# *CURRICULUM VITAE ET STUDIORUM*

## *PAOLO NIMIS*


Date and place of birth: 12/07/1966 Gemona del Friuli (UD)
Citizenship: Italian
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QUALIFICATIONS, JOB POSITIONS

- 1990 Four-year Degree (Laurea) with full honours in Geological Sciences (University of Padua).
- 1994 PhD in Earth Sciences (University of Padua).
- Jan 1995-Jan 1997 Post-doc scholarship at the Dept. of Mineralogy and Petrology, University of Padua.
- Jan 1997-Jul 1997 Visiting Researcher with C.N.R. (Consiglio Nazionale delle Ricerche) scholarship at the Research School of Earth Sciences, Australian National University, Canberra, Australia.
- Mar 1998-Nov 2006: Researcher in Mineral Resources (GEO/09) at the Dept. of Mineralogy and Petrology, University of Padua.
- Nov 2006-Nov 2012: Associate Professor in Mineralogy (GEO/06) at the Dept. of Mineralogy and Petrology (now Dept. of Geosciences), University of Padua.
- Nov 2012-2022: Associate Professor in Mineral Resources (GEO/09) at the Dept. of Geosciences, University of Padua.
- May 2022-: Full Professor in Mineral Resources (GEO/09) at the Dept. of Geosciences, University of Padua.

LECTURING

Since March 1998 lecturing activity (mineralogy, ore deposits, geochemistry and related topics) in several courses of the Faculties of Sciences and Engineering (University of Padua).

RESEARCH

- Crystal-chemistry of rock-forming minerals and relations between crystal-chemical properties, formation conditions and geochemical properties, and applications in petrological, geological and ore-deposit studies.
- Thermobarometry of (ultra)mafic rocks and diamonds, geochemistry of mantle rocks, and their relationships with the diamond-potential of kimberlites.
- (Ultra)mafic-hosted VMS deposits in ancient and modern seafloor settings.
- Metallogeny of Cu in the Alpine and neighbour regions and archaeometric implications.

Author of 106 scientific publications, of which 81 full papers on impacted journals (3228 citations, H-Index 27, as of May 5th 2022, Scopus).
Author of 6 invited talks at international congresses/workshops and of 3 invited talks at national congresses/workshops.

COORDINATION ROLES

*International projects*

- 2013-2014 "The origin of ferropericlase included in diamonds: shallow or deep mantle origin?" funded by the Deep Carbon Observatory (DCO).

*National projects*

- PRIN 2007 “Processi idrotermali e metallogenesi in complessi ofiolitici di tipo SSZ: eredità oceanica e rimobilizzazione orogenica”, Responsible for RU Padova, not funded.

- PRIN 2020 “CriticaL rAw materials: oRe-deposit models in ITalY (CLARITY)”, Responsible for RU Padova, not funded.

*Projects funded by the University of Padua:*

- 1999–2000 Young Researcher Project “Pyroxene Thermobarometry in Simple and Complex Systems”
- 2000–2001 Young Researcher Project “Pyroxene Thermobarometry”
- 2006 University Project “Volcanogenic massive sulfide deposits in South Urals mafic-ultramafic complexes”
- 2007 Project for International Cooperation, with the Institute of Mineralogy, Miass, Russian Academy of Sciences–Urals Division, Russia
- 2013 University Project 2013 “Copper metallogenesis and provenancing in the Alpine realm”

PARTICIPATIONS IN OTHER PROJECTS

- PRIN2001 “Processi di ordine - disordine intracristallino nei minerali delle rocce” (P.I. E. Bruno)
- PRIN2003 “Ricostruzione dei processi metasomatici in peridotiti a granato incorporate in crosta continentale subdotta: dal fabric ai caratteri isotopici nella sequenza della Ulten zone, Austroalpino superiore.” (P.I. Prof. S. Poli)
- PRIN2004 “Processi di ordine-disordine e difettualità negli spinelli” (P.I. E. Bruno)
- Research contract with Gruppo Archeologico Agordino (ARCA) (2008) for the project “The Agordo Cu mines: Reconstruction of the mining history and of metal spreading” (2008) (P.I. G. Artioli)
- Senior Staff member in ERC "Ideas" Project, Starting Grant 2012, INDIMEDEA (Inclusions in Diamonds: Messengers from the Deep Earth), 7th Framework Programme (P.I. F. Nestola)
- Research contract with Comune di Sant’Orsola Terme (2013) for “Mineralogical analyses in the framework of the study of the natural background of metals and semimetals in soils in a portion of Val dei Mocheni” (P.I. G. Artioli)
- SID2015 (University of Padua) "Tectonothermal evolution of Northern Patagonian Andes” (P.I. M. Zattin)
- PRIN2017 “Micro to Macro - How to unravel the nature of the Large Magmatic Events” (P.I. M. Coltorti)

