

Supplementary Figures

Bulk 0 = Si(64.81)Al(16.49)Fe(3.24)Mn(0.05)Mg(1.29)Ca(1.50)Na(4.15)K(8.46)H(0.5)O(167.00)
 Bulk 1 = Si(64.81)Al(16.49)Fe(3.24)Mn(0.05)Mg(1.29)Ca(1.50)Na(4.15)K(8.46)H(12)O(172.75)

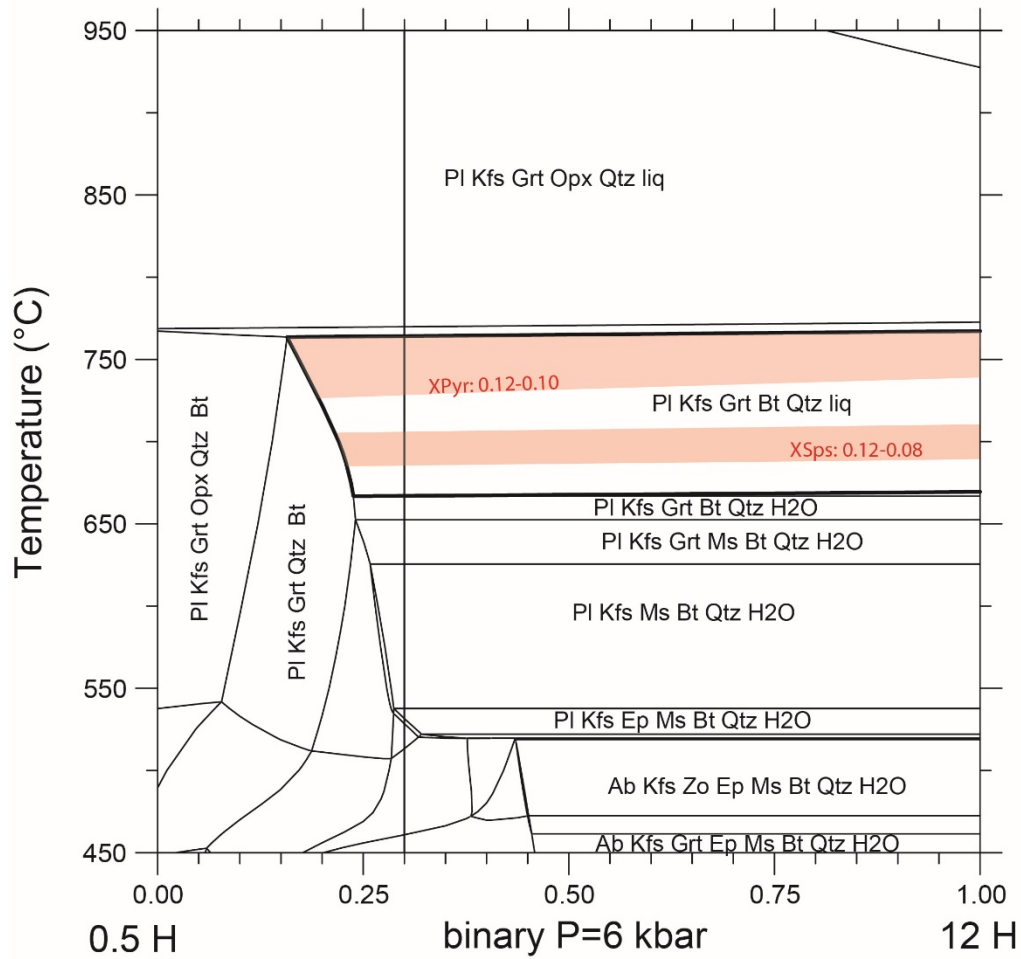


Fig. S1. T-XH₂O diagram at 6 kbar for sample MM30A. The interpreted peak assemblage of garnet-plagioclase-biotite-K-feldspar-quartz-melt is highlighted in bold. The red fields indicate the X_{SpS} and X_{Pyr} compositions that are present in the garnet grains of the sample. The bold line indicates the H₂O value used to calculate the TXCaO and P-T diagrams.

