

PERSONAL INFORMATION

Domenico Calcaterra

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Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input checked="" type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

SSD (settore scientifico disciplinare) GEO/05 Geologia Applicata

WORK EXPERIENCE

2006-to date

Full professor in Engineering Geology, University of Naples Federico II - Napoli (Italy)

2001-2006

Associate professor in Engineering Geology, University of Naples Federico II - Napoli (Italy)

1990-2001

Assistant Professor (Researcher) in Engineering Geology, University of Naples Federico II - Napoli (Italy)

1988-1990

Adjunct Professor in Physical Geography, University of Calabria, Italy

1987-1988

Adjunct Professor in Topography and Cartography, University of Calabria, Italy

Business or sector Public, Education and Research

EDUCATION AND TRAINING

1983

MSc cum laude in Geological Sciences from the University of Naples

WORK ACTIVITIES

Main projects

2022-2025

Scientific Coordinator of the Extended Partnership RETURN (multi-Risk sciEnce for resilienT commUnities undeR a changiNg climate), funded by the Italian Ministry of Universities and Research through PNRR – European Union – NextGenerationEU – Mission 4 “Education and Research”; total amount: € 115.100.000,00.

2022-2025

Principal Investigator (PI) of the University of Napoli Federico II Research Unit, Project GEOSCIENCES IR (Research Infrastructure for the Italian Geological Surveys Network) funded by the Italian Ministry of Universities and Research through PNRR – European Union – NextGenerationEU – Mission 4 “Education and Research”; amount granted to Research Unit € 914.600,00.

- 2023-2020** PI of the Project AIM (Attraction and International Mobility) "Geosciences for the safeguard and valorization of Cultural Heritage", (code AIM1835232-1), funded by the Italian Ministry of Education, Universities and Research; total amount: € 363.960,76.
- 2022-2019** PI of the University of Naples Federico II Research Unit, Project MOSCAS "Models and tools for the characterization of underground cavities", funded by the Italian Ministry for Environment, Land and Sea Protection; total amount: € 245.000; amount granted to Research Unit € 80.000.
- 2022-2019** PI of the University of Naples Federico II Research Unit, National Research PRIN project "URGENT - Urban Geology and Geohazards: Engineering geology for safer, resilieNt and smart ciTies" (code 2017HPJLPW_005), funded by the Italian Ministry of Education, Universities and Research; total amount: € 707.502; amount granted to Research Unit € 136.403.
- 2022-2019** PI of the University of Naples Federico II Research Unit, Project CIS_2020 "Methods for the assessment of the landslide and flooding risk in densely anthropized areas and tools for regional development's strategies - Application to the Salerno-Cava de' Tirreni "Strategic Infrastructural Corridor" case-study", funded by the Campania regional government; total amount: € 400.000; amount granted to Research Unit € 70.000.
- 2021- 2019** PI of the DiSTAR, University of Naples Federico II, Research Unit, Project POR Campania FESR 2014-2020 "RIPA-PAUN - Rete Intelligente dei Parchi Archeologici - Parco Archeologico Urbano Napoli" (code CUP B63D18000370007); amount granted to Research Unit € 71.909,86.
- 2017-2013** PI of the DiSTAR, University of Naples Federico II, Research Unit project PON Ricerca e Competitività 2007-2013 "METRICS Metodologie e tecnologie per la gestione e riqualificazione dei centri storici e degli edifici di pregio" (code PON03PE_00093_5); amount granted to Research Unit € 171.000.
- 2016- 2013** PI of the DiSTAR, University of Naples Federico II project PON Ricerca e Competitività 2007-2013 "SNECS: Social Network delle Entità dei Centri Storici (code PON03PE_00163_1); amount granted to Research Unit € 459.000.
- 2016-2013** PI of the University of Naples Federico II Research Unit, National Research PRIN project 2010-2011 "Time-space prediction of high-impact landslides under changing precipitation regimes" (code 2010E89BPY), funded by the Italian Ministry of Education, Universities and Research; total amount: € 1.062.363; amount granted to Research Unit € 137.400.
- 2015- 2014** PI of the project "Landslide hazard for intermittent slope movements in structurally complex formations: comparative analysis of geological, mineralogical and geotechnical parameters", funded by the Campania regional government, through the Regional Law n. 5/2002; total amount: € 15.000.