EDITORIAL COMMITTEES

- Guest Editor of European Journal of Mineralogy, vol 24 (2012), special section “Diamonds, the mantle petrologist's best friends”.
- Member of the Editorial Board of the international journal Minerals, MDPI (since December 2019).

NETWORKING ACTIVITIES

- Founder member of the Diamond and Mantle Geodynamics of Carbon Consortium (DMGC) affiliated to the Deep Carbon Observatory (DCO).

ORGANISATION OF INTERNATIONAL WORKSHOPS AND MEETINGS

- Convener of session "Cratonic Mantle Processes: Insights from Diamonds and Xenoliths", Goldschmidt 2011 Conference, Prague.
- International School “Diamonds, the mantle petrologist's best friends”, Bressanone (21–26/02/2011).

PANELIST FOR INTERNATIONAL EVENTS

- Invited panelist for AGU-IGC Hot Topic Panel Discussion on “The Dynamic Earth and its Kimberlite, Cratonic Mantle and Diamond record through time”, 35th International Geological Congress, Cape Town (31/08/2016)
- Invited panelist for the seminar by Clifford Patten on Ore Deposits Hub, Open Geoscience Talks (SGA-SEG-IAGOD) (6/4/2022)

LECTURING AT INTERNATIONAL WORKSHOPS

- XIII Scientific Students' School. IMin UB RAS Miass, Russia (2007).
- International School “Diamonds, the mantle petrologist's best friends”, Bressanone/Brixen, February 21–26, 2011.
- International School “The Nature of Diamonds and their Use in Earth's Study”, Bressanone/Brixen, January 28–February 01, 2015.

ASSIGNMENTS AT INTERNATIONAL INSTITUTIONS

- Member of the examination committee of a PhD in Earth Sciences at Université Jean Monnet, Saint-Etienne, France (March 2012).
- Co-supervisor for a Master 2 RGF (Référentiel Géologique de la France) thesis at ISTO-Université d'Orléans (2019).
- Member of the examination committee of a PhD in Earth Sciences at the Australian National University, Canberra, Australia (May 2022).

COOPERATION WITH INDUSTRY

- Research contract with Veneta Mineraria S.r.l. "Analysis and minerography of pyrites of industrial interest" (2008) (P.I. Prof. G. Salviulo)
- Research contract with Soltera Mining Corp. for the minero-petrographic and metallogenic characterisation of the El Torno area, Jujuy Province, Argentina (2012-2013).
- Research contract with DeBeers Group Services (Pty) Ltd for the thermobarometry of diamond inclusions and mantle xenocrysts from Cullinan, Kimberley and Voorspoed mines (2016-2019).

OTHER ACTIVITIES

- 2002-2013 Associate member of the Istituto di Geoscienze e Georisorse, CNR (Padua).
- 2001-present Member of the Council of the Doctorate School in Earth Science, University of Padua.

