

Andrea Giuliani, CV

Nationality and age: Italian, 39
Civil status: Married with two children of 11 and 14
Affiliation: Institute of Geochemistry and Petrology, Department of Earth Sciences, ETH Zurich
E-mail: andrea.giuliani@erdw.ethz.ch
Phone number: +41-446323789
OrcID: 0000-0002-6823-2807
Scopus Author ID: 55413736400
Area of expertise: geochemistry, isotope geology and geochronology, petrology, economic geology

CAREER PATH

I am a Senior Scientist at ETH Zurich where I hold a prestigious *Swiss National Science Foundation Ambizione Fellowship* to undertake fundamental research pertaining the composition and evolution of the deep Earth and the genesis of diamond deposits. I lead a research cluster that currently includes a postdoctoral scholar, two PhD students, a MSc student and a research assistant, and I manage a laboratory for isotope geochemistry in collaboration with other research groups. Before relocating to Switzerland, I led the *Kimberlites and Diamonds (KiDs) research group* at the University of Melbourne, which hosted 5 PhD students, 5 MSc students and a postdoc during its 5 year lifespan. The KiDs group investigated the origin and evolution of mantle-derived diamondiferous magmas (including kimberlites) and their cargoes of diamonds and other mantle fragments. The research activities of the KiDs group were largely financed through competitive grants (e.g., *Australian Research Council DECRA fellowship*; *Marie Curie-Sklodowska European Fellowship*) and funding from the diamond industry (e.g., *research contract with De Beers Group*). The innovative and holistic approach I have adopted to understand the deep Earth and magmas sourced therefrom has been recognised with invited seminars and keynote addresses in international conferences, workshops and seminar series hosted by research institutes worldwide. The results of my collaborative research have been showcased in prestigious international peer-reviewed journals including *Nature* (1), *Science Advances* (2), *Nature Communications* (4), *PNAS* (2) and *Geology* (4) with a total of 77 research articles published to date including 21 published as first author and 28 first-authored by supervised students/postdocs. Some of these articles have been followed up by media interviews and press releases, and recently have been invited to contribute, as leading author, to the *Treatise of Geochemistry (Earth's Interior)* and *Nature Reviews Earth and Environment*. In parallel, I coordinated and lectured an undergraduate subject (Mineralogy, Igneous Petrology and Volcanology) at the University of Melbourne between 2014 and 2019, and I currently jointly coordinate and lecture the MSc subject "Composition and evolution of the Earth and planets" at ETH Zurich. I have also contributed to organise a workshop and 9 scientific sessions at international conferences, and acted as guest editor for 4 volumes published in *Elements*, *Lithos*, *Mineralogy and Petrology*, and *Chemical Geology*.

After early petrological studies of metamorphic rocks for my BSc (2007) and MSc theses (2009), my research interests have shifted to mantle rocks (PhD awarded in December 2013) and progressively expanded to a wide range of research themes including: i) the nature of mantle fluids through direct observations of tiny fluid inclusions in mantle rocks; ii) the composition of the lithospheric mantle beneath continents and its modification via interaction with carbonate-rich melts and fluids, addressed by combining detailed petrological and isotopic investigation; iii) the origin of diamondiferous kimberlites, lamproites, carbonatites and related alkaline magmas, which is pursued through a multidisciplinary approach that embraces mineralogy, petrology, geochemistry, geochronology and geophysical modelling; iv) the evolution of the deep Earth, global geochemical cycles, including those of carbon and volatiles, and mantle dynamics based on the isotopic composition of mantle-derived magmas through time; and v) the genesis of diamond deposits in kimberlites and lamproites, the extraction of base and noble metals from the mantle and their concentration in the crust, and the formation of rare metal mineralisation associated with carbonatites. To address these goals, I have learnt to muster a wide range of analytical methods, pushed the boundaries of existing techniques and explored new methods in isotope geochemistry and geochronology, which will also help address a range of questions in other fields of the geosciences and beyond.

RESEARCH INTERESTS

- Geochemical evolution of Earth's mantle and global cycling of carbon and volatile elements
- Petrogenesis of mantle-derived magmas
- Links between mantle dynamics and magmatic processes
- Formation of diamond, rare metal and other ore deposits
- Application of stable and radiogenic isotope geochemistry to high-temperature processes

EDUCATION

- Mar-2010 – Dec-2013: **PhD**, *Earth Sciences, The University of Melbourne (Australia)*
Thesis: Petrology and Geochemistry of Mantle Xenoliths from the Bultfontein kimberlite (Kimberley, South Africa) Kimberlites: New Insights into Lithospheric Mantle Fluids. *Award:* Best Oral Presentation by young scientist at the 10th International Kimberlite Conference (India, 2012)
- Oct-2007 – Jul-2009: **M.Sc.** (*awarded with distinction*), *Geology, Sapienza University of Rome (Italy)*
Thesis: Red Metagranites from the Gennargentu Igneous Complex (Sardinia).
- Sep-2004 – Jul-2007: **B.Sc.** (*awarded with distinction*), *Earth Sciences, University of Turin (Italy)*
Thesis: Petrographic study of representative rocks from the Western Gneiss Region, Scandinavian Caledonides.
Award: Mention Optime 2008 for excellence in academic studies (Bachelor)

EMPLOYMENT and CAREER BREAKS

- New appointment (starting mid-2024): **Staff Scientist**
Earth and Planets Laboratory, *Carnegie Institution for Science (USA)*
- Jun-2023 – present: **Senior Scientist**
Institute of Geochemistry and Petrology, Department of Earth Sciences, *ETH Zurich* (Switzerland)
- Aug-22: **Assistant Professor in Isotope Geochemistry and Economic Geology - offer declined**
School of Earth Sciences, *University College Dublin* (Ireland)
- Jun-2019 – May-2023: **Swiss National Science Foundation Ambizione Fellow (Senior Scientist)**
Institute of Geochemistry and Petrology, Department of Earth Sciences, *ETH Zurich* (Switzerland)
- July-2016 – Jan-2017: **Marie Curie-Sklodowska Fellow**
Department of Earth Sciences, *VU Amsterdam* (The Netherlands)
- Jun-2015 – Dec-2018: **Australian Research Council DECRA Fellow**
Australian Research Council Centre of Excellence for Core to Crust Fluid Systems (CCFS), Department of Earth and Planetary Sciences, *Macquarie University* (Sydney, Australia)
- Jan-2015 – May-2019: **Igneous Petrology Lecturer**
School of Earth Sciences, *The University of Melbourne* (Australia)
- Jan-2014 – Jan-2015: **Postdoctoral Research Fellow (0.8 FTE due to parental care duties)**
School of Earth Sciences, *The University of Melbourne* (Australia)
- Dec-2013 – Jan-2014: **Career Break for parental care**

GRANTS and AWARDS (total AU\$ 563,000 + €187,000 + CHF 1,159,134)

- 2020: Swiss Federal Institute of Technology – ETH Zurich, **ETH Grant** (CHF 206,800), co-leading investigator, project title: “*Reconstructing primary kimberlite magmas: Combining natural rocks and experimental partition coefficients into true melt compositions*”.
- 2018: Swiss National Science Foundation, **Ambizione Fellowship** (CHF 952,334), individual fellowship, project title: “*A new understanding of kimberlite magmas from deep Earth to diamond mines*”
- 2018: **De Beers Group, Research Contract** (AU\$75,000), leading investigator, project contents: confidential
- 2016: European Commission, **Europlanet 2020 Research Award** (€ ~10,000), leading investigator, project title: “*Carbon isotope evolution of the deep Earth from coupled C-O isotope SIMS measurement of carbonates in kimberlites*”
- 2016: University of Melbourne, **John William Spencer Award** (AU\$ 30,000), leading investigator, project title: “*Towards a fundamentally new approach to diamond exploration*”.

- 2015: European Commission, **Marie Curie-Sklodowska European Fellowship** (€ 177,599), individual fellowship, project title: “*A new approach to revealing the composition of kimberlite melts and their deep mantle source*”.
- 2014: Australian Research Council, **Discovery Early Career Research Award (DECRA) Fellowship** (AU\$ 372,000), individual fellowship, project title: “*A new approach to revealing melting processes in the hidden deep Earth*”.
- 2014: Australian Academy of Sciences, **J.G. Russell Award** (AU\$ 4,000) to the best achieving DECRA awardees.
- 2012: Australian Institute of Mining and Metallurgy, **Bicentennial 88 Gold Endowment** (AU \$1,000), student grant, project title: “*Economic geology implications from the examination of metasomatised mantle xenoliths in kimberlites*”
- 2011: University of Melbourne, **John Hodgson Scholarship** (AU\$ 6,000), student grant, project title: “*Timing of mantle metasomatism: zircon U/Pb vs mica Ar/Ar ages*”.
- 2010: Government of Australia, **International Australia Postgraduate Award** (~AU\$ 90,000); PhD stipend.

