

# ANNA CIPRIANI

Associate Professor  
Universita' di Modena e Reggio Emilia  
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41100 Modena, Italy

Adjunct Research Scientist  
Lamont-Doherty Earth Obs./Columbia University  
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[anka@ldeo.columbia.edu](mailto:anka@ldeo.columbia.edu)

## EDUCATION

- 2007      **Ph.D.** in Earth and Environmental Sciences, (with major in isotope geochemistry and minors in petrology and marine geology) Columbia University (NY, USA)
- 2004      **M.Phil.** in Earth and Environmental Sciences, Columbia University
- 2002      **“Dottorato di ricerca”** (Doctorate) in Earth Sciences, Università degli studi di Padova (Italy)
- 1997      **“Laurea”** *Cum Laude* in Geological Sciences, Università degli studi di Padova

## WORK AND RESEARCH POSITIONS

- Since 2015      **Associate Professor of Geochemistry, Isotope Geochemistry and Environmental Geochemistry** (*Macrosector 04/GEOS-01 MINERALOGIA, PETROLOGIA, GEOCHIMICA, VULCANOLOGIA, GEORISORSE E APPLICAZIONI; subsector GEOS-01/C Geochimica e vulcanologia*), Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia
- Since 2010      **Adjunct Research Scientist**, Lamont-Doherty Earth Observatory of Columbia University
- 2011-2015      **Research Assistant Professor** (*GEO/08: Geochemistry and Volcanology*), Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia (on maternity leave June 2014-May 2015)
- 2010 –2011      **“Professore a contratto”**, Department of Earth Sciences, University of Modena and Reggio Emilia
- 2007 – 2010      **Postdoctoral Research Scientist**, Lamont-Doherty Earth Observatory (on maternity leave March 2009-March 2010)
- 2001 – 2006      **Faculty Fellow**, Department of Earth and Environmental Sciences and Lamont-Doherty Earth Observatory of Columbia University
- 07/1999-01/2000      **Visiting Scholar**, Lamont-Doherty Earth Observatory of Columbia University

- 09/2000-12/2000     **Visiting Scholar**, Lamont-Doherty Earth Observatory of Columbia University
- 1997-1998            **Research Assistant**, Marine Geology Institute CNR, Italian National Research Council

### ACADEMIC TEACHING POSITIONS

- Since 2015            **Associate Professor of Geochemistry** (Corso di Laurea: SCIENZE GEOLOGICHE, D.M. 270/04) and **Advanced Isotope Geochemistry** (Corso di Laurea Magistrale: Geoscienze, Georischi e Georisorse, D.M. 270/04), Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia.
- 2015-2019            **Associate Professor of Geochemistry** (Corso di Laurea: SCIENZE GEOLOGICHE, D.M. 270/04) and **Environmental Geochemistry** (Corso di Laurea Magistrale: SCIENZE E TECNOLOGIE GEOLOGICHE, D.M. 270/04), Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia.
- 2011-2015            **Assistant Professor of Geochemistry and Environmental Geochemistry**, Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia.
- 2001- 2004            **Graduate Teaching Assistant**, Department of Earth and Environmental Sciences of Columbia University  
Spring 2004, “Principles of Geophysics” (W4941)  
Fall 2003, “Introduction to Mineralogy” (W4113)  
Fall 2001, “Earth's Environmental Systems: The Solid Earth System” (V2000)

### PROFESSIONAL SKILLS AND MANAGEMENT

#### Project management:

- Administrative management at Department level including chairing selection committees, design of new curricula, committees on overall direction of research, relationships with third-party funding sources, etc.
- Principal Investigator in a number of sponsored scientific projects (NSF, ODP, MIUR)
- Scientific collaborator in ERC and MIUR projects
- Writing and budgeting of scientific and laboratory proposals
- Budget management and administration of scientific projects
- Writing of annual progress reports to funding agencies, writing of scientific papers, presentation in international meetings.
- Coordinator of scientific blog: [5000undersea.unimore.it](http://5000undersea.unimore.it)
- Student supervision during formal training experience (*tirocinio*) required by the University of Modena and Reggio Emilia.
- Conducting and acquiring third-party external funding for isotope analysis applied to environmental and earth sciences and paleo-anthropology.

- Drafting of policies related to Safety in the workplace in the Department of Chemical and Geological Sciences of Unimore (2016-2017)
- Design of new core curricula for master degree in Earth Sciences (AA2018-2019)

#### Laboratory management:

- Head of the Isotope geochemistry clean laboratory for wet chemistry and isotope separations at the Dipartimento di Scienze Chimiche e Geologiche of the University of Modena and Reggio Emilia. Setting up of chemistry protocols, quality control, users' training, coordination of laboratory exchanges, scientific lead for external contracts (see below).
- Development of new reference materials and international interlaboratory calibration.
- Budget management and administration of scientific laboratories.
- 2002-2007, Junior Manager of the Thermal Ionization Mass Spectrometer Laboratory at *Lamont Doherty Earth Observatory* (help maintain and run the TIMS, organize scheduling, teach and advice junior students in the group and visiting guest users, particularly on laboratory techniques and running a mass spectrometer).

#### Analytical skills

- Ability to undertake complex separation chemistry with low procedure blanks
- Trace and REE elements: ICPSMS iCAP TQ (Thermo), LA-ICP-MS (UP 213 Laser- New Wave Research coupled with ICP-MS XSeriesII - Thermo Fisher Scientific), Secondary Ion Mass Spectrometry (Cameca 3f and 6f), ICP-OES (DA 4500 Perkin Elmer)
- Th/Pa/U and Rb/Sr, Nd/Sm, Pb, Hf/Lu isotopes: chemical separation by ion chromatography, isotope dilution technique, Thermal Ionization Mass Spectrometer (VG 54-30, Triton), Multi Collector-Inductively Coupled Plasma Mass Spectrometer (Plasma 54, VG Axiom, Neptune, Neptune plus)
- In situ  $^{87}\text{Sr}/^{86}\text{Sr}$ , U/Pb and Hf isotopes analysis by LA-ICPMS and LA-MC-ICPMS (UP 213 Laser- New Wave Research coupled with ICP-MS XSeriesII - Thermo Fisher Scientific and Neptune)
- $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology (VG 5400, sample preparation by heavy liquids)
- Oxygen and Carbon isotopes (IRMS Elementar, Micromass Prism for water samples; UV Laser Fluorination technique for solids)
- Material characterization and Imagery: Optical Microscopy; Electron Microscopy
- Major elements: Electron Microprobe Analyses (Cameca SX100, Jeol JXA 8600), Scanning Electron Microscopy (JEOL)

#### Sea-going experience:

- Two deep sea dives by Nautilie submersible at 5000m depth (IFREMER), SMARTIES 2019
- Chief scientist of an oceanographic cruise to the Central Atlantic Ocean (Logachev 2003) and scientific participant during several other cruises.
- Rock sampling (by ROV, dredging, TV-grab, deep sea drilling, submersible).
- Geophysical data acquisition (by multibeam bathymetry, magnetic and seismic reflection profiles).
- Sediment and water sampling.