COLLABORATIONS

- Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou, China
- Department of Geosciences and MARUM Center for Marine Environmental Sciences, Bremen, Germany
- Géosciences Montpellier, CNRS-UMR 5243 - Université Montpellier II, Montpellier, France
- Bayerisches Geoinstitut, Universität Bayreuth, Bayreuth, Germany
- Institute of Earth Sciences, Saint Petersburg State University, Saint Petersburg, Russia
- IPGG RAS Saint Petersburg, Saint Petersburg, Russia
- Carnegie Institution of Washington, USA
- Glasgow University, UK
- V.S. Sobolev Institute of Geology and Mineralogy, Novosibirsk, Russia
- Institute of Mineralogy, Miass, Russia
- Institut für Mineralogie, Universität Münster, Germany
- Institut für Geologie, Universität Bern, Switzerland
- ETH Zurich, Switzerland
- BRGM, Orléans, France
- Institut de Physique du Globe de Paris, Paris, France
- Natural History Museum, London
- CNR-Istituto di Geoscienze e Georisorse, Sezione di Pavia, Italy
- Dipartimento di Scienze della Terra "Ardito Desio", Università di Milano, Italy
- Dipartimento di Scienze della Terra e Geoambientali, Università degli Studi "Aldo Moro", Bari, Italy
- Dipartimento di Scienze della Terra, Università di Torino, Italy

THIRD MISSION

- Public seminar "I giacimenti di rame delle Alpi", Museo Tridentino di Scienze Naturali, Trento, 26/05/2011.
- Public seminar "I giacimenti di rame delle Alpi", Gruppo Mineralogico Euganeo, Padova, 13/04/2012.
- Lecturer for the activity NEMES 2018 (Non è magia è scienza), "I minerali nella vita di ogni giorno", 27-28/09/2018, Università degli Studi di Padova, Regione Veneto, Comune di Padova, Alumni Università di Padova, Assindustria Veneto Centro, CICAP Veneto, Ufficio Scolastico Regionale per il Veneto, EIT Raw Materials.
- Progetto Lauree Scientifiche 2019 (classi di laurea L-32 e L-34), Attività per l'orientamento Scuole Superiori – Leader of field trip to the Vajont landslide, 30/09/2019 (41 participants).

- Scientific revision of the monography: Abbà T. (2019) "Conoscere la geologia del Veneto, vol. 1, Dalle rocce più antiche alle piattaforme anisico-ladiniche", Comitato Scientifico Veneto Friulano e Giuliano del Club Alpino Italiano.
- "Il giacimento a solfuri massivi di Valle Imperina", contribution in Abbà T. (2019) "Conoscere la geologia del Veneto, vol. 1, Dalle rocce più antiche alle piattaforme anisico-ladiniche", Comitato Scientifico Veneto Friulano e Giuliano del Club Alpino Italiano.
- Design of the exhibition on ancient scientific instruments at the Dept. of Geosciences, project Museo Diffuso "Scienza e tecnica all'Università di Padova. Strumenti scientifici, storia e storie dell'Ateneo Patavino", funded by the Università di Padova for the 800th anniversary celebrations (2021-2022).
- Piano Lauree Scientifiche 2021 (classe di laurea L-34), Attività per l'orientamento Scuole Superiori, Stage multidisciplinare "I colori della natura" – Seminario-laboratorio su 'Il colore nei minerali', Dipartimento di Geoscienze, Università di Padova, 06/07/2021 (30 participants).
- Public seminar "Il giacimento minerario di Cinque Valli", in "Memorie per il futuro. Storia mineraria di Cinquevalli", Comune di Roncegno Terme (TN), 03/12/2021 (60 participants).

## Publications ($^{CA}$: corresponding author)

**In press**

1. **Nimis P** (2022) Pressure and temperature data for diamonds. *Reviews in Mineralogy and Geochemistry* (Diamond Volume) *Invited Review*
2. Lorenzon S, Novella D, **Nimis P**, Jacobsen SD, Thomassot E, Pamato MG, Prosperi L, Lorenzetti A, Alvaro M, Brenker F, Salvadego F, Nestola F (2022) Ringwoodite and zirconia inclusions indicate downward travel of super-deep diamond. *Geology*
3. Pasqualetto L, Nestola F, Jacob DE, Pamato MG, Oliveira B, Perritt S, Chinn I, **Nimis P**, Milani S, Harris JW (2022) Protogenetic clinopyroxene inclusions in diamond and Nd diffusion modelling – Implications for diamond dating. *Geology*

**2022**

4. Liu Z, Ionov D, **Nimis P**, Xu Y, Peng-Li H, Golovin A (2021) Thermal and compositional anomalies in a detailed xenolith-based lithospheric mantle profile of the Siberian craton and the origin of seismic mid-lithosphere discontinuities. *Geology*, doi: 10.1130/G49947.1

