

Paolo PAPALE

Curriculum Vitae

54 anni, cittadinanza italiana, sposato, due figli (1990 and 1996)

Educazione

- Laurea in Scienze Geologiche 1989, Università di Pisa, 110 e Lode

Posizione attuale

- Dirigente di Ricerca, INGV Pisa, dal 2003

Posizioni passate

- 2013-2016 Direttore, INGV Struttura Vulcani
- 1999-2003 Ricercatore – ING/INGV
- 1996-1999 Ricercatore a contratto, CNR
- 1990-1996 Contratti e borse con ING, CNR, Univ. di Pisa

Selezioni pubbliche

- 2017 Professore Ordinario (Abilitazione Scientifica Nazionale) nel settore 04/A1 “Geochimica, mineralogia, petrologia, vulcanologia, georisorse”
- 2001 Dirigente di Ricerca, Fisica dei Processi Vulcanici, INGV
- 2001 Professore Ordinario Geo08 Vulcanologia e Geochimica, Univ. della Calabria
- 2001 Professore Associato Geo08 Vulcanologia e Geochimica, Univ. di Urbino
- 1999 Ricercatore in Vulcanologia, INGV

Ruoli e Servizi Internazionali

- Chair, Earth and Cosmic Sciences section, Academia Europaea, 2017 –
- Management Board, GVM – Global Volcano Model, 2011 –
- Presidente, Geochemistry, Mineralogy, Petrology and Volcanology Division – European Geosciences Union, Member of the EGU Council, 2007 – 2011
- Segretario, Volcanology Sub-Division – European Geosciences Union, 2005 – 2011
- Presidential Advisory Board, EGU, in rappresentanza del tema “Solid Earth”, 2007-2009
- Awarding Committee, IAVCEI, 2017 –
- Awarding Committee, EGU Robert Wilhelm Bunsen Medal, 2005 – 2012, Chair since 2010
- Awarding Committee, EGU Arthur Holmes Medal and Honorary Membership, 2010 – 2012
- Awarding Committee, EGU/GMPV YSOPP: “Young Student Outstanding Poster Presentation” award, 2009 – 2011
- Membro della Commissione delle Nazioni Unite per la crisi Nyiragongo-Lake Kivu 2002

Attività di indirizzo scientifico internazionale

- Panel of NSF Merit Reviewers
- Panel of EU FP7 Reviewers, Programmes “People” and “Ideas”
- Panel of EU/H2020 Reviewers, ERC

- Panel of Reviewers, Belgian Government, Remote Sensing Research Programme
- Panel of Reviewers, French USAR – Gestion de Programmes de Recherches
- Panel of Reviewers, Italian Research Programme PRIN
- Peer Reviews per riviste scientifiche internazionali (Nature, J. Geophys. Res, Geophys. Res. Lett., GCubed, Bull. Volcanol., J. Volcanol. Geotherm. Res., J. Appl. Volcanol., Earth Planet. Sci. Lett., Geology, Chem. Geol., etc)
- Chair, GMPV Programme Committee, European Geosciences Union General Assemblies 2008-2009-2010 (circa 100 sessioni scientifiche organizzate)
- 20+ student di laurea e dottorato supervisionati
- 20+ collaborazioni post-dottorato

Incarichi Nazionali

- Direttore, Struttura Vulcani, INGV, 2013 – 2016
- Responsabile del centro INGV di Pericolosità Vulcanica, 2016
- Comitato DPC per la preparazione del Piano di Emergenza ai Campi Flegrei, 2009 – 2012
- Consiglio scientifico dell'INGV, 2007-2008
- Consiglio scientifico, ISPRO, 2006 – to date
- Responsabile nazionale, INGV, Obiettivo Specifico “Fisica dei Vulcani”
- Responsabile Nazionale, INGV, Tema Trasversale Coordinato “Database dei vulcani italiani”
- Responsabile dell'Unità “Modellistica fisico-matematica e simulazione numerica dei processi vulcanici”, INGV
- Comitato Scientifico, GNV, 2002-2004

Attività editoriale

- Chief and Funding Editor, Solid Earth, pubblicato da EGU, 2009 – 2014
- Editorial Board, Journal of Volcanology and Geothermal Research, 1998 – 2006
- Editor, “Volcanic Hazards, Risks, and Disasters”, Elsevier Hazards and Disaster Series, 2014 (505 pp)

Coordinamento di progetti

- Coordinatore, FP7 Marie Curie Initial Training Network “NEMOH - Numerical, Experimental and stochastic Modelling of volcanic processes and Hazard: an Initial Training Network for the next generation of European volcanologists”, 2012 – 2015 (4.1 Meuro)
- Principal Investigator, FP7 Cooperation “VUELCO - Volcanic Unrest in Europe and Latin America: Phenomenology, eruption precursors, hazard foreCast, and risk mitigation, 2011 – 2015 (560 keuro)
- Coordinatore, Progetto MIUR/IT “UNIVOL – Unified Volcano Model (600 keuro)
- Coordinatore Nazionale dei progetti INGV-DPC in Vulcanologia, 2005-2010, e Responsabile del Comitato di Gestione degli stessi (budget ca. 10 Meuro)
- Coordinatore del progetto INGV/DPC 2004-2006 V3_2 Campi Flegrei (1.2 Meuro)
- Coordinatore del progetto GNV 1999-2003 #17 (400 keuro)
- Coordinatore del progetto GNV 1999-2003 “Nyiragongo” (100 keuros)
- Coordinatore di Unità di Ricerca in vari programme di ricerca nazionali (FIRB, GNV, INGV-DPC, etc., circa 500 keuro)

Organizzazione di Conferenze, Workshop e Meeting

- Quale Presidente dell'EUG/GMPV, 150+ sessioni scientifiche organizzate alle EGU General Assemblies 2005-2011
- Quale fondatore e Co-coordinatore della serie di workshop VOBP – Volcano Observatory Best Practice:
 - VOBP #1: “Near-term hazard assessment”, Erice, Sicily, 11-15 September 2011
 - VOBP #2: “Communicating hazards”, Erice, Sicily, 2-6 November 2013
 - VOBP #3: “Long-term hazard assessment”, Vancouver (WA), US, 15-18 November 2016
- Quale coordinatore di progetti EU e nazionali, Direttore della Struttura Vulcani dell'INGV, responsabile dei progetti INGV-DPC in Pericolosità Vulcanica, etc., 20+ altri meeting e conferenze organizzate.

