

Rajabpour, S., Hassanpour, S., and Jiang, S.Y., 2023, Physicochemical evolution and mechanism of a skarn system: Insights from the world-class Mazraeh Cu deposit, NW Iran: GSA Bulletin, <https://doi.org/10.1130/B36854.1>.

## Supplemental Material

**Table S1.** Representative EPMA analyses (in wt%) of garnet and the molecular proportions of its end-members.

**Table S2.** Representative EPMA analyses (in wt%) of pyroxene and the molecular proportions of its end-members.

**Table S3.** Bulk-rock major and trace elements composition of selected granodiorite samples.

**Table S4.** Types of fluid inclusions in minerals from various hydrothermal assemblages of the Mazraeh deposit and their microthermometry results for 49 FIAs.

**Table S5.** Oxygen, hydrogen and sulfur isotope compositions of different minerals and their calculated equilibrium fluids.