**2021**

5. Visonà D, **Nimis P**$^{CA}$, Fioretti AM, Massironi M, Villa IM (2021) A hidden Oligocene pluton linked to the Periadriatic Fault System beneath the Permian Bressanone pluton, eastern Southern Alps. *International Geology Review*, doi: 10.1080/00206814.2021.2003725

**2020**

6. **Nimis P**$^{CA}$, Preston R, Perritt SH, Chinn IL (2020) Diamond's depth distribution systematics. *Lithos* 376–377: 105729, doi: 10.1016/j.lithos.2020.105729
7. Pennacchioni G, Scambelluri M, Bestmann M, Notini L, **Nimis P**, Plümper O, Faccenda M, Nestola F (2020) Record of intermediate-depth subduction seismicity in a dry slab from an exhumed ophiolite. *Earth and Planetary Science Letters* 548: 116490, doi: 10.1016/j.epsl.2020.116490
8. Toffolo L*, **Nimis P**$^{CA}$, Tret'yakov GA, Melekestseva IYu, Beltenev VE (2020) Seafloor massive sulfides from mid-ocean ridges: exploring the causes of their geochemical variability with multivariate analysis. *Earth Science Reviews*, 201: 102958, doi: 10.1016/j.earscirev.2019.102958
9. Artioli G, Canovaro C, Angelini I, **Nimis P** (2020) LIA of prehistoric metals in the Central Mediterranean area: a review. *Archaeometry* 62 (Suppl. 1): 53–85, doi: 10.1111/arcm.12542

**2019**

10. Agrosì G, Tempesta G, Mele D, Caggiani MC, Mangone A, Della Ventura G, Cestelli-Guidi M, Allegretta I, Hutchison MT, **Nimis P**, Nestola F (2019) Multiphase inclusions associated with residual carbonate in a transition zone diamond from Juina (Brazil). *Lithos* 350-351: 105279, doi: 10.1016/j.lithos.2019.105279
11. Nestola F, Zaffiro G, Mazzucchelli ML, **Nimis P**, Andreozzi GB, Periotto B, Princivalle F, Lenaz D, Secco L, Pasqualetto L, Logvinova AM, Sobolev NV, Lorenzetti A, Harris JW (2019) Diamond-inclusion system recording old deep lithosphere conditions at Udachnaya (Siberia). *Scientific Reports* 9: 12586, doi: 10.1038/s41598-019-48778-x
12. Canovaro C, Angelini I, Artioli G, **Nimis P**, Borgna E (2019) Metal flow in the Late Bronze Age across the Friuli plain (Italy): new insights on Cervignano and Muscoli hoards through chemical and

isotopic investigations. *Archaeological and Anthropological Sciences*, 11: 4829–4846, doi: 10.1007/s12520-019-00827-2

13. **Nimis P**[CA], Angel RJ, Alvaro M, Nestola F, Harris JW, Casati N, Marone F (2019) Crystallographic orientations of magnesiochromite inclusions in diamonds: what do they tell us? *Contributions to Mineralogy and Petrology* 174: 29, doi: 10.1007/s00410-019-1559-5
14. Nestola F, Jacob DE, Pamato MG, Pasqualetto L, Oliveira B, Greene S, Perritt S, Chinn I, Milani S, Kueter N, Sgreva N, **Nimis P**, Secco L, Harris JW (2019) Protogenetic garnet inclusions and the age of diamonds. *Geology*, 47: 431–434, doi: 10.1130/G45781.1
15. Anzolini C, Nestola F, Mazzucchelli M, Alvaro M, **Nimis P**, Gianese A, Morganti S, Marone F, Campione M, Hutchison MT, Harris J (2019) Depth of diamond formation obtained from single periclase inclusions. *Geology* 47: 219–222, doi: 10.1130/G45605.1

