Complete list of peer-reviewed publications
(Updated April, 2026)

YEAR 2026

1. Christ O., Barbaro A., Bragaggia G., Gross S., Thomassot E., Domeneghetti M.C., Alvaro M., Brenker F.E., **Nestola F.** (2026) Shock origin of the largest ureilitic microdiamond: structural observations and δ13C value. Geochemical Perspectives Letters 39: 12-16. https://doi.org/10.7185/geochemlet.2606
2. Baratelli L., Merlini M., **Nestola F.**, Nava J., Joseph B., Prencipe M., Cámara F. (2026) Determination of local geometrical distortions in an ordered omphacite under high pressure. Mineralogical Magazine 90(1): 33-42. https://doi.org/10.1180/mgm.2025.10107
3. Day M.C., Jollands M.C., Innocenzi F., Novella D., **Nestola F.**, Pamato M.G. (2026) Infrared spectroscopy of natural Type Ib diamond: Insights into the formation of Y -centers and the early aggregation of nitrogen. American Mineralogist 111(3): 360-375. https://doi.org/10.2138/am-2024-9722

YEAR 2025

4. **Nestola F.**, Kasatkin A.V., Biagioni C., Gurzhiy V.V., Škoda R., Santello L., Agakhanov A.A. (2025) Manuelarossiite, CaPbAlF 7, a new fluoride from the Vesuvius volcano, Italy. Mineralogical Magazine 89(1): 133-140. https://doi.org/10.1180/mgm.2024.59
5. Kasatkin A.V., Zubkova N.V., Škoda R., Chukanov N.V., Gurzhiy V.V., **Nestola F.**, Agakhanov A.A., Belakovskiy D.I., Lednev V.S., Milshina M.D. (2025) Stibiosegnitite, Pb(Fe3+2.5Sb5+0.5)(AsO4)2(OH)6, a new member of the alunite supergroup from the Murzinskoe gold deposit, Altai Krai, Russia. Mineralogical Magazine, https://doi.org/10.1180/mgm.2025.10150
6. Ni P., Shirey S.B., Walter M.J., Czas J., Novella D., **Nestola F.**, Kueter N., Smith E.M., Stachel T., Pearson D.G., Steele A., Gardner L.L., Jacobsen S.D., Harte B., Harris J.W., Shahar A. (2025) Onset of slab mantle melting in Earth's lower mantle: Evidence from ferropericlase in superdeep diamonds. Science Advances 11(42): eadt9106. https://doi.org/10.1126/sciadv.adt9106
7. Kasatkin A.V., Zubkova N.V., Škoda R., Gurzhiy V.V., **Nestola F.**, Biagioni C., Agakhanov A.A., Britvin S.N., Plášil J., Kuznetsov A.M. (2025) Boevskite, Pb4(TeO3)2(SO4)(S2O3), the first mixed sulfate-thiosulfate mineral from the Boevskoe deposit, Southern Urals, Russia. Mineralogical Magazine, https://doi.org/10.1180/mgm.2025.10143
8. Morana M., Barni L., Fang H., Marras G., Cinque G., Angellotti A., **Nestola F.**, Logvinova A., Mikhailenko D., Bindi L., Stagno V. (2025) Diamond – garnet elastic geobarometry applied to an eclogitic system. Lithos 514-515: 108205. https://doi.org/10.1016/j.lithos.2025.108205
9. Christ O., Barbaro A., Ferrière L., Pittarello L., Domeneghetti M.C., Brenker F.E., **Nestola F.**, Alvaro M. (2025) Shock-heated graphite in three IAB iron meteorites—Implications on the formation of diamond. Meteoritics and Planetary Science 60(4): 744-756. https://doi.org/10.1111/maps.14326
10. Timmerman S., Stachel T., Chinn I., **Nestola F.**, Novella D., Davies J., Pearson D.G. (2025) The effect of inclusion-fluid fractionation on different isotopic systems used to date diamonds. Earth and Planetary Science Letters 671: 119635. https://doi.org/10.1016/j.epsl.2025.119635
11. Pezzera A., **Nestola F.**, Stachel T., Stern R.A., Grütter H., Pearson D.G. (2025) Cool transient lithospheric thermal conditions driven by subduction recorded by Neoarchean diamonds from Knee Lake, northwestern Superior Craton. Mineralogy and Petrology 119(4): 823-841. https://doi.org/10.1007/s00710-025-00927-z