Tutoring activities**2001 to date**

Several tens of Master and BS students, and about 20 PhD students

Editorial activity**2012-2020**

Editor-in-Chief, Rendiconti Online, Journal of the Italian Geological Society

Editorial Board of the journals:**2023-to date** Frontiers in Earth Sciences, section "Geohazards and Georisks"**2021-to date** Land, section "Observation and Monitoring"**2020-to date** Sensors, section "Remote Sensors, Control, and Telemetry"**2020-to date** Remote Sensing, section "Earth Observation for Emergency Management"

Guest Editor of the journals:

- 2021** Land, Special Issue "Landslide and Natural Hazard Monitoring"
2019 Geosciences, Special Issue "SAR Applications in Engineering Geology and Structural Engineering"
2010 Geological Society of London, Engineering Geology Series Special volume "Weathering and slope movements";
2007 Geomorphology Special Issue "Weathering and slope movements"
2004 Quarterly Journal of Engineering Geology and Hydrogeology, Special issue "Weathering and slope movements".

Invited presentations

- 2017** Istanbul, 12-14 May, 5th Geological Symp. of Istanbul; lecture on "The importance of Urban Geology for the development and conservation of large cities"
2012 Rio de Janeiro, 11-15 Febr., Intern. Workshop on Extreme Rainfall-Induced landslides; lecture on "Managing and mitigating landslide risk through non-structural countermeasures: lessons and perspectives from Italy"

Memberships of Scientific Societies

- 2018-to date** President, Italian Association of Engineering and Environmental Geology
2012-2020 Steering Committee of the Italian Geological Society
2012-2017 Vice-President, Italian Association of Engineering and Environmental Geology
2007-2014 Steering Committee of the International Association of Engineering Geology – Italian Chapter

Current institutional responsibilities

Member of the following entities:

- 2021- to date** Scientific Board, 2nd level Master "RISCAPE - Paesaggi a rischio. Il progetto di paesaggio nei territori vulnerabili", University of Naples Federico II
2021- to date Technical-scientific Committee in support of National Inspectorate for the Nuclear Security and Radiation Protection (ISIN)
2020- to date Technical-scientific Committee in support of Civil Protection functions, city of Pozzuoli
2017- to date Executive Board, Museum Centre "Museums of Natural Sciences", University of Naples Federico II
2014-to date Executive Board, C.U.G.RI. (interUniversity Centre for the Prediction and Prevention of Major Hazards, Salerno University and University of Naples Federico II)
2014- to date Scientific Board, MIdA Foundation, Musei Integrati dell'Ambiente, Pertosa
2014- to date Executive Board, CRISP (Interdepartmental Research Centre on the "Earth Critical Zone" for supporting the Landscape and Agroenvironment management), University of Naples Federico II
2012-to date Geological Risks Research Center, Cinque Terre National Park

Previous institutional responsibilities

2016-2022

Head of the Dept. of Earth Sciences, Environment and Resources, University of Naples Federico II

2018-2021

Member of the National Scientific Qualification (ASN) Committee, Academic Recruitment Field 04/A3, Engineering Geology, Physical Geography and Geomorphology

2013-2016

Deputy Head of the Dept. of Earth, Environment and Resources Sciences, University of Naples Federico II, Italy

2013-2015

Scientific Board, Cilento Vallo Diano Alburni Unesco Global Geopark

2012-2016

Secretary General of the European Federation of Geologists

2011-2015

Executive Board, Italian National Council of Geologists

2002-2009

Executive Board, Campania Regional Council of Geologists

ADDITIONAL INFORMATION

Main research lines

Landslide hazard and risk assessment

Applicability of satellite-related remote sensing techniques to the monitoring of ground motions

Engineering-geological characterization of rocks, soils and building geomaterials

Publications

Total number of publications in peer-review journals: **153**

Total number of citations: **2813**

H index (Scopus): **34**

Total number of publications in journals belonging to the first Scopus quartile: **50**

Infante D., Di Martire D., Scotto Di Santolo A., Calcaterra D., Ramondini M. (2020) - The contribution of spaceborne SAR data in linear infrastructures monitoring activities. In: Calvetti F., Cotecchia F., Galli A., Jommi C. (eds.), Geotechnical research for land protection and development. CNRIG 2019, Lecture Notes in Civil Engineering, 40, 318-327, doi.org/10.1007/978-3-030-21359-6_34

