

GUY L. HOVIS PUBLICATIONS

1971 - 2026

PEER-REVIEWED ARTICLES

Lafayette College student coauthors shown in bold

Hovis, G.L., Angel, R.J., Tribaudino, M. (submitted 2026) Thermal expansion in garnets and thermal expansion-volume relations in minerals. *American Mineralogist* (in review).

Angel, R.J., Morana, M., Speziale, S., Casati, N.P.M., Woodland, A.B., Alvaro, M., Hovis, G.L., Tribaudino, M. (accepted for publication, 2026) Revised PVT equations of state for almandine and spessartine garnets: Implications for piezobarometry. *Contributions to Mineralogy and Petrology*.

Hovis, G.L., Tribaudino, M. (2025) The thermal expansion of monticellite and olivine. *European Journal of Mineralogy* 37, 181-190.

Hovis, G.L., Tribaudino, M., **Altomare, C.**, Bosi, F. (2023) Thermal expansion of minerals in the tourmaline supergroup. *American Mineralogist* 108, 1053-1063.

Bosi, F., Skogby, H., Hovis, G.L. (2023) Crystal chemistry of povondraite by single-crystal XRD, EMPA, Mössbauer spectroscopy and FTIR. *Mineralogical Magazine* 87, 178-185.

Tribaudino, M., Hovis, G.L., **Almer, C.**, **Leaman, A.** (2022) Thermal expansion of minerals in the amphibole supergroup. *American Mineralogist* 107, 1302-1312.

Hovis, G.L., Tribaudino, M., **Leaman, A.**, **Almer, C.**, **Altomare, C.**, **Morris, M.**, **Maksymiw, N.**, **Morris, D.**, **Jackson, K.**, **Scott, B.**, **Tomaino, G.**, Mantovani, L. (2021) Thermal expansion of minerals in the pyroxene system and examination of various thermal expansion models. *American Mineralogist* 106, 883-899.

Antao, S., Hovis, G.L. (2021) Structural variations across the nepheline (NaAlSiO₄) - kalsilite (KAlSiO₄) series. *American Mineralogist* 106, 801-811.

Hovis, G.L. (2017) A refined view of the thermodynamic mixing quantities for alkali feldspars and the quandary of excess configurational entropy. *American Journal of Science* 317, 597-640.

Hovis, G., Abraham, T., **Hudacek, W.**, **Wildermuth, S.**, **Scott, B.**, **Altomare, C.**, **Medford, A.**, **Conlon, M.**, **Morris, M.**, **Leaman, A.**, **Almer, C.**, **Tomaino, G.**, Harlov, D. (2015) Thermal expansion of F-Cl apatite crystalline solutions. *American Mineralogist* 100, 1040-1046.

Hovis, G.L., **Scott, B.T.**, **Altomare, C.M.**, **Leaman, A.R.**, **Morris, M.D.**, **Tomaino, G.P.**, McCubbin, F.M. (2014) Thermal expansion of fluorapatite-hydroxylapatite crystalline solutions. *American Mineralogist* 99, 2171-2175.

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- Hovis, G.L., **Medford, A., Conlon, M., Tether, A., Romanoski, A.** (2010) Principles of thermal expansion in the feldspar system. *American Mineralogist* 95, 1060-1068.
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Hovis, G.L. (1974) A solution calorimetric and X-ray investigation of Al-Si distribution in monoclinic potassium feldspars. In *The Feldspars*, W. S. MacKenzie and J. Zussman, eds., University of Manchester Press, Manchester, England, 114-144.

DOCTORAL DISSERTATION

Hovis, G.L. (1971) *Thermodynamic properties of monoclinic potassium feldspars*. Harvard University, Cambridge, Massachusetts.

ABSTRACTS AND CONFERENCE PRESENTATIONS

Lafayette College student coauthors shown in bold

Hovis, G.L. (2016) Systematic behavior of K-Na mixing enthalpies with Al-Si order in alkali feldspars and implications for phase equilibria. *2nd European Mineralogical Conference*, Rimini, Italy.

Hovis, G.L. (2015) Well-constrained enthalpies of K-Na mixing in Al-Si ordered and disordered alkali feldspar series from new HF solution calorimetric measurements on forty-one samples. *Abstracts of the Geological Society of America Annual Meeting*, Abstract No. 257589.

Hovis, G., Abraham, T. **Hudacek, W., Wildermuth, S., Scott, B., Altomare, C., Medford, A., Conlon, M., Morris, M., Leaman, A., Almer, C., Tomaino, G.**, Harlov, D. (2015) Thermal expansion of fluorapatite-chlorapatite solid solutions. *Geophysical Research Abstracts* 17, EGU2015-1835-3. [2015 European Geosciences Union General Assembly]

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Hovis, G.L., Neuhoﬀ, P.S. (2006) Thermodynamic properties of natrolite. Zeolite '06 - 7th International Conference on the Occurrence, Properties, and Utilization of Natural Zeolites. Book of Abstracts, R. S. Bowman and S. E. Delap, eds., 134-135.

Person, Erik L., Spooner, Amy M., Hovis, G.L. (2005) Thermal expansion of nepheline – kalsilite minerals. *NCUR, 2005 Abstracts, 19th National Conference on Undergraduate Research, April 21-23, 2005, Lexington, Virginia*, 525.

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- Hovis, G.L., Rodrigues, E., Roux, J. (2000) Thermodynamic behavior of analcime-leucite analogue systems. *Journal of Conference Abstracts (Cambridge Publications), Volume 5, Number 1*, 50. [*Experimental Mineralogy, Petrology, and Geochemistry Meeting (EMPG) VIII*]
- Rodrigues, E., Roux, J., Hovis, G.L., (2000) Ternary analcime-pollucite solid solutions: Phase equilibrium data (1-5 kbar, 600 °C). *Journal of Conference Abstracts (Cambridge Publications), Volume 5, Number 1*, 87. [*Experimental Mineralogy, Petrology, and Geochemistry Meeting (EMPG VIII)*]
- Hovis, G.L., Rodrigues, E., Roux, J. (2000) Analcime - leucite analogue systems: Examples of nonideal thermodynamic behavior without thermal consequences. *Geological Society of America Annual Meeting Abstracts with Programs* 32, A53.
- Hovis, G.L., Richet, P., Whittington, A. (2000) HF solution calorimetry of hydrous aluminosilicate glasses. *Transactions of the American Geophysical Union* 81, F1327-F1328.
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