#### Computer:

- Excellent knowledge of the Microsoft Office suite, Origin, Adobe Illustrator and Photoshop, Coreldraw. Basic knowledge of Unix. Geochemical modelling based on “MELTS” and “UserCalc: a Web-based U-series Calculator for Mantle Melting Problems”

## RESEARCH PROJECTS AND INTERESTS

- Laboratory standard calibration: calibration of new standard reference materials and laboratory intercomparisons.
- Environmental Geochemistry: provenance and fate of microplastic; geochemical monitoring of honey by trace elements and Pb isotopes; geochemical monitoring of mud volcanoes; the hydrological cycle of water from the isotopic viewpoint with monitoring of aquifers post earthquake sequences.
- Forensic Isotope Geochemistry: forensic application of stable and radiogenic isotopes in anthropological and archeological sciences for human evolution and migration studies (diet, provenance and land use); isotope and metals traceability of compounds and pollution.
- Marine petrology and geology: genesis and evolution of the oceanic lithosphere from elemental and isotope geochemistry of abyssal peridotites, gabbros and basalts, and comparison with geophysical data (Mid Atlantic Ridge, South-West Indian Ridge); effect of long-transform cold regime on crust production and on geochemistry of the oceanic lithosphere (Romanche Fracture Zone and Andrew Bain FZ)
- Mantle geochemistry: Genetic relationship between peridotitic upper mantle and basaltic oceanic crust through isotopic investigations (Mid Atlantic Ridge, South-West Indian Ridge, Oman Ophiolites, Liguride Ophiolites); metasomatic processes in the mantle from isotope geochemistry of peridotite xenoliths from Patagonia and the Italian Southern Alps and of ultramafics from orogenic massifs (the Ivrea Verbano Zone)
- Creation of oceanic basins: geodynamic and geochemical processes occurring during the transition from a continental to an oceanic rift (the Red Sea case)
- Paleoclimate/Paleontology: dating sedimentary sequences by Sr isotope stratigraphy, trace element proxies in marine carbonates for paleoceanographic reconstructions
- Global Land Use: contributing to improve the quality of global land cover maps and competition for land use, see Geo-wiki at <http://www.geo-wiki.org>. #Citizenscience #crowdsourcing

## PROFESSIONAL ACTIVITIES AND OUTREACH

- Since 2017    Lecturer on Earth and Environmental science topics for high school students (ocean seafloor exploration, raw materials, pollution, climate change)
- October 2022    Advanced training for high school science teachers on Hydrothermal systems and deep sea mining resources
- January 2020    Invited lecturer at the UNIMORE conference: “Raw materials” with a talk on “A voyage into the deep ocean. From natural heritage to deep-sea mining resource”

- October 2018 Advanced training for high school science teachers on “How to reconstruct the climate of the past with geochemistry” within the "Climate change: Ecosystems, Biodiversity and Evolution" course of the science museum MUSE (Trento, Italy) and University of Modena and Reggio Emilia.
- 2018 Member of committee in charge of drafting new curriculum of studies for master degree in Geological Sciences at UNIMORE
- October 2017 Lecturer of Forensic Geochemistry for the MEME institute, <http://www.istituto-meme.it/>
- 2016-2017 Member of the Security Board of the Department of Chemical and Geological Sciences (University of Modena and Reggio Emilia).
- Since 2015 Member of the Educational Board of the PhD school M3ES, Models and Methods for Material and Environmental Sciences, University of Modena and Reggio Emilia.
- Since 2014 Member of the Council and Faculty of the PhD school M3ES, Models and Methods for Material and Environmental Sciences, University of Modena and Reggio Emilia.
- 2013 Interviewed by Kerry Skyring from Deutsche Welle's Spectrum radio show (Vienna, Austria) on a new study showing that citizen scientists can make a quality contribution to research  
[http://www.iiasa.ac.at/web/home/resources/multimedia/Podcasts/Citizen\\_Science\\_Deutsche\\_Welle.en.html](http://www.iiasa.ac.at/web/home/resources/multimedia/Podcasts/Citizen_Science_Deutsche_Welle.en.html)
- since 2007 Reviewer for *Nature Geoscience*, *Chemical Geology*, *Earth and Planetary Science Letters*, *Geochemistry-Geophysics-Geosystems*, *Journal of Geophysical Research*, *Journal of Petrology*, *Italian Journal of Geosciences*, *Ofioliti*, *Chemosphere*.
- since 2006 External reviewer of research projects for the *US National Science Foundation* and the *Italian MIUR*
- 2002 Lamont Colloquium Organizing Committee, *Lamont Doherty Earth Observatory* (this weekly seminar sponsored by LDEO and Columbia University provides a lively forum for discussing a wide variety of topics within the earth sciences and related fields).
- 2001-2009 Each year the *Lamont Doherty Earth Observatory* opens its doors for a day in October to communicate what it is done all year on this campus. Most of the buildings and laboratories are open for people to explore and look around. I lead visits to the isotope geochemistry clean laboratories and guided kids in recognizing different rocks.

## RESEARCH PARTNERSHIP

- 9/2024-9/2030 ACCORDO QUADRO per la realizzazione di studi geochimici applicati all'osteoarcheologia e paleoantropologia con Università degli studi di Bologna - Dipartimento di Beni Culturali – Prof. Stefano Benazzi
- 5/2024-5/2029 ACCORDO DI COLLABORAZIONE per la realizzazione di studi geochimici nell'ambito delle ricerche previste dal progetto MOTHERS ERC Starting Grant “MOTHERS – MODelling THE Evolution of the mother-infant RelationshipS“- Prof Alessia Nava, Università di Roma, La Sapienza.

Since 08/2021	ACCORDO DI COLLABORAZIONE per la realizzazione di analisi isotopiche nell'ambito del progetto: "La prima Padova: analisi di mobilità e uso del territorio", Università Ca' Foscari di Venezia – Dipartimento di Studi Umanistici
Since 07/2021	ACCORDO DI COLLABORAZIONE per la realizzazione di attività previste nell'ambito del progetto FARE – Ricerca in Italia (framework per l'attrazione e il rafforzamento delle eccellenze per la ricerca in Italia)" - seconda edizione - prof. Benazzi Stefano – Analisi isotopiche"
Since 05/2020	ACCORDO DI COLLABORAZIONE per la realizzazione di analisi chimiche e isotopiche nell'ambito del progetto: Understanding sapRopel dEposition in shAllow environemEnTs (GREAT) - Istituto di Scienze Polari del Consiglio Nazionale delle Ricerche
Since 01/2020	ACCORDO DI COLLABORAZIONE per la realizzazione di analisi chimiche e isotopiche in campo bio-archeologico, in particolare nel sito denominato Mont'è Prama ed in altri siti archeologici e su materiali di collezioni museali – Dipartimento di Scienze Biomediche, Università degli studi di Sassari.
Since 2017	ACCORDO DI COLLABORAZIONE per la realizzazione di attività previste nell'ambito del progetto H2020 ERC – CONSOLIDATOR GRANT – GA Number 724046 – SUCCESS P.I. prof. Benazzi Stefano – Analisi isotopiche"
Since 2017	ACCORDO DI COLLABORAZIONE per lo studio interdisciplinare dei reperti antropologici da Milazzo – San Papino - Soprintendenza ai Beni Culturali ed Ambientali di Messina.

## GRANTS, AWARDS & FELLOWSHIPS

2023-2028	Scientific Collaborator, Work Package 4, ERC-Synergy grant – LAST NEANDERTHALS – The physical, cultural, and bio-genetic landscape of the last Neanderthals (PI Benazzi, Berna, Barzilai, UNIBO, UNISIE, HAIFA, total grant value 13M €).
2023-2025	co-PI, BANDO PRIN PNRR2022, "CAST Copper Accumulation, Supply, and Technology among Italian prehistoric societies", (PI Cattaneo, UNIBO, total grant value € 253388)
2019-2021	co-PI, BANDO PRIN 2017, "Micro to Macro: disequilibrium processes to unravel the nature of large magmatic events" (PI Coltorti, UniFe, total grant value € 739493).
2017-2022	Scientific Collaborator, Work Package 3, ERC-724046-Consolidator grant - SUCCESS – The earliest migration of Homo Sapiens in Southern Europe – Understanding the biocultural processes that define our uniqueness. (PI Benazzi, UniBO, total grant value 2M €).
2017-2020	Scientific Participant, BANDO PRIN 2015, "Geochemical and isotopic budget of highly metasomatized sub-continental mantle in

the Africa and Europe geodynamic systems: modern and fossile analogues” (PI Conticelli, UniFI, total grant value 538961 Euro).

