

Roberto BRAGA curriculum vitae

Subject

Petrology and Petrography (Geo/07)

Education and academic career

2019 Associate Professor - Università di Bologna

2007 Assistant Professor - Università di Bologna

2004-2006 Research Fellow, Dip. di Scienze della Terra e Geologico-Ambientali (Università di Bologna)

2002 PhD in Earth Science (curriculum Chimica e Fisica dei Materiali Geologici) Università di Pavia

1999-2001 PhD student, Università di Pavia

1995 Laurea with honors, Università di Pavia

Research themes

- Origin and evolution of metamorphic and igneous rocks, and their geodynamic implications
- Petrological processes at the crust-mantle interface in exhumed high-grade basements
- Carbon geological cycle
- Characterization of industrial minerals, and earth materials used in the built environment.

Teaching (last 7 years)

- Petrografia (Scienze Geologiche e Scienze Naturali degrees), Petrografia (Restauro e Conservazione dei Beni Culturali), Magmatismo Metamorfismo e Microstrutture (Geologia e Territorio degree), Fondamenti e Didattica di Scienze della Terra (TFA, AA 2014-2015), Natural and artificial stone laboratory (International degree in Science for the Conservation-Restoration of Cultural Heritage), Applied Petrology (EU-funded master degree in Raw Materials Exploration and Sustainability).
- During the years 2015-16, 2016-17 e 2017-18: design and management of laboratory activities for Piano Lauree Scientifiche – PLS, Università di Bologna (<http://www.pls.unibo.it/it/geologia/attivita-1/laboratori-studenti>).
- The “Si fa presto a dire antropocene - cronache da un'epoca "geologica" seminar at Collegio Superiore, Bologna University

Student supervision (since 2008)

- 56 theses (47, 1st cycle; 9, 2nd cycle), 4 PhD students;
- 19 interns

Supervision of Erasmus+ exchange (Source: AlmaRM, Univ. Bologna)

<i>Id</i>	<i>Partner</i>	<i>Programme</i>
53229	E GRANADA01 - Universidad de Granada	Erasmus Plus - Key Action 1
97324	D MUNSTER01 - Westfälische Wilhelms-Universität	Erasmus Plus - Key Action 1

Research activity

Principal investigator of the following competitive projects

2018-2020 Alma Idea Grant Senior (Università di Bologna) - Mobilità di metalli pesanti durante la carbonatazione di materiali geologici e antropogenici

2013-2015 MAPPER MAterie Prime essenziali Per l'Emilia Romagna - SPINNER Regione Emilia Romagna - (2013-2015)

2007 Programma Vigoni. Italy-Germany mobility for research activity, funded Ateno Italo Tedesco.

2002 Grant for laboratory time at the Bristol University

1999 Bando Giovani Ricercatori. Università di Pavia.

Responsibility for scientific research funded by public or private institutions

2017-2018 Caratterizzazione petrologica delle rocce appartenenti alle formazioni geologiche presenti nel territorio della Provincia di Bolzano – Provincia Autonoma di Bolzano

2015-2016 Geological support for the development of the European U, Th and K in bedrock maps - European Commission Joint Research Center

2011-2012 Comune di Piacenza: Studio petrografico finalizzato alla conservazione della copertura lapidea di Piazza Cavalli.

2009 Comune di Tollegno: Valorizzazione paesaggio geologico.

2003, 2005, 2008 Programma Marco Polo. Mobilità per attività di ricerca di giovani ricercatori. Università di Bologna.

Participation to international and national research projects

2019-2022 BioLeach: Innovative Biotreatment of Raw Materials (*Ente finanziatore: EIT Raw Materials*). Scientist in charge of the WP10 “To improve the residue management and to create potential economic value”).

2016-2020 Mining the European Anthroposphere (COST ACTION n. 15115). Member of the Management Committee (http://www.cost.eu/COST_Actions/ca/CA15115?management).

