



# Abolfazl Rezaei

**Associate Professor**

**IASBS, Department of Earth Sciences**

## Publications

### Journals

---

- Mousavi, Seyed Vahid and Karami, Khalil and Tilmes, Simone and Muri, Helene and Xia, Lili and Rezaei, Abolfazl, "Future dust concentration over the Middle East and North Africa region under global warming and stratospheric aerosol intervention scenarios", Atmospheric Chemistry and Physics Discussions, Vol. 7, NO. 1, 2022
- Hussain, Azfar and Cao, Jianhua and Ali, Shaukat and Ullah, Waheed and Muhammad, Sher and Hussain, Ishtiaq and Rezaei, Abolfazl and Hamal, Kalpana and Akhtar, Mobeen and Abbas, Haider and others, "Variability in runoff and responses to land and oceanic parameters in the source region of the Indus River", Geo-spatial Information Science, Vol. 127642, 2022
- Shabani, Marzieh and Masoumi, Zohreh and Rezaei, Abolfazl, "Assessment of groundwater potential using multi-criteria decision analysis and geoelectrical surveying", Geo-spatial Information Science, Vol. 127642, 2022
- Rezaei, Abolfazl and Pirvand, Mohammad, "Semi-Analytical Solution for Reactive Contaminant Transport in a Filled-Fractured System with Intervening Rock Matrices: Case Examples of Tritium and Uranium", Journal of Hydrology, Vol. 127642, 2022
- Shahbazi, Saeedeh and Mousavi, Zahra and Rezaei, Abolfazl,



- "Constraints on the hydrogeological properties and land subsidence through GNSS and InSAR measurements and well data in Salmas plain, northwest of Urmia Lake, Iran.", *Hydrogeology Journal*, Vol. 2022, 2022
- Rezaei, Abolfazl, "Large-scale climate variability footprint in water levels of alluvial aquifers across Iran", *Theoretical and Applied Climatology*, Vol. 603, 2022
  - Rezaei, Abolfazl, "Chemistry of the karst Sarabkalan Spring, Iran, and controls of PDO and ENSO climate indices on it", *Ground Water*, Vol. 59, NO. 2, 2021
  - Rezaei, Abolfazl and Saatsaz, Masoud, "Large-scale climate indices teleconnections with hydrochemical and isotopic characteristics of a karst spring using wavelet analysis", *Environmental Earth Sciences*, Vol. 80, NO. 114, 2021
  - Rezaei, Abolfazl and Soleimani, Freshteh, "Contaminant plume modeling in aquifers through prediction-focused approach and geoelectrical data circumventing classical inversion modeling", *Iranian Journal of Geophysics*, Vol. 15, NO. 2, 2021
  - Rezaei, Abolfazl, "Ocean-atmosphere circulation controls on integrated meteorological and agricultural drought over Iran", *Journal of Hydrology*, Vol. 603, NO. 2, 2021
  - Rezaei, Abolfazl and Shahriari, Farnaz and Cheraghi, Maryeh, "Detecting saline water plume in a heterogeneous synthetic aquifer through a combination of POD and geoelectrical surveys", *Hydrogeology*, Vol. 603, NO. 2, 2021
  - Rezaei, Abolfazl and Mousavi, Zahra and Khorrami, Fatemeh and Nankali, Hamidreza, "Inelastic and elastic storage properties and daily hydraulic head estimates from continuous global positioning system (GPS) measurements in northern Iran", *Hydrogeology Journal*, Vol. 579, 2020
  - Rezaei, Abolfazl and Gurdak, Jason J., "Large-scale climate



