Short academic profile

NADIA MALASPINA

Born on 11/10/1977 in Genova, Italy

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Google Scholar: https://scholar.google.com/citations?user=PUe04toAAAAJ&hl=it&oi=ao

2021-2030: Italian National Scientific Habilitation to function as Full Professor in Petrology (04/A1 – GEO/07)

2020-2022: Councillor of the European Association of Geochemistry (EAG) 2018-2021: Treasurer of the Italian Society of Mineralogy and Petrology (SIMP)

EDUCATION

• 2006: Ph.D. in Earth Sciences (University of Genova, Italy)

• 2002: Master of Science with honours in Geology (University of Genova, Italy)

RESEARCH ACTIVITY AND POSITIONS

- 2019-today: Associate professor in Petrology (GEO/07) at the University of Milano-Bicocca
- 2021: Research activity at Université de Paris (France) in the frame of the project "A transitional metal stable isotope (Fe, Zn, Cu) study of metasomatised mantle wedges in subduction zones, comparison between Alpine (Europe) and Dabie-Sulu (China) suprasubduction peridotites"
- 2017–2019: Research activity at Universität Jena (Germany) in the frame of the project Miur-DAAD Joint Mobility Program "The redox state of the Earth's mantle: from the slab-mantle interface to the sub-continental lithosphere"
- 2010-2019: Research permanent position at the University of Milano-Bicocca
- 2017-2018: Research activity at Plymouth University (UK) in the frame of NERC project "The geological record of the earthquake cycle in the lower crust"
- 2008-2010: Post-doctoral fellowship at the Department of Earth Sciences (University of Milano, Italy) in the frame of the project "Oxidation state of the mantle and origin of COH fluids in orogenic areas"
- 2007-2010: Research activity at the Bayerisches Geoinstitut, University of Bayreuth (Germany) in the frame of the European program "Marie Curie Research Training Network c2c the fate of subducted material"
- 2006-2008: Post-doctoral fellowship at the Department of Earth Sciences (University of Milano, Italy) in the frame of the project "COH fluids, hydrates, carbonates and crust-to-mantle mass transfer in subduction zones"
- 2004-2005: Research activity at the Research School of Earth Sciences (Australian National University), Canberra, Australia

SCIENTIFIC INTERESTS

Study of natural samples from the continental crust and lithospheric mantle in subduction environments aimed to understand:

- Mechanisms of element transfer from the subducting plate to the mantle, with particular interest in the analysis of volatile elements (C-O-H) in metamorphic minerals and fluids and their behaviour at ultrahigh pressure (Cannaò & Malaspina 2018, *Geosphere* 14, 2311-2336);
- Role of fluid phases in metasomatic processes responsible for hydration and carbonation of the mantle at subduction zones (Tumiati & Malaspina 2019, *J Geol Soc* 176, 388-397);
- Oxidation state of mafic and ultramafic rocks, speciation of crustal fluids components at subduction zones and its implication in the global geochemical cycle of volatile elements (Malaspina et al. 2017, Geochm Cosmochim Acta 209, 70-84);
- Role of fluid phases in deformation mechanisms of the lower crust and in the earthquakes genesis (Menegon, Pennacchioni, Malaspina et al. 2017, *GCubed* 18, 4356-4374).

EXPERTISE AND SKILLS

Integrated approach in the study of natural samples including field work, petrologic characterisation of the samples and advanced analytical and experimental techniques such as:

• Field work: Dabie-Sulu Belt (China), Western Gneiss Region (Norway), Western and Central Alps (Italy), Anarak (Iran), Lofoten (Norway), Pohorje (Slovenia)

