

CURRICULUM VITAE FOR CHIARA DOMENEGHETTI

PERSONAL INFORMATION

Nationality: Italian

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Scopus ID: 6701729066

ResearcherID: C-8681-2014

Google Scholar: <https://scholar.google.it/citations?user=DED9SjgAAAAJ&hl=en&oi=ao>

EDUCATION AND POSITIONS

1978	Graduated in Natural Sciences
1979 – 1980	Grant at the Institute of Mineralogy (University of Pavia)
1980 – 1983	Curator of the Museum of the Institute of Mineralogy (University of Pavia)
1983 – 1998	Researcher of the Italian National Council at the CNR-Centro di Studio per la Cristallografia Strutturale (University of Pavia)
1998 – 2001	Associate Professor at the Dept. of Earth Sciences (University of Pavia)
2001 – present	Full Professor of Mineralogy at the Dept. of Earth Sciences (University of Pavia)

FELLOWSHIPS AND GRANTS

1986 – 1989	CNR research "Order disorder transformations in orthopyroxenes" within the cooperation Italy-USA. Italian Leader.
1987 – 2000	Coordinator of various research projects of the local "CNR Centro di studio per la Cristallografia and Cristallografia" (now CNR-IGG, Pavia).
1992 – 1995	European Science Foundation (ESF) project "Kinetics Processes in Minerals and Ceramics - in situ studies". Member
1997 – 2001	European TMR Network "Interdisciplinary European Network for the quantitative analysis of transformation processes in natural minerals" (Coordinator: E.K. Salje). Team Leader
1997 – 1999	Member of the Pavia group in the national projects funded by the Italian MURST
1999 – 2001	Member of the Pavia group in the national projects funded by the Italian MURST
2001 – 2003	Italian FIRB project (2001-03) "Mineral physics and technological applications of columbite-tantalite-tapiolite system". Principal Investigator.
2004 – 2006	Member of the Pavia group in the national projects funded by the Italian MURST
2006 – 2007	PRIN-MIUR: Studi sperimentali su materiali geologici alle alte pressioni e temperature: applicazioni alla comprensione del sistema Terra (PRIN 2006047943 - € 120,000 - PI: PF Zanazzi).
2010 – 2013	Italian Space Agency: MARS-XRD/ExoMars (ASI n.I/060/10/0 - PI: L. Marinangeli).
2011 – 2012	PRIN-MIUR: Dalle materie prime del Sistema Terra alle applicazioni tecnologiche: studi

- cristallochimici e strutturali (PRIN-2010EARRRZ - € 469,693 - PI: M.F. Brigatti).
- 2013 – 2018 ERC Starting grant: Inclusion in diamond messenger from the Deep Earth (INDIMEDEA, ERC-StG n.307322 - € 1.423,464 - PI: F. Nestola). Team member
- 2014 – 2016 PNRA-PEA: Meteoriti Antartiche (2013/AZ2.04 - € 88,000 - PI: L. Folco). Team leader.
- 2015 – 2018 Italian Space Agency: (TOMOX - PI: L. Marinangeli). Team leader.
- 2015 – 2018 SIR-MIUR: Mineral inclusion elasticity for a new deep subduction geobarometer (MILE DEEP, n.RBSI140351 - € 449,900). Team Member.
- 2016 – 2018 PNRA-PEA: Meteoriti Antartiche (PRNA16_00029 - € 87,900 - PI: L. Folco). Team leader.
- 2017 – 2022 ERC Starting grant: Determine the true depth of deep subduction from piezobarometry on host–inclusions systems (TRUE DEPTHS, ERC-StG n.714936 - € 1.697,500). Team Member.
- 2018 – 2021 FARE-MIUR: StackIng disorder in diaMonds as a marker for the history of Pre-solAr Carbon (IMPACT, FARE-MIUR n. R164WEJAHH- € 234.255). Team Member.