**2018**

16. **Nimis P**[CA], Nestola F, Schiazza M, Reali R, Agrosì G, Mele D, Tempesta G, Howell D, Hutchison M, Spiess R (2018) Fe-rich ferropericlase and magnesiowüstite inclusions reflecting diamond formation rather than ambient mantle. *Geology*, 47: 27–30, doi:10.1130/G45235.1
17. Nestola F, Prencipe M, **Nimis P**, Sgreva N, Perritt SH, Chinn IL, Zaffiro G (2018) Toward a robust elastic geobarometry of kyanite inclusions in eclogitic diamonds. *Journal of Geophysical Research* 123: 1–13, doi: 10.1029/2018JB016012
18. Melekestseva IYu, Maslennikov VV, Safina NP, **Nimis P**, Maslennikova SP, Beltenev VE, Rozhdestvenskaya II, Danyushevsky LV, Large R, Artemyev DA, Kotlyarov DA, Toffolo L (2018) Sulfide breccias from the Semenov-3 hydrothermal field, Mid-Atlantic Ridge: authigenic mineral formation and trace element pattern. *Minerals* 8: 321, doi: 10.3390/min8080321
19. Toffolo L*, Addis A, Martin S, **Nimis P**, Rottoli M, Godard G (2018) The Misérègne slag deposit (Valle d'Aosta, Western Alps, Italy): insights into (pre-)Roman copper metallurgy. *Journal of Archaeological Science* 16:248–260, doi: 10.1016/j.jasrep.2018.02.030
20. **Nimis P** (2018) Trapped minerals under stress. Geology 46: 287–288 (Research Focus su invito), doi: 10.1130/focus032018.1
21. Visonà D, Meyzen C, **Nimis P**, Nestola F (2018) Fossil submarine hydrothermalism in metabasalts from the Gudon (Bressanone) amphibolite (Southalpine basement, Eastern Alps, NE Italy) (2018) *European Journal of Mineralogy*, 30: 355–366, doi:10.1127/ejm/2018/0030-2720

**2017**

22. **Nimis P**[CA], Omenetto P, Stasi G, Canovaro C, Dal Sasso G, Artioli G, Angelini I (2017) Lead isotope systematics in ophiolite-associated sulphide deposits from the Western Alps and Northern Apennine (Italy): from oceanisation to metamorphism. *European Journal of Mineralogy* 30: 17–31, doi: 10.1127/ejm/2018/0030-2696
23. Agrosì G, Tempesta G, Della Ventura G, Cestelli Guidi M, Hutchison M, **Nimis P**, Nestola F (2017) Non-destructive in situ study of plastic deformations in diamonds: X-ray Diffraction Topography and µFTIR mapping of two super deep diamond crystals from São Luiz (Juina, Brazil). *Crystals*, 7: 233; doi:10.3390/cryst7080233
24. Martin S, Toffolo L*, Moroni M, Montorfano C, Secco L, Agnini C, **Nimis P**, Tumiati S (2017) Siderite deposits in northern Italy: Early Permian to Early Triassic hydrothermalism in the Southern Alps. *Lithos* 284–285:276–295, 10.1016/j.lithos.2017.04.002
25. Melekestseva IYu, Maslennikov VV, Tret'yakov GA, **Nimis P**, Beltenev VE, Rozhdestvenskaya II, Maslennikova SP, Belogub EV, Danyushevsky L, Large R, Yuminov AM, Sadykov SA (2017) Gold- and silver-rich massive sulfides from the Semenov-2 hydrothermal field, 13°31.13′ N, Mid-Atlantic Ridge: A case of magmatic contribution? *Economic Geology* 112: 741–773, doi: 10.2113/econgeo.112.4.741
26. Toffolo L*, **Nimis P**, Martin S, Tumiati S, Bach W (2017) The Cogne magnetite deposit (Western Alps, Italy): a Late Jurassic seafloor ultramafic-hosted hydrothermal system? *Ore Geology Reviews* 83: 103–126, doi: 10.1016/j.oregeorev.2016.11.030

**2016**

27. Artioli G, Angelini I, **Nimis P**, Villa IM (2016) A lead-isotope database of copper ores from the southeastern Alps: a tool for the investigation of prehistoric copper metallurgy. *Journal of Archaeological Science* 75: 27–39, doi: 10.1016/j.jas.2016.09.005
28. Milani S, Nestola F, Angel RJ, **Nimis P**, Harris JW (2016) Crystallographic orientations of olivine inclusions in diamonds. *Lithos* 265: 312–316, doi: 10.1016/j.lithos.2016.06.010