- **Geochemical analyses** with Laser Ablation ICP-MS (<u>Malaspina et al., 2006, Earth Planet Sci Lett 249, 173-187)</u>
- High pressure experiments and synthesis of minerals with piston cylinder (single stage and end-loaded) and multianvil
- **High temperature experiments** and synthesis of minerals with vertical furnace at controlled oxygen fugacity (Malaspina et al. 2009, J Petrol 50, 1533-1552)
- WDS spectrometer calibration for Flank Method analyses and quantitative maps to measure the Fe³⁺ content in garnets with the JEOL electron microprobe (<u>Malaspina et al. 2010, Earth Planet Sci Lett 298, 417-426</u>)
- Development of **forward thermodynamic modelling** with the software "Perple_X" (<u>Malaspina and Tumiati</u> 2012, *Eur J Mineral* 24, 607-618)

SOFT SKILLS

- Large Classroom Teaching Workshop (24-25 January 2019); open badge: https://bestr.it/verify/FJWL01EO4A
- Bbetween 2018 Multimedia Video Editing: intermediate course (12 November 2018); open badge: https://bestr.it/verify/DLDNORBGJ1

SCIENTIFIC AWARDS

- SIMP Award 2007: for the best Ph.D. thesis in Petrology (Geoitalia 2007, Rimini; Elements, v. 4, ISSN 1811-5209)
- · Young Scientist Award: EGU General Assembly 2007, Vienna

FUNDED RESEARCH COMPETITIVE PROJECTS AS PRINCIPAL INVESTIGATOR OR PROJECT PARTNER

- 2021: Fondazione Cariplo Circular Economy for a sustainable future "ANTICARB –Quarry waste ANTIgorite CARBonation: a zero emission platform for re-manufacturing with the benefit of CO₂ sequestration" (Milano-Bicocca Politecnico di Milano) 48 months Principal Investigator (300k €)
- 2019: **Prin2017** "The Dynamic Mass Transfer from Slabs to Arcs Dynastars" (Genova Milano Milano Bicocca Pavia Padova) 36 months <u>Research Unit Coordinator</u> (384k €)
- 2018: **Miur-DAAD Joint Mobility Program** "The redox state of the Earth's mantle: from the slab-mantle interface to the sub-continental lithosphere" (Milano Bicocca Jena) 24 months <u>Principal Investigator</u> (20k €)
- 2017: **NERC Research Grant** "The geological record of the earthquake cycle in the lower crust" (Plymouth University, UK) 36 months <u>Project Partner</u> (451k £)

FUNDED RESEARCH COMPETITIVE PROJECTS AS TEAM MEMBER

- 2014: Prin 2012 "Volatile transfer at convergent plate margins: linking COH fluids/melts heterogeneities to tectonic anomalies in subduction zones" (University of Milano) 36 months
- 2013: ECoS "Evolution of continental strength from rifting to collision" (Plymouth University, UK) 48 months
- Darius Programme "The palaeotethys suture zone in NE Iran: new constraints on the evolution of the eocimmerian belt" (University of Milano Bicocca) 24 months
- 2011: Prin 2009 "Fluid speciation and redox processes in ultramafic systems at subduction zones: integration of the natural record with an experimental approach" (University of Milano) 24 months
- 2008: Prin 2007 "An experimental approach to the study of dehydration and decarbonation processes in the subducted oceanic lithosphere" (University of Milano) 24 months
- 2007: Marie Curie Research Training Network "c2c the fate of subducted material" (University of Milano) 48 months

FUNDED RESEARCH COMPETITIVE PROPOSALS AT LARGE SCALE FACILITIES

- 2020: **European Synchrotron Radiation Facility** "The redox state of marble-cake mantle: clues from deeply recycled C-bearing crustal materials", beamline (ID18) experiment number ES-958 <u>Principal Investigator</u>
- 2016: **Diamond Light Source** "The smaller, the harder: multiphase micro-inclusions in majoritic garnet as signatures of deep Earth mantle conditions", beamline (I15) experiment number EE14855 <u>Principal Investigator</u>
- 2013: **Diamond Light Source** "Diopsides in diamonds: new geobarometric approaches", beamline (I15) experiment number EE8754 Team Member

FUNDED RESEARCH EVALUATIVE PROJECTS

- "Fondo per il Finanziamento delle Attività Base di Ricerca" (FFABR ANVUR) for the scientific record in the period 2012-2016
- Fondo di Ateneo FAR 2011, 2013, 2014 Team Member
- Fondo di Ateneo FAR 2015, 2016, 2017, 2018 P.I.

