25.
23. Khodamoradi, H., **Khaledi Darvishan, A.,** Sadeghi, S., 2023. Performance Evaluation of Watershed Management Measures in Reducing Soil Erosion in treated and control sub-watersheds of Khamsan Representative Watershed using 137Cs Method. Watershed Management Research, 36(2): 2-17.
24. Sadeghi, P., **Khaledi Darvishan, A.,** 2022. Effect of Fire Treatment on Aggregate Stability and Splash Components in Laboratory Condition. Watershed Engineering and Management, 15(2): 185-200.
25. Karimi, N., Gholami, L., Kavian, A., **Khaledi Darvishan, A.** 2022. Determination of specific contribution of suspended sediment sources in Vaz watershed using geochemical characteristics. Ecohydrology, 9(4): 705-718.
26. Zarei, R., **Khaledi Darvishan, A.,** 2022. The Role of Surface Sealing on Sediment Concentration and Soil Loss in Laboratory Plots under Simulation of Subsequent Rainfalls. Watershed Management Research, 13(26): 230-242.
27. Karimi, N., Gholami, L., Kavian, A., **Khaledi Darvishan, A.,** 2023. Separation of the Relative Contribution of Different Land Covers in Bed Sediment Yield in Vaz River Using Geochemical Characteristics. Watershed Management Research, 35(4): 77-89.
28. Mirchooli, F., Sadeghi, S., **Khaledi Darvishan, A.,** 2022. Comparative analysis of the effect of different algorithms for calculating the topographic factor on the amount and spatial distribution of soil erosion in the Shazand Watershed, Iran. Watershed Engineering and Management, 14(2): 232-242.
29. Kalehhouei, M., Sadeghi, S. H., **Khaledi Darvishan, A.** 2021. Water Erosion Reactivity from Some Climatic Factors. Extension and Development of Watershed Management, 9(34): 20-27.
30. Zabihi Silabi, M., **Khaledi Darvishan, A.** 2021. Qualitative Evaluation of IntErO, EPM, MPSIAC and RUSLE Models in Order to Select the Optimal Models for Different Conditions for Description of Detailed-Executive Watershed Management Services. Extension and Development of Watershed Management, 9(32): 52-66.
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33. Sadeghi S.H., **Khaledi Darvishan A.,** Vafakhah M., Moradi Rekabdarkolaei H., Nasiri Khiavi A., Rajabi M.R., Miar Naeimi, S., Pournabi, S., Ebrahimi Gatgesh, Z., Zaki, S.A., 2021. Integrated and Problem-Based Management of the Watershed using Strategic Planning Framework. Watershed Management Sciences and Engineering. 15(52): 63-66.
34. Hasanzadeh, N., Gholami, L., **Khaledi Darvishan, A.,** Yonesi, H., 2021. Effect of Various Rates of Montmorillonite Nanoclay on Changing Runoff and Soil Loss. JWSS. 25(1): 219-230.
35. **Khaledi Darvishan, A.**, Faraji, J., Gholami, L., Khorsand, M. 2021. Spatio-temporal variation of soil erosion in Khamsan representative watershed using RUSLE. Watershed Engineering and Management, 13(3): 534-547.
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37. Zabihi, M., Moradi, H., **Khaledi Darvishan, A.**, Gholamalifard, M. 2021. Application of InVEST Ecosystem Services Model to Prioritize Sub-watersheds of Talar in term of Soil Erosion, Sediment Retention and Yield. Environment and Water Engineering, 7(2): 294-304.
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39. Adami, M. **Khaledi Darvishan, A.** 2021. Evaluation of Runoff Components in Laboratory Plots with Straw Conservation Treatment. Watershed Management Research Journal, 34(1): 112-125.
40. Mohammadamini, H., Khaledi Darvishan, A., Alavi, J., 2020. Effects of Soil Surface Rock Fragments on Runoff Variables of Field Plots under Rainfall Simulation. Watershed Management Research. 11(22): 243-253.
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42. Sedighi, F., **Khaledi Darvishan, A.**, Zare, M., 2020. Assessment of the Slope Gradient on the Estimated Erosion and Sediment Delivery Ratio by Using ^{137}Cs in the Khamsan Representative Watershed. Watershed Management Research, 33(3): 2-19.
43. Hasanzadeh, N., Gholami, L., **Khaledi Darvishan, A**., Yonesi, H. 2020. Changes study of variations of subsurface soil loss with application of soluble nanoclay and biochar in plot scale. Watershed Management Sciences and Engineering. 14(48): 79-89.
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46. Gholami, L., Kavian, A., **Khaledi Darvishan, A.,** 2018. Role of woodchips on runoff components control at plot scale. Watershed Engineering and Management, 10(3): 375-387.
47. Roshun, S.H., Vahabzadeh, Gh., Solaimani, K., **Khaledi Darvishan, A.,** 2018. The Impact of Sand and Gravel Mining on River Bedload Amount and Gradation (Case Study: Zaremrood River, Mazandaran Province). Water and Soil Science, 28(2): 83-95.
48. Fakhari M A, Lotfalian M, Hosseini S A O, **Khaledi Darvishan A.,** 2018. Effect of rice straw and wood chips on Soil erosion and seedling growth on the fill slope of forest roads. Environmental Erosion Research Journal, 8 (2): 104-118.
49. Gholami, L., Kavian, A., **Khaledi Darvishan, A.,** Alipour, A., Besarand, Z., 2018. The effect of rainfall pattern on changes of time to runoff and runoff coefficient at plot scale. Watershed Engineering and Management, 10(4): 516-528.
50. Aliramayee, R., **Khaledi Darvishan, A.,** Arabkhedri, M., 2019. Effect of rainfall intensity and slope gradient on infiltration and surface runoff in rainfed lands of Kalaleh region, Golestan Province. Watershed Engineering and Management, 10(4): 714-726.
51. Katebikord, A., **Khaledi Darvishan, A.,** Alavi, S.J., 2018. Effects of Rainfall Duration on Hydrological Response of Field Plots under Rainfall Simulation. Watershed Management Research, 9(17): 49-56.
52. Gholami, L., Hadi Ghoroghi, J., Abdullahi, Z., **Khaledi Darvishan, A.** 2017. Comparison and Evaluation of Suspended Sediment Estimation Methods using Data Classification (Case of Study: Doab Mark, Shirgah and Krikla Stations). Iran-Water Resources Research, 13(3): 187-193.
53. Roshun, S.H., Vahabzadeh Kebria, G., Solaimani, K., **Khaledi Darvishan, A.** 2017. Determination of the Best Model to Estimate Suspended Sediment Load in Zaremrood River, Mazandaran Province. Environmental Erosion Research Journal, 7(3): 39-54.
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55. Derikvandi, M., **Khaledi Darvishan, A.,** Chapi, K., 2018. Measuring Soil Erosion at Different Time Intervals in Khamsan Representative Watershed using Erosion Pins. Ecohydrology, 5(2): 675-685.
56. Roshun, S.H., Vahabzadeh, Gh., Solaimani, K., **Khaledi Darvishan, A.,** 2017. Investigation the Effect of Sand and Gravel Mining on Bed Sediment Morphometric Characteristics (Case Study: Zaremrood River, Mazandaran Province). Journal of Water and Soil Sciences, 21(3): 219-229.
57. Behzafar, A., **Khaledi Darvishan, A.,** Gharagozlu, A., 2017. Increasing the accuracy of predicting sediment yield in watem/sedem model using image fusion algorithm (case study: Darkesh watershed). Journal of Soil and Water Resources Conservation, 7(1): 99-112.
58. Ghavimipanah, M., **Khaledi Darvishan, A.,** Ghavimipanah, M., 2017. Verification methods of Analytical Hierarchy Process (AHP) and Multivariate Regression (MR) in landslide zoning (Case Study: Valiasr Watershed in Ardabil Province). Ecohydrology, 4(3): 775-789.