PRIN 2007 Anatessi CROstale: evidenze Naturali, Esperimenti e MOdelli (A.CRO.N.E.MO)
Member of the Research Unit of Padova (from 01-12-2007 to 30-11-2009).

PRIN 2005 Fluidi C-O-H, idrati, carbonati e trasferimento di massa crosta-mantello nelle zone di subduzione. Member of the Research Unit of Bologna (from 01-09-2005 to 31-08-2007).

PRIN 2003 Trasferimento di massa e ruolo dei fluidi durante l'incorporazione di peridotiti nella crosta continentale subdotta: vincoli naturali e sperimentali. Member of the Research Unit of Bologna (from 15-10-2002 to 14-10-2004).

PRIN 2001 Natura e composizione dei vari serbatoi coinvolti nella genesi del magmatismo Terziario Alpino: implicazioni geodinamiche. Member of the Research Unit of Bologna.

Recognitions for research activities

2017 Fondo per il finanziamento delle attività base di ricerca (FFABR) – Ammesso al finanziamento.

Oral presentations at international congresses – last 5 years (, invited)*

2019 *Structure and Composition of the Lower Continental Crust (Pavia, 7-10 ottobre 2019)

2019 *Convegno Internazionale sulla cultura materiale etrusca dell'Appennino. Arezzo – Dicomano

18-19 ottobre 2019

2018 EMAW Pavia, 26-28 giugno 2018

2018 EGU Vienna, 8-13 aprile 2018

2016 *COST Action Workshop, Praga, 19-20 ottobre 2016

2015 *International Workshop on the European Atlas of Natural Radiation, Verbania 9-13 novembre 2015

Visiting fellow at

06/2008 – 09/2008 Frontier Science Organization of Kanazawa University (Giappone). Research Programme: Le pirosseniti della Zona d'Ultimo.

04/2005 – 07/2005 Institut für Mineralogie und Kristallchemie - Universität Stuttgart (Germania). Indicatori di alta e altissima pressione (c. 3 GPa) nelle rocce crostali della zona Nonsberg-Ulten, Austroalpino superiore, Alpi Orientali.

03/2003 – 06/2003 Laboratoire de Géosciences Marines, CNRS – IPGP, Paris (Francia). Interpretazione di microstrutture di reazione in rocce metamorfiche di medio e alto grado. Applicazione dell'analisi d'immagine e dei diagrammi di fase per calcoli geotermobarometrici di dettaglio.

Editorial Activity

- Associate editor of Arabian Journal of Geosciences (Springer Nature)
- Cornelis Klein Anthony R. Philpotts, *Mineralogia e petrografia*, translated by Giorgio Gasparotto and Roberto Braga, Zanichelli, Bologna 2018, ISBN: 9788808320605 (original title, *Earth materials 2nd ed.*, Cambridge University Press, Cambridge, 2017)
- Co-editor del volume The Crust-Mantle and Lithosphere-Asthenosphere Boundaries: Insights from Xenoliths, Orogenic Deep Sections, and Geophysical Studies. GSA Special Paper 526 ISBN 978-0-8137-2526-0

Reviewer for the following scientific journals

ACS Sustainable Chemistry & Engineering, Austrian Journal of Earth Sciences, Canadian Mineralogist, Contributions to Mineralogy and Petrology, European Journal of Mineralogy, GeoActa, International Journal of Earth Sciences, Italian Journal of Geosciences, Journal of Environmental Sciences, Journal of Geodynamics, Journal of Metamorphic Geology, Lithos, Ophioliti, Periodico di Mineralogia, Waste Management.

Reviewer for the following projects funded by the ministry of university and research

Firb – Programma Futuro in Ricerca; Progetti Sir; Programma per Giovani Ricercatori “Rita Levi Montalcini”

Proposal activity and other services for national and international meetings

2020 Organizing committee of the international meeting Mining the European Anthroposphere – MINEA Final Conference <http://conference.minea-network.eu/>

2018 Co-proposer “The nature of the crust-mantle transition and its effects on the regional tectonic and magmatic evolution”, SGI-SIMP joint meeting, 12-14 September 2018, Catania.