Bulk 0 = Si(65.44)Al(16.65)Fe(3.27)Mn(0.05)Mg(1.31)Ca(0.54)Na(4.19)K(8.54)H(3.95)O(169.38)
 Bulk 1 = Si(64.81)Al(16.49)Fe(3.24)Mn(0.05)Mg(1.29)Ca(1.50)Na(4.15)K(8.46)H(3.95)O(168.73)

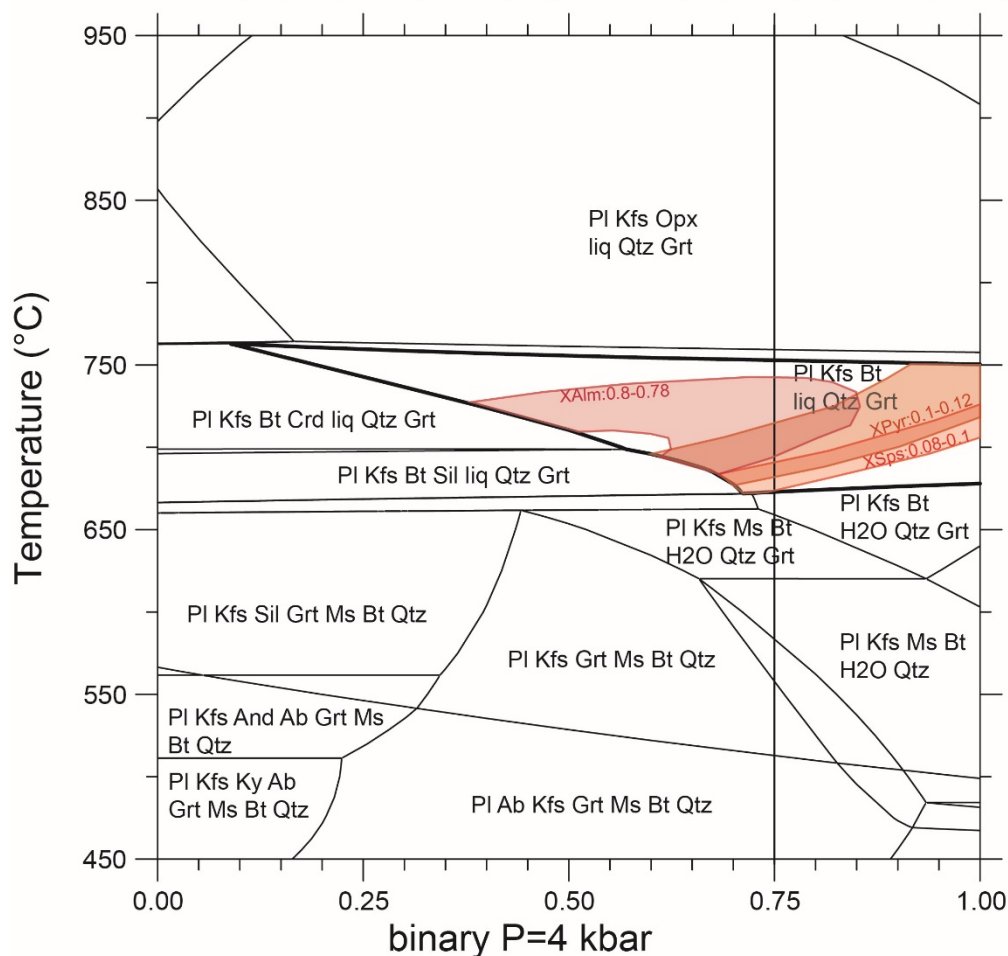


Fig. S2. T-XCaO diagram for sample MM30A at 4 kbar. The interpreted peak assemblage of garnet-plagioclase-biotite-K-feldspar-quartz-melt is highlighted in bold. The red fields indicate the XSps, XPyr and XAlm compositions that are present in the garnet grains of the sample. The bold line indicates the CaO value used to calculate the P-T diagram.



Fig. S3. Lu-Hf spot locations for large garnet (MM31).