COMMISSIONS OF TRUST

- 2021-today: Member of the Ethics Committee Geochemical Society
- 2021-today: Member of the Ethics Committee European Association of Geochemistry
- 2020-today: Member of the Training & Outreach Committee European Association of Geochemistry
- 2018-today: Review panel member of the European Research Council
- 2018: Review member: Premio Forcella 2018
- 2016-today: Review panel member: VQR 2011-2014 ANVUR, VQR 2015-2019 ANVUR
- 2015-today: Review panel member: NERC Peer Review College UK Research Council
- 2015-today: Review panel member: Earth and Environmental Sciences PhD program (University of Pavia)
- 2011-today: Review panel member: "Mathematics, Natural sciences and Engineering (division II)" Swiss National Science Foundation
- 2010-today: Review panel member: "Geochemistry & Petrology Program", Earth Science Division National Science Foundation

EDITORIAL ACTIVITY

- Editor-in-Chief of Lithos (IF: 3.39)
- Guest editor of **Solid Earth** (IF: 2.91) special issue: "Exploring new frontiers in fluids processes in subduction zones"
- Editorial committee of Plinius italian supplement of the European Journal of Mineralogy

PEER REVIEW ACTIVITY IN ISI JOURNALS

• American Mineralogist, Chemical Geology, Contributions to Mineralogy and Petrology, Earth and Planetary Science Letters, European Journal of Mineralogy, Geochimica et Cosmochimica Acta, Geology, Gondwana Research, Journal of Asian Earth Sciences, Journal of Metamorphic Geology, Journal of Petrology, Journal of the Geological Society, Lithos, Lithosphere, Nature Communications, Nature Geoscience, Science Advances, Scientific Reports, Swiss Journal of Geosciences, Tectonics.

COURSES, LECTURES, INVITED SEMINARS AND SUPERVISION ACTIVITY

- 2020-today: "Deformation and metamorphism at convergent margins" 3 CFU (University of Milano-Bicocca)
- 2019-today: "Principles of Geology Introduction to Petrography" 6 CFU (University of Milano-Bicocca)
- 2017-today: "Climate Journal Club" 2 CFU (PhD School of University of Milano-Bicocca)
- 2010-today: "Petrography practical sessions" 6 CFU (University of Milano-Bicocca)
- 2017: "Redox processes and the carbon dilemma at the slab-mantle interface" at the Lake Como School of Advanced Studies "Carbon forms, paths and processes in the Earth" Como, Italy.
- 2015: "The subduction factory and the slab-to-mantle element recycling: Information from ultrahigh pressure rocks" invited seminar at Plymouth University, UK.
- 2014–2018: "Petrogenesis and Geodynamics Environments" 4 CFU (University of Milano-Bicocca)
- 2011-2015: "Field Mapping II" 4 CFU (University of Milano-Bicocca)
- 2011: "Electron probe microanalysis: measuring the Fe2+/Fe3+ ratio with "flank method" at the Short Course "Advances in electron beam techniques: applications to Geosciences" Geoitalia, Torino, Italy.
- 2009/2010: "Petrography Practical Sessions" 2 CFU (University of Milano)
- 2009/2010: Practical with Perple_X thermodynamic software for the course of Petrology 1CFU (University of Milano)
- Supervisor of 16 bachelor, 10 master and 1 PhD students
- · Co-advisor of 2 PhD students

