



## Hamid Alizadeh Ketek Lahijani



Professor in **Sedimentology**

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### Academic Background

- Ph.D. in Sedimentology, Russian Academy of Sciences, Institute of Water Problems, 1994-1998.
- M.Sc. in Sedimentology, Faculty of Sciences, the University of Tehran, 1989-1991.
- B.Sc. in Geology, Faculty of Sciences, The University of Tehran, 1984-1988

### Positions & Work Experiences

- Head of Non-living Marine Science Group, INCO, 1999-2001
- Head of Library of INCO, 2002-2005
- Deputy of Research, INCO, 2006-2010
- Head of Marine Sciences Center, INIO, 2010 -2012
- Deputy of Research, INIOAS, Oct. 2012-Feb. 2015 and 2018-2021

### Teaching Experiences

- Course on Non-Living Characteristics of Iranian Seas: Caspian Sea, Persian Gulf and Oman Sea (Tarbiat-Modares Univ., The University of Guilan and The University of Shahid Beheshti)
- Course on Pollution of Iranian Seas: Caspian Sea, Persian Gulf and Oman Sea (The University of Guilan and The University of Shahid Beheshti)

- Course on Marine Geology (The University of Tehran)
- Course on Oceanography (The University of Tehran, The University of Shahid Beheshti and Iranian National Institute for Oceanography and Atmospheric Science (INIOAS))
- Supervised 10 MSc and 4 PhD students, Examiner of 10 national and international PhD students

## Research Activities & Status

### Research Interest

➤ Paleoclimate	H index Web of Science	21
➤ Marine Hazard	H index Scopus	22
➤ Marine Geology	H index Google(all)	28 i10-index 48

### Full Papers

- **Lahijani, H.**, Ghaffari, P., Leroy, S., Naderi Beni, A., Yakushev, E., Abtahi, B., Saleh, S., Behravesht, M., 2024. A note on the silent decline of the Caspian environment, *Marine Pollution Bulletin*, Volume 205, 116551, <https://doi.org/10.1016/j.marpolbul.2024.116551>.
- **Lahijani, H.**, Ghafarian, P., Saleh, A. Kaveh-Firouz, Mohammadi, A., Azizpour, J., Sanjani, S., Rezaei, H., Afarin, M., 2024. Response of shelf waters in the northern Gulf of Oman to the passage of tropical Cyclone Shaheen (2021), *Dynamics of Atmospheres and Oceans*, Volume 106, 101449
- Gerivani, H., Abdolmajid Naderi Beni, A., Suzanne A.G. Leroy, S., **Lahijani, H.**, 2024. Environmental history of the South Caspian Sea basin and its relation to the Siberian High dynamics since 14,000 years ago, *Marine Geology*, 107356, <https://doi.org/10.1016/j.margeo.2024.107356>.
- Naderi Beni, A., Guillaume Leduc, Morteza Djamali, Arash Sharifi, Nick Marriner, Kazuyo Tachikawa, Frauke Rostek, Rik Tjallingii, **Hamid Lahijani**, Mahboubeh Molavi Arabshahi, Marta Garcia, Laetitia Licari, Martin Tetard, Marie-Charlotte Bellinghery, Edouard Bard, 2024. Postglacial flooding and Holocene climate shifts in the Persian Gulf, *Journal of Quaternary Science*.

