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● WORK EXPERIENCE

01/09/2021 – CURRENT – Caserta, Italy

RESEARCH FELLOW - RTDA – UNIVERSITÀ DEGLI STUDI DELLA CAMPANIA LUIGI VANVITELLI

- Applied Hydrogeology SSD GEO/05

01/09/2020 – 31/08/2021 – Caserta, Italy

RESEARCH FELLOW – UNIVERSITÀ DEGLI STUDI DELLA CAMPANIA LUIGI VANVITELLI

- "LIFE DESERT ADAPT" Erosion risk assessment according to climate and land use changes.

03/2020 – 09/2020 – Thessaloniki, Greece

RESEARCH FELLOW – ARISTOTLE UNIVERSITY OF THESSALONIKI

- "Hydrogeological research of fractured aquifers and springs"

01/04/2019 – 03/2020 – Caserta, Italy

RESEARCH FELLOW – UNIVERSITÀ DEGLI STUDI DELLA CAMPANIA LUIGI VANVITELLI

- "Implementation of geochemical models of water-sediment interaction for inorganic species in coastal areas"

● EDUCATION AND TRAINING

01/11/2014 – 31/10/2017 – Via Vivaldi, N°43, Caserta, Italy

PH.D IN "ENVIRONMENT, DESIGN AND INNOVATION – Università degli studi della Campania "Luigi Vanvitelli"

<https://www.unicampania.it/>

31/01/2009 – 31/10/2012 – Caserta, Italy

LM-75. MASTER DEGREE IN "SCIENCE AND TECHNOLOGY FOR THE ENVIRONMENT AND TERRITORY" – Seconda Università degli Studi di Napoli

Journal Editorial Membership

- Guest Editor position in the peer reviewed Journal Applied Science (MDPI, IF. 2.47); Water (MDPI, IF. 2.47); Remote Sensing (MDPI, IF. 4.8)

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● PUBLICATIONS

Publications

- Madene, E., Boufekane, A., Meddi, M., **Busico, G.**, Zghibi, A. (2022). Spatial analysis and mapping of the groundwater quality index for drinking and irrigation purpose in the alluvial aquifers of upper and middle Cheliff basin (north-west algeria). *Water Supply*, 22(4),
- Rama, F., **Busico, G.**, et al. (2022). Assessment of intrinsic aquifer vulnerability at continental scale through a critical application of the drastic framework: The case of South America. *Science of the Total Environment*, 823.
- Kazakis, N., **Busico, G.**, et al. (2022). The origin of uranium in groundwater of the eastern Halkidiki region, northern Greece. *Science of the Total Environment*, 812.
- Boufekane, A., **Busico, G.**, Maizi, D. (2022). Effects of temperature and relative humidity on the COVID-19 pandemic in different climates: A study across some regions in algeria (north africa). *Environmental Science and Pollution Research*, 29(12),
- Rufino, F., **Busico, G.**, Cuoco, E., et al.. (2022). Geochemical characterization and health risk assessment in two diversified environmental settings (southern Italy). *Environmental Geochemistry and Health*.
- **Busico, G.**, Alessandrino, L., Mastrocicco, M. (2021). Denitrification in intrinsic and specific groundwater vulnerability assessment: A review. *Applied Sciences (Switzerland)*, 11(22)
- **Busico, G.**, Buffardi, C., Ntona, M.M., et al. (2021). Actual and forecasted vulnerability assessment to seawater intrusion via GALDIT_SUSI in the Volturno river mouth (Italy). *Remote Sensing*, 13(18).
- **Busico, G.**, Ntona, M.M., Carvalho, S.C.P., et al. (2021). Simulating future groundwater recharge in coastal and inland catchments. *Water Resources Management*.
- Khosravi, K., Barzegar, R., Golkarian, A., **Busico, G.**, et al. (2021). Predictive modeling of selected trace elements in groundwater using hybrid algorithms of iterative classifier optimizer. *Journal of Contaminant Hydrology*, 242.
- Colombani, N., Gaiolini, M., **Busico, G.**, Postacchini, M. (2021). Quantifying the impact of evapotranspiration at the aquifer scale via groundwater modelling and MODIS data. *Water (Switzerland)*.
- Boufekane, A., Yahiaoui, S., Meddi, H., Meddi, M., **Busico, G.** (2021). Modified DRASTIC index model for groundwater vulnerability mapping using geostatistic methods and GIS in the mitidja plain area (algeria). *Environmental Forensics*
- Mastrocicco, M., Gervasio, M. P., **Busico, G.**, Colombani, N. (2021). Natural and anthropogenic factors driving groundwater resources salinization for agriculture use in the Campania plains (Southern Italy). *Science of the Total Environment*, 758.
- Bannenberg, M., Ntona, M. M., **Busico, G.**, Kalaitzidou, et al. (2020). Hydrogeological and hydrochemical regime evaluation in flamouria basin in Edessa (Northern Greece). *Environments - MDPI*, 7(12), 1-16.
- Jahromi, M.N., Gomeh, Z., **Busico, G.**, et al. (2020). Developing a SINTACS-based method to map groundwater multi-pollutant vulnerability using evolutionary algorithms. *Environmental Science and Pollution Research*. 28(7), 78 54-7869.

