

Curriculum vitae



Surname : Ali-Reza

Name : Soffianaian

Associate Professor of Environmental Sciences

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Academic degrees :

Bsc : Fishing and Environmental Science, Tehran Univ ., Iran, 1990.

Msc : Environemental Science, Tehran Univ., Iran.1993.

PhD : Geography (GIS), Sorbonne Univ., France. 2002.

Thesis Title (phD):

Use of Thematic Mapper Data to assess water quality in Caspian Sea (Guilan)

Courses:

Graduate :

Geographic Information Systems(GIS)

Land use planning

Ecotourism

Undergraduate :

Advanced geographic Information Systems(GIS)

MCDM methods in environmental planning and management

Systemic thinking in environmental management

Research Fields

Application of RS & GIS to Environmental Monitoring & Assessment

Land use Policy

Ecotourism

Professional Experience

Chair of Department of Natural Resources (2013-2016)

Deputy (Research affairs) of Department of Natural Resources (2011-2013)

Head of division, Environmental Sciences, Department of natural resources (2002- 2011)

Apr. 2014 to present Associate Professor of Environmental Sciences, IUT.

Feb. 2002 to May 2014 Assistant Professor of Environmental Sciences, IUT.

Research Projects

- ✓ Ranking of counties of Isfahan province based on tourism indices
 - ✓ Environmental flow requirement of Zanadehrud River and GavKhooni International Wetland for sustainable ecological functions
 - ✓ Ecological land use planning of Isfahan Province
 - ✓ State of Environment (SOE) Outlook Report for the Isfahan Province
 - ✓ Change detection of Mouteh wild life refuge using RS & GIS techniques
 - ✓ Developing soil pollution Atlas for Hamadan province (sampling, analysis and mapping)
 - ✓ Urban tree extraction and mapping using high spatial resolution imagery (case study : Isfahan city)
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Journal papers

- 1- S Maleki, **AR Soffianain**, S Soltani Koupaei, S Saatchi, S Pourmanafi, (2018). Application of Remote Sensing in Monitoring Unsustainable Wetlands:Case Study Hamun Wetland. Journal of the Indian Society of Remote Sensing, 1-9.
- 2- A Asgarian, **AR Soffianian**, S Pourmanafi, M Bagheri, (2018). Evaluating the spatial effectiveness of alternative urban growth scenarios in protecting cropland resources: A case of mixed agricultural-urbanized landscape in central Iran, Sustainable Cities and Society, 43, 197- 207.
- 3- I Momeni, **AR Soffianain**, MR Hemami, S Pourmanafi, AS Mahini, GM Wu, (2018). Exploring structural and functional corridors for wild sheep (*Ovis orientalis*) in a semi-

arid area. *Journal of Arid Environments*, 156, 27-33.

- 4- M Ranaie, **AR Soffianian**, S Pourmanafi, N Mifghafari, M Tarkesh, (2018). Evaluating the statistical performance of less applied algorithms in classification of worldview-3 imagery data in an urbanized landscape. *Advances in Space Research*. 61(6), 1-16.
- 5- M Moein, A Asgarian, Y Sakieh, **AR Soffianian**, (2018). Scenario-based analysis of land-use conflict in central Iran: finding the trade-off between urban growth patterns and agricultural productivity. *Sustainable Cities and Society*. 39, 557-567.
- 6- M Madanian, **AR Soffianian**, S Soltani Koupai, S Pourmanafi, M Momeni, (2018). The study of thermal pattern changes using Landsat-derived land surface temperature in the central part of Isfahan province. *Sustainable Cities and Society*. 39, 650-661.
- 7- M Madanian, **AR Soffianian**, S Soltani Koupai, S Pourmanafi, M Momeni (2018). Analyzing the effects of urban expansion on land surface temperature patterns by landscape metrics: a case study of Isfahan city, Iran. *Environmental Monitoring and Assessment*. 16. 190-189.
- 8- S Maleki, **AR Soffianian**, SS Koupaei, S Saatchi, S Pourmanafi., (2018). Wetland restoration prioritizing, a tool to reduce negative effects of drought; An application of multicriteria-spatial decision support system (MC-SDSS). *Ecological Engineering* 112, 132-139.
- 9- S Torabian, **AR Soffianian**, S Fakheran, A Asgarian, H Akbari Feizabadi, J Senn, (2018). Habitat suitability mapping for sand cat (*Felis margarita*) in Central Iran using remote sensing techniques. *Spatial Information Research*. 26: 11-20.
- 10-
- 11- S. Maleki, AR Soffianian, S.S Koupaei, S Saatchi, S Pourmanafi., (2016). Habitat mapping as a tool for water birds conservation planning in an arid zone wetland: The case study Hamun wetland. *Ecological Engineering* 95, 594-603., 2016
- 12- A Asgarian, A.R. Soffianian, S Pourmanafi., (2016). Crop type mapping in a highly fragmented and heterogeneous agricultural landscape: A case of central Iran using multi-temporal Landsat 8 imagery. *Computers and Electronics in Agriculture* 127, 531-540.
- 13- R Afrakhteh, A Asgarian, Y Sakieh, A. R. Soffianian., (2016). Evaluating the strategy of integrated urban-rural planning system and analyzing its effects on land surface temperature in a rapidly developing region. *Habitat International* 56, 147-156, 2016.