- Hamzeh, M. A., Naderi Beni, A., **Lahijani, H.**, Mehdinia, A., Aghadadashi, V., Koochaknejad, E., 2024. Reconstruction of the sedimentary environment of Nayband Bay during the last 1600 years; implications for relative sea level and climate change in Northern Persian Gulf, *Marine Micropaleontology*, Volume 186,102321.
- **Lahijani, H. A. K.**, Azizpour, J., Arpe, K., Abtahi, B., Rahnama, R., Ghafarian, P., Hamzeh, M. A., Hamzeshpour, A., Mohammadpour Penchah, M., Mahmoudof, S. M., 2023. Tracking of sea level impact on Caspian Ramsar sites and potential restoration of the Gorgan Bay on the southeast Caspian coast, *Science of The Total Environment* 857(1),158833.
- **Lahijani, H. A. K.**, Leroy S.A.G., Arpe, K., Crétaux, J.-F., 2023. Caspian Sea level changes during instrumental period, its impact and forecast: A review, *Earth-Science Reviews*,241, 104428.
- Sharifi, Arash; Djamali, Morteza; Peterson, Larry C; Swart, Peter K; Ávila, María Guadalupe Pulido; Esfahaninejad, Mojgan; de Beaulieu, Jacques-Louis; **Lahijani, Hamid AK**; Pourmand, Ali, 2023. The rise and demise of Iran's Urmia Lake during the Holocene and the Anthropocene: "what's past is prologue". *Reg Environ Change* **23**, 121. <https://doi.org/10.1007/s10113-023-02119-x>
- Reza Safaierad, Roger Matthews, Lydie Dupont, Bernd Zolitschka, Elena Marinova, Morteza Djamali, Christoph Vogt, Ghasem Azizi, **Hamid A.K. Lahijani**, Wendy Matthews, 2023. Vegetation and climate dynamics at the dawn of human settlement: multi-proxy paleoenvironmental evidence from the Hashilan Wetland, western Iran, *Journal of Quaternary Science*, <https://doi.org/10.1002/jqs.3557>
- Kaveh-Firouz, A., Mohammadi, A., Görüm, T., **Lahijani, H.**, Akbas, A., Mirabi A., 2022. Main drivers of drainage pattern development in onshore Makran Accretionary Wedge, SE Iran. *Int J Earth Sci (Geol Rundsch)* **112**, 539–559 (2023). <https://doi.org/10.1007/s00531-022-02270-6>
- Yanko-Hombach, V., A Makeev, T Yanina, **Lahijani, H.**, 2021, INQUA Focus Group SACCOM: 1709" Ponto-Caspian Stratigraphy and Geochronology (POCAS)", *Quaternary International* 590, 1-4.
- Hamzeh, M. A., **Lahijani, H. A. K.**, 2022, Soil and Vegetative Carbon Sequestration in Khuran Estuary Mangroves, Strait of Hormoz, During the Last 18 Centuries, *Estuaries and Coasts*, 45, 1583–1595
- Leroy S.A.G., Reimer P.J., **Lahijani H.**, Naderi Beni A., Sauer E., Chalié F., Arpe K., Demory F., Mertens K., Belkacem D., Kakroodi A.A., Omrani Rekavandi H., Nokandeh J. , Amini A., 2022, Caspian Sea levels over the last 2200 years, with 2 new data from the S-E corner, *Geomorphology*
- Pourkerman, M., Marriner, N., Hamzeh, M. A., Morhange, C., Amjadi, S., **Lahijani, H.**, Vacchi, M., Maghsoudi, M., Shah-Hosseini, M., 2022, Socioeconomic impacts of environmental risks in the western Makran zone (Chabahar, Iran)" *Natural Hazards*
- Pourkerman, M., N Marriner, C Morhange, M Djamali, G Spada, S Amjadi, Matteo Vacchi, **Hamid**

**Lahijani**, Mohammad Esmaeili Jelodar, Hossein Tofighian, Abdolmajid Naderi Beni, 2021, Geoarchaeology as a tool to understand ancient navigation in the northern Persian Gulf and the harbour history of Siraf, *Journal of Archaeological Science: Reports* 33, 102539

