

I massi erratici a mullite-magnetite- microdiamanti del Gilf Kebir: implicazioni per Hypatia e il silica?

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Un ringraziamento a Giancarlo e Jan, due grandi uomini persi nel 2022

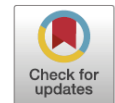
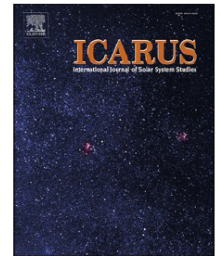


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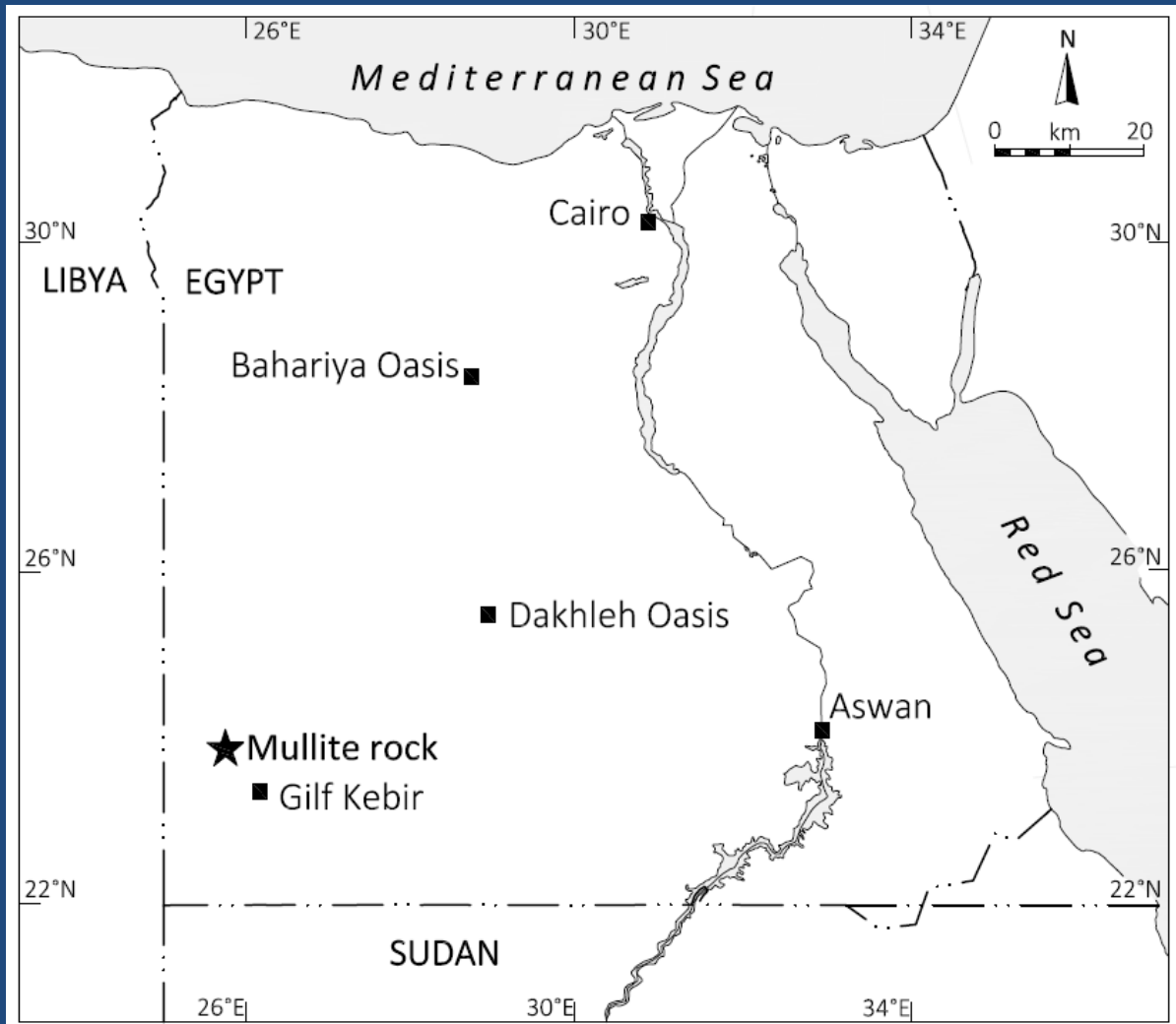
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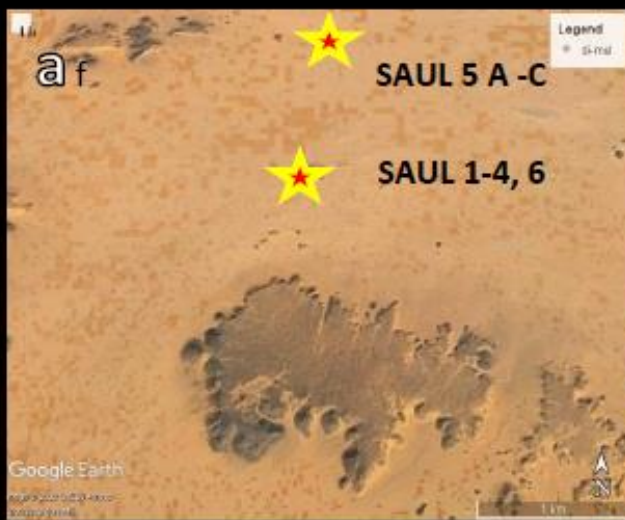