29. Ziberna L*, **Nimis P**, Kuzmin D, Malkovets VG (2016) Error sources in single-clinopyroxene thermobarometry and a mantle geotherm for the Novinka kimberlite, Yakutia. *American Mineralogist* 101: 2222–2232, doi: 10.2138/am-2016-5540
30. **Nimis P**[CA], Alvaro M, Nestola F, Angel RJ, Marquardt K, Rustioni G, Harris JW (2016) First evidence of hydrous silicic fluid films around solid inclusions in gem-quality diamonds. *Lithos* 260: 384-389, doi: 10.1016/j.lithos.2016.05.019
31. Safina NP, Melekestseva IYu, **Nimis P**, Ankusheva NN, Yuminov AM, Kotlyarov VA, Sadykov SA (2016) Barite from the Saf'yanovka VMS deposit (Central Urals) and Semenov-1 and -3 hydrothermal sulfide fields (Mid-Atlantic Ridge): A comparative analysis of formation conditions. *Mineralium Deposita* 51: 491–507, doi: 10.1007/s00126-015-0617-9
32. Addis A, Angelini I, **Nimis P**, Artioli G (2016) Late Bronze Age copper smelting slags from Luserna (Trentino, Italy): Interpretation of the metallurgical process. *Archaeometry* 58: 96–114, doi: 10.1111/arcm.12160

**2015**

33. Angel RJ, **Nimis P**, Mazzucchelli ML, Alvaro M, Nestola F (2015) How large are departures from lithostatic pressure? Constraints from host-inclusion elasticity. *Journal of Metamorphic Geology* 33: 801–813, doi: 10.1111/jmg.12138
34. **Nimis P**[CA], Omenetto P (2015) Does subduction polarity control metallogeny? The Mediterranean case. *Terra Nova* 27: 139–146, doi:10.1111/ter.12141
35. **Nimis P**[CA], Goncharov A, Ionov DA, McCammon C (2015) $Fe^{3+}$ partitioning systematics between orthopyroxene and garnet in mantle peridotite xenoliths and implications for thermobarometry of oxidized and reduced mantle rocks. *Contributions to Mineralogy and Petrology* 169: 6, doi: 10.1007/s00410-014-1101-8
36. **Nimis P**[CA], Angel RJ, Alvaro M, Nestola F (2015) From mineralogy to petrology: the example of diamond and its inclusions. *Rendiconti Online della Società Geologica Italiana* 37: 47-49, doi: 10.3301/ROL.2015.174

**2014**

37. **Nimis P**[CA], Dalla Costa L, Guastoni A (2014) Cobaltite-rich mineralisation in the iron skarn deposit of Traversella (Western Alps, Italy). *Mineralogical Magazine* 78: 25-41, doi: 10.1180/minmag.2014.078.1.02
38. Angel RJ, Mazzucchelli ML, Alvaro M, **Nimis P**, Nestola F (2014) Geobarometry from host-inclusion systems: The role of elastic relaxation. *American Mineralogist* 99: 2146-2149, doi: 10.2138/am-2014-5047
39. Nestola F, **Nimis P**, Angel RJ, Milani S, Bruno M, Prencipe M, Harris JW (2014) Olivine with diamond-imposed morphology included in diamonds. Syngenesis or protogenesis? *International Geology Review* 56: 1658-1667, doi: 10.1080/00206814.2014.956153
40. Prencipe M, Bruno M, Nestola F, De La Pierre M, **Nimis P** (2014) Toward an accurate ab initio estimation of compressibility and thermal expansion of diamond in 3 the [0, 3000K] temperature, and [0, 30GPa] pressures ranges, at the hybrid HF/DFT theoretical level. *American Mineralogist* 99: 1147-1154, doi: 10.2138/am.2014.4772
41. Melekestseva IYu, Tret'yakov GA, **Nimis P**, Yuminov AM, Maslennikov VV, Maslennikova SP, Kotlyarov VA, Beltenev VE, Danyushevsky LV, Large R (2014) Barite-rich massive sulfides from the Semenov-1 hydrothermal field (Mid-Atlantic Ridge, 13°30.87′ N): Evidence for phase separation and magmatic input. *Marine Geology* 349: 37-54, doi: 10.1016/j.margeo.2013.12.013
42. Artioli G, Angelini I, **Nimis P**, Addis A, Villa I (2014) Prehistoric copper metallurgy in the Italian Eastern Alps: recent results. *Historical Metallurgy* 47(1): 51-59