PUBLIC LECTURES AND CONFERENCE INVITATIONS

- Aug-23, **keynote speaker**, SGA Conference, Zurich (Switzerland)
- Jan-23, public seminar, Banaras Hindu University, Varanasi (India)
- Oct-22, public seminar (online), Curtin University, Perth (Australia)
- Jun-22, **invited speaker**, Gordon Conference on “Deep Carbon” (US) – cancelled
- May-22, **workshop**, GAC-MAC, Halifax (Canada)
- Mar-22, **invited seminar**, CEED University of Oslo (Norway)
- Mar-22, public seminar (online), Hebrew University of Jerusalem (Israel)
- Oct-21, public seminar, University of Witwatersrand (South Africa)
- Sep-21, public seminar, Andalusian Institute of Earth Sciences (Spain)
- Jun-21, public seminar (online), Utrecht University (Netherlands)
- Jun-21, **invited seminar** (online), SEG Student Chapter, Pontificia Universidad Catolica (Perú)
- Apr-21, **invited seminar** (online), University of Bern (Switzerland)
- Sep-20, **invited seminar** (online), Zhejiang University (China)
- Dec-19, public seminar, University of Münster (Germany)
- Jul-18, public seminar, Université Grenoble Alpes (France)
- Jun-18, public seminar, Cambridge University (UK)
- Jun-18, public seminar, University of Melbourne (Australia)
- Feb-18, public seminar, ETH Zurich (Switzerland)
- Sep-17, **keynote speaker**, 11th International Kimberlite Conference (Botswana)
- Dec-16, public seminar, Free University of Brussels (Belgium)
- Nov-16, public seminar, Goethe University of Frankfurt (Germany)
- Nov-16, public seminar, University of Barcelona (Spain)
- Oct-16, public seminar, CNRS-CRPG (Nancy, France)
- Aug-16, **keynote speaker**, 35th International Geological Congress (Cape Town, South Africa)
- Jun-16, **invited speaker**, International Diamond School 2016 (Edmonton, Canada)
- Nov-15, **invited speaker**, 2nd Lithospheric Dynamics Workshop (Perth, Australia)
- Jul-15, public seminar, University of Cape Town (South Africa)

SUPERVISION OF POSTDOCS AND POSTGRADUATE STUDENTS

Leader of Kimberlites and Diamonds (KiDs) research group (2015-2020)

* denotes students/postdocs previously affiliated with the KiDs group

Current

1. Sep-22 – ... Alice Faccanoni, **M.Sc.** (main supervisor, ETH), *Understanding water contents in kimberlite melts using olivine*
2. Jun-22 – ... Quentin Charbonnier, **postdoc** (main supervisor, ETH), *Trace element and Sr-Nd-Hf isotope analyses of mantle-derived samples by solution*
3. Nov-20 – ... Senan Oesch, **research assistant** (main supervisor, ETH)

4. Oct-20 – ... Rebecca Zech, **PhD** (co-supervisor; ETH), *Reconstructing primary kimberlite magmas: combining natural rocks with experimental partition coefficients into true melt compositions*
5. Mar-20 – ... Soumendu Sarkar, **PhD** (co-supervisor; Melbourne), *Petrogenesis of olivine lamproites: insights from olivine chemistry and Sr-Nd-Hf isotopes*

Past

1. Jan-22 – Mar-23 Gino Sartori, **PhD** (co-supervisor; ETH), *Carbonatites: Immiscibility and elemental plus isotopic fractionation at subvolcanic conditions.*
2. Jan-21 – Sep-22 Simone Marioni, **M.Sc.** (co-supervisor; ETH), *Field, petrological and isotopic constraints on the metasomatic alteration of the Balmuccia ultramafic complex (Ivrea Zone, Italy)*
3. Aug-19 – Jul-22 Angus Fitzpayne, **postdoc** (main supervisor; ETH), *Geochronology and radiogenic isotope geochemistry of kimberlites from Australia and West Africa*
4. Apr-17 – Dec-21 Hayden Dalton*, **PhD** (main supervisor; Melbourne), *Geochemistry and geochronology of Baltic Shield kimberlites and related rocks: Implications for the genesis of kimberlite magmas*
5. Feb-17 – Aug-21 Madeline Tovey*, **PhD** (main supervisor; Melbourne), *Petrological and geochemical constraints on the source to surface evolution and emplacement style of the Lac de Gras kimberlites, Canada*
6. Mar-16 – Jun-20 Eunjoo Choi*, **PhD** (co-supervisor; Western Australia), *New constraints on the 4D architecture of the Yilgarn craton (Western Australia) from the petrology and geochemistry of kimberlites, ultramafic lamprophyres and related rocks*
7. Mar-15 – Feb-20 Ashton Soltys*, **PhD** (main supervisor; Melbourne), *Petrogenesis of the archetypal Kimberley kimberlites (South Africa)*
8. Oct-15 – Jun-19 Angus Fitzpayne*, **PhD** (main supervisor; Melbourne) *New constraints on the genesis of MARID rocks from mineral chemistry, radiogenic (Sr, Nd, Hf, Pb) and stable (O, Th) isotope geochemistry*
9. May-16 – Dec-17 Montgarri Castillo-Oliver*, **Postdoc** (co-supervisor; Macquarie), *Revisiting the C and O isotope composition of carbonates in kimberlites worldwide*
10. Jul-15 – Oct-17 Sarah Misev*, **M.Sc.** (co-supervisor, Melbourne), *Petrogenesis of South-African transitional kimberlites*
11. Feb-16 – Oct-17 Wenyue Zhuo*, **M.Sc.** (main supervisor; Melbourne), *A petrographic and mineral chemical investigation of metasomatised mantle rocks from the lithosphere beneath Southern Africa*
12. Jul-15 – Jul-17 Emilie Lim*, **M.Sc.** (main supervisor; Melbourne), *Complex zoning of olivine in archetypal kimberlites: New insights into the evolution of kimberlite magmas*
13. Jul-15 – Jul-17 Stefan Fenger*, **M.Sc.** (main supervisor; Melbourne), *Kimberlitic megacrysts: A study of fluid inclusions and mantle processes*
14. Feb-15 – Nov-15 Adam B. Abersteiner, **Hons.** (external advisor; Tasmania), *Petrology and melt inclusions characterisation of the Venetia (South-Africa) and Pipe 1 (Finland) kimberlites*
15. Feb-13 – Oct-14 Ashton Soltys, **M.Sc.** (co-supervisor; Melbourne), *Metasomatic processes in the subcontinental lithospheric mantle*

TEACHING

2020 – 2022: **Composition and Evolution of Earth and Planets**, lecturer (modules on *mantle-derived magmatism and global geochemical cycles*), M.Sc. course (ETH Zurich)

2020: **Mineral Resources**, lecturer (guest lecture on *diamond deposits*), M.Sc. course (ETH Zurich)

2015 – 2019: **Earth composition, Minerals and Magmas**, lecturer, field trip instructor and subject coordinator, B.Sc. course (Melbourne); highest score in student satisfaction survey among Earth Science subjects in 2017 and 2018

2014: **Earth composition, Minerals and Magmas**, mineralogy and petrography lab instructor

INSTITUTIONAL RESPONSIBILITIES

2015 – 2019: Supervisor of optical microscopy laboratory (Melbourne)

2015 – 2017: Supervisor of Electron microscopy and in-situ X-ray microanalysis laboratory (Melbourne)

2014: Assistant manager of SEM laboratory (Melbourne)

SERVICE

- Invited contribution to **Treatise of Geochemistry** (3rd edition): *Geochemistry of Kimberlites*
- Invited contribution to **Nature Reviews Earth and Environment**: *Genesis and Evolution of Kimberlites*
- **Volume guest editor**: Elements, Lithos, Mineralogy and Petrology, Chemical Geology
- **Associated editor**: Frontiers in Earth Sciences (Petrology)
- **Editorial board member**: Journal of Petrology
- **Journal Reviewer**: Nature Geoscience, Nature Communications, Science Advances, Plos One, Geology, Earth and Planetary Science Letters, Geophysical Research Letters, Earth-Science Reviews, Terra Nova, Geochimica et Cosmochimica Acta, Chemical Geology, Geochemistry Geophysics Geosystems, Precambrian Research, Lithos, Journal of Petrology, Contributions to Mineralogy and Petrology, Journal of Volcanology and Geothermal Research, Geological Society of America Bulletin, Journal of Geophysical Research; Geoscience Frontiers, Frontiers in Earth Sciences, International Geology Reviews, Ore Geology Reviews, Mineralium Deposita, Journal of Mineralogical and Petrological Sciences, Mineralogy and Petrology, Australian Journal of Earth Sciences, Bulletin of the Geological Society of France
- **Reviewer of grant applications**: German Research Council (DFG), Australian Research Council (ARC), National Science and Engineer Research Council of Canada (NSERC), Austrian Science Foundation (FWF), Czech Science Foundation (GACR)
- **Member of PhD Advisory Committee**: Earth Sciences, Sapienza University of Rome (Italy)

ORGANISATION OF SCIENTIFIC MEETINGS

Workshops and short courses

_ *Entrainment and transport of diamonds from depth: Physical and chemical evidence from mantle indicator minerals, diamonds and kimberlites*, GAC-MAC 2022 (Canada)

Convened sessions in international conferences

_ *The origin and evolution of kimberlite and related magmas*. 12th International Kimberlite Conference, 2024 (Yellowknife, Canada)

_ *The awesome foursome: volatiles, intraplate magmatism, mantle metasomatism and diamonds*. Goldschmidt 2023 (Lyon, France)

_ *Interdisciplinary perspectives on intraplate magmatism, mantle plumes, and the deep Earth – both past and present*, AGU2021 (New Orleans, United States)

_ *Temporal evolution of mantle-derived magmatism and ancient mantle heterogeneities on Earth*, 2021 Goldschmidt conference (virtual conference)

_ *Mantle dynamics, structure and evolution: Combining geochemical, mineralogical and seismological constraints with geodynamics*, EGU 2020 (virtual conference)

_ *Origin and evolution of the continental lithosphere and its metal endowment*, 2019 Goldschmidt conference (Barcelona, Spain)

_ *Mantle xenoliths, kimberlites and related magmas: the diamond trilogy*, XXII Meeting of the International Mineralogical Association, 2018 (Melbourne, Australia)

_ *Magmas and their cargoes as tracers of mantle evolution: Implications for chemical geodynamics*, 2018 Goldschmidt conference (Boston, United States)