2017 Proposer Working Group Meeting “Recovery technologies for waste incineration residues”, 30-

31 May 2017, Bologna. <http://www.minea-network.eu/event.php?id=15>

2016 Member of the Technical Committee del 2nd European Mineralogical Conference – Rimini 11-15 September 2016

2015 Field leader, Permian white granite, Mergozzo. Italy (post-IWEANR conference field trip).

2014 Member of the Organizin Committee – SGI-SIMP joint meeting, 10-12 September 2014

2013 Field leader, Ulten-Nonsberg field trip (pre-Goldschmidt Conference 2013).

2011 Co-proposer “Anatessi CROstale: evidenze Naturali, Esperimenti e Modelli”, Geoitalia 2011 (Torino).

2011 Field leader “The Ulten Zone Deep Crust” Field Workshop, Geoitalia 2011.

2009 Co-proposer “Approcci multidisciplinari per la ricostruzione ed interpretazione tettonica delle traiettorie P-T-t”, Geoitalia 2009.

2007 Field leader of the Zona d’Ultimo field trip (Austrian Society for Mineralogy and Petrology post-meeting field trip).

Membership and society services

- Member of the European Geosciences Union (EGU).
- Member of the SIMP – Società Italiana di Mineralogia e Petrologia
- Member of the SIMP steering committee biennium 2016-2017.

Other research activities

- Visiting Scientist on N/O Urania – 24/02/2010 – 01/03/2010
- Scientific coordinator of the Thin Section Lab of the Dept. BiGeA (Bologna University).

Qualifications

- Qualification for Full Professor of petrography and petrology awarded on 5/11/2020.
- Qualification for Associate Professor of petrography and petrology awarded on 10/4/2017.

Public engagement

- Rari ma non troppo – talk show from Aspettando la Notte 2019 (<http://nottedeiricercatori.society.eu/aspettando-la-notte-2019/>)
- “La Terra Trasparente” - Instant-lab for the European Researcher Night, 2018 and 2019 editions.

Institutional activities

Since 2021 – Coordinator of the Thesis and Internship commission for the Didattica e comunicazione delle Scienze Naturali

since 2020 – Tutor of the Collegio Superiore, a centre of excellence of Bologna University.

since 2019 – Member of the Teaching committee of the Natural Science degree

2015-2021 – Member of the QA committee for the Scienze Geologiche and Geologia e Territorio degrees

2015-2021 – Delegate for International Relations of the Dipartimento di Scienze Biologiche, Geologiche e Ambientali, Università di Bologna.

since 2013 – Member of the steering committee of the doctorate school Scienze della Terra, della Vita e dell'Ambiente (DOT1303859), Università di Bologna.

Peer-reviewed papers (*supervised PhD student; **supervised research fellow)

Cornelio, A., Zanoletti, A., Braga, R., Depero, L.E., Bontempi, E.
The reuse of industrial by-products for the synthesis of innovative porous materials, with the aim to improve urban air quality
(2021) Applied Sciences (Switzerland), 11 (15), art. no. 6798, DOI: 10.3390/app11156798

*Consuma, G., Aulbach, S., Braga, R., Martin, L.A.J., Tropper, P., Gerdes, A., Fiorentini, M.L.
Multi-stage sulfur and carbon mobility in fossil continental subduction zones: New insights from carbonate-bearing orogenic peridotites
(2021) Geochimica et Cosmochimica Acta, 306, pp. 143-170. DOI: 10.1016/j.gca.2021.05.008

Šyc, M., Simon, F.G., Hykš, J., Braga, R., Biganzoli, L., Costa, G., Funari, V., Grossi, M.
Metal recovery from incineration bottom ash: State-of-the-art and recent developments
(2020) Journal of Hazardous Materials, 393, art. no. 122433, DOI: 10.1016/j.jhazmat.2020.122433

