

Peer-Reviewed Publications by Paul Spry

Journal Articles and Book Chapters (142), graduate students in italics

1. **Spry, P.G.**, Jansson, N.F., and Allen, R.L.. 2024. A stable isotope (S, C, and O) study of metamorphosed massive sulphide deposits in the Bergslagen district: The Stollberg example. *Geological Magazine*, v. 161, <https://doi.org/10.1017/S0016756824000153>.
2. **Spry, P.G.**, Berke, E.H., Layton-Matthews, D., Voinot, A., Heimann, A., Teale, G.S., and von der Handt, A., 2024. Amphibole, magnetite, and ilmenite as potential exploration guides to metamorphosed Proterozoic Cu-Zn±Pb±Au±Ag volcanogenic massive sulfide deposits in Colorado. *Mineralogical Magazine*, v. 88, p. 61-89.
3. Voudouris, P., Melfos, V., Melfou, M., Papadopoulou, L., Tarantola, A., Scheffer, C., Vanderhaeghe, O., Reisberg, L., Frenzel, M., Photiadis, A., Mavrogonatos, C., **Spry, P.G.**, Stourairi, C., and Soukis, K., 2024. Re-Os geochronology, mineralogy, and conditions of formation of the potassic and sodic-calcic alteration associated with the Plaka porphyry Mo system Lavrion, Greece. *Journal of Geochemical Exploration*, <https://doi.org/10.1016/j.jexplo.2024.107609>.
4. Berke, E.H., **Spry, P.G.**, Heimann, A., Teale, G.S., Johnson, B., von der Handt, A., Alers, B., and Shallow, J.M., 2023. The genesis of metamorphosed Paleoproterozoic massive sulfide occurrences in central Colorado: geological, mineralogical and sulfur isotope constraints. *Geological Magazine*, v. 160, 1345-1375.
5. Cawood, T.-K, Rozendaal, A., and **Spry, P.G.**, 2023. Discussion: Syn-metamorphic sulfidation of the Gamsberg zinc deposit, South Africa. *Mineralogy and Petrology*, v. 117, 775-785.
6. **Spry, P.G.**, Mathur, R.D., Teale, G.S., and Godfrey, L.V., 2022. Zinc, sulfur and cadmium isotopes and Zn/Cd ratios as indicators of the origin of the supergiant Broken Hill Pb-Zn-Ag deposit and other Broken Hill-type deposits, New South Wales, Australia. *Geological Magazine*, v. 159, 1787-1808.
7. Frank, K.S., **Spry, P.G.**, O'Brien, J.J., Koenig, A., Allen, R.L., and Jansson, N.F., 2022. Magnetite as a provenance and exploration tool to metamorphosed base metal sulfide deposits in the Stollberg ore field, Bergslagen, Sweden. *Mineralogical Magazine*, v. 86, 373-396.
8. **Spry, P.G.**, McFadden, S., Teale, G.S., Alers, B., Shallow, J.M., and Glenn, J.M., 2022. Nodular sillimanite rocks as field indicators to metamorphosed massive sulfide deposits. *Ore Geology Reviews*, v. 141, 104632.
9. Roberts, J.A., Groat, L.A., **Spry, P.G.**, and Cempírek, J., 2022. Telluride mineralogy at the Deer Horn Au-Ag-Te-(Bi-Pb-W) deposit, British Columbia: Implications for the generation of tellurides. *Canadian Mineralogist*, v. 60, 989-1011.
10. Stergiou, C.L., Melfos, V., Voudouris, P., Papadopoulou, L., **Spry, P.G.**, Peytcheva, I., Dimitrova, D., and Stefanova, E., 2022. A fluid inclusion and critical/rare metal study of epithermal quartz-stibnite veins associated with the Gerakario porphyry deposit, northern Greece. *Applied Geoscience*, 12, 909. <https://doi.org/10.3390/app12020909>.
11. Voudouris, P., Repstock, A., **Spry, P.G.**, Frenzel, M., Mavrogonatos, C., Keith, M., Tarantola, A.,