_ *The geochemistry of hotspots and intraplate magmas: Mantle sources, metasomatism, magmatic processes and xenolith cargoes*, 2017 Goldschmidt conference (Paris, France)

_ *Mantle-derived intraplate magmas, their xenolith and diamond cargo: Processes, timescales and geodynamic implications*, 2015 Goldschmidt conference (Prague, Czech Republic)

ORGANISATION OF SCIENTIFIC MEETINGS

Workshops and short courses

_ *Entrainment and transport of diamonds from depth: Physical and chemical evidence from mantle indicator minerals, diamonds and kimberlites*, GAC-MAC 2022 (Canada)

Convened sessions in international conferences

_ *The awesome foursome: volatiles, intraplate magmatism, mantle metasomatism and diamonds*. Goldschmidt 2023 (Lyon, France)

- _ *Interdisciplinary perspectives on intraplate magmatism, mantle plumes, and the deep Earth – both past and present*, AGU2021 (New Orleans, United States)
- _ *Temporal evolution of mantle-derived magmatism and ancient mantle heterogeneities on Earth*, 2021 Goldschmidt conference (virtual conference)
- _ *Mantle dynamics, structure and evolution: Combining geochemical, mineralogical and seismological constraints with geodynamics*, EGU 2020 (virtual conference)
- _ *Origin and evolution of the continental lithosphere and its metal endowment*, 2019 Goldschmidt conference (Barcelona, Spain)
- _ *Mantle xenoliths, kimberlites and related magmas: the diamond trilogy*, XXII Meeting of the International Mineralogical Association, 2018 (Melbourne, Australia)
- _ *Magmas and their cargoes as tracers of mantle evolution: Implications for chemical geodynamics*, 2018 Goldschmidt conference (Boston, United States)
- _ *The geochemistry of hotspots and intraplate magmas: Mantle sources, metasomatism, magmatic processes and xenolith cargoes*, 2017 Goldschmidt conference (Paris, France)
- _ *Mantle-derived intraplate magmas, their xenolith and diamond cargo: Processes, timescales and geodynamic implications*, 2015 Goldschmidt conference (Prague, Czech Republic)

MEMBERSHIPS IN SCIENTIFIC SOCIETIES

American Geophysical Union (AGU)
European Association of Geochemistry (EAG)
Geochemical Society

MEDIA COVERAGE

- _ Science et Vie, Jun-2022, Carbone voyage au centre de la terre (in French)
- _ Geochemical News, Mar-2022, <https://multibriefs.com/briefs/gs/GS032222.php>
- _ New Scientist, Feb-2022, <https://www.newscientist.com/article/2311012-burst-of-animal-evolution-altered-chemical-make-up-of-earths-mantle/>
- _ ETH Zurich news, Feb-2022, <https://ethz.ch/en/news-and-events/eth-news/news/2022/03/traces-of-life-in-the-earths-deep-mantle.html>
- _ Geochemical News, Feb-2021, <https://multibriefs.com/briefs/gs/GS020221.php>
- _ ETH Zurich news, Jan-2021, <https://ethz.ch/en/news-and-events/eth-news/news/2021/01/witnesses-to-earths-early-history.html>
- _ Deep Carbon Observatory Newsletter, Nov-2019, <https://deepcarbon.net/all-kimberlites-erupted-same-deep-reservoir>
- _ Physics Today, Oct-2019, <https://physicstoday.scitation.org/doi/10.1063/PT.6.1.20191024a/full/>
- _ Geochemical News, Oct-2019 <http://multibriefs.com/briefs/GS/GS100119.php>
- _ Deep Carbon Observatory Newsletter, Nov-2017, <https://deepcarbon.net/feature/burning-questions-remain-after-discovery-recent-volcanic-eruptions-angola#.WiSMYktx3Vp>
- _ Geochemical News, Apr-2015, <http://multibriefs.com/briefs/GS/GS042815.php>

ANALYTICAL SKILLS

- _ Field-emission and conventional tungsten-source scanning electron microscopy (Philips; Fei Quanta) (*including supervision of new operators*)
- _ Micro-Raman microscopy (*independent user*)
- _ Electron probe micro-analyser (Cameca; Jeol) (*independent user*)
- _ Laser ablation inductively-coupled-plasma mass spectrometry (ICP-MS; Agilent) for trace-element analysis of silicate, oxide and sulfide minerals (*including development of reference materials; independent user*)
- _ Triple quad ICP-MS (Agilent) for Rb/Sr dating (*method development; independent user*)
- _ Multi-collector inductively-coupled-plasma mass spectrometry (Nu Instruments), including laser ablation analysis of radiogenic (Sr, Nd, Hf, Pb) isotopes (*method development; independent user*)

- _ High-resolution secondary-ion mass spectrometry (SIMS – Cameca, SHRIMP) for U-Pb zircon dating, and C, O, S isotope analysis (*including sample preparation; user only*)
- _ Static-mode mass spectrometry (with laser ablation, furnace and crusher sources) for Ar/Ar dating and noble gas analysis (*independent user*)
- _ Clean lab for isotopic and general inorganic geochemistry (*own lab at ETH*)
- _ Handling of radioactive material
- _ Thin section preparation; rock crushing and mineral separation (heavy liquids, magnets, etc)
- _ Python, Matlab

FIELD EXPERIENCE

- _ Diamond mines in southern Africa and Canada
- _ Ultramafic complexes (Italy, Spain, France)
- _ Basaltic scoria cones and flows of the Newer Volcanics, western Victoria, Australia (lecturer)
- _ Granites of central Victoria, Australia (lecturer)
- _ Sedimentary sequences, southeastern Australia (teaching assistant)
- _ Intrusive igneous and metapelitic rocks in the Gennargentu area, Sardinia, Italy (M.Sc. thesis)
- _ Volcanic fields in central and southern Italy (Roman and Campanian provinces, Eolie Islands)
- _ Metamorphic, igneous and sedimentary terrains in north-western Alps, Italy
- _ Sedimentary terrains in the Apennines, central Italy

PUBLICATIONS

VOLUMES edited as guest editor

1. Gonzalez-Jimenez J.M., Aulbach S., Smit K.V., Timmerman S., **Giuliani A.**, Mondal S.K. *Origin and Evolution of the Continental Mantle Lithosphere and its Resource Endowment*, **Lithos**, 2021
2. **Giuliani A.**, Pearson D.G. *Kimberlites from deep Earth to Diamond Mines*. **Elements**, vol. 15(6), 2019
3. Stachel T., Pearson D.G., **Giuliani A.**, Hetman C.M., Jakubec J., Janney P.E., Kjarsgaard B.A., Kobussen A.F., Liu J., Navon O., Rudnick R., Snyder D.B., Nasdala L., 2018. *Proceedings of the 11th International Kimberlite Conference. Mineralogy and Petrology Special Issue*, vol. 112 Supplements 1 and 2, 2018
4. **Giuliani A.**, Tappe S., Rooney T., McCoy-West A., Yaxley G., Mezger K. 2017. *The role of intraplate magmas and their inclusions in Earth's mantle evolution*. **Chemical Geology**, vol. 455, 2017

ARTICLES in peer-reviewed international journals

Published and in press articles: 86 (of which 24 published as first author, 30 first-authored by supervised students/postdocs)

Manuscripts submitted: 5

Total citations: 2911 (Scholar) / 2401 (Scopus)

h-index: 34 (Scholar) / 32 (Scopus)

i10-index: 59 (Scholar) / 57 (Scopus)

I.F. = 1-year Impact Factor of the I.S.I. Web of Knowledge

* denotes articles/manuscripts of supervised postgraduate students

** denotes articles/manuscripts of supervised postdocs

Manuscripts under review

1. **Giuliani A.**, Guillong M., Senan O., Howarth G.H. *Mica Rb-Sr dating by laser ablation ICP-MS/MS using an isochronous calibration material and application to West African kimberlites*. Submitted to **Chemical Geology**
2. Antonelli, M.A., Sartori G., **Giuliani A.**, Schauble E., Hoffmann J., Schmidt M.W. *Calcium isotope fractionation during melt immiscibility and carbonatite petrogenesis*. **Geochemical Perspective Letters**, revision submitted
3. *Sarkar S., **Giuliani A.**, Dalton H., Phillips D., Ghosh S. *Secular thinning of the sub-continental lithospheric mantle: A global perspective from kimberlites and lamproites*. Submitted to **Earth and Planetary Science Letters**
4. Pimenta Silva M, **Giuliani A.**, Schaltegger U., Chiaradia M., Skopeletis A., Schoene B., Ulmer P., Müntener O. *Tracing lower crustal contamination in continental arc magmas using Sr-Nd-Hf isotopes: a combined in-situ and bulk rock approach applied to the Adamello batholith*. Submitted to **Journal of Petrology**
5. Ndimande N., Howarth. G.H., Giuliani A., Janney P., le Roex P., Guillong M., Haggerty S. *Neoproterozoic kimberlite and lamproite magmatism of the Man Craton, Liberia, from a common sub-lithospheric source*. Submitted to **Lithos**

Published articles – complete list

2023

1. **Giuliani A.**, Dalton H., Pearson D.G. *Kimberlites: the deepest geochemical probes of Earth's mantle*. **Treatise of Geochemistry: Earth's Interior** (invited), minor revisions
2. Cai R., Liu J., Pearson D.G., **Giuliani A.**, van Keken P.E., Oesch S. *Widespread PREMA in the upper mantle indicated by sodic basalts*. **Nature Communications**, minor revisions