59. Homauonfar, V., **Khaledi Darvishan, A.,** Sadeghi, S.H., 2017. Effects of Soil Preparation for Laboratorial Erosion Studies on Surface Runoff. Watershed Management Research, 7(14): 68-60.
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64. Homayounfar, V., **Khaledi Darvishan, A.,** 2016. Affectability of splash from soil disturbance in laboratorial erosion studies. Watershed Engineering and Management, 8(4): 478-485.
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66. Abdollahi. Z., Sadeghi, S.H.R. and **Khaledi Darvishan, A.**, 2016. Variation of Simulated Rainfall Characteristics by Permuting Intake Discharge and Water Pressure, Watershed Engineering and Management, 10(34): 51-62.
67. **Khaledi Darvishan, A.,** Sharifi Moghadam, E., 2016. Effects of Aggregate Diameter on Soil Splash under Laboratorial Conditions. Watershed Management Sciences and Engineering, 10 (32): 33-38
68. **Khaledi Darvishan, A.,** Homayounfar, V., Sadeghi, S.H., 2016. Generalization of the Results of Laboratory and Field Erosion Plots under Simulated Rainfall. Journal of Extension and Development of Watershed Management, 4(12): 33-42.
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70. Nikkhah, S., Hosayni, S., **Khaledi Darvishan, A.,** Fathizadeh, O., 2015. Measurement of Generated Stemflow for the Quercus Castaneifolia C.A.M and Acer Velutinum Boiss trees in the Growth Area of Hyrcanian Forests. Journal of Natural Ecosystems of Iran, 6(2): 13-26.
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moisture content in laboratorial erosion plots. Iranian Water Research Journal, 8(15): 41-49.