PARTICIPATION TO DOCTORATE COMMITTEE

- 2014-2016: doctorate course in "Chemical, Geological and Environmental Sciences", cycles XXIX-XXXII (University of Milano-Bicocca)
- 2013: doctorate course in "Science", cycle XXXII (University of Milano-Bicocca)
- 2011-2012: doctorate course in "Earth Sciences", cycles XXVII-XXVIII (University of Milano-Bicocca)

KEYNOTES AND INVITED CONTRIBUTIONS AT INTERNATIONAL CONGRESSES

- 2018 invited EGU General Assembly, Wien (Austria) "An integrated petrological and geochemical approach to unravel contrasting P-T-t paths during subduction and exhumation of the Adula Nappe (Central Alps)"
- 2013 keynote Tectonic Fluxes of Carbon DCO Workshop, San Francisco (USA) "COH fluids and redox processes at subduction zones; field and experimental perspectives"
- 2013 invited AGU Fall Meeting, San Francisco (USA) "Fluid-mediated redox processes at subduction zones"
- 2013 invited EGU General Assembly, Wien (Austria) "Fluid-induced oxidation at the slab-mantle interface: insights from UHP garnet peridotites"
- 2012 invited AGU Fall Meeting, San Francisco (USA) "Oxidation state, Fe3+ distribution and C-O-H metasomatism in the mantle at subuction zones"
- 2012 keynote EMC2012, Frankfurt (Germany) "C-O-H metasomatism and redox processes in the mantle at subduction zones"
- 2005 invited AGU Fall Meeting, San Francisco (USA) "Trace element transfer in the mantle wedge: evidence from polyphase inclusions in garnet-pyroxenites (Dabie-Shan, China)"

CONVENER AT INTERNATIONAL CONGRESSES

- GMPV3.2/GD2.5/TS2.7- Shaping the lithosphere: fluid-rock interaction, deformation and volatiles cycle EGU General Assembly, Wien (Austria) 2018
- GMPV3.2 High-pressure and high-temperature mineral physics: a link between petrology, geophysics and geodynamics EGU General Assembly, Wien (Austria) 2015

CONVENER AT NATIONAL CONGRESSES

- P7 New frontiers in metamorphism and deformation-metamorphism relationships through cutting-edge analytical, experimental, numerical, and theoretical techniques Congresso congiunto SIMP-SGI- SoGel Parma (Italy) 2019
- P24 Natural and model systems to unravel the volatiles cycle in the deep earth Congresso congiunto SIMP-SGI-AIV-SoGel Pisa (Italy) 2017
- P9 Input and output in subduction settings: chemical and geodynamics implications 89° Congresso della Società Geologica Italiana, Napoli (Italy) 2016
- S4 The subduction factory a key element in the Earth Congresso congiunto SIMP-AIV-SoGel-SGI, Firenze (Italy) 2015
- S19 Fluids in the Earth's crust and Mantle Congresso congiunto SIMP-SGI, Milano (Italy) 2014

ORGANISATION OF CONGRESSES AND INTERNATIONAL DOCTORATE SCHOOLS

- International School on "Mantle Dynamics" 24-29 October 2021 (Sestri Levante, Italy) member of the organising and scientific committee
- National congress SIMP-SGI-SOGEI Parma 2019 "Time of planet Earth and human lifespan: geosciences between past and future" 16-19 September 2019 (Parma, Italy) member of the organising committee
- National congress SGI-SIMP Catania 2018 "Geosciences for the environment, natural hazard and cultural heritage" 12-14 September 2018 (Catania, Italy) member of the organising committee
- EGU Galileo Conference "Exploring new frontiers in fluid processes in subduction zones" 24-29 June 2018 (Leibnitz, Austria) member of the organising and scientific committee
- Lake Como School of Advanced Studies "Carbon forms, paths and processes in the Earth" 15-20 October 2017 (Como, Italy) member of the organising and scientific committee
- International Winter School "Melting and fluid/melt-rock reactions in the mantle" 13-17 February 2017 (Pavia, Italy) member of the organising committee
- Short Course "Microstructures and physico-chemical properties of Earth and planetary materials" 8-12 February 2010 (Verbania, Italy) member of the organising committee