3. **Giuliani A.**, Schmidt M.W., Torsvik T.H., Fedortchouk Y. *Genesis and evolution of kimberlites*. **Nature Reviews Earth and Environment**, in press (IF = 42.1)
4. **Giuliani A.**, Phillips D., Pearson D.G., Sarkar S., Müller A.A., Weiss Y., Preston R., Seller M., Spetsius Z. *Diamond preservation in the lithospheric mantle recorded by olivine in kimberlites*. **Nature Communications**, in press (IF = 16.6)
5. *Sarkar S., **Giuliani A.**, Dalton H., Phillips D., Ghosh S., Misev S., Maas R. *Derivation of kimberlites and lamproites from a common evolving source in the convective mantle: The case of southern African “transitional kimberlites”*. **Journal of Petrology**, 64(7): egad043 (IF = 4.37)
6. **Fitzpayne A., **Giuliani A.**, Howarth G.H., Peters B.J., Fehr M., Maas R. *Major-, trace-element and Sr-Nd-Hf isotope geochemistry of diamondiferous dykes from Tonguma and Koidu, Sierra Leone: Highly micaceous kimberlites formed by assimilation of metasomatised lithospheric mantle rocks*. **Chemical Geology**, 630: 121475 (IF = 4.69)
7. Antonelli M.A., **Giuliani A.**, Wang Z., Wang M., Zhou L., Feng L., Li M., Zhang Z., Liu F., Drysdale R.N. *Pressure effects and carbonates are not required to explain Ca isotopes in kimberlite magmas*. **Geochimica et Cosmochimica Acta**, 348: 410-427 (IF = 5.92)
8. Pimenta Silva M, Marxer F., Keller T., **Giuliani A.**, Ulmer P., Müntener O. *Alkaline magmas in shallow arc plutonic roots: A field and experimental investigation of hydrous cumulate melting in the Southern Adamello Batholith*. **Contributions to Mineralogy and Petrology**, 178(9): 64 (IF = 3.48)
9. Wang C., Zhang Z., **Giuliani A.**, Bo H., Krmicek L., Li X. *Water contents and hydrogen isotope compositions of amphibole in aillikites from the Tarim large igneous province: Insight into Earth’s deep water cycle*. **GSA Bulletin**, in press, doi: 10.1130/B36906.1 (IF = 5.41)
10. Liu B., Zhang Z., **Giuliani A.**, Xie Q., Kong W., Wang C., Wei B., Ke S., Santosh M., Zhang B., Zhang X., Krmicek L. *A mantle plume connection for alkaline lamprophyres (sannaïtes) from the Permian Tarim large igneous province: Petrological, geochemical and isotopic constraints*. **Journal of Petrology**, 64(2): egad004 (IF = 4.37)
11. Redaa A., Farkas J., Gilbert S., Collins A.S., Löhr S., Vasegh D., Forster M., Blades T., **Giuliani A.**, Maas R., Baldermann A., Dietzel M., Garbe-Schönberg D. *Testing nano-powder and fused-glass mineral reference materials for in-situ Rb-Sr dating of glauconite, phlogopite, biotite and feldspar via LA-ICP-MS/MS*. **Geostandards and Geoanalytical Research**, 47: 23-48 (IF = 4.34)

2022

12. **Giuliani A.**, Drysdale R.N., Woodhead J.D., Planavsky N.J., Phillips D., Hergt J., Griffin W.L., Oesch S., Dalton H., Davies G.R. *Perturbation of the deep-Earth carbon cycle in response to the Cambrian explosion*. **Science Advances**, 8: eabj1325 (IF = 14.1)
13. *Sarkar S., **Giuliani A.**, Phillips D., Howarth G.H., Ghosh S., Dalton H. *Sub-lithospheric melt input in cratonic lamproites*. **Geology**, 50: 1296-1300 (IF = 6.32)
14. *Dalton H., **Giuliani A.**, Hergt J., Phillips D., O’Brien H., Ballmer M., Maas R., Woodhead J.D., *Geodynamic and isotopic constraints on the genesis of kimberlites, lamproites and related magmas from the Finnish segment of the Karelian craton*. **Geochemistry Geophysics Geosystems**, 23: e2021GC010324 (IF = 4.17)
15. *Tovey M., **Giuliani A.**, Phillips D., Nowicki T., Pearson D.G., Fedortchouk Y., Russell J.K.R. *Controls on the emplacement style of coherent kimberlites in the Lac de Gras field, Canada*. **Journal of Petrology**, 63(4): egac028 (IF = 4.52)
16. Wang C., Zhang Z., **Giuliani A.**, Demouchy S., Thoraval C., Krmicek L., Bo H., Zhang W., Xia X. *Hydrogen concentrations and He isotopes in olivine from ultramafic lamprophyres provide new constraints on a wet Tarim plume and Earth’s deep water cycle*. **Journal of Geophysical Research – Solid Earth**, 127: 2022JB024961 (IF = 4.39)
17. Howarth G.H., **Giuliani A.**, Soltys A., Bussweiler Y. *Compositional Variations in Primitive Kimberlite Melts and Entrained Mantle Cargo from a Global Survey of Trace Element Compositions in Kimberlite Olivine*. **Journal of Petrology**, 63(8): egac062 (IF = 4.52)

18. Viljoen A., Howarth G.H., **Giuliani A.**, Fitzpayne A., Costin G. *Correlations between olivine composition and groundmass mineralogy in Sierra Leone kimberlites provide constraints on craton-specific melt-lithosphere interactions.* **Lithos**, 430-431: 106846 (IF = **4.02**)
19. Wang C., Zhang Z., **Giuliani A.**, Liu J., Cai R. *New insights into the mantle source of a large igneous province from highly siderophile element and Sr-Nd-Os isotope compositions of carbonate-rich ultramafic lamprophyres.* **Geochimica et Cosmochimica Acta**, 326: 77-96 (IF = **5.01**)

2021

20. **Giuliani A.**, Jackson M.G., Fitzpayne A., Dalton H. *Remnants of early Earth differentiation in the deepest mantle-derived lavas.* **PNAS**, 118: e2015211118 (IF = **9.41**)
21. Xu J., **Giuliani A.**, Li Q., Lu K., Melgarejo J.C., Griffin W.L. *Light oxygen isotopes in mantle-derived magmas reflects assimilation of sub-continental lithospheric mantle material.* **Nature Communications**, 12: 6295 (IF = **14.9**)
22. Nakanishi N., **Giuliani A.**, Carlson R.W., Horan M.F., Woodhead J.D., Pearson D.G., Walker R.J. *Tungsten-182 evidence for an ancient kimberlite source.* **PNAS**, 118: e2020680118 (IF = **9.41**)
23. **Fitzpayne A., **Giuliani A.**, Magalhaes N., Soltys A., Fiorentini M.L., Farquhar J. *Sulfur isotope constraints on the petrogenesis of kimberlites.* **Geochemistry Geophysics Geosystems**, 22: e2021GC009845 (IF = **3.62**)
24. *Sarkar S., **Giuliani A.**, Ghosh S., Phillips D. *Petrogenesis of coeval lamproites and kimberlites from the Wajrakarur field, southern India: New insights from olivine compositions.* **Lithos**, 406: 106142 (IF = **4.00**)
25. *Tovey M., **Giuliani A.**, Phillips D., Pearson D.G., Sarkar C., Nowicki T., Carlson J. *The spatial and temporal evolution of primitive melt compositions withing the Lac de Gras kimberlite field, Canada: Source evolution vs lithospheric assimilation.* **Lithos**, 392-393: 106142 (IF = **4.00**)
26. *Choi E., Fiorentini M.L., **Giuliani A.**, Foley S.F., Maas R., Graham S. *Petrogenesis of Proterozoic alkaline ultramafic rocks in the Yilgarn craton, Western Australia.* **Gondwana Research**, 93: 197-217 (IF = **6.05**)
27. Wang C., Zhang Z., **Giuliani A.**, Cheng Z., Liu B., Kong W. *Geochemical and O-C-Sr-Nd isotopic constraints on the petrogenetic link between aillikites and carbonatites in the Tarim Large Igneous Province.* **Journal of Petrology**, 62: egab017 (IF = **4.52**)
28. Aulbach S., **Giuliani A.**, Fiorentini M.L., Baumgartner R., Savard D., Kamenetsky V.S., Danyushevsky L., Caruso S., Powell W., Griffin W.L. *Siderophile and chalcophile elements in spinels, sulphides and Ni alloy in strongly metasomatised mantle xenoliths from Bultfontein (South Africa).* **Lithos**, 380-381: 105880 (IF = **4.00**)
29. Gonzalez-Jimenez J.M., Aulbach S., Smit K.V., Timmerman S., **Giuliani A.**, Mondal S.K. *Origin and Evolution of the Continental Mantle Lithosphere and its Resource Endowment: Preface,* **Lithos**, 384-385: 105965 (IF = **4.00**)

2020

30. **Giuliani A.**, Pearson D.G., Soltys A., Dalton H., Phillips D., Foley S.F., Lim E., Goemann K., Griffin W.L., Mitchell R.H. *Kimberlite genesis from a common primary melt modified by lithospheric mantle assimilation.* **Science Advances**, 6: eaaz0424 (IF = **12.8**)
31. Blanks D.E., Holwell D.A., Fiorentini M.L., Moroni M., **Giuliani A.**, Tassara S., Gonzalez-Jimenez J.M., Boyce A.J., Ferrari E. *Fluxing of mantle carbon as a physical agent for metallogenic fertilisation of the crust.* **Nature Communications**, 11: 4342 (IF = **12.1**)
32. Fiorentini M.L., O'Neill C., **Giuliani A.**, Choi E., Maas R., Pirajno F., Foley S.F. *Bushveld superplume drove Proterozoic magmatism and metallogenesis in Australia.* **Scientific Reports**, 10: 19729 (IF = **4.00**)
33. Howarth G.H., **Giuliani A.** *Contrasting types of micaceous kimberlite – lamproite magmatism from the Man craton (West Africa): New insights from petrography and mineral chemistry.* **Lithos**, 362-363: 105483 (IF = **3.91**)
34. *Dalton H., **Giuliani A.**, Phillips D., Hergt J., Maas R., Matchan E. L., Woodhead J.D., O'Brien H. *A comparison of geochronological methods commonly applied to kimberlites and related rocks: three case studies from Finland.* **Chemical Geology**, 558: 119899 (IF = **3.36**)