**2013**

43. Ziberna L*, Klemme S, **Nimis P** (2013) Garnet and spinel in fertile and depleted mantle: insights from thermodynamic modelling. *Contributions to Mineralogy and Petrology* 166: 411-421, doi: 10.1007/s00410-013-0882-5
44. Ziberna L*, **Nimis P**, Zanetti A, Marzoli A, Sobolev NV (2013) Metasomatic processes in the central Siberian cratonic mantle: Evidence from garnet xenocrysts from the Zagadochnaya kimberlite. *Journal of Petrology* 54: 2379-2409, doi: 10.1093/petrology/egt051
45. Shirey SB, Cartigny P, Frost DJ, Keshav S, Nestola F, **Nimis P**, Pearson DG, Sobolev NV, Walter MJ (2013) Diamonds and the Geology of Mantle Carbon. In R.M. Hazen, A.P. Jones and J.A. Baross, Eds., Carbon in Earth, *Reviews in Mineralogy and Geochemistry* 75: 355-421 (open access book), doi: , doi: 10.2138/rmg.2013.75.12

46. Melekestseva IYu, Zaykov VV, **Nimis P**, Tret'yakov GA, Tessalina SG (2013) Cu–(Ni–Co–Au)-bearing massive sulfide deposits associated with mafic–ultramafic rocks of the Main Urals Fault, South Urals: Geological structures, ore textural and mineralogical features, comparison with modern analogs. *Ore Geology Reviews* 52: 18-36, doi: 10.1016/j.oregeorev.2012.03.005

**2012**

47. Howell D, Wood IG, Nestola F, **Nimis P**, Nasdala L (2012) Inclusions under remnant pressure in diamond: a multi-technique approach. *European Journal of Mineralogy* 24: 563-573, doi: 10.1127/0935-1221/2012/0024-2183
48. Nestola F, Merli M, **Nimis P**, Parisatto M, Kopylova M, De Stefano A, Longo M, Ziberna L, Manghnani M (2012) In situ analysis of garnet inclusion in diamond using single-crystal X-ray diffraction and X-ray micro-tomography. *European Journal of Mineralogy* 24: 599-606, doi: 10.1127/0935-1221/2012/0024-2212
49. Nestola F, **Nimis P**, Angel RJ (2012) Diamonds, the mantle petrologist's best friends. Preface. *European Journal of Mineralogy* 24:561-562, doi: 10.1127/0935-1221/2012/0024-2225
50. **Nimis P**[CA], Grütter H (2012) Discussion of "The applicability of garnet-orthopyroxene geobarometry in mantle xenoliths", by Wu C.-M. and Zhao G. (Lithos, v. 125, p. 1-9). *Lithos* 142:285-287, doi: 10.1016/j.lithos.2011.09.006
51. **Nimis P**[CA], Omenetto P, Giunti I, Artioli G, Angelini I (2012) Lead isotope systematics in hydrothermal sulphide deposits from the central-eastern Southalpine (northern Italy). *European Journal of Mineralogy* 24: 23-37, doi: 10.1127/0935-1221/2012/0024-2163

**2011**

52. Nestola F, **Nimis P**, Ziberna L, Longo M, Marzoli A, Harris JW, Manghnani MH, Fedortchouk Y (2011) First crystal-structure determination of olivine in diamond: Composition and implications for provenance in the Earth's mantle. *Earth and Planetary Science Letters* 305: 249-255, doi: 10.1016/j.epsl.2011.03.007

**2010**

53. **Nimis P**[CA], Grütter H (2010) Internally consistent geothermometers for garnet peridotites and pyroxenites. *Contributions to Mineralogy and Petrology* 159: 411-427, doi: 10.1007/s00410-009-0455-9
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