ROLES AND MEMBERSHIP OF SCIENTIFIC SOCIETIES AND INTERNATIONAL RESEARCH PROGRAMS

- 2021-2023: member of the Ethics Committee of the Geochemical Society (EAG representative)
- 2021-2022: member of the Ethics Committee of the EAG
- 2020-2022: councillor of the European Association of Geochemistry (EAG)
- 2018-2021: treasurer of the Italian Society of Mineralogy and Petrology (SIMP)
- 2012-today: scientist member of the Deep Carbon Observatory (DCO ID: 11121/2808-2708-5978-1275-CC)

- 2007-today: member of the European Geoscience Union (EGU)
- 2007-today: member of the European Association of Geochemistry (EAG)
- 2006-today: member of the Italian Society of Mineralogy and Petrology (SIMP)
- 2005-today: member of the American Geophysical Union (AGU)

PUBLIC ENGAGEMENT

- Department delegate of the Interdepartmental Centre for Gender Studies ABCD
- Responsible of the organising committee of the educational activity "Un giorno tra le scienziate in Bicocca" 25-26 February 2021 in the framework of "I Talenti delle Donne" (https://italentidelledonne.comune.milano.it)
- Member of the organising committee of "Scopri le Scienziate" at Meet Me Tonight 2019 (Milano, Italy)
- Member of the organising committee of "On the Rocks Geological video contest (www.sgi-ontherocks.it; www.youtube.com/channel/UCh5YMmGCZwqeMGwTQXqNP_g; www.instagram.com/ontherocksvideo)
- Responsible of the organising committee of the workshop "Women in Sciences Le Scienze con la *D* maiuscola" 13-14 May 2019 (https://www.unimib.it/eventi/womeninsciences).
- Participation to EXPO2015 (Milano, Italy), in the framework of Cluster "Isole Mare e Cibo" with the creation of the video "The Earth Breath" (http://www.youtube.com/watch?v=P0njsSLP-Mg&feature=youtu.be)

BIBLIOMETRIC RECORD

- 32 research publications in ISI journals
- >900 citations
- h-index = 14 (Scopus)
- 1 field guide
- 4 abstracts published in ISI journals
- 80 abstracts at congresses
- 45 oral presentations at congresses

1st June 2021

List of publications

Campione, M, La Fortezza, M, Alvaro, M, Scambelluri, M, <u>Malaspina, N*</u> (2020). Commensurate growth of magnetite microinclusions in olivine under mantle conditions. ACS EARTH AND SPACE CHEMISTRY, in press, doi: 10.1021/acsearthspacechem.0c00026 IF: 2.243

Pellegrino L, <u>Malaspina N*</u>, Zanchetta S, Langone A, Tumiati S (2020). High pressure melting of eclogites and metasomatism of garnet peridotites from Monte Duria Area (Central Alps, N Italy): a proxy for melt-rock reaction during subduction. LITHOS, vol. 358-59, 105391, ISSN: 0024-4937 doi: 10.1016/j.lithos.2020.105391

IF: 3.390

Tumiati, S, <u>Malaspina, N*</u> (2019). Redox processes and the role of carbon-bearing volatiles from the slab—mantle interface to the mantle wedge. JOURNAL OF THE GEOLOGICAL SOCIETY, vol. 176, p. 388-397 ISSN: 0016-7649, doi: 10.1144/jgs2018-046 IF: 3.100

Zanchetta, S, Malaspina, N, Zanchi, A, Benciolini, L, Martin, S, Javadi, H, Kouhpeyma, M (2018). Contrasting subduction—exhumation paths in the blueschists of the Anarak Metamorphic Complex (Central Iran). GEOLOGICAL MAGAZINE, vol. 155, p. 316-334, ISSN: 0016-7568, doi: 10.1017/S0016756817000218