- Pourkerman, M., N Marriner, C Morhange, M Djamali, **H Lahijani**, S Amjadi , Matteo Vacchi, M. E. Jelodar, G. Spada, H. Tofighian, A. N Beni2021, Late Holocene relative sea-level fluctuations and crustal mobility at Bataneh (Najirum) archaeological site, Persian Gulf, Iran, *Geoarchaeology*
- **Lahijani, H.**, Naderi Beni, A., Tudryn, A., Hosseindoost, M., Habibi, P., Pourkerman, M. 2020, Unraveling extreme events from deep water cores of the south Caspian Sea, *Quaternary International*
- Naderi Beni, A., **H Lahijani**, H Tofighian, F Guibal, K Kabiri, T Gambin, M Djamali , 2020, Geoarchaeology of the 18th century Qoroq shipwreck, Caspian Sea, Iran: A tale of sailing in a dynamic environment, *Journal of Archaeological Science: Reports* 34, 102582.
- Djamali, Morteza; Rashidian, Elnaz; Askari-Chaverdi, Alireza; Aubert, Cyril; Brisset, Elodie; Demory, François; Faucherre, Nicolas; Gandouin, Emmanuel; **Lahijani, Hamid**; Marriner, Nick; Naderi-Beni, Abdolmajid; Parnell, Andrew, 2021. Early Sasanian landscape modification: New geoarchaeological evidence from the Ardashir Pond in southwest Iran (Palace of Ardashir, third century CE), *Geoarchaeology*36(6) 925-942.
- Seyedvalizadeh, M., **H. Lahijani**, SM Siadatmousavi , 2020, South Caspian vertical circulation during rapid sea level rise and fall, *Caspian Journal of Environmental Sciences* 19 (1), 19-29
- **Lahijani, H.**, Abbasian, H., Naderi-Beni, A., Leroy, S. A., Habibi, P., Haghani, S., Hosseindost, M., Shahkarami, S., Yeganeh, S., Zandinasab, Z., Tavakoli, V. (2018). Sediment distribution pattern of South Caspian Sea: possible hydroclimatic implications. *Canadian Journal of Earth Sciences*, 56(6): 637-653.
- **Lahijani, H.**, Amjadi, S., Pourkerman, M., Naderi-Beni, A., Hosseindost, M., & Habibi, P. (2018). Makran continental margin sedimentation during Late Holocene. *Canadian Journal of Earth Sciences*, 56(6): 629-636.
- Aubert, C., Djamali, M., Jones, M., **Lahijani, H.**, Marriner, N., Naderi-Beni, N., Sharifi, A., Ponel, P., Gandouin, E. 2018, A major hydrobiological change in Dasht-e Arjan Wetland (southwestern Iran) during the late glacial–early Holocene transition revealed by subfossil chironomids, *Canadian Journal of Earth Sciences*, (56-8) 848-856.
- Leroy, S. A., Chalief, F., Wesselingh, F. P., Sanjani, M. S., **Lahijani, H.**, Athersuch, J., ... & Kabiri, K. (2018). Multi-proxy indicators in a Pontocaspian system: a depth transect of surface sediment in the SE Caspian Sea. *Geologica Belgica*, 21, 3-4.

- Lahijani H., Naderi Beni, A., Tavakoli, V., 2018, Heavy metals in coastal sediments of South Caspian Sea: natural or anthropogenic source? *Caspian J. Environ. Sci.* 16(1), 45-61.
- Modarres, M. H., **Lahijani, H.**, Keshavarz, N., Lahaye, Y., Rehfeld, K., Manttari, I., Naderi-Beni, A., Ojala, A., Moradpour, V. 2018, Late Tortonian–Piacenzian multi-proxy record of Asian southwest monsoon intensification: evidence from Coastal Makran, southeast Iran, *Canadian Journal of Earth Sciences* 56 (4), 347-362
- Pourkerman, M., Marriner, N., Morhange, C., Djamali, M., Amjadi, S., **Lahijani, H.** Beni, A.N., Vacchi, M., Tofighian, H. , Shah-Hosseini, M. (2018). Tracking shoreline erosion of “at risk” coastal archaeology: the example of ancient Siraf (Iran, Persian Gulf). *Applied Geography*, 101, 45-55.
- Shah-Hosseini, M., Ghanavati, E., Morhange, C., Beni, A. N., **Lahijani, H. A.**, & Hamzeh, M. A. (2018). The evolution of Chabahar beach ridge system in SE Iran in response to Holocene relative sea level changes. *Geomorphology*, 318, 139-147.
- Shah-Hosseini, M., Ghanavati, E., Morhange, C., Naderi Beni, A., **Lahijani, H. A.**, & Hamzeh, M. A. (2018). The evolution of Chabahar beach ridge system in SE Iran in response to Holocene relative sea level changes. *Geomorphology*, 318, 139-147.
- Sharifi, A., Murphy, L.N., Pourmand, A., Clement, A.C., Canuel, E.A., Beni, A.N., **Lahijani, H.**, Delanghe, D. and Ahmady-Birgani, H.( 2018). Early-Holocene greening of the Afro-Asian dust belt changed sources of mineral dust in West Asia. *Earth and Planetary Science Letters*, 481, pp.30-40.
- Mehterian, S., Pourmand, A., Sharifi, A., **Lahijani, H. A.**, Naderi, M., & Swart, P. K. (2017). Speleothem records of glacial/interglacial climate from Iran forewarn of future Water Availability in the interior of the Middle East. *Quaternary Science Reviews*, 164, 187-198.
- Hamzeh, M. A., Mahmudy Gharai, M. H., **Lahijani, H.**, Djamali, M., Moussavi Harami, R., Naderi Beni, A., 2016, Holocene hydrological changes in SE Iran, a key region between Indian 1Summer Monsoon and Mediterranean winter precipitation zones, as revealed from a lacustrine sequence from Lake Hamoun, *Quat. Int.* 408, 25-39.
- Hamzeh, M. A., Mahmudy Gharai, M. H., **Lahijani, H.**, Moussavi Harami, R., Djamali, M., Naderi Beni, A., 2016, Paleolimnology of Lake Hamoun (E Iran): implication for past climate changes and possible impacts on human settlements, *PALAIOS*, vol. 31, 1-14.
- **Lahijani, H.**, Leroy, S. A. G., Beni, A. N., Kazanci, N., & Gürbüz, A. (2016). QuickLakeH: Rapidly changing large lakes and human response. *Quaternary International*, (408), 1-15..
- Miller, Ch S., Leroy, S. G. A., Collins, P. E. F. and **Lahijani, H.** (2016), Late Holocene vegetation and ocean variability in the Gulf of Oman, *Quaternary Science Review*, Volume 143, Pages 120-132.