Domingos, F., Cinelli, G., Neves, L., Pereira, A., Braga, R., Bossew, P., Tollesen, T.
Validation of a database of mean uranium, thorium and potassium concentrations in rock samples of Portuguese geological units, generated of literature data
(2020) Journal of Environmental Radioactivity 222, article n. 106338, doi.org/10.1016/j.jenvrad.2020.106338

Lederer, J., Šyc, M., Simon, F.-G., Quina, M., Hykš, J., Huber, F., Funari, V., Fellner, J., Braga, R., Bontempi, E., Bogush, A., Blasenbauer, D.
What waste management can learn from the traditional mining sector: towards an integrated assessment and reporting of anthropogenic resources
(2020) Waste Management, 113, 154-156. https://doi.org/10.1016/j.wasman.2020.05.054

**Lo Pò, D., Braga, R., Tropper, P., Konzett, J., Mair, V., Bargossi, G.M.
Polymineralic inclusions as tracers of multistage metasomatism in a paleo mantle wedge
(2020) Lithos, 364–365, article n. 105517, https://doi.org/10.1016/j.lithos.2020.105517

Syc, M., Simon, F.G., Hykš, J., Braga, R., Biganzoli, L., Costa, G., Funari, V., Grossi, M.,
Metal recovery from incineration bottom ash: state-of-the-art and recent developments
(2020) Journal of Hazardous Materials, 393, article n. 122433, https://doi.org/10.1016/j.jhazmat.2020.122433

*Consuma, G., Braga, R., Giovanardi, T., Bersani, D., Konzett, J., Lugli, F., Mazzucchelli, M., Tropper, P.
In situ Sr isotope analysis of mantle carbonates: Constraints on the evolution and sources of metasomatic carbon-bearing fluids in a paleo-collisional setting.
(2020) Lithos, 354–355, article n. 105334, https://doi.org/10.1016/j.lithos.2019.105334

Elío, J., Cinelli, G., Bossew, P., Gutiérrez-Villanueva, J.L., Tollesen, T., De Cort, M., Nogarotto, A., Braga, R.
First steps towards an All-European Indoor Radon Map
(2019) Natural Hazards Earth System Science, 19, 2451–2464, 2019 <https://doi.org/10.5194/nhess-19-2451-2019>

Gudelius, D., Aulbach, S., Braga, R., Höfer, H.E., Woodland, A.B., Gerdes, A.
Element transfer and redox conditions in continental subduction zones: new insights from peridotites of the Ulten Zone, North Italy,
(2019) Journal of Petrology, 60, 231–268 https://doi.org/10.1093/petrology/egy112

Quina, M.J., Bontempi, E., Bogush, A., Schlumberger, S., Weibel, G., Braga, R., Funari, V., Hykš, J., Rasmussen, E., Lederer, J.
Technologies for the management of MSW incineration ashes from gas cleaning: New perspectives on recovery of secondary raw materials and circular economy
(2018) Science of the Total Environment, 635, pp. 526-542. DOI: 10.1016/j.scitotenv.2018.04.150

Funari, V., Mantovani, L., Vigliotti, L., Tribaudino, M., Dinelli, E., Braga, R.
Superparamagnetic iron oxides nanoparticles from municipal solid waste incinerators
(2018) Science of the Total Environment, 621, pp. 687-696. DOI: 10.1016/j.scitotenv.2017.11.289

**Lo Pò, D., Braga, R., Massonne, H.-J., Molli, G., Montanini, A., Bargossi, G.M.
High-P tectono-metamorphic evolution of mylonites from the Variscan basement of the Northern Apennines, Italy
(2018) Journal of Metamorphic Geology, 36, 23-39. DOI: 10.1111/jmg.12281