- 2014-2017 Renewal - Principal Investigator for the Italian MIUR, (Ministro dell’Istruzione, dell’Universita’ e della Ricerca, Programma per giovani ricercatori “Rita Levi Montalcini”, Crustal accretion during the transition from a continental to an oceanic rift (125633 Euro).
- 12/2012 Laureate of the European Commission (AD6-level in the field of Chemistry, Biology and Health Sciences - COM/AD/01-02/10).
- 2011-2014 Principal Investigator for the Italian MIUR (Ministro dell’Istruzione, dell’Universita’ e della Ricerca, Programma per giovani ricercatori “Rita Levi Montalcini”), “Crustal accretion during the transition from a continental to an oceanic rift” (217527 Euro).
- 2008-2011 co-Principal Investigator for the US National Science Foundation, Division of Earth Sciences; “Acquisition of new instrumentation for geochemical studies in the Earth and Environmental Sciences” (1300000\$).
- 2006-2011 Principal Investigator for the US National Science Foundation, Marine Geology and Geophysics Division; “25 Million Years of mantle upwelling below the Mid Atlantic Ridge: the Vema Lithospheric Section revisited” (341334\$).
- 2006 InterRidge outstanding student award, Polar Ridges Meeting and Workshop in Sestri Levante, Italy.
- 2003-2006 Principal Investigator Ocean Drilling Program, Post-cruise science support, ODP Leg 209, JOI/US Science Programs (20169\$).
- 2003-2004 ODP Schlanger Fellowship, Joint Oceanographic Institutions U.S. Science Support Program (23000\$).
- 2002 Italian National Research Council Fellowship.
- 1999-2000 « Fondazione Ing. Aldo Gini » International Fellowship.
- 1999 Universita’ degli studi di Padova, International Fellowship (declined).

## FIELD & SEA GOING EXPERIENCE

- May/June 2022 **Geochemist/Petrologist**, R/V “PourquoiPas?”, Rainbow Hydrothermal Field (Atlantic Ocean). Exploration with ROV Victor6000, multibeam bathymetry with AUV IdefiX, magnetic and gravity profiles, rock sampling.
- July/August 2019 **Geochemist/Petrologist**, R/V “PourquoiPas?”, Romanche Fracture Zone, (Equatorial Atlantic Ocean). Submersible Nautilie dives, multibeam bathymetry, magnetic and gravity profiles, rock sampling.
- February/March 2006 **Geochemist/Petrologist**, R/V “Akademik Strakhov” Leg 23, Andrew Bain Fracture Zone, South West Indian Ridge (Southern Indian Ocean). Multibeam bathymetry, magnetic and seismic reflection profiles, rock sampling.

April/May 2005	<b>Chief scientist</b> , R/V “Professor Logachev” Leg 26, Vema FZ, Mid Atlantic Ridge (Central Atlantic Ocean). Rock sampling.
Dec 2004/Jan 2005	<b>Geochemist/Petrologist</b> , R/V Urania, Red Sea. Multibeam bathymetry, magnetic and seismic reflection profiles, rock/sediment/water sampling.
May/July 2003	<b>Petrologist</b> , R/V Joides Resolution, Ocean Drilling Program Leg 209, Sites 1268-1275, 15°20 FZ, Mid Atlantic Ridge (Central Atlantic Ocean). Rock basement drilling.
October/November 2001	<b>Petrologist</b> , R/V “Akademik Joffe” Leg10, Sierra Leone FZ, Mid Atlantic Ridge (Central Atlantic Ocean). Multibeam bathymetry and water, rock, sediment sampling.
April/July 2000	<b>Petrologist</b> , R/V “Akademik Strakhov” Leg 22, Vema and Saint Paul FZs, Mid Atlantic Ridge (Central Atlantic Ocean). Multibeam bathymetry, magnetic and seismic reflection profiles, rock/sediment/water sampling.
January/March 1998	<b>Petrologist</b> , R/V “Akademik Strakhov” Leg 19, Vema FZ, Mid Atlantic Ridge (Central Atlantic Ocean). Multibeam bathymetry, magnetic and seismic reflection profiles, rock/sediment sampling.
May/July 1996	<b>Petrologist</b> , R/V “Gelendzhik” Leg G96, Romanche FZ, Mid Atlantic Ridge (Equatorial Atlantic Ocean). Multibeam bathymetry, magnetic and seismic reflection profiles, rock/sediment sampling.
March/May 1996	<b>Petrologist</b> , R/V “Gelendzhik” Leg G96, Bouvet Triple Junction Region, Southern Atlantic Ocean). Multibeam bathymetry, magnetic profiles, rock/sediment sampling.
August 2013	Geological fieldwork in the Northern Apennines
January 2007	Geological fieldwork in the Sultanate of Oman
May 2001	Geological fieldwork in Utah (USA)
1992-2018	Extensive geological fieldwork in Italy: Alps and Apennines
May 2018	Mining exploration in the historic Ivrea-Verbano mining district; <a href="http://www.alligatorenergy.com.au/european-ni-co/">http://www.alligatorenergy.com.au/european-ni-co/</a>

## COLLABORATORS

M. Andreani (U. of Lyon) R. Avanzinelli (UNIFI), B. Balestra (American University), S. Benazzi (UNIBO), G. Borghini (UNIMI), E. Bonatti (LDEO/Columbia University), C. Boschi (IGG-CNR), R. Buck (LDEO/Columbia University), R. Carlson (CWI, Carnegie Institution of Washington), C. Class (LDEO/Columbia University), S. Conticelli (UNIFI), L. Corda (Uni Roma, La Sapienza) L. Dallai (Uni Roma, La Sapienza), H. Dick (WHOI), A. Dulai (Hungarian Natural History Museum), J. Escartin (CNRS/ENS PARIS), S. Fritz (IIASA), P. Fumagalli (UNIMI), L. Gasperini (ISMAR-CNR), S. Goldstein (LDEO/Columbia University), S. Hemming (LDEO/Columbia University), C. Hemond (Université de Bretagne Occidentale), A. Hofmann (LDEO/Columbia University, Max Planck), P. Iacumin (UNIPR), B. John (Uni of Wyoming), A. Keimowitz Spodek (Vassar

College); P. Kelemen (LDEO/Columbia University), L. Kocsis (Uni Lausanne), M. Ligi (ISMAR-CNR), F. Lugli (UNIBO), M. Maia (CNRS-Brest), G. Martinelli (ARPAE), P. Montagna (ISMAR-CNR), B. Mougel (UNAM, Mexico), L. Ottolini (IGG-CNR), A. Peyve (Institute of Geology, Russian Academy of Sciences), A. Pertsev (Institute of Geology of Ore Deposits, IGEM, Russian Academy of Science), L. Pizzino (INGV), E. Rampone (Universita' di Genova), F. Ronchetti (UNIMORE), G. Salerno (INGV), A. Sanfilippo (UNIPV), L. See (IIASA), M. Seyler (U. of Lille and CNRS), T Tutken (UNIMAINZ), B. Turrin (Rutgers), A. Zanetti (IGG-CNR).

### PROFESSIONAL SOCIETIES

American Geophysical Union (AGU)

International Association of Geoanalists (IAG)

### LANGUAGES

Italian (mother tongue), English (proficient user), German, Dutch & Russian (basic user)

## PUBLICATIONS

Author and co-Author of more than 80 articles published in international scientific journals and books, peer-reviewed and ranked in the major international databases. Author of more than 100 abstracts reporting data presented as poster or oral communication to national and international meetings. \*denotes PhD student

H index: 30 (Google Scholar); 27 (Scopus);  
Total citations: 3015 (Google Scholar); 2354 (Scopus);

Seghi F, Lugli F, James H.F., Löffelmann T., Armaroli E., Vazzana A., **Cipriani A**, Snoeck C., Benazzi S. (2024) Strontium isotopes and cremation: Investigating mobility patterns in the Roman city of Mutina (north-eastern Italy). *Journal of Archaeological Science: Reports*, 58, 104728.