Produzione scientifica (Agosto 2018)

ISI Web of Science

- 63 pubblicazioni
- 2469 citazioni
- h-factor = 26

SCOPUS

- 75 publications
- 2810 Citations
- h-factor = 28

Cinque pubblicazioni maggiormente citate (ISI)

1. Papale P., Moretti R., Barbato, D. The compositional dependence of the saturation surface of H₂O+CO₂ fluids in silicate melts. CHEMICAL GEOLOGY 229: 78-95, 2006. 277 Citazioni.
2. Papale P. Strain-induced magma fragmentation in explosive eruptions. NATURE 397: 425-428, 1999. 220 Citazioni.
3. Caricchi L., Burlini L., Ulmer P., Gerya T., Vassalli M., Papale P. Non-Newtonian rheology of crystal-bearing magmas and implications for magma ascent dynamics. EARTH AND PLANETARY SCIENCE LETTERS 264: 402-419, 2007. 186 Citazioni.
4. Aiuppa A., Moretti R., Federico C., Giudice G., Gurrieri S., Liuzzo M., Papale P., Shinohara H., Valenza M. Forecasting Etna eruptions by real-time observation of volcanic gas composition. GEOLOGY 35: 1115-1118, 2007. 132 Citazioni.
5. Papale P. Modeling of the solubility of a two-component H₂O+CO₂ fluid in silicate liquids. AMERICAN MINERALOGIST 84: 477-492, 1999. 129 Citazioni.

Presentazioni a invito (selezione)

- 18th Symposium of the International School of Geophysics, Erice (Sicily), 2001: Physico-chemical magma properties and eruption dynamics.
- European Volcano Dynamics Research Training Network, 3rd Workshop, Azores, 16-26 May, 2003: Numerical modelling of volcanic processes.

- GIV Summer School of Volcanology, Catania (Sicily), June 2003: Numerical modelling of volcanic conduit processes.
- European Volcano Dynamics Research Training Network, 4th Workshop, Napoli, 12-16 January, 2004: Roles of volatiles in sub-surface volcanic processes.
- International School of Volcanology, Tenerife, Canary Islands, May-June 2004: Volatiles in magmas and their control on volcanic eruption dynamics.
- Seminars at Ludwig-Maximilian University, Munich, April 2005: Relationships between magma properties and volcanic eruption dynamics.
- An Introduction to Quantitative Physical Volcanology – Workshop, Geneva, April 2006: Conduit flow dynamics.
- University of Chieti, Italy, March 7th, 2006: Dynamics of explosive eruptions.
- Architectural Association School of Architecture, London, UK, May 2006: The January 2002 Nyiragongo eruption, DRC.
- ETH Zurich, January 12th, 2007: Magma properties and magmatic and volcanic processes: Complex relationships disclosed by numerical simulations.
- AIV School of Volcanology, Stromboli Island (Sicily), September 2008: Magma dynamics and pre-eruptive signals: the contribute of numerical simulations.
- IAVCEI Conference, Reykjavik, Iceland, August 2008: Linking geophysical observations and magma chamber dynamics at active volcanoes. Part I and Part II.
- Dept. of Earth Sciences, University of Leeds, UK, October 2009: Numerical simulation of magma dynamics and associated geophysical signals.
- American Geophysical Union Fall Meeting, December 2010: Current and future trends of volcanology in Italy and abroad.
- Fragile Earth International Conference, Munich September 2011: Towards a globally consistent dynamic picture of pre-eruptive eruption dynamics.
- AIECS – Academia Europea, Graz, 30-31 Agosto 2010: Volcano modelling: control of deep magma dynamics on geophysical network signals.
- 150° Anniversary of Geophysical Institute in Zagreb, December 2011: Recent achievements and next challenges in volcanology.
- Alexander Von Humboldt Conference 2014, Istanbul (Turkey), March 2014: On the unrest and eruptive behaviour of large calderas.
- EGU/GIFT Meeting 2014, Istanbul (Turkey), March 2014: Calderas: the most devastating, the least understood.
- Deep Carbon Observatory Second International Science Meeting, 26-28 March 2015: Carbon in magmas: Budgets and roles in volcanic processes.
- EGU/GIFT Meeting 2016, Merida (Mexico), July 2016: Virtual Volcanoes: computer simulations of volcanic eruptions.
- Mediterranean Offshore Conference, Ravenna (IT), 29-31 March 2017: Krafla Magma Testbed.
- EGU/GIFT Meeting 2017, Wien (Austria), April 2017: Living in a caldera: the case of Campi Flegrei, Italy.
- Ecole Normal Supérieur de Paris (France), 5 February 2017: Advances in numerical modelling of magma and volcano dynamics.
- IUGG 2018, Montral (upcoming) – Plenary Union Lecture on Volcano Science and International Volcano-Related Activities.

Pisa, 6 Agosto 2018

Paolo Papale