35. *Soltys A., **Giuliani A.**, Phillips D., Kamenetsky V.S. *Kimberlite metasomatism of the lithosphere and the evolution of olivine in carbonate-rich melts - evidence from the Kimberley kimberlites (South Africa)*. **Journal of Petrology**, 61: egaa062 (IF = **3.45**)
36. *Choi E., Fiorentini M.L., Hughes H.S.R., **Giuliani A.** *Platinum group element and Au geochemistry of Late Archean to Proterozoic calc-alkaline and alkaline magmas in the Yilgarn Craton, Western Australia*. **Lithos**, 374-374: 105716 (IF = **3.39**)
37. **Fitzpayne A., **Giuliani A.**, Hergt J., Woodhead J.D., Maas R. *Isotopic analyses of clinopyroxene demonstrate the effects of mantle metasomatism upon the lithospheric mantle*. **Lithos**, 370-371: 105595 (IF = **3.39**)
38. *Soltys A., **Giuliani A.**, Phillips D. *Apatite composition records divergent melt evolution trajectories in coherent kimberlites caused by different emplacement mechanisms*. **Contributions to Mineralogy and Petrology**, 175: 49 (IF = **3.23**)
39. **Castillo-Oliver M., **Giuliani A.**, Griffin W.L., O'Reilly S.Y., Drysdale R.N., Abersteiner A., Thomassot E., Li X.H. *New constraints on the source, composition and post-emplacement modification of kimberlites from in situ C-O-Sr isotope analyses of carbonates from the Benfontein sills (South Africa)*. **Contributions to Mineralogy and Petrology**, 175: 33 (IF = **3.23**)
40. *Tovey M., **Giuliani A.**, Phillips D., Moss S. *Controls on the explosive emplacement of diamondiferous kimberlites: New insights from hypabyssal and pyroclastic units in the Diavik mine, Canada*. **Lithos**, 360-361: 105410 (IF = **3.91**)
41. *Dalton H., **Giuliani A.**, O'Brien H., Phillips D., Hergt J. *The role of lithospheric heterogeneity on kimberlite magma compositions from a single field: the case of Kaavi-Kuopio, Finland*. **Lithos**, 354: 105333 (IF = **3.91**)
42. *Choi E., Fiorentini M.L., **Giuliani A.**, Foley S.F., Maas R., Taylor W.R. *Subduction-related petrogenesis of late-Archean calc-alkaline lamprophyres in the Yilgarn craton (Western Australia)*. **Precambrian Research**, 338: 105550 (IF = **3.83**)
43. *Fitzpayne A., Prytulak J., **Giuliani A.**, Hergt J. *Thallium content and isotopic composition of phlogopite in mantle-derived MARID and PIC rocks*. **Chemical Geology**, 531: 119347 (IF = **3.62**)

2019

44. **Giuliani A.**, Pearson D.G. *Kimberlites from deep Earth to diamond mines*. **Elements**, 15: 377-380 (IF = **4.34**)
45. **Giuliani A.**, Martin L.A.J., Soltys A., Griffin W.L. *Mantle-like oxygen isotopes in kimberlites determined by SIMS analyses of zoned olivine*. **Geochimica et Cosmochimica Acta**, 266: 274-291 (IF = **4.69**)
46. Woodhead J.D., Hergt J., **Giuliani A.**, Maas R., Phillips D., Pearson D.G., Nowell G. *Kimberlites reveal 2.5 billion year evolution of a deep isolated mantle reservoir*. **Nature**, 573: 578-581 (IF = **43.1**)
47. Holwell, D.A., Fiorentini, M.L., McDonald I., Lu Y., **Giuliani A.**, Smith D.J., Keith M., Locmelis M. *A metasomatised lithospheric mantle control on the metallogenic signature of post-subduction magmatism*. **Nature Communications**, 10: 3511 (IF = **12.35**)
48. Bussweiler Y., **Giuliani A.**, Greig A., Kjarsgaard B.A., Petts D., Jackson S.E., Barrett N., Luo Y., Pearson D.G. *Trace element analyses of high-Mg olivine by LA-ICP-MS – Characterization of natural olivine standards for matrix-matched calibration and application to mantle peridotites*. **Chemical Geology**, 524: 136-157 (IF = **3.57**)
49. Mitchell R.H., **Giuliani A.**, O'Brien H. *What is a kimberlite? Petrology and mineralogy of hypabyssal kimberlites*. **Elements**, 15: 381-386 (IF = **4.34**)
50. *Dalton H., **Giuliani A.**, O'Brien H., Phillips D., Hergt J. *Petrogenesis of a hybrid cluster of evolved kimberlites and ultramafic lamprophyres in the Kuusamo area, Finland*. **Journal of Petrology**, 60: 2025-2050 (IF = **3.38**)
51. *Fitzpayne A., **Giuliani A.**, Harris C., Thomassot E., Cheng C., Hergt J. *Evidence of subduction-related signatures in the southern African lithosphere from the N-O isotopic composition of metasomatic mantle minerals*. **Geochimica et Cosmochimica Acta**, 266: 237-257 (IF = **4.69**)

52. *Fitzpayne A., **Giuliani A.**, Maas R., Hergt J., Janney P., Phillips D. *Progressive metasomatism of the mantle by kimberlite melts: Sr-Nd-Hf-Pb isotope compositions of MARID and PIC minerals*. **Earth and Planetary Science Letters**, 509: 15-26 (IF = 4.58)
53. Abersteiner A., Kamenetsky V.S., Goemann K., Golovin A.V., Sharygin I.S., **Giuliani A.**, Rodemann T., Spetius Z.V., Kamenetsky M. *Djerfisherite in kimberlites and their xenoliths: Implications for kimberlite melt evolution*. **Contributions to Mineralogy and Petrology**, 174: 8 (IF = 3.63)
54. Abersteiner A., Kamenetsky V.S., Goemann K., **Giuliani A.**, Howarth G., Castillo-Oliver M., Thompson J., Kamenetsky M., Cherry A. *Composition and emplacement of the Benfontein Kimberlite Sill Complex: Textural, petrographic and melt inclusion constraints (Kimberley, South Africa)*. **Lithos**, 324-325: 297-314 (IF = 3.86)

2018

55. **Giuliani A.** *Insights into kimberlite petrogenesis and mantle metasomatism from a review of the compositional zoning of olivine in kimberlites worldwide*. **Lithos**, 312-313: 322-342 (IF = 3.86)
56. **Giuliani A.**, Woodhead J., Phillips D., Maas R., Davies G.R. *Titanates of the lindsleyite-mathiasite (LIMA) group reveal isotope disequilibrium associated with metasomatism in the mantle beneath Kimberley (South Africa)*. **Earth and Planetary Science Letters**, 482: 253-264 (IF = 4.58)
57. *Soltys A., **Giuliani A.**, Phillips D. *A new approach to reconstruct the composition of kimberlite parental melts using the archetypical Bultfontein kimberlite (Kimberley, South Africa)*. **Lithos**, 304-307: 1-15 (IF = 3.86)
58. *Fitzpayne A., **Giuliani A.**, Hergt J., Phillips D., Woodhead J.D., Farquhar J., Fiorentini M.L., Drysdale R.N., Wu N. *Kimberlite-related metasomatism recorded in MARID and PIC mantle xenoliths*. **Mineralogy and Petrology (Proceedings of the 11th International Kimberlite Conference)**, 112 Supplement 1: 71-84 (IF = 1.66)
59. *Lim E., **Giuliani A.**, Phillips D., Goemann K. *Origin of complex zoning in olivine from diverse diamondiferous kimberlites and tectonic settings: Ekati (Canada), Alto Paranaíba (Brazil) and Kaalvallei (South Africa)*. **Mineralogy and Petrology (Proceedings of the 11th International Kimberlite Conference)**, 112 Supplement 2: 539-554 (IF = 1.66)
60. *Soltys A., **Giuliani A.**, Phillips D. *Crystallisation sequence and magma evolution of the De Beers dyke (Kimberley, South Africa)*. **Mineralogy and Petrology (Proceedings of the 11th International Kimberlite Conference)**, 112 Supplement 2: 503-518 (IF = 1.66)
61. **Castillo-Oliver M., **Giuliani A.**, Griffin W.L., O'Reilly S.Y. *Characterisation of primary and secondary carbonates in hypabyssal kimberlites: an integrated compositional and Sr-isotopic approach*. **Mineralogy and Petrology (Proceedings of the 11th International Kimberlite Conference)**, 112 Supplement 2: 555-567 (IF = 1.66)
62. *Fitzpayne A., **Giuliani A.**, Hergt J., Phillips D., Janney P. *New geochemical constraints on the origins of MARID and PIC rocks: Implications for mantle metasomatism and mantle-derived potassic magmatism*. **Lithos**, 318-319: 478-493 (IF = 3.86)
63. Gaeta M., **Giuliani A.**, Di Rocco T., Tecchiato V., Perinelli C., Kamenetsky V.S. *Isotopic disequilibrium in migmatitic hornfels of the Gennargentu Igneous Complex (Sardinia, Italy) records the formation of low ⁸⁷Sr/⁸⁶Sr melts from a mica-rich source*. **Journal of Petrology**, 59: 1309-1328 (IF = 4.10)
64. Stachel T., Pearson D.G., **Giuliani A.**, Hetman C.M., Jakubec J., Janney P.E., Kjarsgaard B.A., Kobussen A.F., Liu J., Navon O., Rudnick R., Snyder D.B., Nasdala L., 2018. *Cratons, kimberlites and diamonds: selected papers of the 11th International Kimberlite Conference*. **Mineralogy and Petrology (Proceedings of the 11th International Kimberlite Conference)**, 112 Supplement 1: 1-3 (IF = 1.66)