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74. Sharifi Moghadam, E., Sadeghi, S.H.R. and **Khaledi Darvishan, A.**, 2014. Small Plot Soil Hydrologic Components as Affected by Application of Vinasse Organic Residue. Iranian Journal of Soil and Water Research, 45(4): 499-508.
75. Sadeghi, S.H.R., Gharamahmoodli, S., **Khaledi Darvishan, A.**, Kheirfam. H., Kiani Harchegani, M., Saeidi, P., 2014. Effect of River Sand and Gravel Mining on Monthly Changeability of Suspended Sediment Concentration. Water and Soil Resources Conservation Journal, 3(3): 65-77.
76. Sadeghi, S.H.R., Gharamahmoodli, S. and **Khaledi Darvishan, A.**, 2014. Variability of Amount and Particle Size Distribution and Morphometric Characteristics of Bed Loads Due to Sand and Gravel Mining, Water and Soil, 28(1): 203-218.
77. Abdolahi, Z., Sadeghi, S.H.R. and **Khaledi Darvishan, A.**, 2013. Designing, manufacturing and testing rainfall simulator nozzles. Journal of Water and Soil Conservation, 20(6): 67-86.
78. Kavian, A., Adineh, F., Vahabzadeh, Gh., **Khaledi Darvishan, A.,** 2013. Spatial Variation of Bedload Shape Characteristic towards Downstream (Case Study: Ghalesar Watershed, Sari). Journal of Range and Watershed Management (Iranian Journal of Natural Resources), 66(1): 131-144.
79. Ghoorghi, J., Habibnejad Roshan, M., Vahabzadeh, Gh., **Khaledi darvishiyan, A.,** 2012. Efficiency of Different Data Separation Methods to Increase the Accuracy of Sediment Rating Curve; Case Study A Part of the Sefidrood Watershed. Irrigation and Water Engineering, 2(3): 97-111.
80. Adineh, F., Kavian, A., Vahabzadeh, Gh., **Khaledi Darvishan, A.,** 2012. The effects of watershed physical properties on bed load morphometric and sedimentologic characteristics along downstream: a case study from Ghalesar watershed in Mazandaran Province. Journal of Stratigraphy and Sedimentology Researches, 28(3): 83-98.
81. Gholami, L., Sadeghi, S.H., **Khaledi Darvishan, A.**, 2012. Evaluation of the Most Appropriate Time Basis of Rain Intensity in Determination of Storm Suspended Sediment. Iranian Journal of Watershed Management Science and Engineering, 6(18): 17-22.
82. Gholami, L., Sadeghi, S.H.R. and **Khaledi Darvishan, A.**, 2012. Storm-wise Rating Loops in Chehelgazi Watershed of Gheshlagh Dam. Iranian Water Research Journal, 6(10): 29-36.
83. **Khaledi Darvishan, A.**, Sadeghi, S.H.R. and Gholami, L., 2011. Effects of Different Land Uses on Morphometric Characteristics of Bed Sediments (Case Study: Vazrood River). Soil and Water Research Journal of Tabriz University, 21(4): 139-151.
84. Sadeghi, S.H.R., Gholami, L., **Khaledi Darvishan, A.** 2011. Simulation feasibility of sedimentgraphs, using time-area model. Watershed Management Research, 92: 53-64.