Zibra, I., Korhonen, F.J., Peterzell, M., Weinberg, R.F., Romano, S.S., Braga, R., De Paoli, M.C., Roberts, M.
On thrusting, regional unconformities and exhumation of high-grade greenstones in Neoarchean orogens. The case of the Waroonga Shear Zone, Yilgarn Craton
(2017) Tectonophysics, 712-713, pp. 362-395. DOI: 10.1016/j.tecto.2017.05.017

Ionov, D.A., Bigot, F., Braga, R.
The provenance of the lithospheric mantle in continental collision zones: Petrology and geochemistry of peridotites in the Ulten-Nonsberg zone (Eastern Alps)
(2017) Journal of Petrology, 58, pp. 1451-1472. DOI: 10.1093/petrology/egx061

*Funari, V., Mäkinen, J., Salminen, J., Braga, R., Dinelli, E., Revitzer, H.
Metal removal from Municipal Solid Waste Incineration fly ash: A comparison between chemical leaching and bioleaching
(2017) Waste Management, 60, pp. 397-406. DOI: 10.1016/j.wasman.2016.07.025

*Förster, B., Braga, R., Aulbach, S., Lo Pò, D., Bargossi, G.M., Mair, V.
A petrographic study of carbonate phases in the Ulten Zone ultramafic rocks: Insights into carbonation in the mantle wedge and exhumation-related decarbonation
(2017) Ofioliti, 42 (2), pp. 105-127. DOI: 10.4454/ofioliti.v42i2.451

*Lo Pò, D., Braga, R., Massonne, H.-J.
Petrographic, mineral and pressure-temperature constraints on phyllites from the Variscan basement at Punta Bianca, Northern Apennines, Italy
(2016) Italian Journal of Geosciences, 135 (3), pp. 489-502. DOI: 10.3301/IJG.2015.29

Ridolfi, F., Renzulli, A., Perugini, D., Cesare, B., Braga, R., Del Moro, S.
Unravelling the complex interaction between mantle and crustal magmas encoded in the lavas of San Vincenzo (Tuscany, Italy). Part II: Geochemical overview and modelling
(2016) Lithos, 244, pp. 233-249. DOI: 10.1016/j.lithos.2015.11.002

Ridolfi, F., Braga, R., Cesare, B., Renzulli, A., Perugini, D., Del Moro, S.
Unravelling the complex interaction between mantle and crustal magmas encoded in the lavas of San Vincenzo (Tuscany, Italy). Part I: Petrography and Thermobarometry
(2016) Lithos, 244, pp. 218-232. DOI: 10.1016/j.lithos.2015.09.029

*Funari, V., Bokhari, S.N.H., Vigliotti, L., Meisel, T., Braga, R.
The rare earth elements in municipal solid waste incinerators ash and promising tools for their prospecting
(2016) Journal of Hazardous Materials, 301, pp. 471-479. DOI: 10.1016/j.jhazmat.2015.09.015

*Funari, V., Meisel, T., Braga, R.
The potential impact of municipal solid waste incinerators ashes on the anthropogenic osmium budget
(2016) Science of the Total Environment, 541, pp. 1549-1555. DOI: 10.1016/j.scitotenv.2015.10.014

*Lo Pò, D., Braga, R., Massonne, H.-J., Molli, G., Montanini, A., Theye, T.
Fluid-induced breakdown of monazite in medium-grade metasedimentary rocks of the Pontremoli basement (Northern Apennines, Italy)
(2016) Journal of Metamorphic Geology, 34 (1), pp. 63-84. DOI: 10.1111/jmg.12171

*Funari, V., Braga, R., Bokhari, S.N.H., Dinelli, E., Meisel, T.
Solid residues from Italian municipal solid waste incinerators: A source for "critical" raw materials
(2015) Waste Management, 45, pp. 206-216. DOI: 10.1016/j.wasman.2014.11.005

Bianchini, G., Braga, R., Langone, A., Natali, C., Tiepolo, M.
Metasedimentary and igneous xenoliths from Tallante (Betic Cordillera, Spain): Inferences on crust-mantle interactions and clues for post-collisional volcanism magma sources
(2015) Lithos, 220-223, pp. 191-199. DOI: 10.1016/j.lithos.2015.02.011