Armaroli E.\*, Lugli F., **Cipriani A.**, Tütken T. (2024) Spatial ecology of moose in Sweden: Combined Sr-OC isotope analyses of bone and antler. *PLoS one*, 19(4), e0300867.

Columbu, A., Pérez-Mejías, C., Regattieri, E., Lugli, F., Dong, X., Depalmas, A., Melis R., **Cipriani A**, Cheng H., Zanchetta G., De Waele, J. (2024). Speleothems uncover Late Holocene environmental changes across the Nuragic period in Sardinia (Italy): A possible human influence on land use during bronze to post-Iron Age cultural shifts. *QUATERNARY SCIENCE REVIEWS*, 328, 1-19.

Bigi, D., Lugli, S., Manzi, V., Roveri, M., Pashko, P., Milushi, I., Muttoni G., Turco E., **Cipriani A.**, Lugli, F. (2024). The Messinian salinity crisis onset in Albania: An integrated approach by bio-magnetostratigraphy and rock magnetic analyses. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 638, 112036.

Tesi, T., Asioli, A., Massara, E. P., Montagna, P., Pellegrini, C., Nogarotto, A., **Cipriani A.**, Piva A., Muschitiello F., Rovere M., Viaggi P., & Trincardi, F. (2024) Abrupt and persistent shutdown of the thermohaline forcing during MIS5e in the Adriatic Sea: Insights from shallow-water sapropel sediments. *Quaternary Science Advances*, 13, 100134.

Kocsis, L., Rabi, M., Ulianov, A., **Cipriani, A.**, Farkas, I. M., & Botfalvai, G. (2023). Geochemical investigation of the mixed Máriahalom vertebrate fauna at the Paleogene–Neogene boundary in the Central Paratethys: environmental conditions and age constrain. *Swiss Journal of Palaeontology*, 142(1), 17.

Kazlagic A. , M. Rosner , **A. Cipriani** , D. A. Frick , J. Glodny , E. J. Hoffmann , J. M. Hora , J. Irrgeher , F. Lugli , T. Magna , T. C. Meisel , A. Meixner , A. Possolo , A. Pramann , M. J. Pribil , T. Prohaska , A. Retzmann , O. Rienitz , D. Rutherford , G. M. Paula-Santos , M. Tatzel , S. Widhalm , M. Willbold , T. Zuliani and J. Vogl J. (2023) Characterisation of Conventional <sup>87</sup>Sr/<sup>86</sup>Sr Isotope Ratios in Cement, Limestone and Slate Reference Materials Based on an Interlaboratory Comparison Study, *Geostandards and Geoanalytical Research*, Volume 47, Issue 4 p. 821-840.

Vola, G., Ardit, M., Frijia, G., Di Benedetto, F., Fornasier, F., Lugli, F., ... & **Cipriani, A.** (2023) Characterization and Provenance of Carbonate Rocks for Quicklime and Dolomite Production in Twin-Shaft Regenerative Kilns from the Arabian Peninsula and Neighboring Countries. *Minerals*, 13(12), 1500-1.

Piccirilli, E., Sorrentino, R., Lugli, F., Bortolini, E., Silvestrini, S., Cavazzuti, C., Conti S, Czifra S, Gyenesei K, Köhler K, Tankó K., Vezzana A, Jerem E., **Cipriani A.**, Gottarelli A., Belcastro MG, Hajdu T., Benazzi, S. (2023). New insights on Celtic migration in Hungary and Italy through the analysis of non-metric dental traits. *PLoS ONE*, 18(10), e0293090-e0293090.

**Cipriani A.**, Giovanardi, T., Mazzucchelli, M., Lugli, F., Sforza, M. C., Gualtieri, A. F., Di Giuseppe, D.; Gaeta, M., Brunelli, D. (2023). Origin of a carbonate-bearing fluorapatite from Tertiary volcanics of the Veneto Volcanic Province, Italy. *Mineralogy and Petrology*, 117(3), 573-594.

Gigante, M., Mazzariol, A., Bonetto, J., Armaroli, E., **Cipriani A.**, Lugli, F. (2023). Machine learning-based Sr isoscape of southern Sardinia: A tool for bio-geographic studies at the Phoenician-Punic site of Nora. *PLoS one*, 18(7), e0287787.

Giovanardi, T., da Costa, P. C. C., Girardi, V. A., Weska, R. K., Vasconcelos, P. M., Thiede, D. S., Mazzucchelli M., **Cipriani, A.** (2022). Age, geochemistry and mantle source of the Alto Diamantino basalts: Insights on NW Paraná Magmatic Province. *Lithos*, 426, 106797.

Garbelli C., **Cipriani A.**, Brand U., Lugli F., Posenato R. (2022) Strontium isotope stratigraphic insights on the end-Permian mass extinction and the Permian-Triassic boundary in the Dolomites (Italy), *Chemical Geology*, Volume 605, 2022, doi: 10.1016/j.chemgeo.2022.120946

Kocsis L, Briguglio A, **Cipriani A**, Frijia G, Vennemann T, Baumgartner C, Roslim A. (2022) Strontium isotope stratigraphy of late Cenozoic fossiliferous marine deposits in North Borneo (Brunei, and Sarawak, Malaysia). *Journal of Asian Earth Sciences*. 2022 Jun 15;231:105213.

Vescogni A, Guido A, **Cipriani A**, Gennari R, Lugli F, Lugli S, Manzi V, Reghizzi M, Roveri M (2022) Palaeoenvironmental setting and depositional model of upper Messinian microbialites of the Salento Peninsula (Southern Italy): A central Mediterranean Terminal Carbonate Complex. *Palaeogeography, Palaeoclimatology, Palaeoecology*, doi: 10.1016/j.palaeo.2022.110970.

Bertotto GW, Mazzucchelli M, Giovanardi T, Conceição RV, Zanetti A, Schilling ME, Bernardi MI, Ponce AD, Jalowitzki T, Gervasoni F, **Cipriani A.** (2022) Mantle Xenoliths from Huanul Volcano (Central-West Argentina): A Poorly Depleted Mantle Source under Southern Payenia. *Geosciences*. 2022 Apr 1;12(4):157.

Berio LR, Mitterpergher S, Storti F, Bernasconi SM, **Cipriani A**, Lugli F, Balsamo F. Open-closed-open paleofluid system conditions recorded in the tectonic vein networks of

the Parmelan anticline (Bornes Massif, France). *Journal of the Geological Society*. 2022 Mar 15.

Lugli F, **Cipriani A**, Bruno L, Ronchetti F, Cavazzuti C, Benazzi S (2022) A strontium isoscape of Italy for provenance studies. *Chemical Geology*, doi: 10.1016/j.chemgeo.2021.120624.

Le Roux V, Urann B.M., Brunelli D., Bonatti E., **Cipriani A**, Demouchy S, and Monteleone B.D. "Postmelting hydrogen enrichment in the oceanic lithosphere." *Science Advances* 7, no. 24 (2021): eabf6071, 2021

Borghini G, Rampone E, Class C, Goldstein S, Cai Y, **Cipriani A**, Hofmann AW, Bolge L. Enriched HfNd isotopic signature of veined pyroxenite-infiltrated peridotite as a possible source for E-MORB. *Chemical Geology*. 2021 Dec 30;586:120591.