SUPERVISION ACTIVITIES:

• **Postdoctoral researchers**

- 1997 – 1998 Thomas Malcherek (TMR project post-doc)
- 1999 – 2000 Fernando Camara Artigas (TMR project post-doc)
- 2015 – 2016 Matteo Alvaro (mineral physics)
- 2017 – Claudia Stangarone (Ab-initio calculations, crystallography)
- 2017 – Marco Piazzi (solid state physics, magnetism)

• **Graduate students (PhD)**

- 1994 – 1997 *Tiziana Boffa Ballaran*: Study of order-disorder transformation in omphacites by X-ray single crystal diffraction and IR spectroscopy.
- 1994 – 1997 *Michele Zema*: Cooling rate calculation of meteorites (diogenites) from 4Vesta asteroid.
- 1998 – 2001 *Serena Tarantino*: Mixing properties in the enstatite-ferrosilite system: a study by IR spectroscopy and X-ray diffraction.
- 2003 – 2006 *Marco Pistorino*: Thermal expansion and compressibility of columbites and tantalites.
- 2006 – 2009 *Matteo Alvaro*: Thermal expansion and compressibility of pigeonites.
- 2009 – 2012 *Francesco Pandolfo*: Thermal expansion and compressibility of omphacitic pyroxenes.
- 2013 – 2016 *Lorenzo Scandolo*: Thermal expansion of mantle minerals inclusions in diamonds.
- 2015 – *Mattia L. Mazzucchelli*: Finite Element Modelling (FEM) of elastic anisotropy for host inclusion systems.
- 2016 – *Mara Murri*: Raman investigation of inclusion under non-hydrostatic deviatoric stress.
- 2016 – *Gabriele Zaffiro*: Elastic properties of UHP metamorphism index mineral.
- 2017 – *Marta Morana*: Impact diamonds in Meteorites.

• **Undergraduate students (M.Sc. and B.Sc.)**

- 1985 *Marco Ruocco*: Crystal chemical study of Al-rich orthopyroxenes. Master July 1985.
- 1985 *Claudio Negretto*: The order-disorder transformation in omphacites. Master July 1985.
- 1992 *Maria de Risky*: Fe distribution in orthopyroxene: a comparison between results by X-ray diffraction and Mossbauer spectroscopy. Master July 1992.
- 1997 *Davide Destro*: The intracrystalline exchange reaction in orthopyroxene: a trace for recovering thermal history of meteorites. Master July 1997
- 1999 *Annalisa Corsico Piccolino*: Relationship between closure temperature and trace elements partitioning in orthopyroxenes from howardites. Master July 1999
- 2004 *Matteo Orlandi*: Ortopirosseno della acondrite Moama: ordine-disordine e storia termica.

- Bachelor October 2004
- 2004 *Matteo Alvaro* (Now at University of Pavia, I): Riclassification of Trezzano chondritic meteorite. Bachelor July 2004
- 2006: *Matteo Alvaro* (Now at University of Pavia, I): Order – disorder processes in pyroxenes from ureilites meteorites. Master July 2006.
- 2006 *Tiziana Trabucchi*: Mona Lisa and Arctic project: geological experiences in simulation conditions for future planetary explorations. Master, July 2006.
- 2011 *Samuela Emily Bordoni*: Thermal expansion of a natural disordered (Mg_{0.60}Fe_{1.40})Si₂O₆ orthopyroxene. Bachelor July 2010
- 2013: *Davide Comboni* (Now PhD at University of Milan, I): New thermoelastic parameters, thermal expansion behaviour and dehydration of cancrinite. Bachelor July 2013
Mattia Luca Mazzucchelli: Diamond inclusions: new thermoelastic parameters for pyrope. Bachelor July 2013
- 2014: *Mara Murri*: Critical reassessment of the thermoelastic properties for diamond. Bachelor July 2014
Greta Rustioni: The role of fractures on the entrapment pressure for diamond-inclusion pair. Bachelor September 2014
- 2015: *Gabriele Zaffiro*: Development of a new resistance furnace for in situ high temperature single-crystal X-Ray diffraction. Bachelor January 2015
Matteo Di Prima: Almandine garnet at high-temperature: the role of controlled oxygen fugacity. Bachelor July 2015
Mattia Luca Mazzucchelli: Pressure of formation determination for host-inclusion systems. Master July 2015
- 2016: *Mara Murri*: Geothermometer calibration for augites (partially funded by The Barringer award for Impact related research). Master July 2016
Greta Rustioni (Now PhD at BGI, Bayreuth D): Brittle deformation in minerals. Master July 2016
Gabriele Zaffiro: Characterization of the stress distribution in synthetic host-inclusion pairs. Master July 2016
- 2018: *Pietro Bernocchi*: Raman spectroscopy of zircon inclusion in Dora Maira Garnets. Master February 2018

TEACHING ACTIVITIES

- 2001 – present Mineralogy and Laboratory, for the degree in Geological Sciences, 12 CFU, University of Pavia, Italy
- 2001 – 2007 Extraterrestrial Materials, M.Sc. degree programme in Geological Sciences, 3CFU, University of Pavia, Italy.

