

Alcuni contributi scientifici eccellenti del DFST nel periodo 2012-17

(con rilevanza prevalente rispetto alle sei Linee progettuali del progetto dipartimentale;
in grassetto i ricercatori strutturati afferenti al DFST)

LP1

Ferlito C., Bruno V., Salerno G., Caltabiano T., Scandura D., Mattia M., **Coltorti, M.** (2017) Dome-like behaviour at Mt. Etna: The case of the 28 December 2014 South East Crater paroxysm. *Scientific Reports*, 7.

Giacomoni P. P., Ferlito C., **Coltorti M.**, **Bonadiman C.**, Lanzafame, G. (2014) Plagioclase as archive of magma ascent dynamics on “open conduit” volcanoes: The 2001–2006 eruptive period at Mt. Etna. *Earth-Science Reviews*, 138, 371-393.

Holakooei P., Ahmadi M., Volpe L., **Vaccaro C.** (2016) Early Opacifiers In The Glaze Industry Of First MillenniumbcPersia: Persepolis And Tepe Rabat. *Archaeometry*, vol. 58, p. 1-16,

Rango T., Vengosh A., Dwyer G., **Bianchini G.** (2013) Mobilization of arsenic and other naturally occurring contaminants in groundwater of the Main Ethiopian Rift aquifers. *Water Research* 47, 5801-5818.

Baldoncini M., Albéri M., Bottardi C., Raptis K.G.C., Minty B., Strati V., **Mantovani F.** (2017) Exploring atmospheric radon with airborne gamma-ray spectroscopy. *Atmospheric Environment*, in press, doi.org/10.1016/j.atmosenv.2017.09.048.

LP2 & LP6

Fabbri B., Bonoldi L., **Guidi V.**, **Cruciani G.**, Casotti D., **Malagu C.**, Bellussi G., Millini R., Montanari L., Carati A., Rizzo C., Montanari E. & Zanardi S. (2017) Crystalline Microporous Organosilicates with Reversed Functionalities of Organic and Inorganic Components for Room-Temperature Gas Sensing. *ACS Appl. Mater. Interfaces*, 9(29), 24812–24820.

Rodeghero E., **Martucci A.**, **Cruciani G.**, Sarti E., Cavazzini A., Costa V., Bagatin R., & Pasti L. (2017) Detailed Investigation of Thermal Regeneration of High-Silica ZSM-5 Zeolite through in Situ Synchrotron X-ray Powder Diffraction and Adsorption Studies. *The Journal of Physical Chemistry C*, 121 (33), 17958–17968.

Ardit M., **Martucci A.**, & **Cruciani G.** (2015) Monoclinic–orthorhombic phase transition in ZSM-5 zeolite: spontaneous strain variation and thermodynamic properties. *The Journal of Physical Chemistry C*, 119(13), 7351-7359.

Giberti A., Casotti D., **Cruciani G.**, Fabbri B., Gaiardo A., **Guidi, V.**, [...], Gherardi, S. (2015) Electrical conductivity of CdS films for gas sensing: Selectivity properties to alcoholic chains. *Sensors and Actuators B: chemical*, 207, 504-510.

LP3 & LP6

Hallbauer-Zadorozhnaya V., **Santarato G.**, Abu Zeid N. (2015) Non-linear behaviour of electrical parameters in porous, water-saturated rocks: a model to predict pore size distribution. *Geophysical Journal International*, 202(2), 871-886.

Bignardi S., Fedele F., Yezzi A., Rix G., **Santarato, G.** (2012) Geometric Seismic-Wave Inversion by the Boundary Element Method. *Bulletin of the Seismological Society of America*, 102(2), 802-811.

Caputo R., Sboras S., Pavlides S., Chatzipetros A. (2015) Comparison between single-event effects and cumulative effects for the purpose of seismic hazard assessment. A review from Greece. *Earth-Science Reviews*, 148, 94-120.

Caputo R., Poli M. E., Minarelli L., Rapti D., Sboras S., Stefani M., Zanferrari A. (2016) Palaeoseismological evidence for the 1570 Ferrara earthquake, Italy. *Tectonics*, 35(6), 1423-1445.

LP4

Kreibich H., Van Den Bergh J. C., Bouwer L. M., Bubeck P., **Ciavola P.**, Green C., [...], Thielen A. H. (2014) Costing natural hazards. *Nature Climate Change*, 4(5), 303.

Armaroli C., Grottoli E., Harley M. D., **Ciavola P.** (2013) Beach morphodynamics and types of foredune erosion generated by storms along the Emilia-Romagna coastline, Italy. *Geomorphology*, 199, 22-35.

Wolter A., Stead D., Ward B. C., Clague J. J., **Ghirotti, M.** (2016) Engineering geomorphological characterisation of the Vajont Slide, Italy, and a new interpretation of the chronology and evolution of the landslide. *Landslides*, 13(5), 1067-1081.

Spreafico M. C., Francioni M., Cervi F., Stead D., Bitelli G., **Ghirotti M.**, [...], Borgatti L. (2016) Back analysis of the 2014 San Leo landslide using combined terrestrial laser scanning and 3D distinct element modelling. *Rock Mechanics and Rock Engineering*, 49(6), 2235-2251.

Armand R., **Cherubini C.**, Tuduri J., Pastore N., Pourret O. (2015) Rare earth elements in French stream waters – revisiting the geochemical continental cycle using FOREGS dataset. *Journal of Geochemical Exploration*, 157, 132–142.

LP5

Garbelli C., Angiolini L., Brand U., Shen S. Z., Jadoul F., **Posenato R.**, [...], Cao C. Q. (2016) Neotethys seawater chemistry and temperature at the dawn of the end Permian mass extinction. *Gondwana research*, 35, 272-285.

D'Onofrio R., **Luciani V.**, Fornaciari E., Giusberti L., Boscolo Galazzo F., Dallanave E., [...], Telch S. (2016) Environmental perturbations at the early Eocene ETM2, H2, and I1 events as inferred by Tethyan calcareous plankton (Terche section, northeastern Italy). *Paleoceanography*, 31(9), 1225-1247.

Pomar L., **Morsilli M.**, Hallock P., & Bádenas B. (2012) Internal waves, an under-explored source of turbulence events in the sedimentary record. *Earth-Science Reviews*, 111(1), 56-81.

Gattolin G., Preto N., Breda A., Franceschi M., Isotton M., & **Gianolla P.** (2015) Sequence stratigraphy after the demise of a high-relief carbonate platform (Carnian of the Dolomites): sea-level and climate disentangled. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 423, 1-17.

Trasversali a tutte le LP ('Big Data')

Khachatryan V., [...] Andreotti M., **Calabrese R.**, Corvo M., Fiore M., **Fiorini M.**, **Luppi E.**, **Pappalardo L.L.**, Shapoval I., Tellarini G., **Tomassetti L.**, [...] et al. (CMS and LHCb Collaborations, 2015) Observation of the rare $B_s^0 \rightarrow \mu^+ \mu^-$ decay from the combined analysis of CMS and LHCb data. *Nature* 522, 68–72

Aaij R., [...] Andreotti M., **Calabrese R.**, Corvo M., Fiore M., **Fiorini M.**, **Luppi E.**, **Pappalardo L.L.**, Tellarini G., **Tomassetti L.**, [...] et al. (The LHCb collaboration, 2017) Measurement of matter–antimatter differences in beauty baryon decays, *Nature Physics* 13, 391–396.