

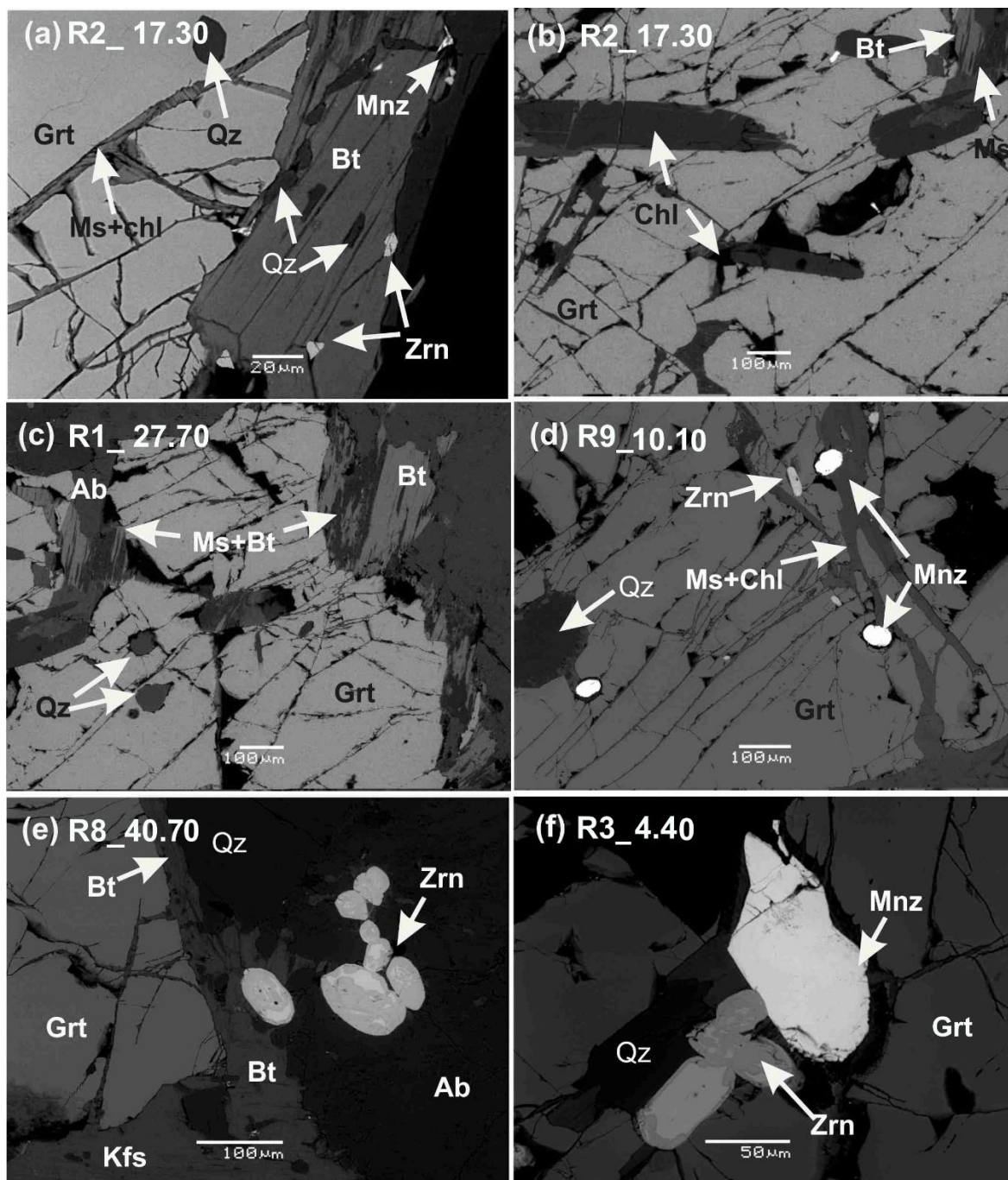


Figure S1. Representative example of garnet megacrysts, (a-f) Highly fractured garnets often show offsets on the order of a few hundred micrometers, and typically extend from one side of the garnet to the other, also showing the matrix minerals (quartz and feldspar) or with retrograde minerals (biotite and chlorite). Inclusions of quartz, plagioclase, chlorite, sillimanite, zircon, and monazite are widely distributed in the garnet megacrysts.