- 14- A. zaehri. A.R. Soffianian., (2016). An Investigation of the impervious surfaces changes in Isfahan city by using of remote sensing., journal of geographig space., 52, 17-35.
- 15- H. Karimi, A. R. Soffianian, N Mirghaffari, S Soltani., Determining Air Pollution Potential Using Geographic Information Systems and Multi-criteria Evaluation: A Case Study in Isfahan Province in Iran., (2016). Environmental Processes 3 (1), 229-246., 2016
- 16- V. Rahdari., A. R. Soffianian, S. Maleki Najafabdi., (2016). Land use/cover mapping usig satellite data and geographic information system (GIS) (Case study: Mouteh wild life sanctuary). J.Env. Sci. Tech., Vol 18, No.1,80-89.
- 17- Alireza Soffianian, M. A. Madanian. , (2015). Monitoring land cover changes in Isfahan Province, Iran using Landsat satellite data. . Environmental Monitoring and Assessment. DOI 10.1007/s10661-015-4442-5.
- 18- Asef Darvishi, Sima Fakheran, Alireza Soffianian., (2015). Monitoring landscape changes in Caucasian black grouse (*Tetrao mlokosiewiczi*) habitat in Iran during the last two decades. DOI 10.1007/s10661-015-4659-3.
- 19- Mozghan Ahmadi Nadoushan , Alireza Soffianian, Sima Fakheran, MirMasoud Kheirkhah Zarkesh, (2015). Assessing the effects of changing grain size and extent on landscape metrics. Survey Methodology. Vol. 44, No. 1, pp. 94-118.
- 20- M. A. Madanian, Alireza Soffianian, A. Hajian , (2014). Change detection through four techniques using multi-temporal Landsat Thematic Mapper data: a case study on Falavarjan area, Isfahan, Iran. Journal of Environmental Informatics. 23(2) 58-66.
- 21- N. Bihamta & A.R. Soffianian & S. Fakheran, M. Gholamalifard. (2014). Using the SLEUTH Urban Growth Model to Simulate Future Urban Expansion of the Isfahan Metropolitan Area, Iran. J Indian Soc Remote Sensing DOI 10.1007/s12524-014-0402-8.
- 22- S. Maleki najafabadi & A.R. Soffianian& V. Rahdari & F.I Amiri & B. Pradhan &T. Tabatabaei. 2014. Geospatial modeling to identify the effects of anthropogenic processes on landscape pattern change and biodiversity. Arab J Geosciences. DOI 10.1007/s12517-014-1297-y.

- 23- Alireza Soffianian, E. Madani, M. Arabi ,2014. Risk assessment of heavy metal soil pollution through principal components analysis and false color composition in Hamadan Province, Iran, *Environmental Systems Research* 2014, 3:3
- 24- Z. Mokhtari, A.R. Soffianian, S. J. Kajeddin, H. R. Ziaee . 2014. Gradient analysis of urban landscape pattern, (Case Study in Isfahan, Iran) *Journal of Biodiversity and Environmental Sciences*, Vol. 4, No. 6, p. 322-333.
- 25- M. Yeganeh, M. Afyuni , A. Khoshgoftarmanesh , L. Khodakarami, M. Aminic, A.R. Soffianian, R. Schulin, (2013). Mapping of human health risks arising from soil nickel and mercury contamination. *Journal of Hazardous Materials*. N. 244– 245. pp. 225– 239.
- 26- Bateni, F., Fakheran, S., Soffianian, A. (2013). Assessment of land cover changes & water quality changes in the Zayandehroud River Basin between 1997–2008. *Environmental Monitoring and Assessment*, DOI 10.1007/s10661-013-3348-3.
- 27- Khodakarami, L. A Soffianian, 2012. Application of Multi Temporal Remote Sensing for Precision Farming. *JWSS-Isfahan University of Technology*. 59 (16), pp. 215-231.
- 28- Samereh Falahatkar, S. M. Hosseini and A. Soffianian, (2011). The relationship between land cover changes and spatial-temporal dynamics of land surface temperature. *Indian Journal of Science and Technology* 4 (2) 76- 81.
- 29- Shila Hajehforooshnia, A. R. Soffianian , A. Salman Mahiny, Sima Fakheran, 2011. Multi Objective Land Allocation (MOLA) For Zoning Ghamishloo Wildlife Sanctuary in IRAN. *Journal for Nature Conservation*. Vol. 19. N. 4. P: 254-262.
- 30- Soffianian, A.R., M. Ahmadi Nadoushan, L. Yaghmaei, S. Falahatkar, Mapping and analyzing urban expansion using remotely sensed imagery in Isfahan, Iran, *World Applied Sciences Journal* 9 (12): 1370-1378, 2010.
- 31- Samereh Falahatkar, A.R. Soffianian, S.J. Khajeddin, H. R. Ziaee and M. Ahmadi Nadoushan, 2011. Integration of Remote Sensing data and GIS for prediction of land cover map. *INTERNATIONAL JOURNAL OF GEOMATICS AND GEOSCIENCES*. 1 (4) 847- 864.
- 32- Shila Hajehforooshnia , Ali R. Soffianian, "COMPARISON OF LAND COVERS CLASSIFICATION METHODS IN ETM+ SATELLITE IMAGES (CASE STUDY: GHAMISHLOO WILDLIFE REFUGE)", *Journal of Environmental Research and*