Sabbatino, M., Tavani, S., Vitale, S., Ogata K., Corradetti A., Consorti L, Arienzo I, **Cipriani A.**, Parente M. "Forebulge migration in the foreland basin system of the central-southern Apennine fold-thrust belt (Italy): New high-resolution Sr-isotope dating constraints." *Basin Research* 33, no. 5 (2021): 2817-2836, 2021

Argentino C., Lugli F., **Cipriani A.**, Panieri G.. "Testing miniaturized extraction chromatography protocols for combined Sr-87/Sr-86 and delta Sr-88/(86) analyses of pore water by MC-ICP-MS." *LIMNOLOGY AND OCEANOGRAPHY-METHODS*, 2021

Elmi C, **Cipriani A**, Lugli F, Sighinolfi G. Insights on the Origin of Vitriified Rocks from Serravuda, Aciri (Italy): Rock Fulgurite or Anthropogenic Activity?. *Geosciences*. 2021 Dec;11(12):493.

Bertotto, G. W., Mazzucchelli M, Zanetti A, Ponce AD, Giovanardi T, Brunelli D, Bernardi MI, Hémond C, **Cipriani A**. "Mantle heterogeneities produced by open-system melting and melt/rock reactions in Patagonian extra-Andean backarc mantle (Paso de Indios, Argentina)." *Journal of South American Earth Sciences* 106 (2021): 103002, 2021

Nava A, Lugli F, Romandini M, Badino F, Evans D, Helbling A, Oxilia G, Arrighi S, Bortolini E, Delpiano D, Duches R, Figus C, Livraghi A, Marciani G, Silvestrini S, **Cipriani A**, Giovanardi T, Pini R, Nannini N, Tuniz C, Bernardini F, Dori I, Coppa A, Cristiani E, Dean C, Bondioli L, Peresani M, Müller W, Benazzi S (2020) Early life of Neanderthals. *PNAS*, doi: 10.1073/pnas.2011765117, 2020

Sighinolfi G.P, Lugli F., Piccione F., De Michele V., **Cipriani A.**, Terrestrial target and melting site of Libyan Desert Glass: new evidence from trace elements and Sr isotopes, *Meteoritics & Planetary Science*, First published: 04 September 2020, <https://doi.org/10.1111/maps.13550>, 2020

Benazzi S, Arrighi S, Badino F, Bortolini E, Figus C, Lugli F, Marciani G, Oxilia G, Romandini M, Silvestrini S, Boscato P. **Cipriani A.**, Moroni A., Negrino F, Peresani M., Pini R., Ravazzi C., Ronchitelli A., Spinapolice E., 2020 A focus on the Middle to Upper Palaeolithic transition in the Mediterranean area. In *Peopling dynamics in the*

Mediterranean area between 45 and 39 ky ago: state of art and new data. Edited by Stefano Benazzi, Dusan Boric, *Quaternary International*, Volume 551, Pages 1-6 (20 June 2020)

Brunelli, D., Sanfilippo, A., Bonatti, E., Skolotnev, S., Escartin, J., Ligi, M., Ballabio, G. and **Cipriani, A.**, 2020. Origin of oceanic ferrodiorites by injection of nelsonitic melts in gabbros at the Vema Lithospheric Section, Mid Atlantic Ridge. *Lithos*, 105589, 2020

Lugli F, Weber M, Giovanardi T, Arrighi S, Bortolini E, Figus C, Marciani G, Oxilia G, Romandini M, Silvestrini S, Jochum KP, Benazzi S, **Cipriani A.** Fast offline data reduction of laser ablation MC-ICP-MS Sr isotope measurements via the interactive Excel-based spreadsheet 'SrDR'. *Journal of Analytical Atomic Spectrometry*, doi: 10.1039/C9JA00424F, 2020

Sabbatino, M., Vitale, S., Tavani, S., Consorti, L., Corradetti, A., **Cipriani, A.**, Arienzo, I. and Parente, M., 2020. Constraining the onset of flexural subsidence and peripheral bulge extension in the Miocene foreland of the southern Apennines (Italy) by Sr-isotope stratigraphy. *Sedimentary Geology*, 401, p.105634, 2020

Cerchiari A, Remitti F, Mitterpergher S, Festa A, Lugli F, **Cipriani A.** Cyclical variations of fluid sources and stress state in a shallow megathrust zone mélange. *Journal of the Geological Society*, doi: 10.1144/jgs2019-072, 2020

Kocsis L., Dulai A., **Cipriani A.**, Vennemann T., Yunsi M., Geochemistry of recent and fossil brachiopod calcite of *Megathiris detruncata* (Terebratulida, Megathyrididae): a modern baseline study to trace past environmental conditions, *CHEMICAL GEOLOGY*, 533, 119335, ISSN 0009-2541, <https://doi.org/10.1016/j.chemgeo.2019.119335>, 2020

Li, P., Xia, Q., Dallai, L., Brunelli D., Bonatti E., **Cipriani A.**, Ligi M., High H<sub>2</sub>O Content in Pyroxenes of Residual Mantle Peridotites at a Mid Atlantic Ridge Segment. *SCIENTIFIC REPORTS* 10, 579. <https://doi.org/10.1038/s41598-019-57344-4>, 2020

Arrighi S, Bortolini E, Tassoni L, Benocci A, Manganelli G, Spagnolo V, Foresi LM, Bambini AM, Lugli F, Badino F, Aureli D, Boschini F, Figus C, Marciani G, Oxilia G, Silvestrini S, **Cipriani A.**, Romandini M, Peresani M, Ronchitelli A, Moroni A, Benazzi S (2020) Backdating systematic shell ornament making in Europe to 45,000 years ago. *Archaeological and Anthropological Sciences* 12, 59, 2020

Lugli F., Giulia Di Rocco, Antonino Vazzana, Filippo Genovese, Diego Pinetti, Elisabetta Cilli, Maria Cristina Carile, Sara Silvestrini, Gaia Gabanini, Simona Arrighi, Laura Buti, Eugenio Bortolini, **Cipriani A.**, Carla Figus, Giulia Marciani, Gregorio Oxilia, Matteo Romandini, Rita Sorrentino, Marco Sola & Stefano Benazzi, Enamel peptides reveal the sex of the Late Antique 'Lovers of Modena', *SCIENTIFIC REPORTS* 9, 13130. <https://doi.org/10.1038/s41598-019-49562-7>, 2019

Argentino C, Lugli F, **Cipriani A.**, Conti S, Fontana F, A deep fluid source of radiogenic Sr and highly dynamic seepage conditions recorded in Miocene seep carbonates of the northern Apennines (Italy), *CHEMICAL GEOLOGY*, 522, pp. 135-147, 2019

Lugli F, **Cipriani A**, Capecchi G, Ricci S, Boschini F, Boscato P, Iacumin P, Badino F, Mannino MA, Talamo S, Richards MP, Benazzi S, Ronchitelli A, Strontium and stable isotope evidence of human mobility strategies across the Last Glacial Maximum in southern Italy. *NATURE ECOLOGY & EVOLUTION*, doi: 10.1038/s41559-019-0900-8, 2019

Lugli, F.\* & **Cipriani, A.**, Comment on: metals in bones of the middle-aged inhabitants of Sardinia island (Italy) to assess nutrition and environmental exposure [Bocca et al. (2018), *Environ Sci Pollut Res*], *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, pp 1–5, <https://doi.org/10.1007/s11356-018-3330-2>, 2018

Brunelli D., **Cipriani A**, Bonatti E., Thermal effects of pyroxenites on mantle melting below mid-ocean ridges, *NATURE GEOSCIENCE*, Volume 11, Issue 7, Pages 520-525, 1 July 2018