12. Balić-Žunić T., Garavelli A., Mitolo D., **Nestola F.**, Pamato M.G., Rasmussen M.B., Jølnæs M.B. (2025) Heimaeyite, Na3Al(SO4)3, a new mineral from the fumaroles on Eldfell volcano, Iceland. European Journal of Mineralogy 37(1): 79-89. https://doi.org/10.5194/ejm-37-79-2025
13. Nimis P., Grütter H.S., **Nestola F.** (2025) Multistage diamond formation, mantle uplift and changing geothermal regimes recorded by inclusions in Kimberley diamonds. Mineralogy and Petrology 119(3): 413-432. https://doi.org/10.1007/s00710-025-00908-2
14. Kasatkin A.V., **Nestola F.**, Vymazalová A., Košek F., Agakhanov A.A., Kuznetsov A.M. (2025) Zavyalovite, Ag2TeS3, a new sulfotelluride from the Boevskoe deposit, Southern Urals, Russia. Mineralogical Magazine, https://doi.org/10.1180/mgm.2025.10142
15. Barbaro A., **Nestola F.**, Singerling S.A., Nava J., Brenker F.E. (2025) Nano-scale impact shock features of diamond and graphite in ureilites. Carbon 243: 120583. https://doi.org/10.1016/j.carbon.2025.120583
16. Kasatkin A.V., Biagioni C., **Nestola F.**, Agakhanov A.A., Stepanov S.Y., Gurzhiy V.V., Petrov S.V., Pilugin A.G. (2025) Vadlazarenkovite, Pd8Bi1.5Te1.25As0.25, a new mineral isotypic with mertieite from the Konder massif, Far East, Russia. Mineralogical Magazine 89(1): 92-101. https://doi.org/10.1180/mgm.2024.52
17. Carvalho L.D.V., Doyle B., Stachel T., Stern R., Steele-macinnis M., **Nestola F.**, Pearson D.G. (2025) The Sequoia kimberlite complex, central Slave Craton – A new superdeep diamond location. Mineralogy and Petrology 119(3): 395-409. https://doi.org/10.1007/s00710-025-00899-0
18. Kasatkin A.V., Biagioni C., **Nestola F.**, Škoda R., Gurzhiy V.V., Agakhanov A.A., Kuznetsov A.M. (2025) Tarutinoite, Ag3Pb7Bi7S19, a new member of the lillianite homologous series from the Tarutinskoe copper-skarn deposit, Southern Urals, Russia. Mineralogical Magazine 89(4): 483-491. https://doi.org/10.1180/mgm.2025.1
19. Curtolo A., Day M.C., Innocenzi F., Bolfan-casanova N., Pamato M.G., Falvard S., **Nestola F.**, Harris J.W., Novella D. (2025) H2O in nominally anhydrous mineral inclusions in diamonds and the volatile composition of diamond forming media. Earth and Planetary Science Letters 658: 119311. https://doi.org/10.1016/j.epsl.2025.119311
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21. Bruno M., Ghignone S., Aquilano D., **Nestola F.** (2024) A critique of using epitaxial criterion to discriminate between protogenetic and syngenetic mineral inclusions in diamond. Scientific Reports 14(1): 8674. https://doi.org/10.1038/s41598-024-59432-6
22. Christ O., **Nestola F.**, Alvaro M. (2024) Open questions on carbonaceous matter in meteorites. Communications Chemistry 7(1): 118. https://doi.org/10.1038/s42004-024-01200-8
23. Qu K., Sun W., **Nestola F.**, Gu X., Yang Z., Sima X., Tang C., Fan G., Wang Y. (2024) Kenorozhdestvenskayaite-(Fe), Ag6(Ag4Fe2)Sb4S12□: A new tetrahedrite group mineral containing a natural [Ag6]4+cluster and its relationship to the synthetic ternary phosphide (Ag6M4P12) M6′. American Mineralogist 109(7): 1275-1283. https://doi.org/10.2138/am-2023-9074
24. Rossi V., Bernardi M., Fornasiero M., **Nestola F.**, Unitt R., Castelli S., Kustatscher E. (2024) Forged soft tissues revealed in the oldest fossil reptile from the early Permian of the Alps. Palaeontology 67(1): e12690. https://doi.org/10.1111/pala.12690

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26. Zhang Q., Timmerman S., Stachel T., Chinn I., Stern R.A., Davies J., **Nestola F.**, Luth R., Pearson D.G. (2024) Sublithospheric diamonds extend Paleoproterozoic record of cold deep subduction into the lower mantle. Earth and Planetary Science Letters 634: 118675. https://doi.org/10.1016/j.epsl.2024.118675
27. Barbaro A., **Nestola F.**, Kasatkin A.V., Ardit M., Rotiroti N., Škoda R., Agakhanov A.A., Dalconi M.C., Castellaro F. (2024) Perchiazziite, CO2(CO3)(OH)2, a new member of the rosasite–malachite group from the monte ramazzo mine, Italy. Canadian Journal of Mineralogy and Petrology 62(2): 369-378. https://doi.org/10.3749/2300048
28. Kasatkin A.V., **Nestola F.**, Day M.C., Gorelova L.A., Škoda R., Vereshchagin O.S., Agakhanov A.A., Belakovskiy D.I., Pamato M.G., Cempírek J., Anosov M.Y. (2024) Fluor-rossmanite, □(Al 2 Li)Al 6 (Si 6 O 18)(BO 3) 3 (OH) 3 F, a new tourmaline supergroup mineral from Malkhan pegmatite field, Western Siberia, Russia. Mineralogical Magazine 88(6): 668-676. https://doi.org/10.1180/mgm.2024.34
29. Day M.C., Jollands M.C., Novella D., **Nestola F.**, Dovesi R., Pamato M.G. (2024) Hydrogen-related defects in diamond: A comparison between observed and calculated FTIR spectra. Diamond and Related Materials 143: 110866. https://doi.org/10.1016/j.diamond.2024.110866
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32. Wang Y., **Nestola F.**, Hou Z., Miyawaki R., Pekov I.V., Gu X., Dong G., Qu K. (2024) Nomenclature of the ancylite supergroup. Mineralogical Magazine 88(6): 677-681. https://doi.org/10.1180/mgm.2024.8
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35. Wang Y., **Nestola F.**, Hou Z., Gu X., Dong G., Yang Z., Fan G., Xiao Z., Qu K. (2023) Bobtraillite from Gejiu hyperagpaitic nepheline syenite, southwestern China: new occurrence and crystal structure. European Journal of Mineralogy 35(1): 65-74. https://doi.org/10.5194/ejm-35-65-2023
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