Ferrero, S., Braga, R., Berkesi, M., Cesare, B., Laridhi Ouazaa, N.
Production of metaluminous melt during fluid-present anatexis: An example from the Maghrebian basement, La Galite Archipelago, central Mediterranean
(2014) Journal of Metamorphic Geology, 32 (2), pp. 209-225. DOI: 10.1111/jmg.12068

Braga, R., Cinelli, G.
The gabbro and serpentized peridotite of Bonassola (Bracco-Levanto ophiolite, Italy) - An extremely low natural radiation area to improve in situ gamma spectrometry
(2014) Ophioliti, 39 (2), pp. 43-49. DOI: 10.4454/ofioliti.v39i2.428

*Lo Pò, D., Braga, R.
Influence of ferric iron on phase equilibria in greenschist facies assemblages: The hematite-rich metasedimentary rocks from the Monti Pisani (Northern Apennines)
(2014) Journal of Metamorphic Geology, 32 (4), pp. 371-387. DOI: 10.1111/jmg.12076

Bianchini, G., Braga, R., Langone, A.
Crustal xenoliths from Tallante (Betic Cordillera, Spain): Insights into the crust-mantle boundary
(2013) Geological Magazine, 150 (5), pp. 952-958. DOI: 10.1017/S001675681300040X
Renna, M.R., Tribuzio, R., Braga, R.
Petrogenetic relationships between peralkaline rhyolite dykes and mafic rocks in the post-Variscan gabbroic complex from Bocca di Tenda (northern Corsica, France)
(2013) Contributions to Mineralogy and Petrology, 165 (6), pp. 1073-1085. DOI: 10.1007/s00410-012-0848-z

Romagnoli, C., Casalbore, D., Bosman, A., Braga, R., Chiocci, F.L.
Submarine structure of Vulcano volcano (Aeolian Islands) revealed by high-resolution bathymetry and seismo-acoustic data
(2013) Marine Geology, 338, pp. 30-45. DOI: 10.1016/j.margeo.2012.12.002

Braga, R., Peddis, F., Perondi, C.
Yellowing of a white granite pavement in urban environment: The Fe-rich patina of Piazza Cavalli, Piacenza (Italy)
(2012) Periodico di Mineralogia, 81 (3), pp. 345-357. DOI: 10.2451/2012PM0020

Braga, R., Massonne, H.-J.
H₂O content of deep-seated orogenic continental crust: The Ulten Zone, Italian Alps
(2012) International Geology Review, 54 (6), pp. 633-641. DOI: 10.1080/00206814.2010.548155
**Langone, A., Braga, R., Massonne, H.-J., Tiepolo, M.
Preservation of old (prograde metamorphic) U-Th-Pb ages in unshielded monazite from the high-pressure paragneisses of the Variscan Ulten Zone (Italy)
(2011) Lithos, 127 (1-2), pp. 68-85. DOI: 10.1016/j.lithos.2011.08.007

Scambelluri, M., Rampone, E., Braga, R., Malaspina, N.
The Variscan garnet peridotites from the Eastern Alps (Ulten Zone): Records of subduction metasomatism in the mantle wedge
(2010) Journal of the Virtual Explorer, 36 DOI: 10.3809/jvirtex.2009.00259

Zibra, I., Kruhl, J.H., Braga, R.
Late Palaeozoic deformation of post-Variscan lower crust: Shear zone widening due to strain localization during retrograde shearing
(2010) International Journal of Earth Sciences, 99 (5), pp. 973-991. DOI: 10.1007/s00531-009-0441-5

Cavazza, W., Braga, R., Reinhardt, E.G., Zanotti, C.
Influence of host-rock texture on the morphology of carbonate concretions in a meteoric diagenetic environment
(2009) Journal of Sedimentary Research, 79 (6), pp. 377-388. DOI: 10.2110/jsr.2009.047

Sapienza, G.T., Scambelluri, M., Braga, R.
Dolomite-bearing orogenic garnet peridotites witness fluid-mediated carbon recycling in a mantle wedge (Ulten Zone, Eastern Alps, Italy)
(2009) Contributions to Mineralogy and Petrology, 158 (3), pp. 401-420. DOI: 10.1007/s00410-009-0389-2

Tribuzio, R., Renna, M.R., Braga, R., Dallai, L.

