

*American Mineralogist, Volume 103, pages 1169–1171, 2018*

**LETTER**

**Trace element thermometry of garnet-clinopyroxene pairs, revisited**

**RICHARD N. ABBOTT JR.<sup>1,\*</sup>**

<sup>1</sup>Department of Geological and Environmental Sciences, Appalachian State University, Boone, North Carolina 28608, U.S.A.

**ABSTRACT**

Two errors are identified in the implementation of a recently published thermometer based on the partitioning of trace elements between garnet and clinopyroxene. The errors compromise comparisons with other thermometers and experimental results. Using the same methodology, a new, simplified procedure is presented to rectify the errors and test the consequences. In general, the corrected thermometer gives temperatures that are 30–50 °C higher than uncorrected values.

**Keywords:** Geothermometer, garnet, clinopyroxene, REE