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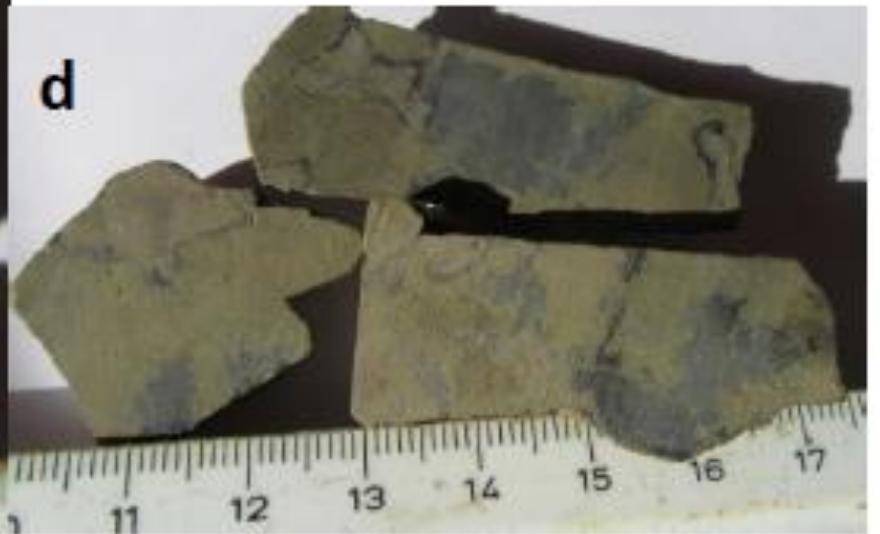


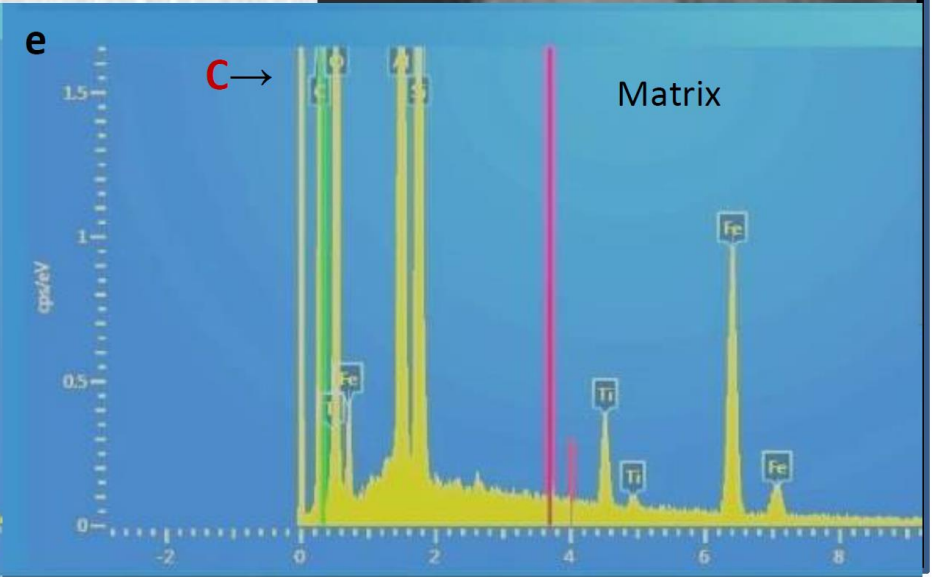
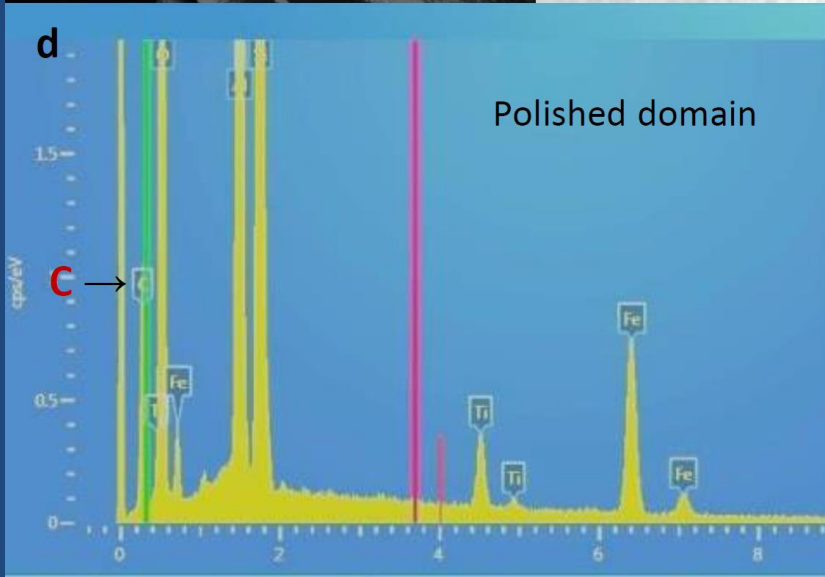
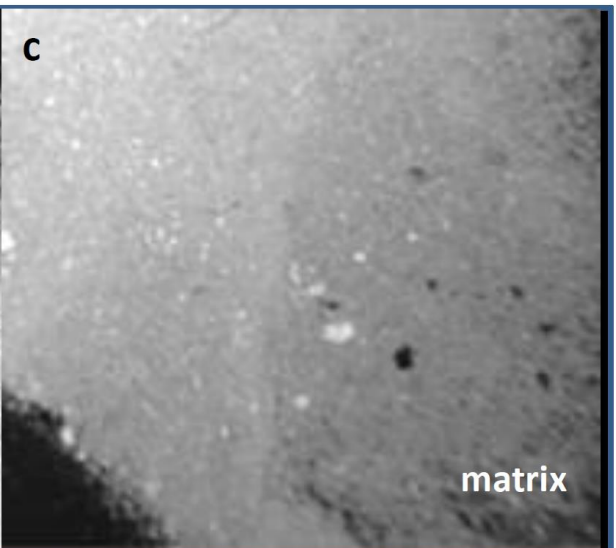
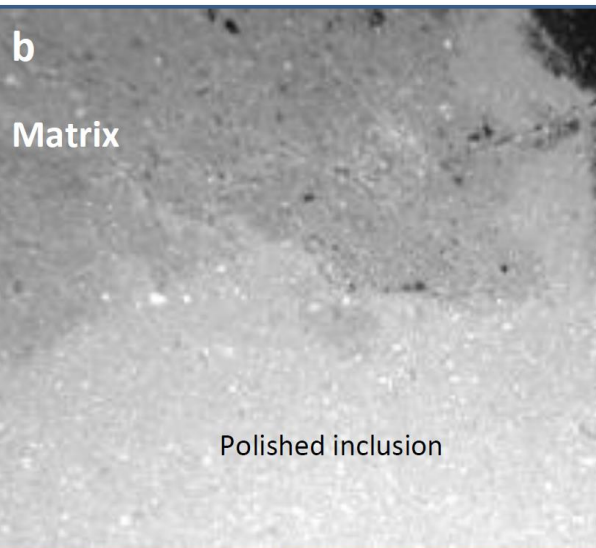