INSTITUTIONAL RESPONSIBILITIES

- 1998 – Faculty member, Dept. of Earth and Environmental Sciences, University of Pavia, Italy
- 2001 – Member of the Graduate Student Advisory board (PhD Committee), Dept. of Earth and Environmental Sciences, University of Pavia, Italy
- 2010 – 2013 Coordinator of the PhD Program in Earth Sciences of the University of Pavia
- 2013 – 2016 Coordinator of the PhD Program in Earth and Environmental Sciences of the University of Pavia

COMMISSIONS OF TRUST

- 1990 – Reviewer for American Mineralogist, Bulletin de Mineralogie, Physics and Chemistry of Minerals, Contributions to Mineralogy and Petrology, Meteoritics & Planetary Science.
- 2015 – Editorial board member for Frontiers (Earth and Planetary Material division)

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 1990 – Member, of the Italian Society of Mineralogy and Petrology (SIMP)
- 1990 – Member of the Mineralogical Society of America (MSA)
- 1990 – 2005 Member of the Italian Association for Crystallography (AIC)

BIBLIOMETRIC RECORD

- 73 Research publications in ISI journals
- >100 scientific communications to national and international conferences
- Several invited talks and seminar to national and international institutions
- More than 1300 citations
- H-index = 23

TRACK RECORD AND SCIENTIFIC INTERESTS

The scientific field of interest of M.C. Domeneghetti developed in the crystal-chemistry of rock-forming minerals studying, by X-ray single-crystal diffraction, the structural variations which occur in pyroxenes and amphiboles as a function of chemical composition and degree of order. The aim was that of investigating how in these minerals the cation distribution affects geometrical parameters of the structure and of finding their correlations with the formation conditions. M.C.D. studied both thermodynamic and kinetic aspects of order-disorder reactions in pyroxenes under controlled conditions of T and pO₂ and phase transitions in pigeonite and cummingtonite induced by in situ annealings. In particular M.C.D.: a) investigated the convergent ordering process in omphacites, applying the Landau theory to the results of X-ray diffraction and using IR spectroscopy to analyse local heterogeneities; b) studied the non convergent ordering in orthopyroxene and pigeonite using the Mueller-Ganguly approach. This allowed her to obtain information about the cooling rate of host rocks and also to constrain the thermal history of meteorite and lunar samples. More recently M.C.D focused on the study of thermal expansion and compressibility of minerals and on the effect, on these properties of the isomorphous substitutions and cation ordering.

PUBLICATIONS IN PEER-REVIEWED JOURNALS (past ten years)

1. Alvaro M., Nestola F., Ballaran T.B., Cámara F., Domeneghetti M.C., and Tazzoli V. (2010) High-pressure phase transition of a natural pigeonite. *American Mineralogist*, 95(2-3): 300-311 (IF:2.026).
2. Redhammer G.J., Cámara F., Alvaro M., Nestola F., Tippelt G., Prinz S., Simons J., Roth G. and Amthauer G. (2010) Thermal expansion and high-temperature P2₁/c–C2/c phase transition in clinopyroxene-type LiFeGe₂O₆ and comparison to NaFe(Si,Ge)₂O₆. *Physics and Chemistry of Minerals*, 37(10): 685-704 (IF: 1.876).
3. Alvaro M., Nestola F., Cámara F., Domeneghetti M.C., And Tazzoli V. (2011) High-pressure displacive phase transition of a natural Mg-rich pigeonite. *Physics and Chemistry of Minerals*, 38(5): 379-385 (IF: 1.730).
4. Alvaro M., Cámara F., Domeneghetti M.C., Nestola F., And Tazzoli V. (2011) HT P2₁/c to C2/c phase transition and kinetics of Fe²⁺-Mg order-disorder of an Fe-poor pigeonite: implications for cooling history of ureilites. *Contributions to Mineralogy and Petrology*, 163(3): 599-613. (IF: 3.441)
5. Gatta G.D., Angel R.J., Zhao J., Alvaro M., Rotiroti N., Carpenter M.A. (2011) Phase-stability,