Lugli, F.\*, **Cipriani, A.**, Tavaglione, V., Traversari, M., Benazzi, S., Transhumance pastoralism of Roccapelago (Modena, Italy) early-modern individuals: Inferences from Sr isotopes of hair strands, *AMERICAN JOURNAL OF PHYSICAL ANTHROPOLOGY*, doi: 10.1002/ajpa.23643, June 2018

Giovanardi, T., Mazzucchelli, M., Lugli, F.\*, Girardi, V.A.V.a Correia, C.T., Tassinari, C.C.G., **Cipriani, A.**, Isotopic constraints on contamination processes in the Tonian Goiás Stratiform Complex, *LITHOS*, Volume 310-311, pp. 136-152, June 2018

Sorrentino, R., Bortolini, E., Lugli, F.\*, Mancuso, G., Buti, L., Oxilia, G., Vazzana, A., Figus, C., Serrangeli, M.C., Margherita, C., Penzo, A., Gruppioni, G., Gottarelli, A., Jochum, K.P., Belcastro, M.G., **Cipriani, A.**, Feeney, R.N.M., Benazzi, S., Unravelling biocultural population structure in 4th/3rd century BC Monterenzio Vecchio (Bologna, Italy) through a comparative analysis of strontium isotopes, non-metric dental evidence, and funerary practices, *PLoS ONE*, Open Access, Volume 13, Issue 3, March 2018

Ligi, Marco; Bonatti, Enrico; Bosworth, William; Cai, Yue; **Cipriani, A.**; Palmiotto, Camilla; Ronca, Sara; Seyler, Monique - Birth of an ocean in the Red Sea: Oceanic-type basaltic melt intrusions precede continental rupture, *GONDWANA RESEARCH* - n. volume 54 - pp. 150 -160 ISSN: 1342-937X, 2018

Weber M., Lugli F.\*, Jochum K.P., **Cipriani A.**, Scholz D., Calcium carbonate and phosphate reference materials for monitoring bulk and microanalytical analysis of Sr isotopes, *GEOSTANDARDS AND GEOANALYTICAL RESEARCH*, 42(1) pp. 77-89, doi: 10.1111/ggr.12191, 2018

Laso Bayas, Juan Carlos; Lesiv, Myroslava; Waldner, François; Schucknecht, Anne; Duerauer, Martina; See, Linda; Fritz, Steffen; Fraisl, Dilek; Moorthy, Inian; McCallum, Ian; Perger, Christoph; Danylo, Olha; Defourny, Pierre; Gallego, Javier; Gilliams, Sven; Akhtar, Ibrar Ul Hassan; Baishya, Swarup Jyoti; Baruah, Mrinal; Bungnamei, Khangsembou; Campos, Alfredo; Changkakati, Trishna; **Cipriani, A.** et al. - A global reference database of crowdsourced cropland data collected using the Geo-Wiki platform - *SCIENTIFIC DATA* 4, pp. 1-10 ISSN: 2052-4463, 2017

Lugli, Federico\*; **Cipriani, A.**; Arnaud, Julie; Arzarello, Marta; Peretto, Carlo; Benazzi, Stefano - Suspected limited mobility of a Middle Pleistocene woman from Southern Italy: strontium isotopes of a human deciduous tooth - *SCIENTIFIC REPORTS* 7, 1-8 ISSN: 2045-2322, 2017

Giovanardi, Tommaso; Girardi, Vicente A.V.; Correia, Ciro T.; Tassinari, Colombo C.G.; Sato, Kei; **Cipriani, Anna**; Mazzucchelli, Maurizio - New U-Pb SHRIMP-II zircon intrusion ages of the Cana Brava and Barro Alto layered complexes, central Brazil: constraints on the genesis and evolution of the Tonian Goiás Stratiform Complex – *LITHOS*, 282-283, pp. 339 - 357 ISSN: 0024-4937, 2017

Lugli, Federico\*; **Cipriani, Anna** - Commentary on “Analyses of human dentine and tooth enamel by laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) to study the diet of medieval Muslim individuals from Tauste (Spain)” by Guede et al. 2017, *Microchemical Journal* 130, 287–294 - *MICROCHEMICAL JOURNAL* 133, pp. 67-69, DOI: 10.1016/j.microc.2017.03.017, 2017

Gasparini, Luca; Bonatti, Enrico; Borsetti, Anna Maria; Capotondi, Lucilla; **Cipriani, Anna**; Negri, Alessandra - Timing of transverse ridge uplift along the Vema transform (Central Atlantic) - *MARINE GEOLOGY* 385, pp. 228 - 232 ISSN: 0025-3227, 2017

Lugli F.\*, **Cipriani A.**, Peretto C., Mazzucchelli M., Brunelli D., In situ high spatial resolution  $^{87}\text{Sr}/^{86}\text{Sr}$  ratio determination of two Middle Pleistocene (c.a. 580 ka) *Stephanorhinus hundsheimensis* teeth by LA–MC–ICPMS, *International Journal of Mass Spectrometry*, 412(C):38–48, DOI: 10.1016/j.ijms.2016.12.012, 2017

Lugli F.\*, Brunelli D., **Cipriani A.**, Bosi G., Traversari M., Gruppioni G., C4-plant foraging in Northern Italy: stable isotopes, Sr/Ca and Ba/Ca data of human osteological samples from Roccapelago (16 th –18 th century AD), *Archaeometry*, DOI: 10.1111/arc.12295, 2017

Mazzucchelli M., **Cipriani A.**, Christophe Hémond, Alberto Zanetti, Gustavo Walter Bertotto, Carlos Alberto Cingolani, Origin of the DUPAL anomaly in mantle xenoliths of Patagonia (Argentina) and geodynamic consequences, *Lithos*, 248–251, April 2016, pp 257-271, 2016

Borghini G., Rampone E., Zanetti A., Class, C., **Cipriani, A.**, Hofmann A.W., Goldstein S., Pyroxenite layers in the Northern Apennines Upper Mantle (Italy): Generation by Pyroxenite Melting and Melt-infiltration, *Journal of Petrology*, 10.1093/petrology/egv074, 2016

Pertsev A.N., Leonid Y Aranovich, Vsevolod Y Prokofiev, Nikolay S Bortnikov, **Anna Cipriani**, Sergey S Simakin, Sergey E Borisovskiy, Signatures of Residual Melts, Magmatic and Seawater-Derived Fluids in Oceanic Lower-Crust Gabbro from the Vema Lithospheric Section, Central Atlantic, *Journal of Petrology* 56 (6), 1069-1088, 2015

Bonatti E., **A. Cipriani**, L. Lupi, The Red Sea: Birth of an Ocean, in “*The Red Sea: The Formation, Morphology, Oceanography and Environment of a Young Ocean Basin*”, edited by Najeeb M.A. Rasul, Ian C.F. Stewart, Springer, pp 29-44, 2015

Fritz S., L. See, I. McCallum, Liangzhi You, A. Bun, E. Moltchanova, M. Duerauer, F. Albrecht, C. Schill, C. Perger, P. Havlik, A. Mosnier, P. Thornton, U. Wood-Sichra, M. Herrero, I. Becker-Reshef, C. Justice, M. Hansen, P. Gong, S. Abdel Aziz, **A. Cipriani** et al., Mapping global cropland and field size, *Global change biology* 21 (5), 1980-1992, 2015

See L., Schepaschenko D., Lesiv M., McCallum I., Fritz S., Comber A., Perger C., Schill C., Zhao Y., Maus V., Siraj M. A., Albrecht F., **Cipriani A.**, et al., Building a hybrid land cover map with crowdsourcing and geographically weighted regression, *ISPRS Journal of Photogrammetry and Remote Sensing*, 2015/5/1, Volume 103, pp. 48-56

Giovanardi Tommaso, Mazzucchelli Maurizio, Zanetti Alberto, Langone Antonio, Tiepolo Massimo, **Cipriani A.**, Occurrence of Phlogopite in the Finero Mafic Layered Complex, *Central European Journal of Geosciences*, Volume 6, Issue 4, pp 588-613 December 2014