- Pakzad, H., Pasandi, M., Yeganeh, S., and **Lahijani, H.**, 2016, Assessment of heavy metal enrichment in the offshore fine-grained sediments of the Caspian Sea, *Environ Monit Assess* 188: 303, 1-14.
- Shumilovskikh, L. S., Hopper, K., Djamali, M., Ponel, P., Demory, F., Rostek, F., Tachikawa, K., Bittmann, F., Golyeva, A., Guibal, F., Talon, B., Wang, L., Nezamabadi, M., Bard, E., **Lahijani, H.**, Nokandeh, J., Omrani Rekavandi, H., Jacques-Louis de Beaulieu, Sauer, E. and Andrieu-Ponel, V., (2016), Landscape evolution and agro-sylvo-pastoral activities on the Gorgan Plain (NE Iran) in the last 6000 years, *The Holocene*.
- Talebi, T., Ramezani, E., Djamali, M., **Lahijani, H.**, Naqinezhad, A., Alizadeh, K., Andrieu-Ponel, V., (2016), The Late-Holocene climate change, vegetation dynamics, lake-level changes and anthropogenic impacts in the Lake Urmia region, NW Iran, *Quat. Int.* 408, 40-51
- Djamali, M., Jones, M., D., Migliore, J., Balatti, S., Fader, M., Contreras, D., Gondet, S., Hosseini, Z., **Lahijani, H.**, Naderi, A., Shumilovskikh, L. S., Tengberg, M., Weeks, L., 2015, Olive cultivation in the heart of the Persian Achaemenid Empire: new insights into agricultural practices and environmental changes reflected in a late Holocene pollen record from Lake Parishan, SW Iran, *Veget Hist Archaeobot.*
- Haghani, S., Leroy, S. A. G., Khdir, S., Kabiri, K., Naderi Beni, A., **Lahijani, H.** A. K., 2015, An early Little Ice Age brackish water invasion along the south coast of the Caspian Sea (sediment of Langarud wetland) and its wider impacts on environment and people, *The Holocene*.
- Kakroodi, A. A., Leroy, S. A. G., Kroonenberg, S. B., **Lahijani, H.**, Alimohammadian, H., Boomer, I., Goorab, A., 2015, Late Pleistocene and Holocene sea-level change and coastal palaeoenvironment evolution along the Iranian Caspian shore, *Marine Geology*, vol. 361, p 111-125.
- Sharifi, A., Pourmand, A., Canuel, E. A., Ferer-Tyler, E., Peterson, L. C., Aichner, B., Feakins, S. J., Daryaee, T., Djamali, M., Naderi Beni, A., **Lahijani, H.**, Swart, P. K., 2015, Abrupt climate variability since the last deglaciation based on a high-resolution, multi-proxy peat record from NW Iran: The hand that rocked the Cradle of Civilization? *Quaternary Science Reviews* 123, 215-230
- Arpe, K., Leroy, S. A. G., Wetterhall, F., Khan, V., Hagemann, S., **Lahijani, H.**, 2014, Prediction of the Caspian Sea level using ECMWF seasonal forecasts and reanalysis, *Springer*, 117:41–60.
- Naderi Beni, A. M., **Lahijani, H.**, Marriner, N., Pourkerman, M., Jokar, R., Hosseindoust, M., Djamali, M., Andrieu-Ponel, V., Kamkar, A., 2014, Caspian Sea-level changes at the end of Little Ice Age and its impacts on the avulsion of the Gorgan River: a multidisciplinary case study from the southeastern flank of the Caspian Sea, *me'diterran'ee.*, no 122, 133-143.
- Naderi beni, A., **Lahijani, H.**, Pourkerman, M., Jokar, R., Djamali, M., Marriner, N., Andrieu-Ponel, V., Mousavi Harami, R., 2014, Late Holocene Caspian Sea Level Changes and its Impacts on Low Lying Coastal Evolution: a Multidisciplinary Case Study from South Southeastern Flank of the Caspian Sea,