Giordan D., Cignetti M., Godone D., Peruccacci S., Raso E., Pepe G., Calcaterra D., Cevasco A., Firpo M., Scarpellini P., Gnone M. (2020) - A new procedure for an effective management of geo-hydrological risks across the "Sentiero Verde-Azzurro" trail, Cinque Terre National Park, Liguria (north-western Italy). Sustainability, 12(2), doi.org/10.3390/su12020561

Di Napoli M., Carotenuto F., Cevasco A., Confuorto P., Di Martire D., Firpo M., Pepe G., Raso E., Calcaterra D. (2020) - Machine learning ensemble modelling as a tool to improve landslide susceptibility mapping reliability. Landslides, 17, 1897-1914, doi.org/10.1007/s10346-020-01392-9

Di Napoli M., Marsiglia P., Di Martire D., Ramondini M., Ullo S.L., Calcaterra D. (2020) - Landslide susceptibility assessment of wildfire burnt areas through Earth-Observation techniques and a machine learning-based approach. Remote Sensing, 12, doi.org/10.3390/rs12152505

Di Benedetto C., Gautiero A., Guarino V., Allocca V., De Vita P., Morra V., Cappelletti P., Calcaterra D. (2020) - Knowledge-based model for geomaterials in the Ancient Centre of Naples (Italy): towards an integrated approach to cultural heritage. Digital Applications in Archaeology and Cultural Heritage, 18, doi.org/10.1016/j.daach.2020.e00146

Guerriero L., Ruzza G., Calcaterra D., Di Martire D., Guadagno F.M., Revellino P. (2020) - Modelling prospective flood hazard in a changing climate, Benevento Province, Southern Italy. Water, 12, doi.org/10.3390/w12092405

Pepe G., Baudinelli E., Zanini M., Calcaterra C., Cevasco A., Scarpellini P., Firpo M. (2020) - Application of bioengineering techniques as geo-hydrological risk mitigation measures in a highly valuable cultural landscape: experiences from the Cinque Terre National Park (Italy). Sustainability, 12(20), 8653, doi.org/10.3390/su12208653

Guerriero L., Di Martire D., Calcaterra D., Francioni M. (2020) - Digital image correlation of Google Earth images for Earth's surface displacement estimation. Remote Sensing, 12, 3518, doi.org/10.3390/rs12213518

Rispoli C., Di Martire D., Calcaterra D., Cappelletti P., Graziano S.F., Guerriero L. (2020) - Sinkholes threatening places of worship in the historic center of Naples. Journal of Cultural Heritage, 46, 313-319, doi.org/10.1016/j.culher.2020.09.009

Raso E., Mandarino A., Pepe G., Calcaterra D., Cevasco A., Confuorto P., Di Napoli M., Firpo M. (2021) - Geomorphology of Cinque Terre National Park (Italy). *Journal of Maps*, 17(3), 171-184, doi:10.1080/17445647.2020.1837270

Massarotti N., Mauro A., Normino G., Vanoli L., Verde C., Allocata V., Calcaterra D., Coda S., De Vita P., Forzano C., Palombo A., Cosenza P. (2021) - Innovative solutions to use ground-coupled heat pumps in historical buildings: a test case in the city of Napoli, southern Italy. *Energies*, 14, doi.org/10.3390/en14020296

Ammirati L., Mondillo N., Calcaterra D., Di Martire D. (2021) - Sentinel-1 data for monitoring a pre-failure event of tailings dam. In: Rizzo P., Milazzo A., (eds.), European Workshop on Structural Health Monitoring EWSHM 2020, Lecture Notes in Civil Engineering, 128, 140–148, doi.org/10.1007/978-3-030-64908-1_13

Petrosino P., Angrisani A.C., Barra D., Donadio C., Aiello G., Allocata V., Coda S., De Vita P., Jicha B.R., Calcaterra D. (2021) - Multiproxy approach to urban geology of the historical center of Naples, Italy. *Quaternary International*, 577, 147-165, doi.org/10.1016/j.quaint.2020.12.043

Miano A., Mele A., Calcaterra D., Di Martire D., Infante D., Prota A., Ramondini R. (2021) - The use of satellite data to support the structural health monitoring in areas affected by slow-moving landslides: a potential application to reinforced concrete buildings. *Structural Health Monitoring*, doi.org/10.1177/1475921720983232