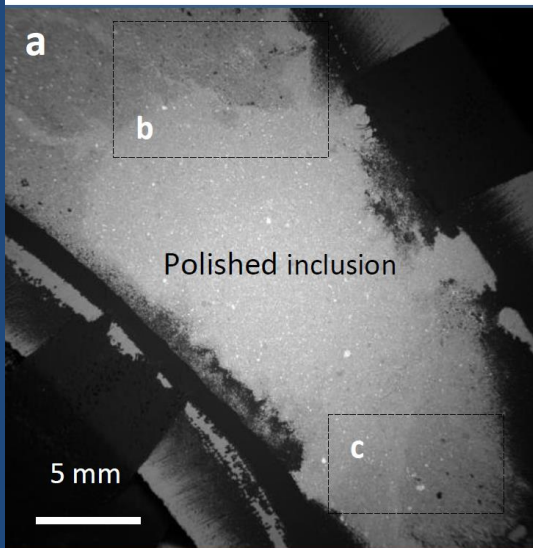
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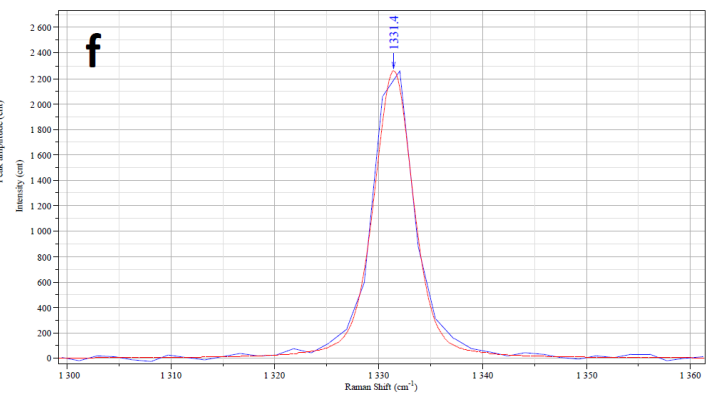
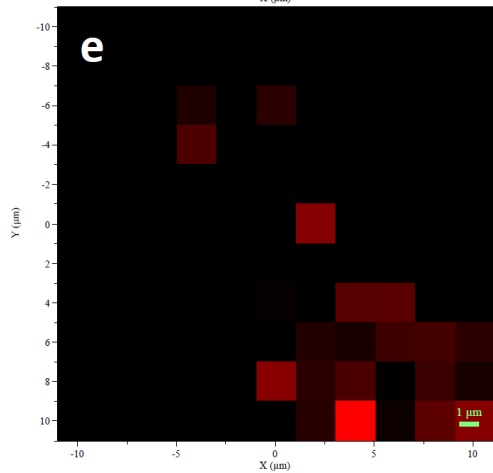
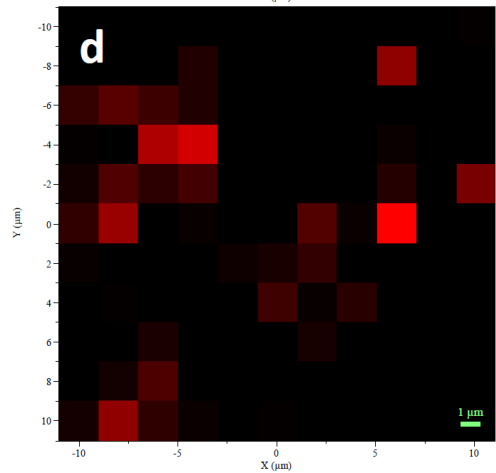
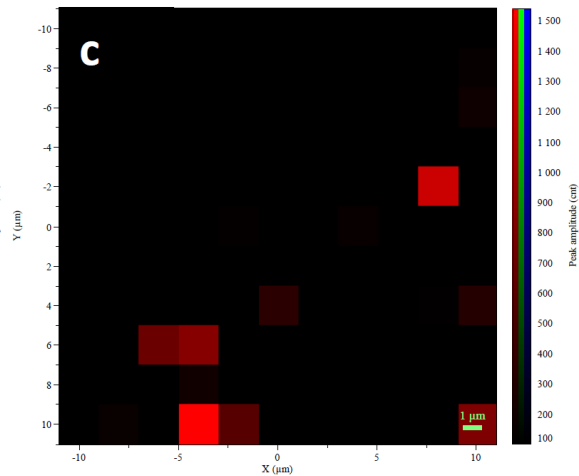