- elastic behavior and pressure-induced structural evolution of kalsilite: a ceramic material and high-T/high-P mineral. *American Mineralogist*, 96(8-9): 1363-1372 (IF:2.169).
6. Domeneghetti M.C., Fioretti A.M., Cámara F., McCammon C., Alvaro M. (2013) Thermal history of nakhlites: a comparison between MIL-03346 and its terrestrial analogue theo's flow. *Geochimica et Cosmochimica Acta*, 121: 571-581 (IF: 4.250).
 7. Ferrari S., Nestola F., Massironi M., Maturilli A., Helbert J., Alvaro M., Domeneghetti M.C., Zorzi F. (2014) In-situ high-temperature emissivity spectra and thermal expansion of C2/c pyroxenes. *American Mineralogist*, 99(4): 786-792 (DOI: 10.2138/am.2014.4698, IF:1.964)
 8. Gatta G.D., Comboni D., Alvaro M., Lotti P., Cámara F., Domeneghetti M.C. (2014) Thermoelastic behavior and dehydration process of cancrinite. *Physics and Chemistry of Minerals*, 41(5): 373-386 (DOI: 10.1007/s00269-014-0656-2, IF: 1.538).
 9. Alvaro M., Nestola F., Ross N.L., Domeneghetti M.C. and Reznitsky L. (2014) High pressure behavior of thiospinel CuCr_2S_4 . *American Mineralogist* 99(5): 908-913 (DOI: 10.2138/am.2014.4689, IF: 1.964).
 10. Pandolfo F., Cámara F., Domeneghetti M.C., Alvaro M., Nestola F., Karato S., Amulele G. (2015) Volume thermal expansion along the jadeite–diopside join. *Physics and Chemistry of Minerals*, 42(1): 1-14 (DOI: 10.1007/s00269-014-0694-9, IF: 1.585)
 11. Alvaro M., Domeneghetti M.C., Marinangeli, L. (2015) A new calibration to determine the closure temperatures of Fe-Mg ordering in augite from nakhlites. *Meteoritics and Planetary Science*, 50(3): 499-507 (IF: 2.819).
 12. Scandolo L., Mazzucchelli M.L., Alvaro M., Domeneghetti M.C., Nestola F. (2015) Thermal expansion behavior of orthopyroxenes: the role of the Fe-Mn substitution. *Mineralogical Magazine*, 79(1): 71-87. (IF: 2.212)
 13. Milani S., Nestola F., Alvaro M., Mazzucchelli M.L., Domeneghetti M.C., Geiger C.A. (2015) Diamond-garnet geobarometry: The role of garnet compressibility and expansivity. *Lithos*, 227: 140-147. (IF: 3.723)
 14. M. Alvaro, R.J. Angel, C. Marciano, S. Milani, G. Zaffiro, L. Scandolo, M.L. Mazzucchelli, G. Rustioni, M.C. Domeneghetti, F. Nestola (2015) A new micro-furnace for "in situ" high-temperature single crystal X-ray diffraction measurements. *Journal of Applied Crystallography*, 48 (4): 1192-1200. (IF: 2.570)
 15. Nestola F., Alvaro M., Casati M.N., Wilhelm H., Kleppe A., Jephcoat A.J., Domeneghetti M.C., Harris J.W. (2016) Source assemblage types for cratonic diamonds from X-ray synchrotron diffraction. *Lithos*, 265: 334-338.
 16. M. Murri, L. Scandolo, A. Fioretti, M.C. Domeneghetti and M. Alvaro (2016). Fe-Mg equilibrium behaviour in augite: implications for the thermal history of terrestrial and extraterrestrial rocks. *American mineralogist* 101 (12), 2747-2750.
 17. S. Milani, R.J. Angel, L. Scandolo, M.L. Mazzucchelli, T. Boffa-Ballaran, S. Klemme, M.C. Domeneghetti, R. Miletich, K. Scheidl, M. Derzsi, K. Tokár, M. Prencipe, M. Alvaro, F. Nestola (2017) Elastic behaviour of grossular garnets at high pressure and temperature. *American Mineralogist*, 102(4): 851-859.
 18. Murri M., Camara F., Adam J., Domeneghetti M.C., Alvaro M. (2018) Intracrystalline "geothermometry" assessed on clino- orthopyroxenes bearing synthetic rocks. *Geochimica et Cosmochimica Acta*, (in press).