Vescogni A., Bosellini F.R., **Cipriani A.**, Gurler G., Ilgar A., Paganelli E. The Dağpazarı carbonate platform (Mut Basin, Southern Turkey): facies and environmental reconstruction of a coral reef system during the Middle Miocene Climatic Optimum. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Volume 410, Pages 1-422, 15 September 2014

Palmiotto Camilla, Laura Corda, Marco Ligi, **A. Cipriani**, Henry J. B. Dick, Eric Douville, Luca Gasperini, Paolo Montagna, François Thil, Anna Maria Borsetti, Barbara Balestra and Enrico Bonatti, Non-volcanic tectonic islands in ancient and modern oceans, *Geochemistry Geophysics Geosystems*, DOI: 10.1002/ggge.20279, 2013

Pertsev A., Aranovich L., Prokofiev V., Bortnikov N., **Cipriani A.**, High-Salinity Seawater-Derived Fluids and Lower-Crust Hydrothermal Mineralization at the Vema Lithospheric Section, Central Atlantic, *PROCEDIA EARTH AND PLANETARY SCIENCE*, n. volume 7 - pp. da 677 a 680 ISSN: 1878-5220, 2013

Borghini G., Rampone E., Zanetti A., Class, C., **Cipriani, A.**, Hofmann A.W., Goldstein S., Global scale upper mantle Nd isotopic heterogeneity on a meter scale in veined Ligurian peridotites, October 2013, v. 41, p. 1055-1058, doi:10.1130/G34438.1, *Geology*, 2013

Boschi C., Bonatti E., Ligi M., Brunelli D., **Cipriani A.**, Dallai L., D'Orazio M., Fruh-Green G.L., Tonarini S., Barnes J.D., Bedini M.R., Serpentinization of Mantle Peridotites along an Uplifted Lithospheric Section, Mid Atlantic Ridge at 11° N, vol. 178 September 15, 2013., p. 3-23, *Lithos*, 2013

Fritz S., L. See, M. van der Velde, R. Nalepa, C. Perger, C. Schill, I. McCallum, D. Schepaschenko, F. Kraxner, X. Cai, X. Zhang, S. Ortner, R. Hazarika, **A. Cipriani**, C. Di Bella, A.H. Rabia, A. Garcia, M. Vakolyuk, K. Singha, M.E. Beget, S. Erasmı, F. Albrecht, B. Shaw and M. Obersteiner, Downgrading recent estimates of land available for biofuel production. *Environmental Science & Technology*, DOI: 10.1021/es303141h, 2013.

Ligi M., Bonatti E., Bortoluzzi G., **A. Cipriani**, L. Cocchi, F. Caratori Tontini, E. Carminati, L. Ottolini, A. Schettino “Birth of an ocean in the Red Sea: Initial pangs”, *Geochemistry Geophysics Geosystems*, doi: 10.1029/2012GC004155, 2012.

Ligi M., Bonatti E., Brunelli D., **A. Cipriani**, Ottolini L., “Water in Mid Ocean Ridge Basalts: Some like it Hot, some like it cold”, *Volume Speciale Mare - CNR Dipartimento Terra e Ambiente*, ISSN 2239-5172 Volume DTA/06-2011, pp. 671-690, 2011.

Ligi M., Bonatti E., F. Caratori Tontini, **A. Cipriani**, L. Cocchi, A. Schettino et al., “Initial Burst of Oceanic Crust Accretion in the Red Sea Due to Edge-Driven Mantle Convection”, *Geology*, 39, 1019-1022, 2011.

**Cipriani A.**, Bonatti E., Carlson R.W., “Non-chondritic  $^{142}\text{Nd}$  in Sub-oceanic Mantle Peridotites”, *Geochemistry Geophysics Geosystems*, doi:10.1029/2010GC003415, 2011.

**Cipriani A.**, Bonatti E., Seyler M., Brueckner H., Brunelli D., Dallai L., Hemming S., Ligi M., Ottolini L., Turrin B., “A 19 to 17 Ma amagmatic extension event at the Mid-Atlantic Ridge: ultramafic mylonites from the Vema Lithospheric Section”, *Geochemistry Geophysics Geosystems*, 10, Q10011, doi:10.1029/2009GC002534, 2009.

**Cipriani A.**, Bonatti E., Brunelli D., Ligi, M., “26 Million Years of Mantle Upwelling Below a Segment of the Mid Atlantic Ridge: the Vema Lithospheric Section Revisited”, *Earth and Planetary Science Letters* 285 (1-2), pp. 87-95, 2009

Peyve AA, Skolotnev SG, Ligi M, Turko NN, Bonatti E, Kolodyazhnyi SY, Chamov NP, Tsukanov NV, Baramykov YE, Eskin AE, Grindlay N, Sclater JG, Brunelli D, Pertsev AN, **Cipriani A**, Bortoluzzi G, Mercuri R, Paganelli E, Muccini F, Takeuchi C, Zaffagnini F, Dobrolyubova KO, “Investigation of the Andrew Bain transform fault zone (African-Antarctic region)”, *Doklady Earth Sciences*, Volume: 416, Issue: 7, 991-994, 2007

Kelemen, P.B., Kikawa, E., Miller, D.J., Abe N., Bach W., Carlson RL, Casey JF, Chambers L. M, Cheadle M., **Cipriani A.**, Dick HJB, Faul U., Garces M., Garrido C., Gee JS, Godard M., Graham DW, Griffin DW, Harvey J., Ildefonse B., Iturrino GJ, Josef J., Meurer WP, Paulick H., Rosner M., Schroeder T., Seyler M., Takazawa E., Leg 209 summary: processes in a 20-km-thick conductive boundary layer beneath the Mid-Atlantic Ridge, 14°–16°N. In Kelemen, P.B., Kikawa, E., and Miller, D.J. (Eds.), *Proc. ODP, Sci. Results*, 209: College Station, TX (Ocean Drilling Program), 1–33. doi:10.2973/odp.proc.sr.209.001.2007

Brunelli D., Seyler M., **Cipriani A.**, Ottolini L., Bonatti E., “Discontinuous melt extraction and refertilization of mantle peridotites from the Vema Lithospheric Section (Mid Atlantic Ridge)”, *Journal of Petrology*, 4, 4, 745-771, 2006.

Bonatti E., Brunelli D., Buck RW, **Cipriani A.**, Fabretti P., Ferrante V., Gasperini L., Ligi M., – “Flexural uplift of a Lithospheric Slab near the Vema Transform (Central Atlantic): Timing and Mechanisms”, *Earth and Planetary Science Letters*, 242, 642-655, 2005.

Ligi M., Bonatti E., **Cipriani A.**, Ottolini L. – “Water-rich basalts at mid-ocean ridge cold spots”, *Nature*, 434, 66-69, 2005.

**Cipriani A.**, H.K. Brueckner, E. Bonatti, D. Brunelli – “Oceanic crust generated by elusive parents: Sr and Nd isotopes in basalt-peridotite pairs from the Mid Atlantic Ridge”, *Geology*, 32, 8, 657-660, 2004.

Kelemen P.B., Kikawa E., Miller DJ, Abe N., Bach W., Carlson RL, Casey JF, Chambers L. M, Cheadle M., **Cipriani A.**, Dick HJB, Faul U., Garces M., Garrido C., Gee JS, Godard M., Graham DW, Griffin DW, Harvey J., Ildefonse B., Iturrino GJ, Josef J., Meurer WP, Paulick H., Rosner M., Schroeder T., Seyler M., Takazawa E.; “Proceedings of the Ocean Drilling Program; initial reports; drilling mantle peridotite along the Mid-Atlantic Ridge from 14 degrees to 16 degrees N; covering Leg 209 of the cruises of the drilling vessel JOIDES Resolution; Rio de Janeiro, Brazil, to St. George, Bermuda; sites 1268-1275, 6 May-6 July 2003”, Texas A&M University, Ocean Drilling Program. College Station, TX, United States. Pages: variously paginated. 2004.