- Melfos, V., Tombros, S., Zhai, D., Cook, N.J., Ciobanu, C.L., Schaarschmidt, A., Rieck, B., Kollitsch, U., and Falkenberg, J., 2022. Physicochemical constraints on indium-, tin-, germanium-, gallium-, gold- and tellurium-bearing mineralizations in the Pefka and St Philippos polymetallic vein-and breccia deposits: new insights into the critical element potential of Greece. *Ore Geology Reviews*, 140, 10438.
12. **Spry, P.G.**, and Teale, G.S., 2021. A classification of Broken Hill-type deposits: A critical review. *Ore Geology Reviews*, v. 139, 103935.
 13. Stergiou, C.L., Melfos, V., Voudouris, P., Papadopoulou, L., **Spry, P.G.**, Peytcheva, I., Dimitrova, D., Stefanova, E., and Giouri, K., 2021. Rare and critical metals in pyrite, chalcopyrite, magnetite, and titanite from the Vathi porphyry Cu-Au±Mo deposit, northern Greece. *Minerals*, 11 (6), 630, DOI: 10.3390/min11060630
 14. Voudouris, P., Melfos, V., Mavrogonatos, C., Photiades, A., Moraiti, E., Rieck, B., Kolitsch, U., Tarantola, A., Scheffer, C., Morin, D., Vanderhaeghe, O., **Spry, P.G.**, Ross, J., Soukis, K., Vaxevanopoulos, M., Zaimis, S., Magganas, A., Kati, M., and Katerinopoulos, A., 2021. The Lavrion mines: a unique site of geological and mineralogical heritage. *Minerals*, 11, 76. <https://doi.org/10.3390/min11010076>, 22 p.
 15. Stergiou, C.L., Melfos, V., Voudouris, P., **Spry, P.G.**, Papadopoulou, L., Chatzipetros, A., Mavrogonatos, C., Filippidis, A., 2021. The geology, geochemistry and origin of the porphyry Cu-Au-(Mo) system at Vathi, Serbo-Macedonian Massif, Greece. *Applied Sciences*, v. 11, 479.
 16. *Kadel-Harder, I.M.*, **Spry, P.G.**, Layton-Mathews, D., Voinot, A., von der Handt, McCombs, A.L., 2021. Paragenetic relationships between low and high-grade gold mineralization in the Cripple Creek Au-Te deposit, Colorado: trace element studies of pyrite. *Ore Geology Reviews*, v. 115, 103847.
 17. *Kadel-Harder, I.M.*, **Spry, P.G.**, McCombs, A.L., and Zhang, H., 2021, Identifying pathfinder elements for gold in bulk-rock geochemical data from the Cripple Creek Au-Te deposit, Colorado: A statistical approach. *Geochemistry: Exploration, Environment, Analysis*, 21 (1) geochem2020-048.
 18. Kelley, K.D., **Spry, P.G.**, McLemore, V.T., Fey, D.L., and Anderson, E.D. 2020. Alkalic-type epithermal gold deposit model. U.S. Geological Survey Scientific Investigations Report, 2010-5070-R, 74 p.
 19. Mavrogonatos, C., Voudouris, P., Zaccarini, F., Klemme, S., Berndt, J., Tarantola, A., Melfos, V., and **Spry, P.G.**, 2020, Multi-stage introduction of precious and critical metals in pyrite: A case study from the Konos Hill and Pagoni Rachi porphyry/epithermal prospects, NE Greece. *Minerals* 10, 784: doi103390/min10090784.
 20. Melfos, V., Voudouris, P., Melfou, M., Chansez, M., Papadopoulou, L., Filippidis, A., **Spry, P.G.**, Schaarschmidt, A., Klemd, R., Haase, K.M., Tarantola, A., Chelle-Misou, C., Mavrogonatos, C., 2020, Mineralogical constraints of the potassic/sodic-calcic hydrothermal alteration at the porphyry Cu-Mo±Re±Au mineralization in Maronia, NE Greece. *Minerals*, v. 10 (182), doi:10.3390/min10020182.
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23. *Fornadel, A.P., Spry, P.G., Jackson. S.E.*, 2019, Geological controls on the stable tellurium isotope variation in tellurides and native tellurium from epithermal and orogenic gold deposits: application to the Emperor gold-telluride deposit, Fiji. *Ore Geology Reviews*, v. 113, 103076.
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27. Li, H.-Z., Liang, J., Zhai, M.-G., Zhang, L.-C., Voudouris, P.C., Yang, Z.-J., Zhou, Y.-Z., He, J.-G., and **Spry, P.G.**, 2019, The mineralogy, mineral chemistry, and origin of the Wuyang banded iron formations, North China Craton. *Precambrian Research*, v. 328, p. 111-128.
28. Voudouris, P., Mavrogonatos, C., **Spry, P.G.**, Melfos, V., Klemd, R., Haase, K., Repstock, A., Djiba, A., Bismayer, U., Tarantola, A., Scheffer, C., Moritz, R., Kouzmanov, K., Alfieris, D., Schaarschmidt, A., Galanopoulos, E., Galanos, E., Kołodziejczyk, J., Papavassiliou, K., Stergiou, C., Melfou, M., 2019, Porphyry and epithermal deposits in Greece: an overview, new discoveries, and mineralogical constraints on their genesis. *Ore Geology Reviews*, v. 107, p. 654-691.
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 - 35. Mavrogonatos, C., Voudouris, P., **Spry, P.G.**, Melfos, V., Klemme, S., Berndt, J., Bakerm T., Moritz, R., Bissig, T., Monecke, T., Zaccarini, F., Galanopoulos, E., and Kanellopoulos, C., 2018, Mineralogical study of advanced-argillic alteration assemblages from the Konos Hill Mo-Re-Cu-Au porphyry system, NE Greece. *Minerals*, v. 8 (479), 1-18; doi:10.3390/min8110479.
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 - 37. *Fornadel, A.P.*, **Spry, P.G.**, Schauble, E.A., Hagneghadar, M.A., Jackson. S.E., and Mills, S.J., 2017, Theoretical and measured stable Te isotope fractionation in tellurium-bearing minerals in precious metal hydrothermal ore deposits. *Geochimica et Cosmochimica Acta*, v. 202, p. 215-230.
 - 38. Kelley, K.D., and **Spry, P.G.**, 2016, Critical metals associated with alkaline-rock related epithermal gold deposits. *Reviews in Economic Geology*, v. 18, p. 195-216.
 - 39. O'Brien, J.J., **Spry, P.G.**, Teale, G.S., Jackson, S.E., and Rogers, D., 2015, Gahnite composition as a means to fingerprint metamorphosed base metal deposits. *Journal of Geochemical Exploration*, v. p. 48-61.
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 - 42. O'Brien, J.J., **Spry, P.G.**, Nettleton, D., Ruo, X., Teale, G.S., Jackson, S.E., and Rogers, D., 2015, Random forests as a statistical method for distinguishing gahnite compositions as an exploration guide to Broken Hill-type Pb-Zn-Ag deposits in the Broken Hill domain, Australia. *Journal of Geochemical Exploration*, v. 149, p. 74-86.
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