Di Napoli M., Di Martire D., Bausilio G., Calcaterra D., Confuorto P., Firpo M., Pepe G., Cevasco A. (2021) - Rainfall - Induced shallow landslide detachment, transit and runout susceptibility mapping by integrating Machine Learning techniques and GIS - based approaches. *Water*, 13, doi.org/10.3390/w13040488

Fusco F., Mirus B.B., Baum R.L., Calcaterra D., De Vita P. (2021) - Incorporating the effects of complex soil layering and thickness local variability into distributed landslide susceptibility assessments. *Water*, 13, doi.org/10.3390/w13050713

Novellino A., Cesarano M., Cappelletti P., Di Martire D., Di Napoli M., Ramondini M., Sowter A., Calcaterra D. (2021) - Slow-moving landslide risk assessment combining Machine Learning and InSAR techniques. *Catena*, 203, doi.org/10.1016/j.catena.2021.105317

Confuorto P., Sepe C., Del Gaudio C., Di Martire D., Verderame G.M., Calcaterra D. (2021) - Intervention model for natural and anthropogenic risk scenarios in the framework of Municipal Emergency Plans. *International Journal of Disaster Risk Reduction*, 58, doi.org/10.1016/j.ijdrr.2021.102204

Tufano R., Formetta G., Calcaterra D., De Vita P. (2021) - Hydrological control of soil thickness spatial variability on the initiation of rainfall-induced shallow landslides using a three-dimensional model. *Landslides*, doi.org/10.1007/s10346-021-01681-x

Allocata V., Di Napoli M., Coda S., Carotenuto F., Calcaterra D., Di Martire D., De Vita P. (2021) - A novel methodology for Groundwater Flooding Susceptibility assessment through Machine Learning techniques in a mixed-land use aquifer. *Science of the Total Environment*, 790, doi.org/10.1016/j.scitotenv.2021.148067

Sepe C., Calcaterra D., Cecconi M., Di Martire D., Pappalardo L., Scarfone R., Vitale E., Russo G. (2021) - Capillary barriers during rainfall events in pyroclastic deposits of the Vesuvian area. *Geosciences*, 11, doi.org/10.3390/geosciences11070274

Miele P., Di Martire D., Di Napoli M., Guerriero L., Calcaterra D. (2021) - Temporal efficiencies of soil bioengineering techniques to mitigate geo-hydrological risks. *Ecological Engineering*, 170, doi.org/10.1016/j.ecoleng.2021.106338

Pappalardo G., Mineo S., Cappadonia C., Di Martire D., Calcaterra D., Tammaro U., Rotigliano E., Agnesi V. (2021) - A combined GNSS-DINSAR-IRT study for the characterization of a deep-seated gravitational slope deformation. *Italian Journal of Engineering Geology and Environment*, 1/2021, 151-162. doi.org/10.4408/IJEGE.2021-01.S-14

Sepe C., Calcaterra D., Di Martire D., Ramondini M., Russo G., Vitale E., Pappalardo L. (2021) - Landslide susceptibility assessment in pyroclastic soils: numerical analysis on the role of capillary barriers. *Italian Journal of Engineering Geology and Environment*, 1/2021, 221-228. doi.org/10.4408/IJEGE.2021-01.S-20

Ranaldo M., Di Martire D., Ciarcia S., Calcaterra D. (2021) - Landslide susceptibility assessment in the southern sector of the Tammaro River basin (Italy). *Italian Geotechnical Journal/Rivista Italiana di Geotecnica*, 4/2021, 96-106. doi.org/10.19199/2021.4.0557-1405.096

Guerriero L., Prinzi E.P., Calcaterra D., Ciarcia S., Di Martire D., Guadagno F.M., Ruzza G., Revellino P. (2021) - Kinematics and geologic control of the deep-seated landslide affecting the historic center of Buonalbergo, southern Italy. *Geomorphology*, 394, doi.org/10.1016/j.geomorph.2021.107961

Allocata V., Coda S., Calcaterra D., De Vita P. (2021) - Groundwater rebound and flooding in the Naples' periurban area (Italy). *Journal of Flood Risk Management*, doi.org/10.1111/jfr3.12775