Petrogenesis of Early Permian olivine-bearing cumulates and associated basalt dykes from Bocca di Tenda (Northern Corsica): Implications for post-collisional Variscan evolution
(2009) Chemical Geology, 259 (3-4), pp. 190-203. DOI: 10.1016/j.chemgeo.2008.10.045

Braga, R., Massonne, H.-J.
Mineralogy of inclusions in zircon from high-pressure crustal rocks from the ulten zone, Italian alps
(2008) Periodico di Mineralogia, 77 (3), pp. 43-64. Cited 10 times. DOI: 10.2451/2008PM0018

Braga, R., Sapienza, G.T.
The retrograde evolution of a dolomite-bearing hydrous peridotite from the Ultен Zone (Italian Alps)
(2007) GeoActa, 6, pp. 37-45. ISSN: 17218039

Braga, R., Massonne, H.-J., Morten, L.
An early metamorphic stage for the Variscan Ultен Zone gneiss (NE Italy): Evidence from mineral inclusions in kyanite
(2007) Mineralogical Magazine, 71 (6), pp. 691-702. DOI: 10.1180/minmag.2007.071.6.691

Giacomini, F., Braga, R., Tiepolo, M., Tribuzio, R.
New constraints on the origin and age of Variscan eclogitic rocks (Ligurian Alps, Italy)
(2007) Contributions to Mineralogy and Petrology, 153 (1), pp. 29-53. DOI: 10.1007/s00410-006-0131-2

Gasperini, D., Bosch, D., Braga, R., Bondi, M., Macera, P., Morten, L.
Ultramafic xenoliths from the Veneto Volcanic Province (Italy): Petrological and geochemical evidence for multiple metasomatism of the SE Alps mantle lithosphere
(2006) Geochemical Journal, 40 (4), pp. 377-404. DOI: 10.2343/geochemj.40.377

Braga, R., Morten, L., Zanetti, A.
Origin of a mica megacryst in an alkaline dyke from the Veneto Volcanic Province, Italy
(2006) European Journal of Mineralogy, 18 (2), pp. 223-231. DOI: 10.1127/0935-1221/2006/0018-0223

Scribano, V., Sapienza, G., Braga, R., Morten, L.
Gabbroic xenoliths in tuff-breccia pipes from the Hyblean Plateau: Insights into the nature and composition of the lower crust underneath South-eastern Sicily, Italy
(2006) Mineralogy and Petrology, 86 (1-2), pp. 63-88. DOI: 10.1007/s00710-005-0092-6

Braga, R., Callegari, A., Messiga, B., Ottolini, L., Renna, M.R., Tribuzio, R.
Origin of prismatic garnet from the Sondalo granulites (Central Alps, northern Italy)
(2003) European Journal of Mineralogy, 15 (2), pp. 393-400. DOI: 10.1127/0935-1221/2003/0015-0393

Braga, R., Giacomini, F., Messiga, B., Tribuzio, R.
The Sondalo Gabbroic complex (Central Alps, Northern Italy): Evidence for emplacement of mantle-derived melts into amphibolite-facies metapelites
(2001) Physics and Chemistry of the Earth, Part A: Solid Earth and Geodesy, 26, pp. 333-342. DOI: 10.1016/S1464-1895(01)00063-1

Co-author of more than 90 abstracts at national and international meetings

Bologna, 8th January 2022

Roberto Braga