85. Fazli, S., Sadeghi, S.H.R. and **Khaledi Darvishan, A.**, 2011. Studying Storm Sediment Graphs in Khamsan Representative Watershed. Iranian Water Research Journal, 5(8): 217-221.
86. **Khaledi Darvishan, A.**, Sadeghi, S.H.R., Gholami, L., and Telvari, A.R., 2010. Comparison of USLE Different Versions in Chehelgazi Watershed in Kordistan Province, Iran, Journal of Watershed Management, 1(1): 30-43.
87. Fazli, S., Sadeghi, S.H.R. and **Khaledi Darvishan, A.**, 2010. Rainfall-Runoff-Sediment Modeling. Watershed Management Science and Engineering, 4(11): 41-44.
88. Gholami, L., Sadeghi, S.H.R. and **Khaledi Darvishan, A.**, 2009. Modeling Storm-Wise Sediment Delivery Ratio Model in Chehelgazi Watershed by using Climatic and Hydrologic Characteristics. Journal of Agricultural Science and Natural Resources, 16(2): 253-260.
89. Sadeghi, S.H.R., **Khaledi Darvishan, A.** and Gholami, L., 2008. Effects of Sand and Gravel Mining on Bed Sediment Morphometric Characteristics. Scientific Quarterly Journal of Iranian Association of Engineering Geology, 1(2): 75-86.
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91. Gholami, L., Sadeghi, S.H.R., **Khaledi Darvishan, A.** and Telvari, A.R., 2009. Storm-Wise Sediment Yield Prediction using Rainfall and Runoff Variables. Journal of Water and Soil (Agricultural Science and Technology Journal), 22(2): 263-271.
92. **Khaledi Darvishan, A.,** Sadeghi, S., Vafakhah, M., Gholami, L. 2008. Recognition of Effective Physical Characteristics of Watershed on Bed Sediment Morphometry (Case Study: Vaz River), Iran-Water Resources Research, 4(1): 75-78.
93. Sadeghi, S.H.R., Gholami, L. and **Khaledi Darvishan, A.**, 2008. Comparison of Sediment Delivery Ratio Estimation Methods in Chehelgazi Watershed of Gheshlagh Dam. Agricultural Science and Technology Journal, 22(1): 141-150.
94. Sadeghi, S.H.R., **Khaledi Darvishan, A.**, Vafakhah, M. and Gholami, L., 2008. Study on Changes in Morphometric Characteristics of Bed Materials in Downstream Ward of Vaz River. Journal of the Iranian Natural Resources, 60(4): 1185-1189.
95. Sadeghi, S.H.R., **Khaledi Darvishan, A.** and Vafakhah, M., 2007. Study on Channel Hydraulic Characteristics on Morphometric Variations of Bed Sediment. Journal of Hydraulics, spring 2007: 1-10.

AWARDS AND HONOURS

Aug 2018	Award: Youth Outstanding Paper Award (Datum) 2018 - WASWAC - Moscow, Russia
Aug 2014	Award: Best PhD Thesis for the period 2013 selected by "Watershed Management Society of Iran (WMSI)"
Feb 2013	Award: First rank graduate of the PhD Degree, GPA 18.99 / 20 (Thesis: 19.79 / 20)
Dec 2008	Award: First Rank of the PhD Entrance Examination

Feb 2005	Award: First rank graduate of the MSc Degree, GPA 18.42 / 20 (Thesis: 19.28 / 20)
Jul 2003	Award: First Rank of the MSc Entrance Examination
Jul 2003	Award: First rank graduate of the BSc Degree, GPA 18.14 / 20

GRANTS AND FELLOWSHIPS

Sep 2010 – Feb 2013 PhD Scholarship, Iran Ministry of Science, Research and Technology

RESEARCH PROJECT EXPERIENCE

2024. Co-PI. Preparing an Atlas of Ecological Health and Security of Iran's Major Watersheds, Iran National Science Foundation (INSF), Iran, 150 p.