Tufano R., Guerriero L., Annibali Corona M., Bausilio G., Di Martire D., Nisio S., Calcaterra D. (2022) - Anthropogenic sinkholes of the city of Naples, Italy: an update. *Natural Hazards*, 112, 2577-2608, doi.org/10.1007/s11069-022-05279-x

- Valente E., Calcaterra D. (2022) - River network and alluvial events in the urban area of Naples (Italy). *Rend. Online Soc. Geol. It.*, 56, 29-35, doi.org/10.3301/ROL.2022.04
- Bausilio G., Annibali Corona M., Di Martire D., Di Napoli M., Guerriero L., Tufano R., Calcaterra D. (2022) - Evaluation of anthropogenic sinkhole susceptibility in the city of Naples (Italy) using a presence only algorithm. *Rend. Online Soc. Geol. It.*, 56, 45-49, doi.org/10.3301/ROL.2022.06
- Miele P., Di Napoli M., Novellino A., Calcaterra D., Mallorqui J.J., Di Martire D. (2022) - SAR data and field surveys combination to update rainfall-induced shallow landslide inventory. *Remote Sensing Applications: Society and Environment*, 26, doi.org/10.1016/j.rsase.2022.100755
- Guerriero L., Di Napoli M., Novellino A., Di Martire D., Rispoli C., Lee K., Bee E., Harrison A., Calcaterra D. (2022) - Multi-hazard susceptibility assessment using analytic hierarchy process: the Derwent Valley Mills UNESCO World Heritage Site case study (United Kingdom). *Journal of Cultural Heritage*, 55, 339-345, doi.org/10.1016/j.culher.2022.04.009
- Bianchini S., Conforto P., Intrieri E., Sbarra P., Di Martire D., Calcaterra D., Fanti R. (2022) - Machine learning for sinkhole risk mapping in Guidonia-Bagni di Tivoli plain (Rome), Italy. *Geocarto International*, 37(27), 16687-16715, doi.org/10.1080/10106049.2022.2113455
- Ammirati L., Di Martire D., Bordicchia F., Calcaterra D., Russo G., Mondillo N. (2022) - Semi-real time systems for subsidence monitoring in areas affected by underground mining: the example of the Nuraxi-Figus coal district (Sardinia, Italy). *International Journal of Coal Science & Technology*, doi.org/10.1007/s40789-022-00559-0
- Vitagliano E., Vitale E., Russo G., Piccinini L., Fabris M., Calcaterra D., Di Maio R. (2022) - Analysis of the periodic component of vertical land motion in the Po Delta (Northern Italy) by GNSS and hydrological data. *Remote Sensing*, 14(5), doi.org/10.3390/rs14051126
- Tufano R., Guerriero L., Annibali Corona M., Cianfone G., Di Martire D., Ietto F., Novellino A., Rispoli C., Zito C., Calcaterra D. (2023) - Multiscenario flood hazard assessment using probabilistic runoff hydrograph estimation and 2D hydrodynamic modelling. *Natural Hazards*, 116, 1029-1051, doi.org/10.1007/s11069-022-05710-3
- Langella A., Calcaterra D., Cappelletti P., Ciarcia S., D'Amore M., Di Martire D., Graziano S.F., de Gennaro M. (2023) - An example of integrated geological survey of geomaterials and their weathering forms: the Reggia di Caserta main façade. *Studies in Conservation*, 68(4), 432-444, doi.org/10.1080/00393630.2022.2050096
- Raimondi L., Pepe G., Firpo M., Calcaterra D., Cevasco A. (2023) - An open-source and QGIS-integrated physically based model for spatial prediction of rainfall-induced shallow landslides (SPRIn-SL). *Environmental Modelling and Software*, 160, doi.org/10.1016/j.envsoft.2022.105587.
- Khalili M.A., Voosoghi B., Guerriero L., Haji-Aghajany S., Calcaterra D., Di Martire D. (2023) - Mapping of mean deformation rates based on APS-corrected InSAR data using unsupervised clustering algorithms. *Remote Sensing*, 15, doi.org/10.3390/rs15020529
- Discenza M.E., Esposito C., Di Luzio E., Delchiaro M., Di Martire D., Minnillo M., Rouhi J., Martino S., Della Seta M., Troiani F., Calcaterra D., Scarascia Mugnozza G. (2023) - Deep-Seated Gravitational Slope Deformations in Molise region (Italy): novel inventory and main geomorphological features. *Journal of Maps*, doi.org/10.1080/17445647.2022.2163198
- Di Napoli M., Miele P., Guerriero L., Annibali Corona M., Calcaterra D., Ramondini M., Sellers C., Di Martire D. (2023) - Multitemporal relative landslide exposure and risk analysis for the sustainable development of rapidly growing cities. *Landslides*, 20, 1781-1795, doi.org/10.1007/s10346-023-02065-z
- Coda S., Tufano R., Calcaterra D., Colantuono P., De Vita P., Di Napoli M., Guerriero L., Allocchio A. (2023) - Groundwater flooding hazard assessment in a semi-urban aquifer through probability modelling of surrogate data. *Journal of Hydrology*, 621, 129659, doi.org/10.1016/j.jhydrol.2023.129659
- Sepe C., Calcaterra D., Di Martire D., Fusco F., Tufano R., Vitale E., Guerriero L. (2023) - Triggering conditions and propagation of the December 2019 Palma Campania landslide: Implications for residual hazard estimation at recurrent landslide sites. *Engineering Geology*, 322, 107177, doi.org/10.1016/j.enggeo.2023.107177
- Fusco F., Tufano R., De Vita P., Di Martire D., Di Napoli M., Guerriero L., Miletì F.A., Terribile F., Calcaterra D. (2023) - A revised landslide inventory of the Campania region (Italy). *Scientific Data*, 10:355, doi.org/10.1038/s41597-023-02155-6
- Corti M., Ghirlanda E., Mainetti M., Abbate A., De Vita P., Calcaterra D., Papini M., Longoni L. (2023) - Evaluation of the applicability of sediment transport models to dam filling prediction in different Italian geological contexts. *Italian Journal of Engineering Geology and Environment*, 1/2023, 27-32, doi: 10.4408/ijege.2023-01.S-04
- Fusco F., Abbate A., Calcaterra D., De Vita P., Guerriero L., Longoni L., Papini M. (2023) - Susceptibility mapping of shallow landslides inducing debris flows: a comparison of physics-based approaches. *Italian Journal of Engineering Geology and Environment*, 1/2023, 63-71, doi.org/ 10.4408/ijege.2023-01.s-09