IF: 2.490

Cannaò, E, <u>Malaspina, N</u> (2018). From oceanic to continental subduction: Implications for the geochemical and redox evolution of the supra-subduction mantle. GEOSPHERE, vol. 14, p. 2311-2336, ISSN: 1553-040X, doi: 10.1130/GES01597.1

IF: 2.577

Tumiati,S, Zanchetta,S, Pellegrino,L, Ferrario, C, Casartelli,S, <u>Malaspina, N</u> (2018). Granulite facies overprint in garnet peridotites and kyanite eclogites of Monte Duria (Central Alps, Italy): clues from srilankite-

and sapphirine-bearing symplectites. JOURNAL OF PETROLOGY, vol. 59, p. 115-152, ISSN: 0022-3530, doi: 10.1093/petrology/egy021

IF: 3.470

Malaspina, N, Langenhorst, F, Tumiati, S, Campione, M, Frezzotti, ML, Poli, S. (2017). Corrigendum to "The redox budget of crust-derived fluid phases at the slab-mantle interface" [Geochim. Cosmochim. Acta 209 (2017) 70–84]. GEOCHIMICA ET COSMOCHIMICA ACTA, vol. 213, p. 681-682, ISSN: 0016-7037, doi: 10.1016/j.gca.2017.07.005

IF: 4.659

Degli Alessandrini, G, Menegon, L, <u>Malaspina, N</u>, Dijkstra, A, Anderson, M. (2017). Creep of mafic dykes infiltrated by melt in the lower continental crust (Seiland Igneous Province, Norway). LITHOS, vol. 274-275, p. 169-187, ISSN: 0024-4937, doi: 10.1016/j.lithos.2016.12.030 IF: 3.390

Menegon, L., Pennacchioni, G., <u>Malaspina, N.</u>, Harris, K., Wood, E. (2017). Earthquakes as Precursors of Ductile Shear Zones in the Dry and Strong Lower Crust. GEOCHEMISTRY, GEOPHYSICS, GEOSYSTEMS, vol. 18, p. 4356-4374, ISSN: 1525-2027, doi: 10.1002/2017GC007189 IF: 3.280 - #Top20Article

Campione, M, Tumiati, S, <u>Malaspina, N</u>. (2017). Primary spinel + chlorite inclusions in mantle garnet formed at ultrahigh-pressure. GEOCHEMICAL PERSPECTIVES LETTERS, vol. 4, p. 19-23, ISSN: 2410-3403, doi: 10.7185/geochemlet.1730

IF: 4.450

Malaspina, N, Langenhorst, F, Tumiati, S, Campione, M, Frezzotti, ML, Poli, S. (2017). The redox budget of crust-derived fluid phases at the slab-mantle interface. GEOCHIMICA ET COSMOCHIMICA ACTA, vol. 209, p. 70-84, ISSN: 0016-7037, doi: 10.1016/j.gca.2017.04.004 IF: 4.659

Malaspina, N, Alvaro, M, Campione, M, Wilhelm, H, Nestola, F. (2015). Dynamics of mineral crystallization from precipitated slab-derived fluid phase: first in situ synchrotron X-ray measurements. CONTRIBUTIONS TO MINERALOGY AND PETROLOGY, vol. 169, 26, ISSN: 0010-7999, doi: 10.1007/s00410-015-1121-z IF: 3.230

Angiolini L, Zanchi AM, Zanchetta S, Nicora A, Vuolo I, Berra F, Henderson C, <u>Malaspina N</u>, Rettori R, Vachard D, Vezzoli G (2015). From rift to drift in South Pamir (Tajikistan): Permian evolution of a Cimmerian terrane. JOURNAL OF ASIAN EARTH SCIENCES, vol. 102, p. 146-169, ISSN: 1367-9120, doi: 10.1016/j.jseaes.2014.08.001

