



*Supplement of*

**U and Th content in magnetite and Al spinel obtained by wet chemistry and laser ablation methods: implication for (U–Th) / He thermochronometer**

**Marianna Corre et al.**

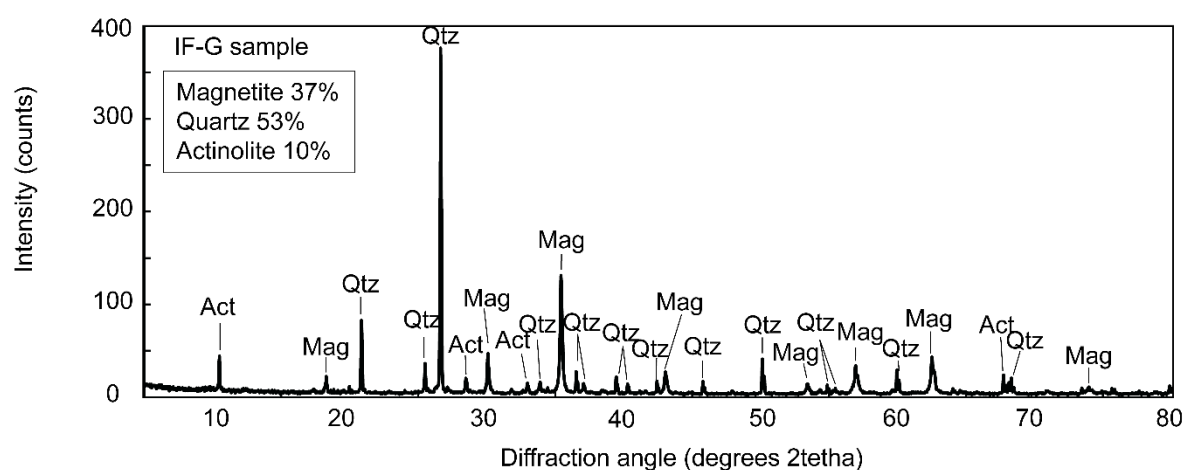
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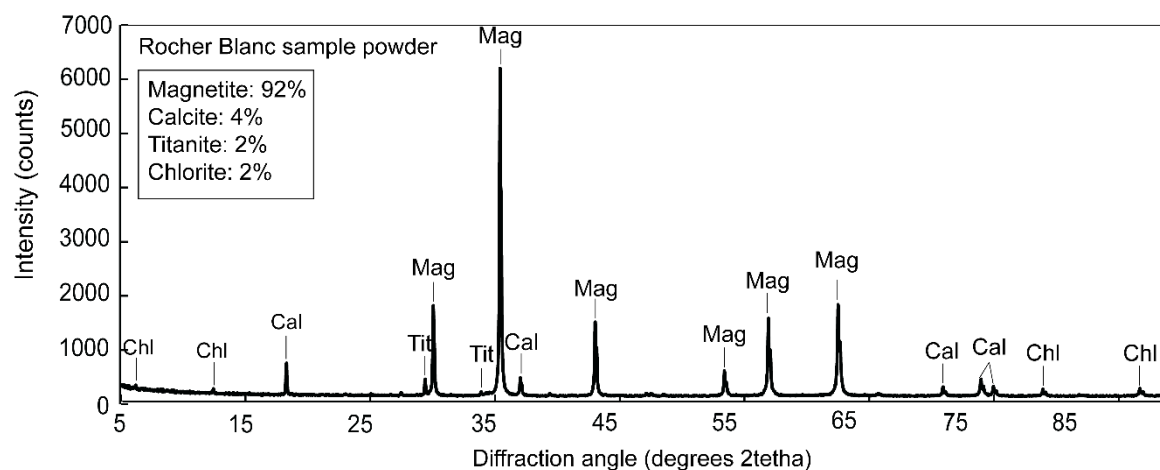
## Supplementary Data

### S1. XRD data

0.125 g of powders from IF-G, RB, Al-Spl and NMA samples were analyzed by XRD to quantify the mineralogical phases present. Figures S1 to S4 present the XRD diffractograms and the quantification of the phases in % estimated with the Profex software (Döbelin version 5.0.1):