- Rufino, F., Cuoco, E., **Busico, G.**, et al. (2020). Deep carbon degassing in the Matese massif chain (Southern Italy) inferred by geochemical and isotopic data. *Environmental Science and Pollution Research*.
- Vigliotti, M., **Busico, G.**, Ruberti, D. (2020). Assessment of the vulnerability to agricultural nitrate in two highly diversified environmental settings. *Environments*, MDPI, 7(10), 1-15
- **Busico, G.**, Kazakis, N., et al. (2020). The Importance of Incorporating Denitrification in the Assessment of Groundwater Vulnerability. *Applied Science*, 10, 2328.
- **Busico, G.**, Colombani, N., Fronzi, D., et al. (2020). Evaluating SWAT model performance, considering different soils data input, to quantify actual and future runoff susceptibility in a highly urbanized basin. *Journal of Environmental Management*, 266, 110625
- Bui, D.T., Khosravi, K., Karimi. M., **Busico, G.**, et al. (2020). Enhancing nitrate and strontium concentration prediction in groundwater by using new data mining algorithm. *Science of The Total Environment*, 136836.
- **Busico, G.**, Kazakis, N., et al.. (2020). A novel hybrid method of specific vulnerability to anthropogenic pollution using multivariate statistical and regression analyses. *Water Research*, 171
- **Busico, G.**, Giuditta, E., et al. (2019) A Hybrid GIS and AHP Approach for Modelling Actual and Future Forest Fire Risk Under Climate Change Accounting Water Resources Attenuation Role. *Sustainability*, 1 1, 7166.
- Rufino, F., **Busico, G.**, et al. (2019). Evaluating the suitability of urban groundwater resources for drinking water and irrigation purposes: An integrated approach in the agro-aversano area of Southern Italy. *Environmental Monitoring and Assessment*, 191(12)
- Mastrocicco, M., **Busico, G.**, et al. (2019) Modelling actual and future seawater intrusion in the variconi coastal wetland (Italy) due to climate and landscape changes, *Water*, 11(7), 1502
- Colombani, N., **Busico, G.**, Mastrocicco, M. (2019) Deciphering decadal temperature variations in springs of the Campania region (Italy). *Water*, 11(2), 288
- **Busico, G.**, Matrocicco, M., et al. (2019) PNA: a simple methodology to delineate "Nitrate Vulnerable Zones". *Environmental Earth Sciences*.
- Kazakis, N., **Busico, G.**, et al.. (2019) GALDIT-SUSI a modified method to account for surface water bodies in the assessment of aquifer vulnerability to seawater intrusion. *Journal of Environmental Management*, 235, 257-265. doi:10.1016/j.jenvam.2019.01.069
- Kazakis, N., **Busico, G.**, Colombani, N., et al. (2018). Limitations of GALDIT to map seawater intrusion vulnerability in a highly touristic coastal area. Paper presented at the *IOP Conference Series: Earth and Environmental Science*.
- **Busico, G.**, Cuoco, E., et al. (2018). Multivariate statistical analysis to characterize/discriminate between anthropogenic and geogenic trace elements occurrence in the Campania plain, Southern Italy. *Environmental Pollution*, 234, 260-269.
- **Busico, G.**, Cuoco, E., et al. (2017). Aquifer vulnerability and potential risk assessment: Application to an intensely cultivated and densely populated area in Southern Italy. *Arabian Journal of Geosciences*, 10(10).
- **Busico, G.**, Kazakis, N., et al. (2017). A modified SINTACS method for groundwater vulnerability and pollution risk assessment in highly anthropized regions based on NO_3^- and SO_4^{2-} concentrations. *Science of the Total Environment*. 609, 1512-1523.

● PROPOSED PROJECT

PRIN 2022: GUARD: Groundwater and sUrface wAteR salinization inDex.

FIS 2021: DOGMA: Dynamic and Open Groundwater Modelling Assessment

● ACCEPTED PROJECTS

2020 – CURRENT

GRECODAM: Are Eco-friendly Energy Recharge Dams a solution.

Project's scientific responsible for the University of Campania Luigi Vanvitelli.

● HONOURS AND AWARDS

Honours and awards

- March 2022: Young Researcher award from The Hellenic Committee of Hydrogeology, 12th International Hydrogeological congress of Greece and Cyprus
- June 2019 Zuppi awards. Special mention received by the Italian committee of IAH (International Association of Hydrogeologists) for the best PhD thesis in "Applied geology" written between the period 2017-2019