

CURRICULUM OF LUCA PAGANO

Degree of Civil Engineer (1991). Research experiences at the L.N.E.C of Lisbon (1994) and at U.P.C of Barcellona (1995). Degree of Research Doctor in Geotechnical Engineering at the University of Rome "La Sapienza" Ph.D (1996) (Thesis: Static behaviour of earth dams). Post doctoral grant at University of Naples "Federico II" (1998-2000). Researcher in geotechnical engineering at University of Naples "Federico II" (2000-2011). Associate professor in geotechnical engineering at University of Naples "Federico II" (since 2011 on).

Research topics. Static behaviour of earth dams. Seismic behaviour of earth dams. Behaviour of river embankments and full scale physical modelling of river embankments. Seismic vulnerability of road embankments. Seismic behaviour of natural and artificial slopes. Retaining wall behaviour. Rainfall induced landslides in pyroclastic soils. Physical modelling of the hydrological behaviour of silty pyroclastic covers. Monitoring of natural slopes in pyroclastic soils. Early warning system of geotechnical systems (earth dams and rainfall-induced landslides).

Journal papers

- 1) Pirone M., Reder A., Rianna G., Pagano L., Nicotera M.V., Urciuoli G. (2020). Laboratory and physical prototype tests for the investigation on hydraulic hysteresis of pyroclastic soils. *GEOSCIENCES*, <https://doi.org/10.3390/geosciences10080320> 10(8), 320; 1-25
- 2) Coppola L., Reder A., Rianna G., Pagano L. (2020) The Role of Cover Thickness in the Rainfall-Induced Landslides of Nocera Inferiore 2005 *GEOSCIENCES*, <https://doi.org/10.3390/geosciences10060228> 10(6), 228; 1-20
- 3) Sica S., Pagano L., Rotili F. (2019). Rapid drawdown on earth dam stability after a strong earthquake. *COMPUTERS & GEOTECHNICS*, ISSN:0266352X Vol. 116, DOI:10.1016/j.compgeo.2019.103187, December 2019, 1-15
- 4) PAGANO L, REDER A., RIANNA G (2019). The effects of vegetation on the hydrological response of silty volcanic covers. *CANADIAN GEOTECHNICAL JOURNAL* ISSN:, 12086010,. [dx.doi.org/10.1139/cgj-2017-0625](https://doi.org/10.1139/cgj-2017-0625) Vol. 56, September 2019, 1261–1277
- 5) REDER A., RIANNA G., PAGANO L. (2019). Some aspects of water and energy budget of a pyroclastic cover. *ENVIRONMENTAL GEOTECHNICS*, ISSN: 2051-803X, doi: [dx.doi.org/10.1680/jenge.15.00076](https://doi.org/10.1680/jenge.15.00076), Vol 6, Issue 6, September 2019, p. 1-14
- 6) RIANNA G, COMEGNA L, PAGANO L, PICARELLI L, REDER A. (2019). The role of the hydraulic hysteresis on the hydrological response of sloping unsaturated silty soils. *WATER*, ISSN:20734441, Vol. 11, Issue 3, 1 March 2019, 1-15
- 7) RIANNA G., REDER A., PAGANO L. (2018). Estimating actual and potential bare soil evaporation from pyroclastic soils: Towards improved landslide prediction. *JOURNAL OF HYDROLOGY*. <https://doi.org/10.1016/j.jhydrol/2018.05.005>, 562 (2018) 193–209
- 8) REDER A., RIANNA G., PAGANO L. (2018). Physically based approaches incorporating evaporation for early warning predictions of rainfall-induced landslides. *NATURAL HAZARDS EARTH SYSTEM SCIENCES.*, <https://doi.org/10.5194/nhess-18-613-2018>
- 9) GRECO R., PAGANO L (2017). Basic features of the predictive tools of early warning systems for water-related natural hazards: examples for shallow landslides. *NATURAL HAZARDS EARTH SYSTEM SCIENCES*, 17, 2213-2227, <https://doi.org/10.5194/nhess-17-2213-2017>, 2017