2021. Co-PI. Assessment of Five-Year Rangeland Preservation Affecting Soil Sustainability Index and Soil Quality in the Dalahoo, Kermanshah Province, Iran, Soil Conservation and Watershed Management Research Institute, Iran, 74 p.

2021. Co-PI. Health Atlas of Pishkooh Watershed, Taft City, Yazd Province, Iran. Department of Natural Resources and Watershed Management of Yazd Province, 128 p.

2020. PI. Assessing the Environmental Diversity of Iran. Forests, Range and Watershed Management Organization of Iran. 283 p.

2019. Co-PI. Report of Study and Synthesis of Strategic Plan for Integerated Management of Pilot Watersheds of Asiabrood and Bararood, Chalus City, Ministry of Jihad-e-Agriculture (FRWO), Department of Natural Resources and Watershed Management of Mazandaran Province–Nowshahr, 167 p.

2014. Co-PI. Study on Effects of Sand and Gravel Minings on Morphometric Characteristics of Suspended and Bed Loads. Iran National Science Foundation (INSF).

INVITED TALKS

2023 – Keynote Speaker: "Investigating the contribution of main land uses in soil erosion and sediment yield in the southern watersheds of the Caspian Sea". Perm State Agro-Technological University, Perm, Russia, 14-17 November 2023.

2019 – Keynote Speaker: "Soil Erosion Researches in Khamsan Representative and Paired Watersheds (KHRPW) Approaches and Goals". Perm State Agro-Technological University, Perm, Russia, 19-22 November 2019.

2020 – Keynote Speaker: "Global distribution of ^{137}Cs and $^{210}Pb_{excess}$ in the reference soil due to annual precipitation and latitudinal zoning". University of Montenegro, Podgorica, Montenegro, 28-31 May 2020.

REVIEWER SUMMARY

International Journal of Environmental Research and Public Health	Journal of Mountain Science
Environmental Science and Pollution Research	Soil & Tillage Research
International Journal of Sediment Research	Journal of Hydrology

International journal of Digital Earth	Natural Hazards
Frontiers in Environmental Science	Remote Sensing
Land Degradation & Development	Sustainability
Science of the Total Environment	Catena
Journal of Soils and Sediments	Water

TEACHING EXPERIENCE

Kurdistan University

Undergraduate courses

Soil and water conservation structures	B.Sc.	Previous
Watershed management	B.Sc.	Previous

Tarbiat Modares University

Graduate courses

Sediment sourcing	Ph.D.	Ongoing
Erosion and sediment models	M.Sc.	Ongoing
Applied sedimentology	M.Sc.	Ongoing
Advanced sedimentology	M.Sc.	Previous
River management	Ph.D.	Ongoing
Mass movements	M.Sc.	Ongoing
Advanced watershed management	Ph.D.	Ongoing
Evaluation of water and soil conservation projects	Ph.D.	Ongoing
Research methodology	M.Sc.	Ongoing
Water, soil and plants relationship	M.Sc.	Previous

THESIS SUPERVISED

Thesis Title	Grade	Name of the Candidate	Defense Time
Effect of Spatial Scale on Watershed Sediment Budget	Ph.D.	Fatemeh Sedighi	*2021*
Temporal Variations of Sediment Source and Quality in Talar Watershed	Ph.D.	Maziar Mohammadi Khanghah	*2021*
Spatio-temporal variations of soil erosion and the relative contribution of sediment sources in the Iranian part of the Caspian Sea Basin	Ph.D.	Khadijeh Haji	*2023*
Relationship between Topographic Metrics and Sediment Budget Components	Ph.D.	Reza Zarei	*2025*