Khalili M.A., Guerrero L., Coda S., Sellers C., Calcaterra D., Di Martire D. (2023) - Assessment of MT-INSAR processing techniques for slow-moving landslides monitoring in Cuenca (Ecuador) through double-band SAR satellite. *Italian Journal of Engineering Geology and Environment*, 1/2023, 81-88, doi.org/10.4408/ijge.2023-01.S-11

Khalili M.A., Guerrero L., Pouralizadeh M., Calcaterra D., Di Martire D. (2023) - Monitoring and prediction of landslide-related deformation based on the GCN-LSTM algorithm and SAR imagery. *Natural Hazards*, doi.org/10.1007/s11069-023-06121-8

Guerrero L., Francioni M., Calcaterra D., Di Martire D., Palumbo S., Zito C., Sciarra N. (2023) - Reduced complexity debris flow/flood hazard assessment at the southwestern slope of Mt. Omo, L'Aquila municipality, central Italy. *Landslides*, doi.org/10.1007/s10346-023-02143-2

Fiorucci M., Pepe G., Marmoni G.M., Pecci M., Di Martire D., Guerrero L., Bausilio G., Vitale E., Raso E., Raimondi L., Cevasco A., Calcaterra D., Scarascia Mugnozza G. (2023) - Long-term hydrological monitoring of soils in the terraced environment of Cinque Terre (north-western Italy). *Frontiers in Earth Sciences*, 11:1285669, doi.org/10.3389/feart.2023.1285669

Sepe C., Calcaterra D., Damiano E., Di Martire D., Greco R., Pappalardo L., Ramondini M., Vitale E., Russo G. (2023) - Transient infiltration tests in pyroclastic soils with double porosity. *Journal of Mountain Science*, 20(11), 3327-3342, doi.org/10.1007/s11629-023-7955-3

Di Napoli M., Tanyas H., Castro-Camilo D., Calcaterra D., Cevasco A., Di Martire D., Pepe G., Brandolini P., Lombardo L. (2023) - On the estimation of landslide intensity, hazard and density via data-driven models. *Natural Hazards*, 119, 1513-1530, doi.org/10.1007/s11069-023-06153-0