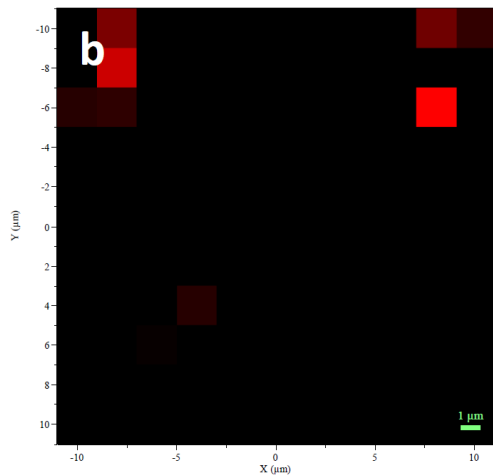
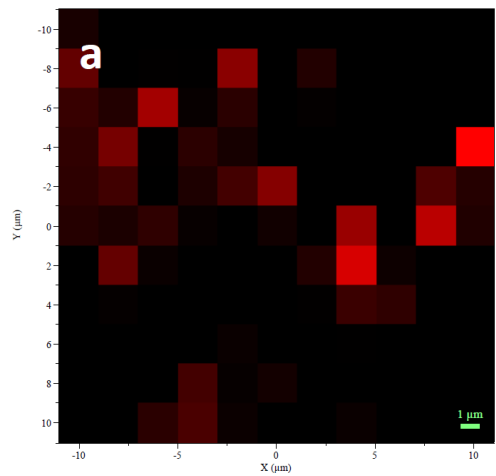
Jan D. Kramers^{a,*}, Georgy A. Belyanin^a, Wojciech J. Przybyłowicz^b, Hartmut Winkler^c, Marco A.G. Andreoli^{d,e}



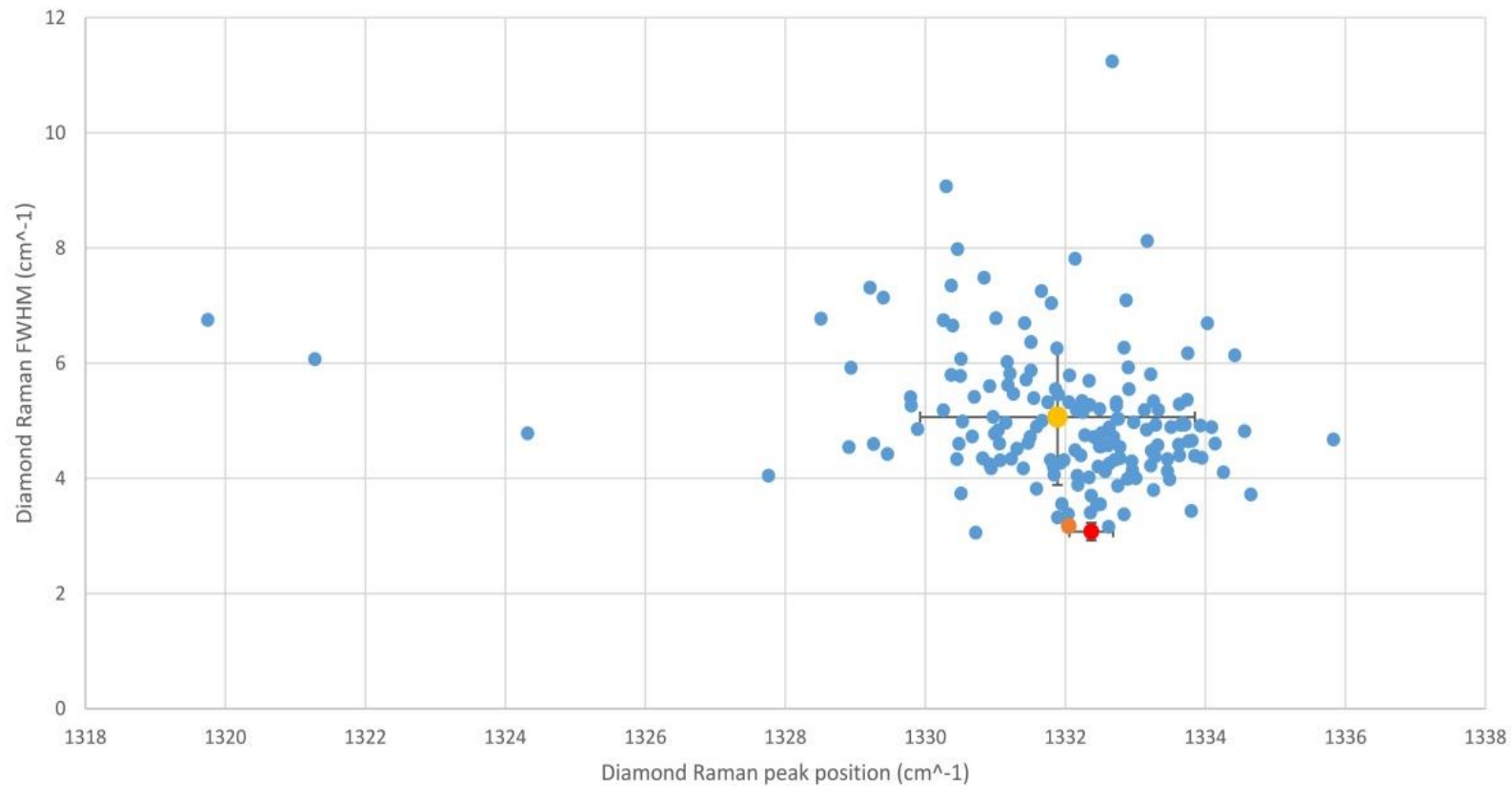