- Leroy .S, **Lahijani .H**, Reyss .J.-L., Chalié. F, Haghani. S, Shah- hosseini .M, Shahkarami .S, Tudryn .A, Arpe .K, Habibi .P, asrollahzadeh .H.S, Makhloogh. A, 2013., A two-step expansion of the dinocyst *Lingulodinium machaerophorum* in the Caspian Sea: the role of changing environment., Elsevier., Quaternary Science Vol:77 31- 45.
- Leroy,S., Kakroodi, A., Kroonenberg, S., **Lahijani, H.**, Alimohammadian,H., Nigarov, A., 2013, Holocene vegetation history and sea level changes in the SE corner of the Caspian Sea: relevance to SW Asia climate, Quaternary Science Reviews, Vol.70,2847.
- Miller,C., Leroy, S., Izon,G., **Lahijani,H.**, Marret,F., Cundy, A., Teasdale, P., 2013, Palynology: A tool to identify abrupt events? An example from Chabahar Bay, southern Iran, Marine Geology vol. 337, pp. 195-201.
- Naderi Beni .A, **Lahijani .H**, Mousavi Harami.R, Arpe .K, Leroy .S, Marriner .N, Berberian .M, Andrieu-Ponel .V, Djamali. M, Mahboubi. A, and Reimer .P. J., 2013., Caspian sea-level changes during the last millennium: historical and geological evidence from the south Caspian Sea., Climate of the Past., Vol: 9(1645-1665).
- Naderi Beni, A., **Lahijani, H.**, Moussavi Harami, R., Leroy, S.A.G., Shah-hosseini,M., Kabiri, K., Tavakoli, V., 2013, Development of spit-lagoon complexes in response to Little Ice Age rapid sea-level changes in the central Guilan coast, South Caspian Sea, Iran, Geomorphology, 187,pp 11-26.
- Ponel, P., Andrieu-Ponel, V., Djamali, M., **Lahijani, H.**, Leydet, M., Mashkour, M., 2013, Fossil beetles as possible evidence for transhumance during the middle and late Holocene in the high mountains of Talysch (Talesh) in NW Iran?., Journal of Environmental Archaeology, VOL. 18 , NO. 3 201-210.
- Arpe. K., Leroy, S. A. G., **Lahijani ,H.**,Khan, V., 2012, Impact of the European Russia drought in 2010 on the Caspian Sea level., Hydrology and Earth System Sciences, 16, 19–27.
- Kakroodi, A. A., Kroonenberg, S.B., Hoogendoorn R.M., Mohammdd Khani, H., Yamani M.,Ghassemi M.R., **Lahijani, H.**, 2012, Rapid Holocene sea-level changes along the Iranian Caspian coast, Quaternary International.
- Amini, A., Moussavi Harami, R., **Lahijani, H.**, Mahboubi, A., 2012, Holocene Sedimentation Rate in Gorgan Bay and Adjacent Coasts in Southeast of Caspian Sea, Journal of Basic and Applied Scientific Research, 2(1)289-297.
- **Lahijani, H.**, Tavakoli, V: 2011, Identifying Provenance of south Caspian Coastal Sediments Using mineral distribution pattern, Quaternary International Vol., 261, 128-137.
- Leroy, S., **Lahijani, H.**, Djamali, M., Naginezhad, A., Moghadam, M., Arpe, K., Shah – hosseini, M.,