**Figure S1.** XRD diffractogram of IF-G sample, where quartz, magnetite and actinolite phases are identified.



**Figure S2.** XRD diffractogram of powder of RB sample, that is composed of magnetite, calcite, titanite, chlorite

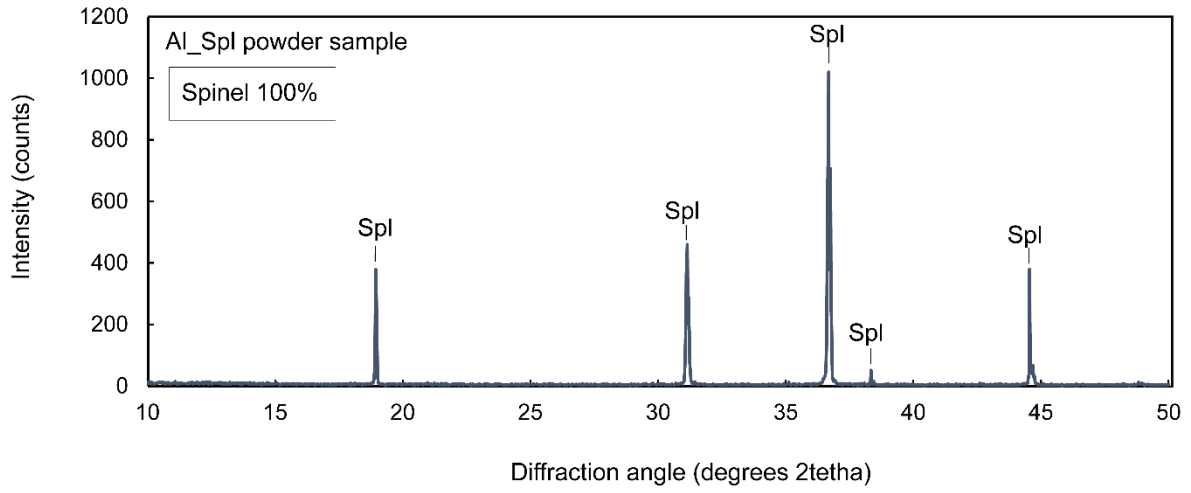


Figure S3. XRD diffractogram of powder of Al\_Spl sample, composed of pure spinel.

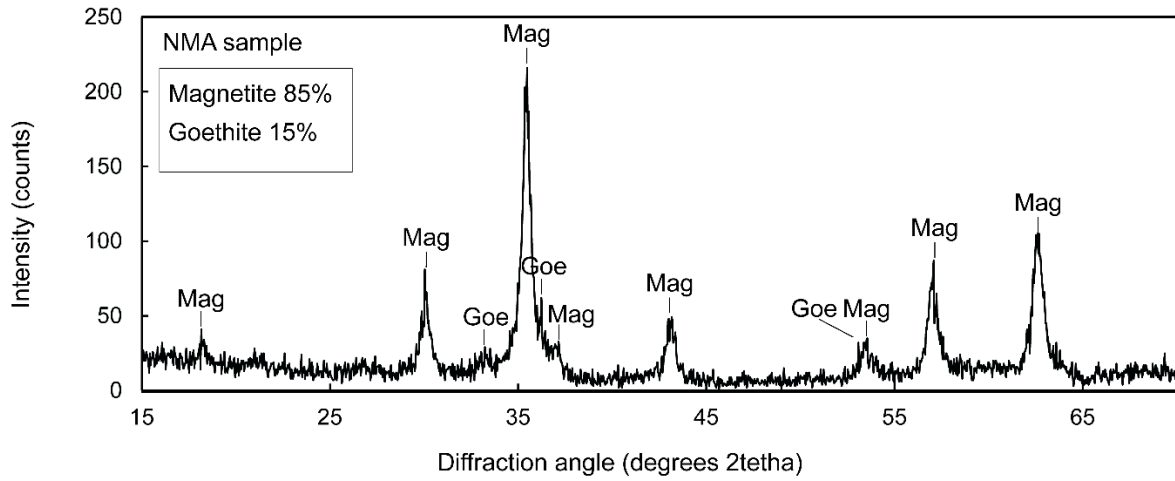


Figure S4. XRD diffractogram of NMA sample composed of magnetite and goethite.