Bonatti E., Ligi M., Brunelli D., **Cipriani A.**, Fabretti P., Ferrante V., Gasperini L., Ottolini L. - “Mantle thermal pulsations below the Mid Atlantic Ridge and temporal variations in the formation of oceanic lithosphere”. *Nature*, 423, 499-505, 29 May 2003

Brunelli D., **Cipriani A.**, Ottolini L., Peyve A., Bonatti E., “Mantle peridotites from the Bouvet Triple Junction Region, South Atlantic”, *Terranova*, Vol 15, 194-203, 2003

Peyve, A.A., Dobrolhybova, K.O., Efimov, V.N., **Cipriani, A.**, Ligi, M., Mazarovich, A.O., Perfil'ev, A.S., Raznitsyn, Yu.N., Savel'eva, G.N., Simonov, V.A., Skolotnev, S.G., Structure peculiarities of the Sierra Leone fracture zone (central Atlantic), *Doklady Akademii Nauk* 377 (6), pp. 803-807, 2001

Fabretti P., Bonatti E., Peyve A., Brunelli D., **Cipriani A.**, et al. - “First results of Cruise S19 (PRIMAR Project): petrological and structural investigations of the Vema transverse Ridge (equatorial Atlantic)”, *Giornale di Geologia*, ser. 3<sup>a</sup>, Vol. 60, pp. 3-16, 1998.

Carrara G., Bortoluzzi G., Zitellini N., Bonatti E., Brunelli D., **Cipriani A.**, et al. - “The Bouvet Triple Junction Region (South Atlantic): a report on two geological expeditions”, *Giornale di Geologia*, ser. 3<sup>a</sup>, Vol. 59/1-2, pp. 19-33, 1997.

Gasperini L., Bonatti E., Brunelli D., Carrara G., **Cipriani A.**, Fabretti P., Gilod D., Ligi M., Peyve A., Skolotnev S., Susini S., Tartarotti P., Turko N. - “New data on the geology of the Romanche F.Z., equatorial Atlantic: PRIMAR-96 cruise report”, *Giornale di Geologia*, ser. 3<sup>a</sup>, Vol. 59/1-2, pp. 3-18, 1997.

#### OTHER PUBLICATIONS

Bertacchini M., **Cipriani A.**, Sighinolfi G., The Gemma 1786 Museum of Modena and Reggio Emilia University: new catalogue of meteorites and inventory of materials of interest for planetary sciences, *Atti Soc. Nat. Mat. Modena* 152 (2021)

**Cipriani A.**, Lugli F, Martinelli G, Sciarra A, Analisi isotopiche ( $^{87}\text{Sr}/^{86}\text{Sr}$ ,  $\delta^{18}\text{O}$ ,  $\delta\text{D}$  e trizio) delle Salse di Nirano. In: Studi interdisciplinari in Scienze della Terra per la fruizione in sicurezza della Riserva Naturale delle Salse di Nirano (eds. Castaldini D,

Coventi M, Coratza P, Tosatti G). *Atti Soc. Nat. Mat. Modena*, Vol 148 – Supplemento, pp. 153-165, 2017.

**Cipriani A**, Lugli F, Frank G.A. Verheijen, Daniele Brunelli, Andrea Marchetti, Gianluca Malavasi, “Le analisi di fosforo ed elementi leggeri nei suoli”. In “Una sosta lungo la via Emilia, tra selve e paludi. La mansio di Forum Gallorum a Castelfranco Emilia” (eds. S. Campagnari, F. Foroni, D. Neri), pp. 207-210, 2018.

#### SELECTED RECENT ABSTRACTS

Lugli F., Giovanardi T., Di Giuseppe D., Gualtieri A. & **Cipriani A.**: Boron isotope analysis in silicate and carbonate matrix, SGI-SIMP, Turin, 19-21 September 2022

Ogunyele A.C., Giovanardi T., Bonazzi M., Mazzucchelli M., De Carlis A., **Cipriani A.** & Zanetti A.: Geochemical changes in parental melt sources and metasomatic overprinting of alkali-rich dykes from Ivrea-Verbano Zone, Southern Alps: further evidence from petrography, mineral chemistry and U-Pb zircon geochronology, SGI-SIMP, Turin, 19-21 September 2022

Remitti F., Mittempergher S., Festa A., **Cipriani A.** & Lugli F.: Mechanical behavior of the shallow part of megathrusts: hints from the Sestola Vidiciatico tectonic Unit (Northern Apennines, Italy), SGI-SIMP, Turin, 19-21 September 2022

Berio L.R., Mittempergher S., Storti F., Bernasconi S.M., **Cipriani A.**, Lugli F. & Balsamo F.: Open-closed-open paleofluid system conditions recorded in the tectonic vein networks of the Parmelan anticline (Bornes Massif, France), SGI-SIMP, Turin, 19-21 September 2022

Giovanardi T., da Costa P.C.C., Girardi V.A.V., Weska R.K., Vasconcelos P.M., Thiede D.S., Mazzucchelli M. & **Cipriani A.**: The NW Paraná Magmatic Province: Age, geochemistry and mantle source of the Alto Diamantino basalts, SGI-SIMP, Turin, 19-21 September 2022

Grammatica M., Bertotto G.W., Zanetti A., Mazzucchelli M., Jalowitzki T., Santos A., Orihashi Y., Gervasoni F. & **Cipriani A.**: Mantle xenoliths from Los Gemelos volcano (Canquel plateau, Patagonia Argentina): new insights into ultra-depleted lithologies in the SCLM, SGI-SIMP, Turin, 19-21 September 2022

Kazlagić A, Rosner M., **Cipriani A.** et al, 2022, Investigating the differences in conventional  $^{87}\text{Sr}/^{86}\text{Sr}$  isotope ratio measurements between MC-ICP-MS and MC-TIMS in cement reference materials, 28th ICP-MS USER MEETING AND 14th SYMPOSIUM MASS SPECTROMETRIC METHODS OF ELEMENTAL TRACE ANALYSIS, 8-12 September, Leoben, Austria

Kazlagić A, Rosner M., **Cipriani A.** et al, 2022, Investigating the differences between MC-ICP-MS and MC-TIMS using conventional  $^{87}\text{Sr}/^{86}\text{Sr}$  isotope ratios in limestone and slate reference materials, Geoanalysis 2022 conference, 6-12 August Freiberg, Germany.

Ogunyele AC, Giovanardi T, Bonazzi M, Mazzuccheli M, De Carlis A, **Cipriani A**, Zanetti A. 2022, Transition from “orogenic-like” to “anorogenic” geochemical affinity in Mesozoic post-collisional magmatism: evidence from alkali-rich dykes from Ivrea-Verbano Zone (Southern Alps). Copernicus Meetings; 2022 Mar 25.

Verhoest L, C Hemond, P Nonnotte, **A Cipriani**, F Lugli, M Maia, D Brunelli 2021, Cold Spots as a Tool to Reveal Short-Scale Mantle Heterogeneities, AGU Fall Meeting 2021

Berio, L., Mittempergher, S., Storti, F., Balsamo, F., Bernasconi, S.M., **Cipriani, A.**, Lugli, F. and Bistacchi, A., 2021, April. Pre-to syn-folding closed paleofluid system conditions and their opening in late-to post-folding structural evolution: the case of Urgonian platform carbonates folded in the Parmelan anticline, Bornes Massif, external Western Alps. In EGU General Assembly Conference Abstracts (pp. EGU21-10204).