- Hosseindoust, M., Miller, Ch., Tavakoli, V., Habibi, P., Naderi, M; 2011, Late Little Ice Age palaeoenvironmental records from the Anzali and Amirkola Lagoons (South Caspian Sea): Vegetation and Sea level changes, *Palaeogeography, Palaeoclimatology, Palaeoecology*, vol. 302, pp. 415-434.
- Shah-hosseini, M., Morhange, C., Naderi Beni, A., Marriner, N., **Lahijani, H.**, Hamzeh, M., Sabatier, F., 2011, Coastal boulders as evidence for high-energy waves on the Iranian coast of Makran, *Marine Geology*, 290, 17-28.
  - Djamali, M., Miller, N. F., Ramezani, E.M., Ponel, V. A., Thomas Delille, Beaulieu, J. L., Berberian, M., Guibal, F., **Lahijani, H.**, Lak, R., Ponel, P., 2010, Notes on Arboricultural and Agricultural Practices in Ancient Iran Based on New Pollen Evidence, *Paleoient*, vol, 36.2, pp. 175-188.
  - Ghaffari, P., **Lahijani, H.**, and J. Azizpour, 2010, Snapshot observation of the physical structure and stratification in deep-water of the South Caspian Sea (western part), *Ocean Science*, 6, 877-885.
  - **Lahijani, H.**, S Leroy, MN Beni, K Arpe , 2010 Blaze in Volga: Is it a critical point for the fall in Caspian Sea level? *EPISODES* 33 (3), 208-208
  - Lahijani, H., Haeri Ardakani, O., Sharifi, A., Naderi Beni, A., 2010, Sedimentological and Geological Characteristics of the Gorgan Bay Sediments, *Journal of Oceanography* , Vol 1.
  - Morteza Djamali, Philippe Ponel, Thomas Delille, Alain Thiéry, Alireza Asem, Valérie Andrieu, Ponel, Jacques-Louis de Beaulieu, Hamid Lahijani, Majid Shah-Hosseini, Abdolhossein Amini, Lora Stevens, 2010, A 200,000-year record of the brine shrimp *Artemia* (Crustacea: Anostraca) remains in Lake Urmia, NW Iran, *Int. J. Aqu. Sci*; 1(1):14-18.
  - **Lahijani, H.**, H. Rahimpour – Bonab, v., Tavakoli, M. Hosseindoost, 2009, Evidence for late Holocene highstands in Central Guilan- East Mazandaran, South Caspian coast, Iran., *Quaternary International*, 197 , 55-71.
  - Djamali, M., de Beaulieu, J., Andrieu-Ponel, V., Berberian, M., Miller, F., Gandouin, E., **Lahijani, H.**, Shah-Hosseini, M., Ponel, P., Salimian, M., Guiter, F., 2009, late Holocene pollen record from Lake Almalou in NW Iran: Evidence for changing land-use in relation to some historical events during the last 3700 years, *Journal of Archaeological Sciences*, 36, 1364-1375.
  - **Lahijani, H.**, Tavakoli, V., Amini A., 2008, River Mouth Configuration in South Caspian Coast, Iran, *Environmental Sciences*, vol. 5, no. 2, pp. 65-86.
  - Djamali, M., de Beaulieu, J. L., Shah-hosseini, M., Andrieu-Ponel, V., Ponel, P., Amini, A., Akhiani, A., Leroy, L., Stevens, L., **Lahijani, H.**, Brewer., S. 2008, A Late Pleistocene Long Pollen Record from Lake Urmia, NW Iran ,*Quaternary Research*, (69),413-420.
  - **Lahijani, H.**, Tavakoli, V. Hosseindoost, M., 2007, History of Caspian Environmental Changes by



Molluscan Isotope Records, Journal of Coastal Research ., Spec., Is. 50, PP.438 – 442.