MEETINGS CONFERENCES, SEMINARS AND WORKSHOPS (past ten years):

19. F. Nestola, F. Cámara, M. Alvaro, M.C. Domeneghetti, V. Tazzoli, H. Ohashi. High-pressure behaviour of a Li-bearing orthopyroxene. 1st SIMP-AIC joint meeting, Sept. 7-12th 2008. Sestri Levante (GE), I
20. Alvaro M., Nestola F., Boffa Ballaran T., Cámara F., Domeneghetti M. C., Tazzoli V. HP – phase transition of a natural P21/c pigeonite: spontaneous strain and structure evolution. EGU 2008, Apr. 11 – 18th 2008. Wien, A
21. Alvaro M., Nestola F., Boffa Ballaran T., Cámara F., Domeneghetti M. C., Tazzoli V. HP study of a natural pigeonite. International school of mineralogy 2008: "HP-HT Mineral Physics: implications for geosciences". Feb. 11 – 15th 2008. Bressanone, IT
22. Alvaro M., Nestola F., Cámara F., Domeneghetti M. C., Tazzoli V. Composition Vs transition pressure: a model for clinopyroxenes. GEOITALIA 2009, Sept. 9 – 11th 2009. Rimini, IT
23. Alvaro M., Nestola F., Cámara F., Domeneghetti M. C., Tazzoli V. and R.J. Angel. P21/c to C2/c phase transition in clinopyroxenes and the geodynamic implications. ECM26 2010, Aug 29th – Sept 5th 2010 Darmstad, D
24. Alvaro M., Nestola F., Cámara F., Domeneghetti M. C., Tazzoli V. and R.J. Angel. Phase transition mechanisms in clinopyroxenes under non-ambient conditions. ACA 2010, Jul 23rd – Jul 27th. Chicago, USA
25. Domeneghetti M.C., Fioretti A.M., Cámara F., McCammon C., Alvaro M. Thermal history of nakhlites: a comparison between MIL03346 and its terrestrial analogue Theo's flow. EMC 2012, Sep 2nd – 6th 2012. Frankfurt, D
26. Ferrari S., Nestola, F., Helbert, J., Maturilli, A., D'Amore, M., Alvaro, M., Domeneghetti, M., Massironi, M., Hiesinger, H. Calcium pyroxenes at Mercurian surface temperatures: investigation of in-situ emissivity spectra and thermal expansion. AGU Fall meeting 2013, December 9-13th 2013. San Francisco, CA, USA
27. Sula Milani, Matteo Mazzucchelli, Fabrizio Nestola, Matteo Alvaro, Ross J. Angel, Charles A. Geiger, and Chiara Domeneghetti. The P-T conditions of garnet inclusion formation in diamond: thermal expansion of synthetic end-member pyrope (pico). EGU 2013, Apr 7th – 12th 2013. Wien, A
28. M. Alvaro, R.J. Angel, M.L. Mazzucchelli, F. Nestola, M.C. Domeneghetti. Isomekes: Fundamental tool to determine the formation pressure for the diamond-inclusion pair. EGU 2014, April 27th May 2nd 2014. Wien, A
29. Fioretti AM, Alvaro M., Domeneghetti M.C., Marinangeli, L. (2014) New augite geothermometer for Nakhilites. 77th Annual Meeting of the Meteoritical-Society. Sep. 8th – 13th 2014. Casablanca, Morocco. METEORITICS & PLANETARY SCIENCE 49, A118.
30. Lorenzo Scandolo, Mazzucchelli M.L., Chiara M. Domeneghetti, Matteo Alvaro, Fabrizio Nestola, Francesco Pandolfo. Thermal expansion behavior of orthopyroxenes: the role of the Fe-Mn substitution. SIMP-SGI 2014, Sep. 10th -12th 2014. Milano, I.
31. Domeneghetti M.C., Alvaro M., Fioretti A.M., Cámara F., Marinangeli L. New augite geothermometer for nakhlites. SIMP-SGI 2014, Sep. 10th -12th 2014. Milano, I.
32. Alvaro M., Domeneghetti M.C., Fioretti A.M.. Pyroxenes Fe-Mg exchange reaction and its application to planetary studies. XII Congresso Nazionale di Scienze Planetarie, Feb 2nd-6th 2015. Bormio, I
33. Mattia L. Mazzucchelli, Ross Angel, Matteo Alvaro, Paolo Nimis, Chiara Maria Domeneghetti