IF: 3.059

Zanchi AM, Malaspina N, Zanchetta S, Berra F, Benciolini L., Bergomi MA, Cavallo A, Reza Javadi, H, Kouhpeyma, M, Javadi, HR, Kouhpeyma, M. (2015). The Cimmerian accretionary wedge of Anarak, Central Iran. JOURNAL OF ASIAN EARTH SCIENCES, vol. 102, p. 45-72, ISSN: 1367-9120, doi: 10.1016/j.jseaes.2014.08.030

IF: 3.059

Campione M, Malaspina N, Frezzotti M (2015). Threshold size for fluid inclusion decrepitation. JOURNAL OF GEOPHYSICAL RESEARCH. SOLID EARTH, vol. 120, p. 7396-7402, ISSN: 2169-9313, doi: 10.1002/2015JB012086

IF: 3.640

Tumiati S, Godard G, Martin S, <u>Malaspina N</u>, Poli S (2015). Ultra-oxidized rocks in subduction mélanges? Decoupling between oxygen fugacity and oxygen availability in a Mn-rich metasomatic environment. LITHOS, vol. 226, p. 116-130, ISSN: 0024-4937, doi: 10.1016/j.lithos.2014.12.008 IF: 3.913

Malaspina N, Langenhorst F, Fumagalli P, Tumiati S, Poli S (2012). Corrigendum to "Fe3+ distribution between garnet and pyroxenes in mantle wedge carbonate-bearing garnet peridotites (Sulu, China) and implications for their oxidation state". LITHOS, vol. 154, ISSN: 0024-4937, doi: 10.1016/j.lithos.2012.08.006

IF: 3.913

Malaspina N, Langenhorst F, Fumagalli P, Tumiati S, Poli S (2012). Fe3+ distribution between garnet and pyroxenes in mantle wedge carbonate-bearing garnet peridotites (Sulu, China) and implications for their oxidation state. LITHOS, vol. 146–147, p. 11-17, ISSN: 0024-4937, doi: 10.1016/j.lithos.2012.04.023 IF: 3.913

Borfecchia E, Mino L, Gianolio D, Groppo C, <u>Malaspina N</u>, Martinez-Criado G, Sans JA, Poli S, Castelli D, Lamberti C (2012). Iron oxidation state in garnet from a subduction setting: a micro-XANES and electron microprobe ("flank method") comparative study. JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY, vol. 27, p. 1725-1733, ISSN: 0267-9477, doi: 10.1039/C2JA30149K IF: 3.646

Malaspina N, Tumiati S (2012). The role of C-O-H and oxygen fugacity in subduction-zone garnet peridotites. EUROPEAN JOURNAL OF MINERALOGY, vol. 24, p. 607-618, ISSN: 0935-1221, doi: 10.1127/0935-1221/2012/0024-2213

IF: 1.663

Malaspina N, Scambelluri M, Pennacchioni G, Spagnolo C (2011). Fluid-induced plastic deformation in the crustal Austroalpine system (Western Italian Alps): a petrologic and fluid inclusion analysis. ITALIAN JOURNAL OF GEOSCIENCES, vol. 130, p. 61-74, ISSN: 2038-1719, doi: 10.3301/IJG.2010.24 IF: 1.694

Scambelluri M, Rampone E, Braga R, <u>Malaspina N</u> (2010). The Variscan garnet peridotites from the Eastern Alps (Ulten Zone): records of subduction metasomatism in the mantle wedge. JOURNAL OF THE VIRTUAL EXPLORER, vol. 36, ISSN: 1441-8142, doi: 10.3809/jvirtex.2009.00259

Malaspina N, Scambelluri M, Poli S, Van Roermund HLM, Langenhorst F (2010). The oxidation state of mantle wedge majoritic garnet websterites metasomatised by C-bearing subduction fluids. EARTH AND PLANETARY SCIENCE LETTERS, vol. 298, p. 417-426, ISSN: 0012-821X, doi: 10.1016/j.epsl.2010.08.022 IF: 4. 823