2017

65. **Giuliani A.**, Campeny M., Kamenetsky V.S., Afonso J.C., Maas R., Melgarejo J.C., Kohn B., Matchan E., Mangas J., Goncalves A.O., Manuel J. *Southwestern Africa on the burner: Pleistocene carbonatitic volcanism linked to deep mantle upwelling beneath Angola*. **Geology**, 45: 971-974, doi 10.1130/G39344.1 (IF = 4.64)

66. **Giuliani A.**, Tappe S., Rooney T., McCoy-West A., Yaxley G., Mezger K. *The role of intraplate magmas and their inclusions in Earth's mantle evolution (editorial)*. **Chemical Geology**, 455: 1-5, doi: 10.1016/j.chemgeo.2017.03.019 (IF = **3.48**)
67. **Giuliani A.**, Soltys A., Phillips D., Kamenetsky V.S., Maas R., Goemann K., Woodhead J.D., Drysdale R., Griffin W.L. *The final stages of kimberlite petrogenesis: petrography, mineral chemistry, melt inclusions and Sr-C-O isotope geochemistry of the Bultfontein kimberlite (Kimberley, South Africa)*. **Chemical Geology**, 455: 342-356, doi: 10.1016/j.chemgeo.2016.10.011 (IF = **3.48**)
68. *Abersteiner A., **Giuliani A.**, Kamenetsky V.S., Phillips D. *Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa*. **Chemical Geology**, 455: 331-341, doi: 10.1016/j.chemgeo.2016.08.029 (IF = **3.48**)
69. Woodhead J.D., Hergt J., **Giuliani A.**, Phillips D., Maas R. *Tracking continental-scale modification of the Earth's mantle using Hf-isotopes in zircon megacrysts*. **Geochemical Perspective Letters**, 4: 1-6, doi: 10.7185/geochemlet.1727 (IF = n.a.)

2016

70. **Giuliani A.**, Fiorentini M.L., Martin L., Farquhar J., Phillips D., Griffin W.L., LaFlamme C. *Sulfur isotope composition of metasomatised mantle xenoliths from the Bultfontein kimberlite (Kimberley, South Africa): contribution from subducted sediments and the effect of sulfide alteration on S isotope systematics*. **Earth and Planetary Science Letters**, 445: 114-124, doi: 10.1016/j.epsl.2016.04.005 (IF = **4.33**)
71. **Giuliani A.**, Phillips D., Kamenetsky V.S., Goemann K. *Constraints on kimberlite ascent mechanism revealed by phlogopite compositions in kimberlites and mantle xenoliths*. **Lithos**, 240-243: 189-201, doi: 10.1016/j.lithos.2015.11.013 (IF = **3.72**)
72. **Giuliani A.**, Foley S. *The geochemical complexity of kimberlite rocks and their olivine populations: A comment on Cordier et al. (2015, Journal of Petrology, 56, 1775-1796)*. **Journal of Petrology**, 57(5): 921-926, doi: 10.1093/petrology/egw026 (IF = **3.77**)
73. *Soltys A., **Giuliani A.**, Phillips D., Kamenetsky V.S., Maas R., Woodhead J.D., Rodeman T. *In-situ assimilation of mantle minerals by kimberlitic magmas – evidence from a garnet wehrlite xenolith entrained in the Bultfontein kimberlite (Kimberley, South Africa)*. **Lithos**, 256-257: 182-196 (IF = **3.72**)

2015

74. **Giuliani A.**, Phillips D., Woodhead J.D., Kamenetsky V.S., Fiorentini M.L., Maas R., Soltys A., Armstrong R.A. *Did diamond-bearing orangeites originate from MARID-veined peridotites in the lithospheric mantle?* **Nature Communications**, 6: 7837, doi: 10.1038/ncomms7837 (IF = **10.74**)
75. Kamenetsky V.S., Mitchell R.H., Maas R., **Giuliani A.**, Gaboury D., Zhitova L. *Chlorine in mantle-derived carbonatite melts revealed by halite in the St.-Honoré intrusion (Quebec, Canada)*. **Geology**, 43(8): 687-690, doi: 10.1130/G36843.1 (IF = **4.96**)

2014

76. **Giuliani A.**, Phillips D., Kamenetsky V.S., Kendrick M.A., Wyatt B.A., Goemann K., Hutchinson G. *Petrogenesis of mantle polymict breccias: Insights into mantle processes coeval with kimberlite magmatism*. **Journal of Petrology**, 55(4): 831-858, doi: 10.1093/petrology/egu008 (IF = **4.49**)
77. **Giuliani A.**, Kamenetsky V.S., Phillips D., Fiorentini M.L., Farquhar J., Kamenetsky M.B., Kendrick M.A. *Stable isotope (C, O, S) compositions of volatile-rich minerals in kimberlites: A review*. **Chemical Geology**, 374-375: 61-83, doi: 10.1016/j.chemgeo.2014.03.003 (IF = **3.48**)
78. **Giuliani A.**, Phillips D., Maas R., Woodhead J.D., Kendrick M.A., Greig A., Armstrong R.A., Chew D., Kamenetsky V.S., Kendrick M.A., Fiorentini M.L. *LIMA U-Pb ages link lithospheric mantle metasomatism to Karoo magmatism beneath the Kimberley region, South Africa*. **Earth and Planetary Science Letters**, 401: 132-147, doi: 10.1016/j.epsl.2014.05.044 (IF = **4.72**)
79. Kamenetsky V.S., Belousova E., **Giuliani A.**, Kamenetsky M.B., Goemann K., Griffin W.L. *Chemical abrasion of zircon and ilmenite megacrysts in the Monastery kimberlite: implications for the composition of kimberlite melts*. **Chemical Geology**, 383: 76-85, doi: 10.1016/j.chemgeo.2014.06.008 (IF = **3.48**)

80. Kamenetsky V.S., Golovin A., Maas R., **Giuliani A.**, Kamenetsky M.B., Weiss Y. *Towards a new model for kimberlite petrogenesis: evidence from unaltered kimberlites and mantle minerals*. **Earth-Science Reviews**, 139: 145-167, doi 10.1016/j.earscirev.2014.09.004 (IF = **7.14**)

2013

81. **Giuliani A.**, Kamenetsky V.S., Kendrick M.A., Phillips D., Goemann K. *Ni-rich metasomatism of the lithospheric mantle by pre-kimberlitic alkali-S-Cl-rich C-O-H fluids*. **Contributions to Mineralogy and Petrology**, 165(1): 155-171, doi 10.1007/s00410-012-0801-1 (IF = **3.48**)
82. **Giuliani A.**, Kamenetsky V.S., Kendrick M.A., Wyatt B.A., Phillips D., Maas R. *Oxide, sulphide and carbonate minerals in a mantle polymict breccia: Metasomatism by protokimberlite magmas, and relationship to the kimberlite megacrystic suite*. **Chemical Geology**, 353: 4-18, doi 10.1016/j.chemgeo.2012.09.025 (IF = **3.15**)
83. **Giuliani A.**, Phillips D., Fiorentini M.L., Maas R., Kendrick M.A., Wing B., Woodhead J.D., Bui T.H., Kamenetsky V.S. *Mantle oddities: A sulphate fluid preserved in a MARID xenolith from the Bultfontein kimberlite (Kimberley, South Africa)*. **Earth and Planetary Science Letters**, 376: 74-86, doi 10.1016/j.epsl.2013.06.028 (IF = **4.35**)
84. Gaeta M., **Giuliani A.**, Perilla S., Misiti V. *Reddish Metagranites from the Gennargentu Igneous Complex (Sardinia, Italy): Insight into metasomatism induced by magma mingling*. **Journal of Petrology**, 54(5): 839-859, doi 10.1093/petrology/egs088 (IF = **4.71**)
85. Kendrick M.A., Honda M., Pettke T., Scambelluri M., Phillips D., **Giuliani A.** *Subduction zone fluxes of halogens and noble gases in seafloor and forearc serpentinites*. **Earth and Planetary Science Letters**, 365: 86-96, doi 10.1016/j.epsl.2013.01.006 (IF = **4.35**)

2012

86. **Giuliani A.**, Kamenetsky V.S., Phillips D., Kendrick M.A., Wyatt B.A., Goemann K. (2012) *Nature of alkali-carbonate fluids in the sub-continental lithospheric mantle*. **Geology**, 40: 967-970, doi 10.1130/G33221.1 (IF = **4.09**)

ABSTRACTS (including conference submissions)

* denotes presentations by supervised postgraduate students

** denotes presentations by supervised postdocs

2023

1. **Giuliani A.**, Phillips D., Pearson D.G., Sarkar S., Weiss Y., Preston. R., Seller M., Spetius Z. *Compositional variations of olivine in kimberlites: A new tool for diamond exploration*. 17th SGA extended abstract.
2. **Giuliani A.**, Guillong M., Oesch S., Maas R., Howarth G.H., Fiorentini M.L. *In-situ Rb-Sr dating of mica: Method refinement and application to mineral resources*. 17th SGA extended abstract.
3. **Giuliani A.**, Guillong M., Maas R., Howarth G.H. *In-situ Rb-Sr dating of mica without employing the MicaMG standard*. Goldschmidt 2023 abstract.
4. *Zech R., **Giuliani A.**, Schmidt M.W. *New constraints on kimberlite melt composition using bulk and groundmass compositions*. Goldschmidt 2023 abstract.
5. Pimenta Silva M., **Giuliani A.**, Schaltegger U., Schoene B., Ulmer P., Müntener O. *Tracking crustal contamination in arc batholiths: the Adamello case study*. Goldschmidt 2023 abstract.
6. *Zech R., **Giuliani A.**, Schmidt M.W. *Trace element partitioning of the main groundmass phases of kimberlite-like melts*. EMPG 2023 abstract.
7. Sarkar S., Dalton H., **Giuliani A.**, Phillips D. *Role of lithospheric mantle assimilation on the volatile contents of lamproites and kimberlites: New insights from olivine and apatite compositions*. IAVCEI 2023 abstract.
8. Ceccato A., Behr W.M., Zappone A., Tavazzani L., Giuliani A. *Tectonics and rheological evolution of the Gotthard nappe (Central Swiss Alps): constraints from integrated field and in-situ petrochronological analyses of the Rotondo granite*. Italian Geological Society conference, abstract.