- **Lahijani, H.**, Kamranpouri, A., Amini, A., 2006, Heavy Metals Contamination in Modern Sediment of Sefidrud Delta, Scientific Reseach Journal of Iran Marine Sciences, vol,4, no. 3&4, pp.43-51.
- **Lahijani H.**, 1999: Beach Profile Changes under the Caspian Sea Level Fluctuations, Oceanography, Vol. 2 & 3, P. 35-41 (in Persian).
- **Lahijani, H.**, Nemirovskaya, I. A., Krasnozhon, G. F., 1999: Hydrocarbon Content of Beach Sediment on the Iranian Coast of the Caspian Sea, Water Resources, Vol. 26, No. 1, P. 104-107, (in Russian & English).
- Krasnozhon, G. F., **Lahijani, H.**, Voropayev, G. V., 1999: Sefidrud Delta Evolution from Space Images of the Caspian Coast of Iran, Earth Research from Space, No. 1, P. 105-111, (in Russian).
- Voropayev, G., Krasnozhon, G., **Lahijani, H.**, 1998: Caspian Deltas, the Caspian Bull. No. 1, P. 23-27 (in Russian & English).
- Voropayev, G. V., Krasnozhon, G. F., **Lahijani, H.**, 1998: Riverine Sediments and Stability of Iranian Coast of the Caspian Sea, Water Resources, Vol. 25, N. 6, P. 747-758 (in Russian & English).
- **Lahijani, H.**, Krasnozhon, G. F., 1998: Riverine Water Supply from the Iranian Coast of the Caspian Sea, Meteorology and Hydrology, No. 11, P. 100-102 (in Russian).
- Okhravi, R., **Lahijani, H.**, 1994: Depositional Environments and Diagenesis of the Dourd Formation, Alborz Mountains, Iran, Sedimentary Geology, Vol. 93, P. 261-277.

**PI of Projects**

**INSF (Iranian National Science Foundation) Projects**

- Holocene climate-environmental changes in northern Iran and their impacts (current INSF-NSFC)
- Investigating of the Caspian Paleoenvironmental Condition in the Extreme Sea Level Since LGM Using Deep Water Sediments, 2019, Iran National Science Foundation Science deputy of presidency, National Institute for Oceanography and Atmospheric Science, University Paris-Sud, 2019.
- Sedimentary Atlas of the northern half of the Persian Gulf, INSF Current Project, 2020.
- Paleoclimate INSF Grant. (Completed, three papers published), 2018.
- **CISSC (Center for International Scientific Studies and Cooperations) Projects**
- Investigating Palaeotsunami records in Makron Deep Water Cores, 2023.
- Coastal Hazard Assessment in Iranian Coast of Oman Sea and Climate Change Perspective, 2010, Jundi – Shapour Collaborative Program between Center for International Scientific Studies and Collaboration (CISSC) and French Embassy in Iran (SCAC), C. Morhange, CEREGE & H. Lahijani, INIO.
- Persian Gulf Coral Reefs: Indicator of Environmental Health and Climate Change, 2010, Center for International Scientific Studies and Collaboration, ICRP framework W. Piller, Graz Univ. and Iranian National Institute for Oceanography.
- Late Quaternary History of Vegetation and Climate Change in Northern Iran Comparing with Central Dry Plateau, 2008, Jundi – Shapour Collaborative Program between Center for International Scientific Studies and Collaboration (CISSC) and French Embassy in Iran (SCAC), de Beaulieu, IMEP; H.Lahijani, INCO.
- Pollution Record Due to Caspian Sea Level Rise in Coastl Lagoon of Guilan Province, 2008, Center for International Scientific Studies and Collaboration, ICRP framework with S.Leroy, Brunel Univ., and Iranian National Center for Oceanography.

#### **DOE-UNDP Projects**

- Third National Report of IR Iran for UNFCCC: Vulnerability and Adaptation of Coastal Zone, 2014, Department of Environment IR Iran.
- Second National Report of IR Iran for UNFCCC: Vulnerability and Adaptation of Coastal Zone, 2009, Department of Environment IR Iran.