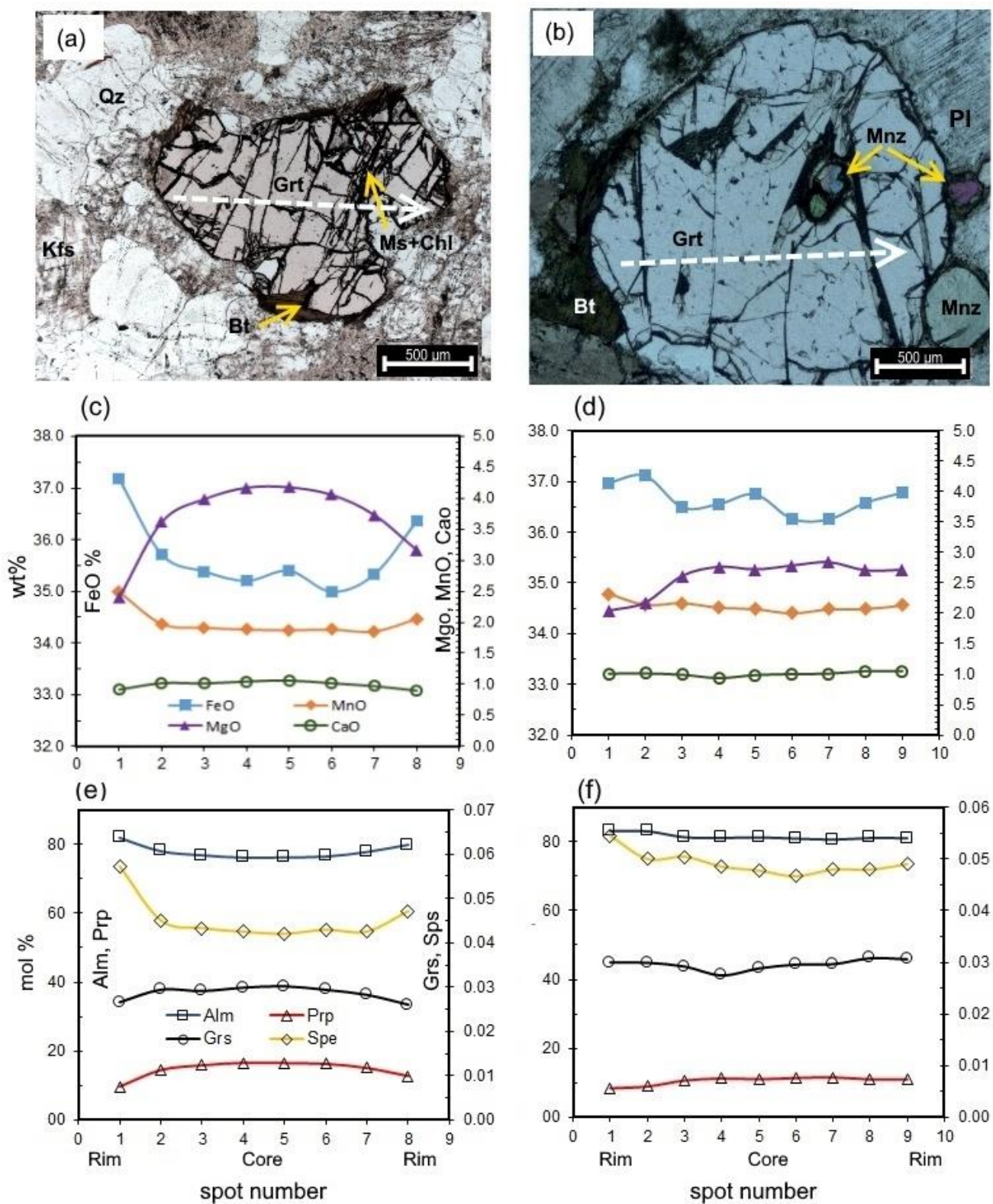


Figure S2. (a, b) Garnet megacrysts from sample R3_4.40 and R5_27.50 and R5/27.50 showing the analyzed profiles, (c-f) The main oxide content (FeO, MgO, MnO, CaO) profiles and corresponding garnet end-member proportions constitute (Alm, Prp, Grs, Sps).