2022

9. **Giuliani A.**, Drysdale R.N., Woodhead J.D., Planavsky N.J., Phillips D., Hergt J., Griffin W.L., Oesch S., Dalton H., Davies G.R. *Perturbation of the deep-Earth carbon cycle in response to the Cambrian explosion*. EGU 2022 abstract. (session highlight)
10. Wang C., Zhang Z., **Giuliani A.**, Cheng Z., Liu B., Kong W. *Petrogenetic link between aillikites and carbonatites in the Tarim Large Igneous*. Goldschmidt 2022 abstract.
11. *Zech R., **Giuliani A.**, Schmidt M.W. *New constraints on kimberlite melt composition using bulk and groundmass compositions*. Earth Mantle Workshop 2022 abstract.
12. *Marioni S., Galli A., **Giuliani A.**, Schmidt M.W., Ulmer P. *Genesis of the Balmuccia peridotite complex (Ivrea zone, European Southern Alps): an "old" working hypothesis*. Earth Mantle Workshop 2022 abstract.
13. Pimenta Silva M., **Giuliani A.**, Schaltegger U., Schoene B., Ulmer P., Müntener O. *Magmatic Differentiation vs Contamination in Arc Plutons: A new in situ perspective based on Sr isotopes in plagioclase from Adamello (Italy)*. AGU 2022 abstract.

2021

14. **Giuliani A.**, Guillong M., Fitzpayne A., Howarth G. *Emplacement ages of the Man Craton kimberlites (Sierra Leone) from in situ Rb/Sr dating of mica: Methodology and geodynamic implications*. AGU 2021 abstract.
15. **Giuliani A.**, Jackson M.G., Fitzpayne A., Dalton H. *Remnants of early Earth differentiation in the deepest mantle-derived lavas*. Goldschmidt 2021 abstract.
16. Nakanishi N., Carlson R.W., Horan M.F., **Giuliani A.**, Woodhead J.D., Pearson D.G., Walker R.J. *Tungsten-182 and Neodymium-142 evidence for an ancient kimberlite source*. Goldschmidt 2021 abstract.
17. Fiorentini M.L., Caruso S., **Giuliani A.** *A glimpse into the secular change of mantle-derived magmatism at the transition between Neoproterozoic and Paleoproterozoic*. Goldschmidt 2021 abstract.

2020

18. **Giuliani A.**, Koornneef J.M., Barry P., Will P., Busemann H., Maden C., Maas R., Greig A., Davies G.R. *A preliminary assessment of the application of Sr, Nd, Pb, He and N isotope analysis to fluid inclusions in kimberlite olivine: A new approach to trace deep-mantle sources*. EGU 2020 abstract.
19. **Giuliani A.**, Jackson M.G., Fitzpayne A. *The role of FOZO-PREMA in kimberlite genesis*. Goldschmidt 2020 abstract.
20. **Fitzpayne A., Giuliani A., Hergt J., Woodhead J.D., Maas R.** *Isotopic analyses of clinopyroxene in mantle xenoliths demonstrate the effects of mantle metasomatism upon the lithospheric mantle*. EGU 2020 abstract.
21. **Fitzpayne A., Giuliani A., Magalhaes N., Soltys A., Fiorentini M.L., Farquhar J.** *The petrology and sulfur isotopic composition of sulfides and sulfates in the Kimberley kimberlites*. Goldschmidt 2020 abstract.
22. **Dalton H., Giuliani A., Phillips D., Hergt J., Maas R., Woodhead J.D., Matchan E., O'Brien H.** *Kimberlite magmatism in Finland: Distinct sources and links to the breakup of Rodinia*. Goldschmidt 2020 abstract.
23. **Tovey M., Giuliani A., Phillips D., Sarkar C., Pearson D.G., Nowicki T., Carlson J.** *Decoupling of kimberlite source and primitive melt compositions*. Goldschmidt 2020 abstract.

2019

24. **Giuliani A., Martin L.A.J., Soltys A., Griffin W.L.** *Mantle-like oxygen isotopes in kimberlites determined by SIMS analyses of zoned olivine*. Goldschmidt 2019 abstract.
25. **Dalton H., Giuliani A., Phillips D., Hergt J., O'Brien H.** *Petrographic and geochemical variations in the Kaavi-Kuopio kimberlite field, Finland: The role of mantle assimilation*. Goldschmidt 2019 abstract.
26. **Fitzpayne A., Giuliani A., Maas R., Hergt J., Janney P., Phillips D.** *Progressive metasomatism of the mantle by kimberlite melts: Sr-Nd-Hf-Pb isotope compositions of MARID and PIC minerals*. Goldschmidt 2019 abstract.
27. **Holwell, D.A., Fiorentini, M.L., McDonald I., Lu Y., Giuliani A., Smith D.J., Keith M., Locmelis M.** *An SCLM control on the metallogenic DNA of the continental lithosphere*. Goldschmidt 2019 abstract.
28. **Soltys A., Giuliani A., Phillips D.** *Apatite geochemistry provides insights into the late magmatic evolution of kimberlites*. Goldschmidt 2019 abstract.
29. **Tovey M., Giuliani A., Phillips D., Moss S.** *What controls the explosive emplacement of the diamondiferous Diavik kimberlites: New insights from mineral chemistry and petrography of hypabyssal and pyroclastic samples*. Goldschmidt 2019 abstract.

2018

30. **Giuliani A., Soltys A., Lim E., Farr H., Phillips D., Foley S.F., Griffin W.L.** *Olivine, kimberlites and the modification of carbonated melts in the deep Earth*. Goldschmidt 2018 abstract.
31. **Soltys A., Giuliani A., Phillips D.** *Apatite from southern African kimberlites: Petrography and Mineral Chemistry*. International Mineralogical Association 2018, Melbourne (Australia), abstract n. 1130.
32. **Tovey M., Giuliani A., Phillips D.** *Distinguishing coherent kimberlite units of the Ekati Diamond Mine – Implications for emplacement processes and diamond prospecting*. International Mineralogical Association 2018, Melbourne (Australia), abstract n. 1139.
33. **Fitzpayne A., Giuliani A., Maas R., Hergt J., Phillips D., Janney P.** *Sr-Nd-Hf-Pb isotope compositions of MARID and PIC minerals: progressive metasomatism of the mantle by kimberlitic melts*. International Mineralogical Association 2018, Melbourne (Australia), abstract n. 1176.
34. **Dalton H., Giuliani A., O'Brien H., Hergt J., Phillips D.** *Mineral chemistry and petrography of Kuusamo kimberlites and related rocks, Finland*. International Mineralogical Association 2018, Melbourne (Australia), abstract n. 1258.
35. **Farr H., Giuliani A., Phillips D.** *Melt evolution of the Finsch orangeite, South Africa*. International Mineralogical Association 2018, Melbourne (Australia), abstract n. 1284.
36. **Choi E., Fiorentini M.L., Giuliani A., Foley S.F.** *Petrogenesis of alkaline magmas in the Yilgarn Craton, Western Australia: Platinum-group element and mineral geochemistry*. International Mineralogical Association 2018, Melbourne (Australia), abstract n. 1301.

37. **Castillo-Oliver M., **Giuliani A.**, Griffin W.L., O'Reilly S.Y., Drysdale R.N., Ling X., Li X.H. *The origin of carbonates in the Benfontein kimberlite sills: an in situ C-O-Sr approach*. International Mineralogical Association 2018, Melbourne (Australia), abstract n. 1520.
38. **Giuliani A.**, Soltys A., Lim E., Farr H., Phillips D., Foley S.F., Griffin W.L. *Olivine, kimberlites and the modification of carbonated melts in the deep Earth*. 3rd European Mantle Workshop, Pavia (Italy).