Development , Vol. 5, No. 2, PP. 279-293,

- 33- Nemati Varnosfaderany, M. Mirghaffary, N. ebrahimi, E. Soffianian, A.R., 2009. Water quality assessment in an arid region using a water quality index. *Journal of water science & technology- WST* (60.9). 2319-2327.
- 34- Nemati Varnosfaderany, M. ebrahimi, E. Mirghaffary, N. Soffianian, A.R., 2009. Biological assessment of Zayandeh Rud River, Iran, using benthic macroinvertebrates. *Journal of Limnologica*. Doi : 10.1016/j.limno.2009.10.002.).
- 35- V. Rahdary, A.R. Soffianian, S. Maleki Najfabdai, S.J. Khajeddin and ahlavanravi, 2008. Land use and land cover change detection of Mouteh wildlife refuge using remote sensing data and GIS. *World Applied Sciences Journal*. 3- 113-118.

International Conference Papers

- 1 - SOFFIANIAN A., AFRAZ R., HEMAMI M., FAKHERAN S., "Analysis of soil Heavy Metal Pollution and Landscape Pattern in Nahavand, Iran", *Proceedings of The 8th World Congress of the International Association for Landscape Ecology* , PP. 489, 2011.
- 2- BATENI F., FAKHERAN S., SOFIANIAN A., MIRGHAFARI N., "Spatiotemporal Changes of Zayandehroud River Water Quality in Response to Change in Landscape Patterns", *Proceedings of The 8th World Congress of the International Association for Landscape Ecology* , 2011.
- 38- RAIISI M, SOFIANIAN A., "Industrial Site Selection by GIS in Isfahan, Iran", *Proceedings of The 19th International Conference on GeoInformatics (GeoInformatics2011)* , 2011.
- 3- AFZALI A., MIRGHAFARI N., SOFIANIAN A., "Landfill site selection in the semi arid area of central Iran case study: Najafabad city, Iran", *Proceedings of International Congress of Environmental Research (ICER 08)* , PP. 641, 2008
- 40- FAZELI SR, SOFFIANIAN A., "Urban land cover mapping using Aster Terra satellite image,a case study : Isfahan city,Iran", *Proceedings of International Conference on Cartography and GIS* , 2008.
- 4- SOFIANIAN A., RAHDARI V, MALEKI NAJFABADI S., KHAJEHDIN S., "Land use

and land cover change detection of moute wildlife refuge using remote sensing and geographic information system", Proceedings of GIS 86 , 2008.

5- BADRABADI H.Y., KHAJEHDIN S., SOFFIANIAN A., JABARZARE A., "Studing of the MODIS data potentials to assess the pastureland production in the arid region of semirom-iran", Proceedings of XXI International Grassland Congress VIII International Rangeland Congress, PP. 703, 2008.

6- NAJFABADI S., RAHDARI V, "change detection of landscape ecology in Moteh wildlife refuge", Proceedings of 15th National & Third Internatiional Conference of Biology , PP. 21, 2008.

7- SOFFIANIAN A., TABEAUD M., GEROYANNIS H., "FOLLOW-UP OF ANZALI WETLAND, ON THE IRANIAN COAST OF CASPIAN SEA, A NECESSITY TO MAINTAIN WATER QUALITY", Proceedings of Post Sustainable Development: Spaces , Nature , culture and Quality , 2007.