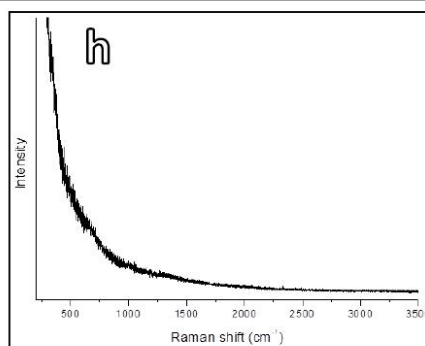
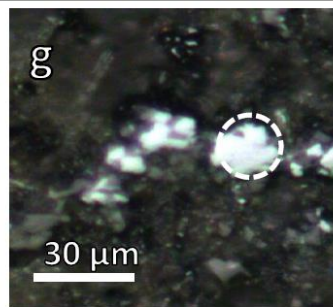
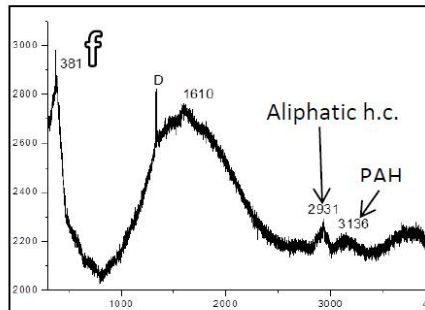
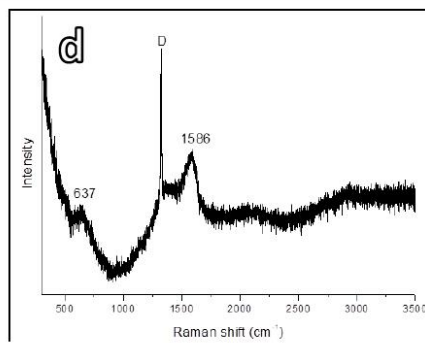
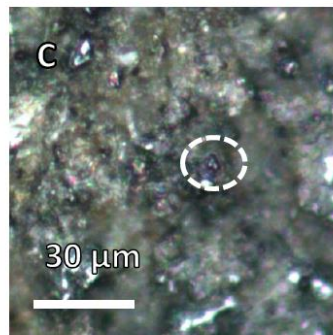
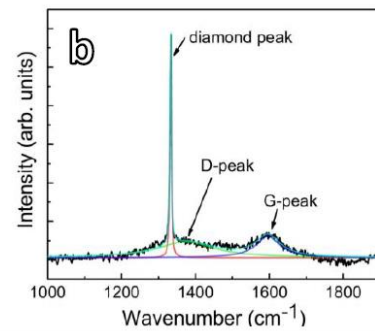