2017

39. **Giuliani A.**, Soltys A., Lim E., Farr H., Phillips D., Goemann K., Griffin W.L. *Olivine zoning and the evolution of kimberlite systems*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4916 (**keynote**)
40. **Giuliani A.**, Phillips D., Maas R., Woodhead J.D., Harris C., Fiorentini M.L., Farquhar J., Thomassot E., Cheng C., Fitzpayne A. *Tracing mantle metasomatism using combined stable (C, O, N) and radiogenic (Sr, Nd, Hf, Pb) isotope geochemistry: case studies from mantle xenoliths of the Kimberley kimberlites*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4504
41. *Lim E., **Giuliani A.**, Phillips D. *Complex zoning of olivine in archetypal kimberlites provides new insights into the evolution of kimberlite magmas*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4588
42. *Soltys A., **Giuliani A.**, Phillips D. *Primitive melt composition of the Bultfontein Kimberlite*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4490
43. *Soltys A., **Giuliani A.**, Phillips D. *Apatite from the Kimberley Kimberlites (South Africa): Petrography and Mineral Chemistry*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4491
44. *Fitzpayne A., **Giuliani A.**, Hergt J., Phillips D., Janney P. *New constraints on the origins of MARID and PIC rocks based on mineral and bulk-rock geochemical data: Implication for mantle metasomatism and alkaline magmatism*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4481
45. *Fitzpayne A., **Giuliani A.**, Phillips D., Hergt J., Farquhar J., Drysdale R.N. *Multiple metasomatic events recorded in MARID xenoliths*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4482
46. *Farr H., **Giuliani A.**, Phillips D. *Melt evolution of the Finsch orangeite, South Africa*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4515
47. **Castillo-Oliver M., **Giuliani A.**, Griffin W.L., O'Reilly S.Y., Thomassot E., Drysdale R.N. *New constraints on the origin of carbonates in kimberlites using petrography, mineral chemistry and in situ stable isotope analysis*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4562
48. *Choi E., Fiorentini M.L., **Giuliani A.**, Kemp A., Pirajno F., Foley S. *Mineralogy, Geochemistry, and Petrogenesis of Paleoproterozoic Alkaline Magmas in the Yilgarn Craton, Western Australia*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4451
49. Woodhead J.D., Hergt J., **Giuliani A.**, Phillips D., Maas R. *Tracking continental-scale modification of the Earth's mantle using Hf-isotopes in zircon megacrysts*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4575
50. Phillips D., Zhong D., Matchan E.L., Maas R., Farr H., O'Brien H., **Giuliani A.** *A Comparison of Geochronology Methods Applied to Kimberlites and Related Rocks from the Karelian Craton, Finland*. 11th International Kimberlite Conference, Extended Abstract No. 11IKC-4480
51. **Giuliani A.**, Campeny M., Kamenetsky V.S., Maas R., Melgarejo J.C., Kohn B., Matchan E., Mangas J., Goncalves A.O., Manuel J. *Southwestern Africa on the burner: Pleistocene carbonatitic volcanism linked to mantle upwelling in Angola*. Goldschmidt 2017 abstract.
52. *Fitzpayne A., **Giuliani A.**, Phillips D., Hergt J., Janney P. *New constraints on MARID-PIC mantle metasomatism and their relationship to continental alkaline magmatism*. Goldschmidt 2017 abstract.

2016

53. **Giuliani A.**, Soltys A., Griffin W.L., Foley S., Kamenetsky V.S., Phillips D., Greig A., Goemann K. *Trace element variations across olivine record the evolution of kimberlite melts: Case studies from the Kimberley kimberlites (South Africa)*. 35th International Geological Congress, Cape Town (South Africa), abstract 2265 (**keynote**)

2015

54. **Giuliani A.**, Phillips D., Kamenetsky V.S., Goemann K. *Constraints on kimberlite ascent mechanism revealed by phlogopite in kimberlites and mantle xenoliths*. Goldschmidt 2015, Prague (Czech Republic), abstract 1051
55. *Abersteiner A., **Giuliani A.**, Kamenetsky V.S., Phillips D. *Alkali-carbonate rich melt inclusions in magmatic minerals of the Venetia kimberlite*. Goldschmidt 2015, Prague (Czech Republic), abstract 7
56. Hergt J., Woodhead J.D., Phillips D., **Giuliani A.**, Maas R. *Widespread metasomatism in the sub-African mantle: Fossil evidence from kimberlitic zircon megacrysts*. Goldschmidt 2015, Prague (Czech Republic), abstract 1241

2014

57. **Giuliani A.**, Phillips D., Kamenetsky V.S., Sotlys A. *A mantle xenolith perspective on kimberlite petrogenesis*. Australian Earth Sciences Convention 2014, Newcastle, Geological Society of Australia, Abstracts 110, p.154
58. **Giuliani A.**, Phillips D., Kendrick M.A., Matchan E., Armstrong R.A. *$^{40}\text{Ar}/^{39}\text{Ar}$ dating of phlogopite and amphibole in metasomatised mantle xenoliths: the "rogue" chronometer of mantle events*. Australian Earth Sciences Convention 2014, Newcastle, Geological Society of Australia, Abstracts 110, p.298-299.
59. *Soltys A., **Giuliani A.**, Phillips D., Kamenetsky V.S. *Carbonate metasomatism coeval with kimberlite magmatism in the lithospheric mantle beneath Kimberley (South Africa)*. Australian Earth Sciences Convention 2014, Newcastle, Geological Society of Australia, Abstracts 110, p.300.

2013

60. **Giuliani A.**, Phillips D., Kendrick M.A., Maas R., Greig A., Armstrong R., Felgate M.R., Kamenetsky V.S. *Dating mantle metasomatism: A new tool (U/Pb LIMA titanate) and an impostor ($^{40}\text{Ar}/^{39}\text{Ar}$ phlogopite)*. Mineralogical Magazine, 77(5), p.1178 (Goldschmidt 2013)
61. **Giuliani A.**, Phillips D., Kendrick M.A., Maas R., Greig A., Armstrong R., Felgate M.R., Kamenetsky V.S. *Dating mantle metasomatism by U/Pb and $^{40}\text{Ar}/^{39}\text{Ar}$ methods: which one works better?* 26th Victorian Universities Earth and Environmental Sciences Conference, Geological Society of Australia, Abstracts n.107.

2012

62. **Giuliani A.**, Kamenetsky V.S., Phillips D., Wyatt B.A., Hutchinson G. (2012) *Alkali-carbonate fluids in the lithospheric mantle*. 10th International Kimberlite Conference, Bangalore, India, Extended Abstract n.110.
63. **Giuliani A.**, Kendrick M.A., Phillips D. (2012) *Halogen and Ar geochemistry of metasomatic mantle xenoliths from the Bultfontein Pipe (Kimberley District, South Africa)*. 10th International Kimberlite Conference, Bangalore, India, Extended Abstract n.117.
64. Phillips D., **Giuliani A.**, Jelsma H., Joy S. (2012) *$^{40}\text{Ar}/^{39}\text{Ar}$ analyses of kelyphite: A new approach for dating kimberlites and related rocks*. 10th International Kimberlite Conference, Bangalore, India, Extended Abstract n.107.
65. **Giuliani A.**, Kamenetsky V.S., Kendrick M.A., Phillips D. (2012) *Mobilisation of Ni and transition metals by alkaline volatile-rich fluids and olivine serpentinisation in the sub-cratonic lithospheric mantle*. 34th International Geological Congress, Brisbane, Australia, Abstract n.2705.
66. **Giuliani A.**, Kendrick M.A., Phillips D. (2012) *Halogen recycling through subduction zones revealed by extreme iodine enrichment in olivine from mantle xenoliths of the Bultfontein Kimberlite (Kimberley, South Africa)*. 34th International Geological Congress, Brisbane, Australia, Abstract n.3460.

2011

67. **Giuliani A.**, Wyatt B.A., Phillips D., Kendrick M.A. (2011) *An unusual Polymict Peridotite from Kimberley, South Africa: Insights into mantle metasomatism prior to kimberlite emplacement*. 25th International Union of Geodesy and Geophysics Assembly, Melbourne, Australia, Abstract n.1577.
68. **Giuliani A.**, Gaeta M., Perilla S., Misiti V. (2011) *Red Metagranites of the Gennargentu Igneous Complex: Evidence of SiO_2 - K_2O -rich silicate melt re-mobilisation*. 25th International Union of Geodesy and Geophysics Assembly, Melbourne, Australia, Abstract n.1578.
69. **Giuliani A.**, Phillips D., Kamenetsky V.S., Kendrick M.A., Goemann K. (2011) *Native Ni and Ni-Fe olivine in a Bultfontein mantle xenolith: Evidence of Ni-bearing hydrothermal fluids in the SCLM*. Biennial

Conference of the Specialist Group in Geochemistry, Mineralogy and Petrology, Geological Society of Australia, Murrumarang 2011, p.27.

70. **Giuliani A.**, Phillips D., Woodhead J.D. (2011) *Sr-Ba sulphate veins in a MARID xenolith: mantle origin or crustal contamination?* Biennial Conference of the Specialist Group in Geochemistry, Mineralogy and Petrology, Geological Society of Australia, Murrumarang 2011, p.26.

2010

71. **Giuliani A.** (2010) *Polymict peridotite from Kimberley (South Africa): metasomatic tales from the Kaapvaal lithospheric mantle.* 24th Victorian Universities Earth and Environmental Sciences Conference, Geological Society of Australia, Abstracts n.99.
72. **Giuliani A.**, Gaeta M. (2010) *Thermometamorphism and partial melting of peraluminous granites: a source of K₂O-rich rhyolitic melts.* 24th Victorian Universities Earth and Environmental Sciences Conference, Geological Society of Australia, Abstracts n.99.

2009

73. **Giuliani A.**, Gaeta M. (2009) *Thermometamorphism and partial melting of granitic rocks from Gennargentu Igneous Complex (Sardinia): a source of rhyolitic melts.* HT-HP Laboratory of Experimental Volcanology and Geophysics Annual Report, National Institute of Geophysics and Volcanology, Rome.
74. Gaeta M., **Giuliani A.**, Misiti V. (2009) *Hybrid rocks in the thermometamorphic aureole of the Gennargentu Igneous Complex (Sardinia, Italy).* HT-HP Laboratory of Experimental Volcanology and Geophysics Annual Report, National Institute of Geophysics and Volcanology, Rome.