- 10) REDER A., PAGANO L., PICARELLI L., RIANNA G. (2017). The role of the lowermost boundary conditions in the hydrological response of shallow sloping covers. *LANDSLIDES*, 14:861–873 p. 1-13, ISSN: 1612-510X, doi: 10.1007/s10346-016-0753-z
- 11) RIANNA G., REDER,A., MERCOGLIANO P., PAGANO L. (2017). Evaluation of Variations in Frequency of Landslide Events Affecting Pyroclastic Covers in Campania Region under the Effect of Climate Changes. *HYDROLOGY*. 2017,4(3), 34; 1-20. doi:10.3390/hydrology4030034
- 12) DI MARTIRE D., IGLESIAS R., MONELLS D., CENTOLANZA G., SICA S., RAMONDINI M., PAGANO L., MALLORQUÍ J. J., CALCATERRA D. (2014). Comparison between Differential SAR interferometry and ground measurements data in the displacement monitoring of the earth-dam of Conza della Campania (Italy). *REMOTE SENSING OF ENVIRONMENT* (ISSN: 0034-4257) pp. 58–69 Vol.148 - valutato “eccellente” nella VQR 2011-2014
- 13) RIANNA G., PAGANO L., URCIUOLI G. (2014). Rainfall patterns triggering shallow flowslides in pyroclastic soils. *ENGINEERING GEOLOGY* (ISSN:0013-7952) pp. 22 - 35 Vol. 174 valutato “eccellente” nella VQR 2011-2014
- 14) RIANNA G., PAGANO L., URCIUOLI G. (2014). Investigation of soil-atmosphere interaction in pyroclastic soils. *JOURNAL OF HYDROLOGY* (ISSN:0022-1694) pp. 480 - 492 Vol. 510 valutato “eccellente” nella VQR 2011-2014
- 15) PAGANO L., REDER A., RIANNA G. (2014). Processi di infiltrazione ed evaporazione nei terreni piroclastici illustrati attraverso la selezione di alcuni eventi rappresentativi. *RIVISTA ITALIANA DI GEOTECNICA* (ISSN:0557-1405) pp. 56 - 70 Vol. 48
- 16) PAGANO L., SICA S. (2013). Earthquake Early Warning for Earth Dams: Concepts and Objectives. *NATURAL HAZARDS* (ISSN:1573-0840) pp. 303 - 318 Vol. 66
- 17) CALABRESI G., COLLESELLI F., DANESE D., GIANI G., MANCUSO C., MONTRASIO L., NOCILLA A., PAGANO L., REALI E., SCIOTTI A. (2013). Research study of the hydraulic behaviour of the Po River embankments. *CANADIAN GEOTECHNICAL JOURNAL* (ISSN:0008-3674) pp. 947 - 960 Vol. 50 valutato “eccellente” nella VQR 2011-2014
- 18) TOLL D.G., LORENCO S.D.N., MENDES J., GALLIPOLI D., EVANS F.D., AUGARDE C.E., CUI Y.J., TANG A.M., RJAS VIDOVIC J.C., PAGANO L., MANCUSO C., ZIGARIELLO C., TARANTINO A. (2011). Soil Suction Monitoring for Landslides and Slopes. *QUARTERLY JOURNAL OF ENGINEERING GEOLOGY AND HYDROGEOLOGY* (ISSN:1470-9236) pp. 23 - 33 Vol. 44
- 19) PAGANO L.; PICARELLI L.; RIANNA G.; URCIUOLI G. (2010). A simple numerical procedure for timely prediction of precipitation-induced landslides in unsaturated pyroclastic soils. *LANDSLIDES* (ISSN:1612-510X) pp. 273 - 289 Vol. 7 - valutato “eccellente” nella VQR 2004-2010
- 20) BILOTTA E., PAGANO L., SICA S. (2010). Effects of ground-motion asynchronism on the equivalent acceleration of earth dams. *SOIL DYNAMICS AND EARTHQUAKE ENGINEERING* (ISSN:0267-7261) pp. 561 - 579 Vol. 30 - valutato “eccellente” nella VQR 2004-2010
- 21) PAGANO L., FONTANELLA E., SICA S., DESIDERI A. (2010). Effectiveness of pore water pressure measurements in the interpretation of the hydraulic behaviour of two earth dams. *SOILS AND FOUNDATIONS* (ISSN:0038-0806) pp. 295 - 307 Vol. 50
- 22) PAGANO L., SICA S., COICO P. (2009). A study to evaluate the seismic performance of road embankments. *SOILS AND FOUNDATIONS* (ISSN:0038-0806) pp. 909 - 920 Vol. 49

- 23) SICA S., PAGANO L. (2009). Performance-based analysis of earth dams: procedures and application to a sample case. SOILS AND FOUNDATIONS (ISSN:0038-0806) pp. 921 - 940 Vol. 49
- 24) SICA S., L. PAGANO, MODARESSI A (2008). Influence of past loading history on the seismic response of earth dams. COMPUTERS AND GEOTECHNICS (ISSN:0266-352X) pp. 61 - 85 Vol. 35 - valutato "eccellente" nella VQR 2004-2010
- 25) PAGANO L., SICA S., DESIDERI A (2006). Representativeness of Measurements in the Interpretation of Earth Dam Behavior. CANADIAN GEOTECHNICAL JOURNAL (ISSN:0008-3674) pp. 87 - 99 Vol. 43 - valutato "eccellente" nella VQR 2004-2010
- 26) PAGANO L., F. SILVESTRI, VINALE F. (2001). A back-analysis of Beliche Dam. Discussion to the paper by Naylor D.J., Maranhã J.R., Maranhã das Neves E., Veiga Pinto A.A. (1997).. GEOTECHNIQUE (ISSN:0016-8505) pp. 377 - 381 Vol. 51(4),
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- 29) FANELLI M.; GIUSEPPETTI G.; MAZZA G.; DE MARCO S.; LA BARBERA G.; PALUMBO P.; RUGGERI G.; RIBACCHI R.; L. PAGANO; SILVESTRI F.; VINALE F.; SEMBENELLI (1998). LA Potenzialità della Modellazione Matematica e delle Procedure di Calcolo Automatico nel Progetto e nella Valutazione della Sicurezza delle Dighe. L'ENERGIA ELETTRICA (ISSN:0013-7308) pp. 225 - 242 Vol. 75,
- 30) BILOTTA E., PAGANO L., SICA S. (2008). Effects of ground motion asynchronism on the seismic behaviour of two earth dams. RIVISTA ITALIANA DI GEOTECNICA (ISSN:0557-1405) pp. 54 - 77 Vol. 42 N.4
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- 32) SICA S., PAGANO L., VINALE F. (2008). Interpretation of seismic accelerations recorded at the Camastra Dam. RIVISTA ITALIANA DI GEOTECNICA (ISSN:0557-1405) pp. 97 - 111 Vol. 42 N.4
- 33) L. PAGANO, C. MANCUSO, S. SICA (2008). Prove in sito sulla diga del Camastra: tecniche sperimentali e risultati. RIVISTA ITALIANA DI GEOTECNICA (ISSN:0557-1405) pp. 11 - 28 Vol. XLI