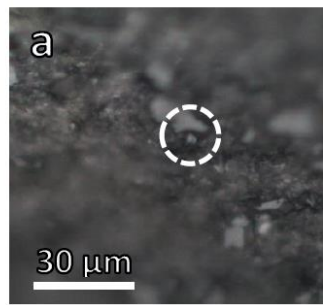


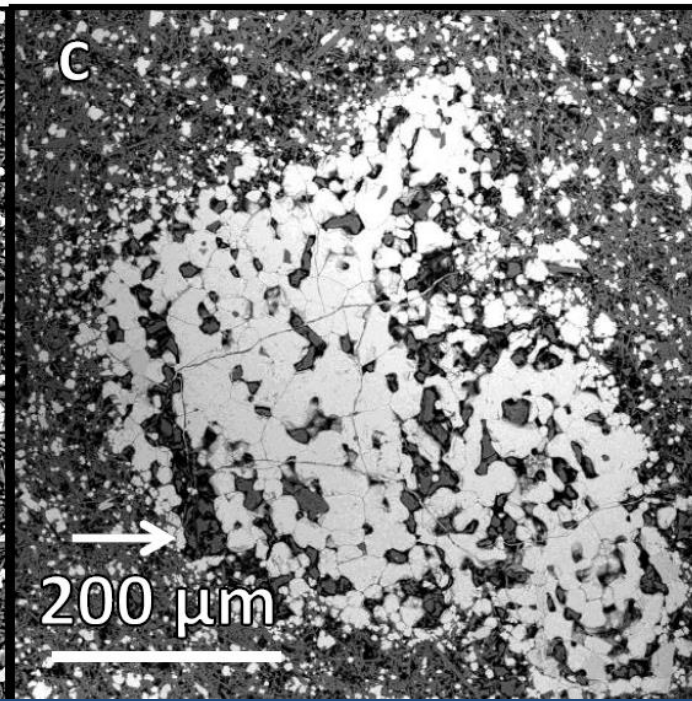
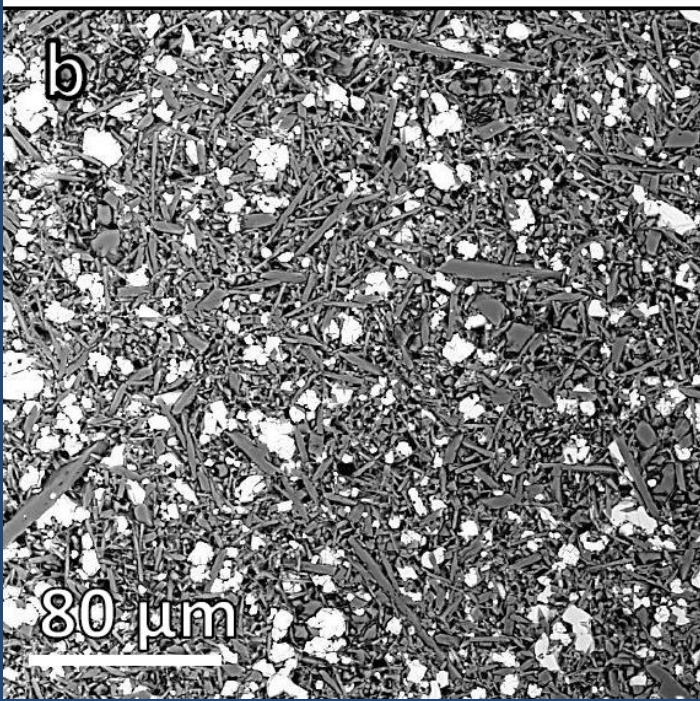
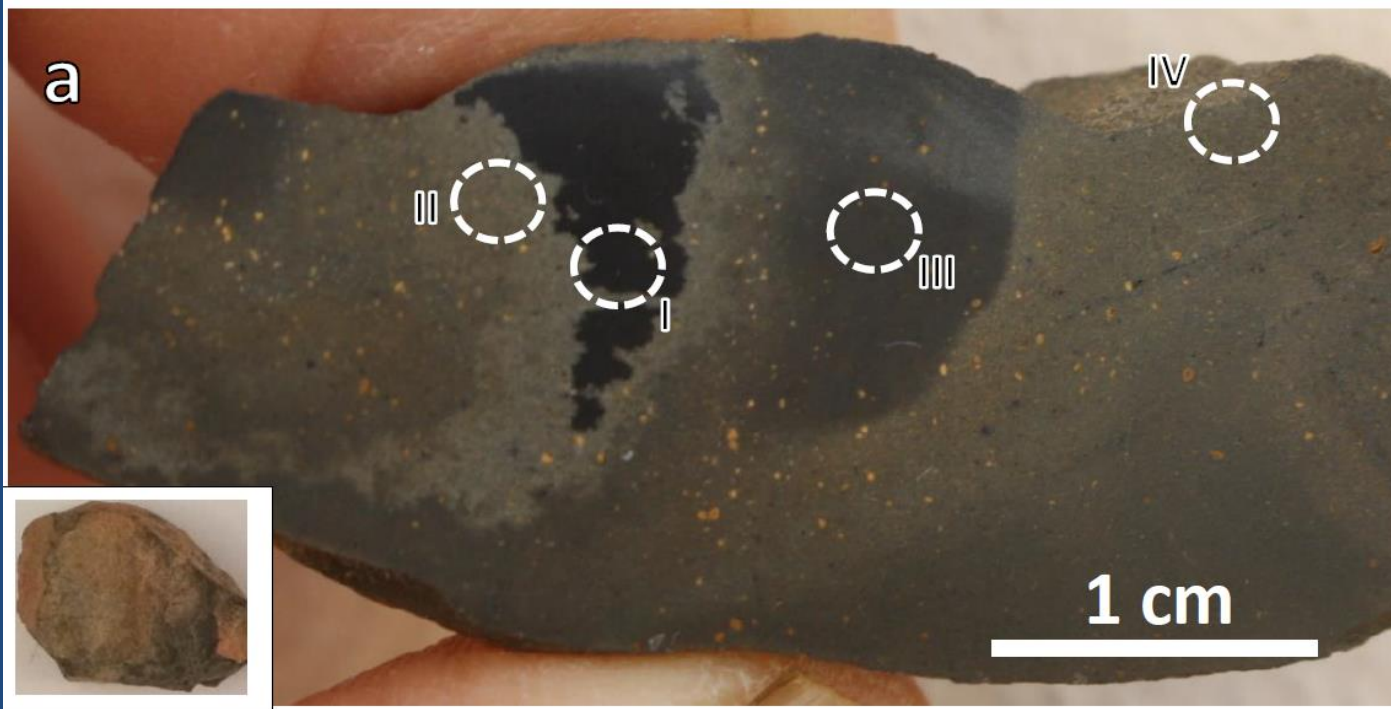


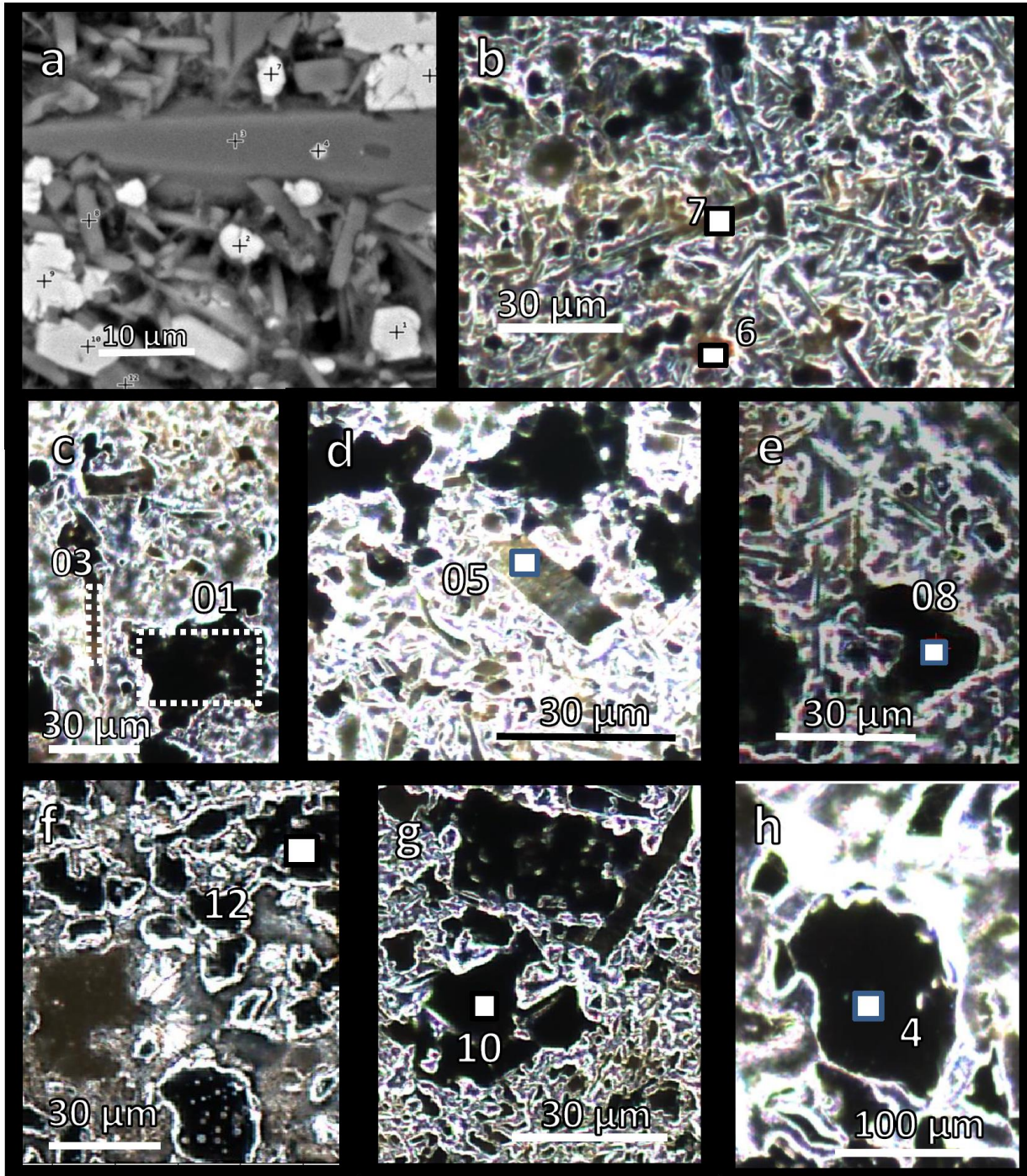


Diamond Raman peak FWHM vs peak position for all the Gifl maps