Analysis of the Erosional History using Soil Redistribution, Sediment Fingerprinting and Measurement	Ph.D.	Negin Ghaderi Dehkordi	*2025*
Variability of the Contribution of Suspended and Bed Sediment Sources during Storm Hydrograph	Ph.D.	Fatemeh Akbari	*2025*
Land Use Contributions to Suspended and Bed Sediment Yields with Different Sizes in Kasilian Representative Watershed	Ph.D.	Vahid Beiranvandi	*2026*
Modelling the contribution of land uses in sediment yield using deep learning methods	Ph.D.	Hamid Khodamoradi	*Ongoing*
Source oriented optimization of the sediment quantity and quality based on land use/land cover and climate change scenarios	Ph.D.	Elnaz Ghabelnezam	*Ongoing*
Comparison of Surface Runoff and Soil Loss from Field Plots with Disturbed and Undisturbed Soils	M.Sc.	Vafa Homayounfar	*2014*
Analyzing the Effects of Rainfall Duration on Soil Erosion Process in Field Plots under Rainfall Simulation	M.Sc.	Azadeh Katebikord	*2015*
Analyzing the Effects of Soil Surface Rock Fragments on Soil Erosion Process in Field Plots under Rainfall Simulation	M.Sc.	Hero Mohammadamini	*2015*
Effect of Rainfall Intensity and Slope on Infiltration, Runoff, Soil and Nutrient Loss in Rainfed Lands (Case Study: Kalaleh Region, Golestan Province)	M.Sc.	Ramyar Aliramayee	*2016*
Analyzing the Monthly, Seasonal and Annual Sediment Delivery Ratio at Plot Scale	M.Sc.	Mohammad Derikvandi	*2016*
Accuracy assessment of the estimation of monthly, seasonal and annual soil erosion and sediment delivery ratio using RUSLE model in GIS Environment	M.Sc.	Mohsen Khorsand	*2017*
The Role of Surface Sealing on Runoff and Soil Loss in Subsequent Rainfalls	M.Sc.	Reza Zarei	*2018*
Effect of Straw Conservation Treatment on Runoff and Soil Loss Changes in Surface Roughness	M.Sc.	Mostafa Adami	*2018*
Spatial Changeability of Performance of Watershed Management Measures in Reducing Soil Erosion in Khamsan Representative Watershed using Cs- 137 Method	M.Sc.	Hamid khodamoradi	*2019*
Etimating Spatial Variations of Sedeiment Delivery Ratio in Khamsan Representative Watershed using WaTEM/SEDEM	M.Sc.	Jalal Faraji	*2019*
Evaluation of the Estimates of WaTEM/SEDEM and 137Cs in the Khamsan Representative Watershed using Sediment Measurements in Check Dam Reservoirs	M.Sc.	Elaheh Fathi Dareh Nijeh	*2019*
Evaluation of sediment delivery ratio estimating methods in Khamsan representative watershed	M.Sc.	Nasrin Azami	*2019*
Relationship Analysis between Sediment Delivery Ratio and Sediment Structural Connectivity Index in the Khamsan Representative Watershed	M.Sc.	Bita Mahmoudi	*2019*

Spatial Distribution and Source Identification of Heavy Metals in Khamsan Representative Watershed, Iran	M.Sc.	Mohammad Amjadi	*2020*
Effect of Fire on Aggregate Stability and Splash Erosion Components under Laboratory Conditions	M.Sc.	Padidehossadat Sadeghi	*2020*
Tracing soil erosion and main sediment sources in a small watershed using n-alkanes	M.Sc.	Shahrbanoo Pourbakhshi	*2022*
Downstream Changes of the Contribution of Erosion Types in Bed Sediment Yield in Vaz River	M.Sc.	Donya Khatibi Rudbarsara	*2022*
Spatial Variations of Bed Sediment Quality Indices in Vaz River, Mazandaran Province	M.Sc.	Somayeh Pooram Nitlakh	*2023*
Contribution of Factors Affecting Annual Soil Erosion and Sediment Yield in Kasilian representative Watershed by Combining the Results of G2 Model and Geodetector Statistical Method	M.Sc.	Faezeh Kamari Yekdangi	*2023*
Spatiotemporal Analysis of Monthly Soil Erosion and Sediment Yield using RUSLE and TLSD Models in Kasilian Watershed	M.Sc.	Fatemeh Sarouneh	*2023*
Effect of Combined Application of Sawdust and Polyvinyl Acetate in Controlling Surface Runoff and Soil Loss in Small Experimental Plots under Rainfall Simulation	M.Sc.	Arasteh Payfeshordeh	*2024*
Daily Suspended Sediment Yield Modeling using Combined Taguchi-Artificial Intelligence Approach	M.Sc.	Fatemeh Abdolbaghi	*Ongoing*
Application of Dynamic Sediment Connectivity in Monthly Sediment Prediction using Artificial Intelligence and Ensemble Modeling Approach	M.Sc.	Fatemeh Zahra Enayati	*Ongoing*

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