- and Fabrizio Nestola. Elastic geobarometry for ultra-high pressure metamorphic (UHPM) rocks EGU 2015, April 12th 17th 2015. Wien, A
34. M. Alvaro, R.J. Angel, C. Marciano, S. Milani, L. Scandolo, M.L. Mazzucchelli, G. Zaffiro, G. Rustioni, M. Briccola, M.C. Domeneghetti, F. Nestola. A new micro-furnace for “in situ” high-temperature single crystal X-ray diffraction measurements ECM 2015, August 22nd – 29th 2015, Rovinj, HR.
 35. Scandolo L., Alvaro M., McCammon C., Milani S., Di Prima M., Domeneghetti M.C., Nestola F. The role of oxidation on the high-temperature behavior of almandine. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 36. G. Zaffiro, R.J. Angel, M. Alvaro, F. Nestola, M.C. Domeneghetti, L. Scandolo, M.L. Mazzucchelli, S. Milani, G. Rustioni, C. Marciano. New micro-furnace for “in situ” high-temperature single crystal X-ray diffraction measurements. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 37. M. Alvaro, R.J. Angel, M.L. Mazzucchelli, M.C. Domeneghetti, F. Nestola. Elastic geobarometry for UHPM rocks: A link between mineralogy and petrology. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 38. Murri M., Scandolo L., Alvaro M., Domeneghetti M.C., Fioretti A.M. Clinopyroxene Fe-Mg exchange reaction applied to Martian nakhlites. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 39. G. Rustioni, R.J. Angel, S. Milani, M.L. Mazzucchelli, P. Nimis, M.C. Domeneghetti, F. Marone, M. Alvaro, J.W. Harris, F. Nestola. Elastic geobarometry for host-inclusion systems: Pressure release and the role of brittle failure. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 40. S. Milani, L. Scandolo, G. Zaffiro, M. Di Prima, M.L. Mazzucchelli, M. Alvaro, M.C. Domeneghetti, F. Nestola. On the determination of the entrapment pressure for garnet inclusions in diamond. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 41. M.L. Mazzucchelli, R.J. Angel, M. Alvaro, P. Nimis, M.C. Domeneghetti, F. Nestola. Host-inclusion geobarometry for ultra-high pressure metamorphic (UHPM) rocks. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 42. S. Ferrari, M. Alvaro, F. Nestola, A. Maturilli, J. Helbert, M. C. Domeneghetti, M. Massironi and F. Zorzi. Thermal Expansion of C2/c Pyroxenes: Implications for the Thermal Infrared Spectroscopy of Solar System Bodies. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 2nd - 4th 2015. Florence, I
 43. M. Alvaro, R.J. Angel, C. Marciano, G. Zaffiro, L. Scandolo, M.L. Mazzucchelli, S. Milani, G. Rustioni, C.M. Domeneghetti, and F. Nestola. Development of a new micro-furnace for "in situ" high-temperature single crystal X-ray diffraction measurements. 24th Annual Meeting of the German Crystallographic Society (DGK), March 14th – 17th 2016, Universität Stuttgart, D.
 44. R.J. Angel, M. Alvaro, P. Nimis, M.L. Mazzucchelli, F. Nestola. Single Inclusion Piezobarometry Reveals High-temperature decompression path for Variscan Granulites. EGU 2016, April 17th 22nd 2016. Wien, A
 45. M.L. Mazzucchelli, R.J. Angel, G. Rustioni, S. Milani, P. Nimis, M.C. Domeneghetti, F. Marone, J.W. Harris, F. Nestola, M. Alvaro. Elastic geobarometry and the role of brittle failure on pressure release. EGU 2016, April 17th 22nd 2016. Wien, A
 46. M. Murri, L. Scandolo, A.M. Fioretti, M.C. Domeneghetti, M. Alvaro. Fe-Mg exchange reaction in

clinopyroxene and its application to the thermal history of planetary bodies. Lunar and Planetary Science Conference 21st -25th March, Houston, Texas (USA).