- variability controls on climate, vegetation coverage, lake and groundwater storage in the Lake Urmia watershed using SSA and wavelet analysis", *Science of The Total Environment*, Vol. 724, 2020
- Shabani, Marzieh and Rezaei, Abolfazl and Masoumi, Zohreh, "Assessment of groundwater potential in Zanjanrood catchment area using spatial analysis and geoelectrical investigations", *Scientific Quarterly Journal, GEOSCIENCES*, Vol. 29, NO. 2, 2020
  - Mousavi, Z and Masoumi, Z and Rezaei, A and others, "Investigation of Qom plain subsidence using synthetic aperture radar Interferometry and aquifer hydrogeological characterization", *Scientific Quarterly Journal, GEOSCIENCES*, Vol. 29, NO. 2, 2020
  - Hajeb, Zahra and Mousavi, Zahra and Masoumi, Zohreh and Rezaei, Abolfazl, "InSAR Time series Analysis of Interseismic deformation of Eastern part of Iran", *Scientific Quarterly Journal of Geosciences*, Vol. 29, NO. 114, 2020
  - Rezaei, Abolfazl and Rezaeian, Mahnaz and Porkhial, Soheil, "The hydrogeochemistry and geothermometry of the thermal waters in the Mouil Graben, Sabalan volcano, NW Iran", *Geothermics*, Vol. 78, NO. 18, 2019
  - Masoumi, Zohreh and Rezaei, Abolfazl and Maleki, Jamshid, "Improvement of water table interpolation and groundwater storage volume using fuzzy computations", *Environmental monitoring and assessment*, Vol. 191, NO. 6, 2019
  - Rezaei, Abolfazl and Mousavi, Zahra, "Characterization of land deformation, hydraulic head, and aquifer properties of the Gorgan confined aquifer, Iran, from InSAR observations", *Journal of Hydrology*, Vol. 579, NO. 6, 2019
  - Rezaei, Abolfazl and Javadi, Hadi and Rezaeian, Mahnaz and Barani, Soghra, "Heating mechanism of the Abgarm--Avaj geothermal system observed with hydrochemistry,



geothermometry, and stable isotopes of thermal spring waters, Iran", *Environmental Earth Sciences*, Vol. 77, NO. 18, 2018

- Rezaei, Abolfazl, "Comments on "Quantifying groundwater exploitation induced subsidence in the Rafsanjan plain, southeastern Iran, using InSAR time-series and in situ measurements" by Motagh, M., Shamshiri, R., Haghighi, MH, Wetzell, HU, Akbari, B., Nahavandchi, H.,... \&", *Engineering geology*, Vol. 246, NO. 1, 2018
- Karimi, Haji and Raeisi, Ezzatollah and Rezaei, Abolfazl, "Determination of karst aquifer characteristics using physicochemical parameters (A case study from west of Iran)", *Geopersia*, Vol. 8, NO. 2, 2018
- Rezaei, Abolfazl and Karimi, Haji and Zhan, Hongbin, "THE IMPORTANCE OF UNDERSTANDING THE HYDROGEOLOGY AND GEOCHEMISTRY OF KARST TERRAINS FOR SAFELY SITING DAMS.", *Journal of Cave \& Karst Studies*, Vol. 79, NO. 1, 2017
- Rezaei, Abolfazl and Mohammadi, Zargham, "Annual safe groundwater yield in a semiarid basin using combination of water balance equation and water table fluctuation", *Journal of African Earth Sciences*, Vol. 134, NO. 3, 2017
- Rezaei, Abolfazl, "Impact of Fractured Aquitards on Solute Transport in an Aquifer-Aquitard System", *Advanced Applied Geology*, Vol. 7, NO. 1, 2017
- Rezaei, Abolfazl and Khorrami, Roghayyeh, "THE Quranic Intertextuality in the Poems by Sufyan ibn Mus' ab (the Ahl al-Bayt's Poet)", *Atmospheric Chemistry and Physics Discussions*, Vol. 7, NO. 1, 2016
- Rezaei, Abolfazl and Zare, Mohammad and Zhan, Hongbin, "Aquitard horizontal dispersion on reactive solute transport in an aquifer--aquitard system", *Transport in Porous Media*, Vol. 113, NO. 3, 2016



- Rezaei, Abolfazl and Zhan, Hongbin and Zare, Mohammad, "Impact of thin aquitards on two-dimensional solute transport in an aquifer", *Journal of contaminant hydrology*, Vol. 152, NO. 2, 2013
- Rezaei, Abolfazl and Zare, Mohammad and Raeisi, Ezzatollah and Ghanbari, Reza Namdar, "Interaction of a fresh water lake and a karstic spring via a syncline fold", *Groundwater*, Vol. 51, NO. 2, 2013