Malaspina N, Hermann J, Scambelluri M (2009). Fluid/mineral interaction in UHP garnet peridotite. LITHOS, vol. 107, p. 38-52, ISSN: 0024-4937, doi: 10.1016/j.lithos.2008.07.006 IF: 3.913

Malaspina N, Poli S, Fumagalli P (2009). Unravelling redox processes in mantle wedge peridotites. GEOCHIMICA ET COSMOCHIMICA ACTA, vol. 73, p. A821, ISSN: 0016-7037 IF: 4.659

Malaspina N, Poli S, Fumagalli P (2009). The Oxidation State of Metasomatized Mantle Wedge: Insights from C-O-H-bearing Garnet Peridotite. JOURNAL OF PETROLOGY, vol. 50, p. 1533-1552, ISSN: 0022-3530, doi: 10.1093/petrology/egp040 IF: 3.470

Hermann J, Gerald J.F, <u>Malaspina N</u>, Berry A, Scambelluri M (2007). OH-bearing planar defects in olivine produced by the breakdown of Ti-rich humite minerals from Dabie Shan (China). CONTRIBUTIONS TO MINERALOGY AND PETROLOGY, vol. 153, p. 417-428, ISSN: 0010-7999, doi: 10.1007/s00410-006-0155-7

IF: 3.230

Scambelluri M, <u>Malaspina N</u>, Hermann J (2007). Subduction fluids and their interaction with the mantle wedge: a perspective from the study of high pressure ultramafic rocks. PERIODICO DI MINERALOGIA, vol. 76, p. 174-197, ISSN: 0369-8963, doi: 10.2451/2007PM0026 IF: 1.417

Scambelluri M, Hermann J, <u>Malaspina N</u> (2006). The deep subduction fluids in high and ultrahigh pressure rocks and their interaction with the overlying mantle wedge. GEOCHIMICA ET COSMOCHIMICA ACTA, vol. 70, p. A559, ISSN: 0016-7037

IF: 4.659

Malaspina N, Hermann J, Scambelluri M, Compagnoni R (2006). Multistage metasomatism in ultrahigh pressure mafic rocks from the North Dabie Complex (China). LITHOS, vol. 90, p. 19-42, ISSN: 0024-4937, doi: 10.1016/j.lithos.2006.01.002

IF: 3.913

Malaspina N, Hermann J, Scambelluri M, Compagnoni R (2006). Polyphase inclusions in Garnet-Orthopyroxenite (Dabie-Shan, China) as monitors for metasomatism and fluid-related trace element transfer in subduction zone peridotite. EARTH AND PLANETARY SCIENCE LETTERS, vol. 249, p. 173-187, ISSN: 0012-821X, doi: 10.1016/j.epsl.2006.07.017 IF: 4.823

Malaspina N, Hermann J, Scambelluri M, Compagnoni R (2005). UHP garnet orthopyroxenites (Dabie shan, china) as monitors of percolation of hydrous Si-rich melts in deep subduction environments. OFIOLITI, vol. 30, p. 201, ISSN: 0391-2612

IF: 0.930

Piccardo GB, Rampone E, Romairone A, Scambelluri M, Elter P, <u>Malaspina N</u>, Molli G, Tribuzio R, Vissers RLM (2004). The oceanic lithosphere of the Jurassic Ligurian Tethys: formation and subduction. In: Field trip guide books. vol. 3, ROMA: Istituto poligrafico e Zecca dello Stato

Scambelluri M, Fiebig J, <u>Malaspina N</u>, Muentener O, Pettke T (2004). Serpentinite subduction: implications for fluid processes and trace element recycling. INTERNATIONAL GEOLOGY REVIEW, vol. 46, p. 595-613, ISSN: 0020-6814

IF: 3.657