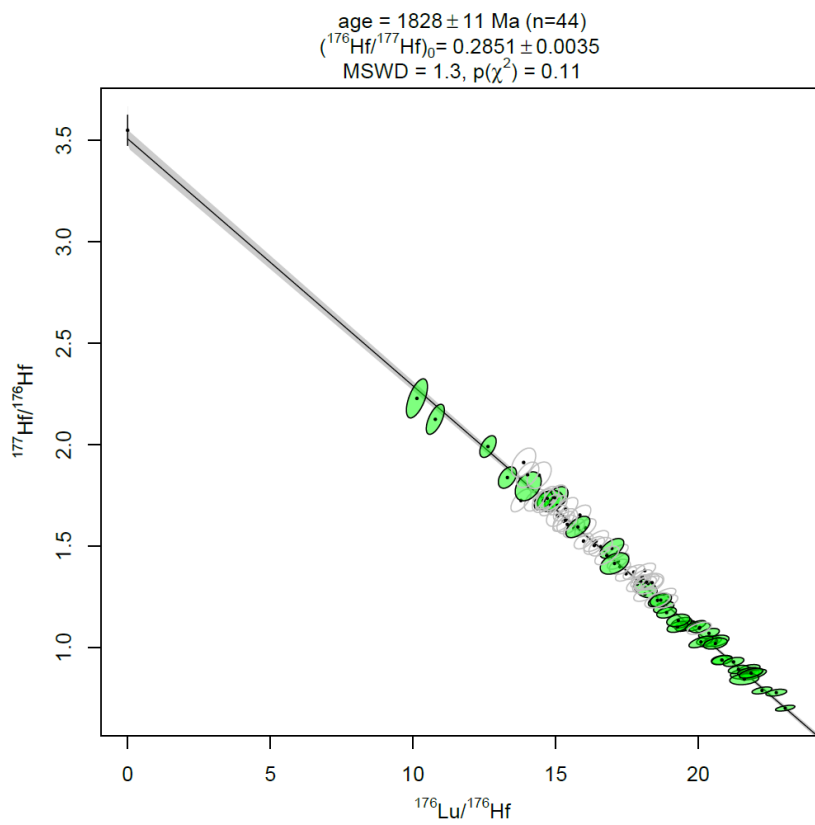


Fig. S4. Calculated Lu-Hf isochron for analyses obtained from the garnet core only.

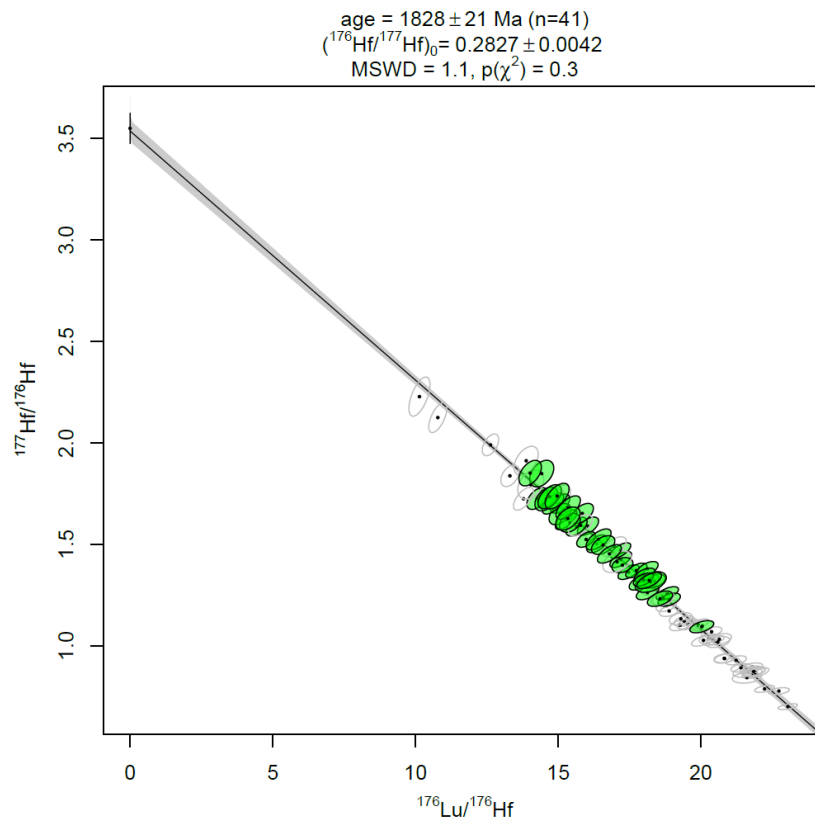


Fig. S5. Calculated Lu-Hf garnet isochron using analyses obtained from the rim only.



Fig. S6. Lu-Hf spot locations for small garnet (MM30).