#### **DOE-IRNEF Project**

- Coastal and offshore monitoring of the Persian Gulf and the Gulf of Oman: A management report on the state of environmental of the Persian Gulf and the Gulf of Oman-offshore areas along with providing

solutions to reduce the effects of the factors that threaten these environments, 2023

➤ **Governorship of Golestan-ATF Project**

➤ Comprehensive studies to save Gorgan Bay, 2021

➤ **Water Resources Dep. Project**

➤ The Role of Circum Caspian States in Pollution of the Caspian Sea, 2000. Water Resources Dep. Tehran.

➤ **I was PI of 11 projects that supported financially by the Iranian National Institute for Oceanography and Atmospheric Science (INIOAS)**

### Book Chapter

- **Lahijani H.A.K.**, Rostamabadi S., Naderi Beni A., Shirzade M., Barin M. (2020) Sediment Distribution Pattern in Lake Urmia. In: . The Handbook of Environmental Chemistry. Springer, Berlin, Heidelberg.
- Martin Kehl, Babak Rafiei-Alavi, **Hamid Lahijani**, 2022, Holocene Paleoenvironmental Change and Phases of Drought in the Iranian Highlands. A Review, Book Chapter In: Reinhard Bernbeck, Gisela Eberhardt and Susan Pollock (Eds) Concepts of Resilience for the Study of Early Iranian Societies, Sidestone Press, Netherlands.
- Babak Rafiei-Alavi, Martin Kehl, **Hamid Lahijani**, 2022, The Impact of Climate on Human Occupations in the Iranian Plateau from the Neolithic to the Early Iron Age: A preliminary Effort to Link the Archaeological and Paleoclimate Records, Book Chapter In: Reinhard Bernbeck, Gisela Eberhardt and Susan Pollock (Eds) Concepts of Resilience for the Study of Early Iranian Societies, Sidestone Press, Netherlands.
- Yakushev, E. V., Andrulionis, N. Yu., Jafari, M. **Lahijani, H. A. K.**, Ghaffari, P., 2023, How Climate Change and Human Interaction Alter Chemical Regime in Salt Lakes, Case Study: Lake Urmia, Aral Sea, the Dead Sea, and Lake Issyk-Kul In: Peygham G. Nooran, Evgeniy V. Yakushev, Ole Anders Nøst and Jorn Bruggeman (eds.), Lake Urmia: A Hypersaline Waterbody in a Drying Climate, Hdb Env Chem, DOI 10.1007/698\_2021\_811, Springer Nature Switzerland AG
- **Lahijani H.A.K.**, Hamzeh M.A., Yakushev E.V., Rostamabadi A. 2023 Salt Load Impact on Lake Urmia Basin Volume In: Peygham G. Nooran, Evgeniy V. Yakushev, Ole Anders Nøst and Jorn Bruggeman (eds.), Lake Urmia: A Hypersaline Waterbody in a Drying Climate, Hdb Env Chem, DOI 10.1007/698\_2021\_811, Springer Nature Switzerland AG

- Sherkatiazin, B., Yakushev, E. V., **Lahijani, H. A. K.**, Dahle, S., Knutz, T., Schelwet, H., Ghaffari, P., 2021, Hydro-Meteorological Observations in Hypersaline Basin of Lake Urmia In: Peygham G. Nooran, Evgeniy V. Yakushev, Ole Anders Nøst and Jorn Bruggeman (eds.), Lake Urmia: A Hypersaline Waterbody in a Drying Climate, Hdb Env Chem, DOI 10.1007/698\_2021\_811, Springer Nature Switzerland AG
- Leroy S.A.G., **Lahijani H.A.K.**, Crétaux J.-F., Aladin N.V., Plotnikov I.S., 2020, Past and current changes in the largest lake of the world: The Caspian Sea In: Michke, S.,( Ed.)2019, Large Asian Lakes in a Changing World, Springer
- Leroy S. A. G., Warny S., **Lahijani H.**, Piovano E. L., Fanetti D. and Berger A. R., 2009, The role of geosciences in the improvement of mitigation of natural disasters: five case studies In: Beer, T.(Ed.) Geophysical Hazards: MinimizingRisk,MaximizingAwareness,InternationalYearofPlanetEarthserie, Springer, 240P.
- **Lahijani, H.**, 2004, Introduction to the Caspian Characteristics, Norbakhsh Pub., Tehran, 119p.[In Persian