47. G. Rustioni, R.J. Angel, M.L. Mazzucchelli, S. Milani, P. Nimis, M.C. Domeneghetti, F. Marone, J.W. Harris, F. Nestola & M. Alvaro. Pressure release for host – inclusion systems: the interplay between brittle failure and fluid phase. European Mineralogical Conference – EMC 2016, 11th-15th September, Rimini, Italy.
48. M. Murri, L. Scandolo, A.M. Fioretti, M.C., F. Nestola, Domeneghetti & M. Alvaro. new insights on Theo's flow lava using intracrystalline thermometry on augites. European Mineralogical Conference – EMC 2016, 11th-15th September, Rimini, Italy.
49. Mazzucchelli M.L., Burnley P., Angel R.J., Domeneghetti M.C., Nestola F., Alvaro M. Elastic geobarometry: uncertainties arising from the shape of the inclusion. European Mineralogical Conference – EMC 2016, 11th-15th September, Rimini, Italy.
50. Mazzucchelli M.L., Burnley P., Angel R.J., Domeneghetti M.C., Nestola F., Alvaro M. Elastic geobarometry: uncertainties arising from the geometry of the system. EGU 2017, April 17th 22nd 2017. Wien, A
51. Lucia Marinangeli, Loredana Pompilio, Anna Chiara Tangari, Antonio Baliva, Matteo Alvaro, Maria Chiara Domeneghetti, Franco Frau, Maria Teresa Melis, Giovanni Bonanno, Maria Consolata Rapisarda, Paolo Petrinca, Oliva Menozzi, Vasco Lasalvia, and Simone Pirrotta TOMOX : An X-rays tomographer for planetary exploration. EGU 2017, April 17th 22nd 2017. Wien, A
52. Murri M., Jones A.P., McMillan P.F., Salzmann C.G., Alvaro M., Domeneghetti M.C., Nestola F., Principe M., Dobson D., Hazael R., Moore M. Structure characterization of impact natural diamond from Popigai crater. Meteoritical Society Meeting 2017, 24-28 July 2017 Santa Fe, New Mexico, USA.
53. Lucia Marinangeli, Loredana Pompilio, Anna Chiara Tangari, Antonio Baliva, Matteo Alvaro, Maria Chiara Domeneghetti, Franco Frau, Vasco La Salvia, Maria Teresa Melis, oliva Menozzi, Giovanni Bonanno, Maria Consolata Rapisarda, Paolo Petrinca, Simone Pirrotta and Angela Volpe TOMOX : An X-rays tomographer for lunar planetary exploration. European Planetary Science conference (EPSC), Riga.
54. Alvaro M., Jones A.P., McMillan P.F., Salzmann C.G., Murri M., Domeneghetti M.G., Nestola F., Principe M., Dobson D., Hazael R., Moore M., Vishnevsky S., Logvinova A.M. & Sobolev N.K. : Structure characterization of impact natural diamond from Popigai crater. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 3rd - 6th 2017. Pisa, I.
55. Mazzucchelli M.L., Burnley P., Angel R.J., Domeneghetti M.C., Nestola F. & Alvaro M.: Elastic geobarometry: the strain and the stress distribution in the host-inclusion system revealed by Finite Element Modeling (FEM). Congresso congiunto SIMP-AIV-SoGeI-SGI. September 3rd - 6th 2017. Pisa, I
56. Murri M., Cámara F., Adam J., Domeneghetti M.C. & Alvaro M.: Intracrystalline “geothermometry” assessed on clino- orthopyroxenes bearing synthetic rocks. Congresso congiunto SIMP-AIV-SoGeI-SGI. September 3rd - 6th 2017. Pisa, I
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