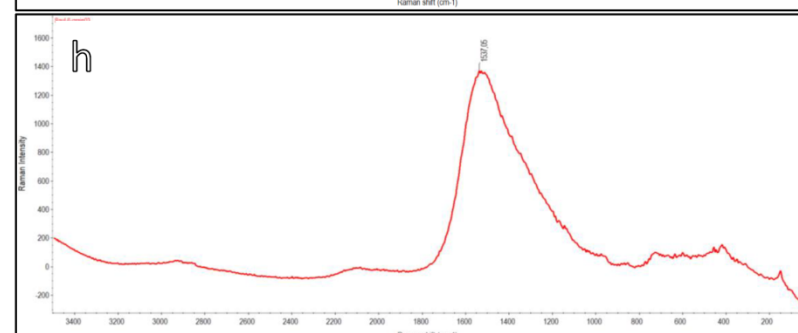
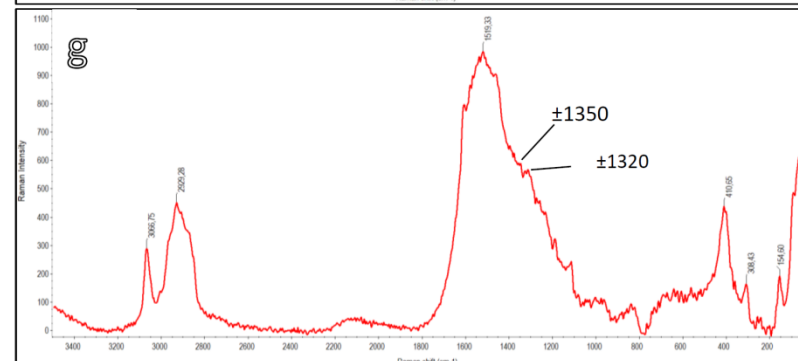
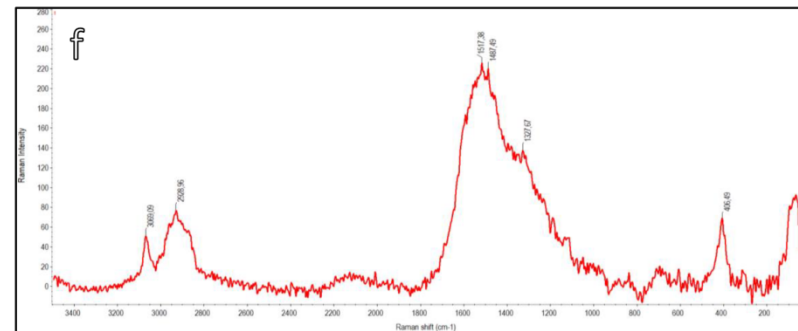
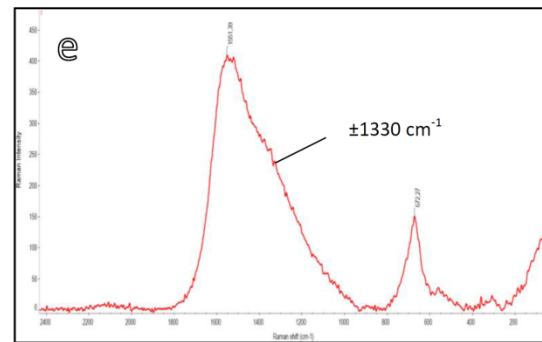
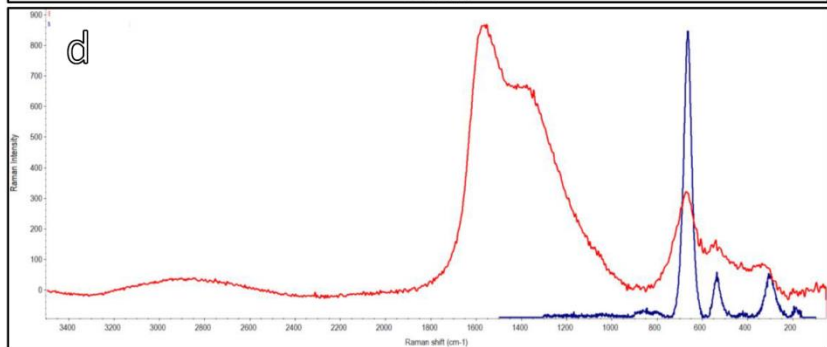
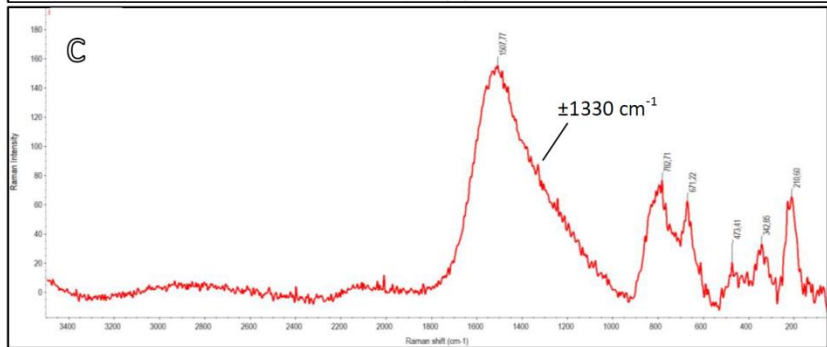
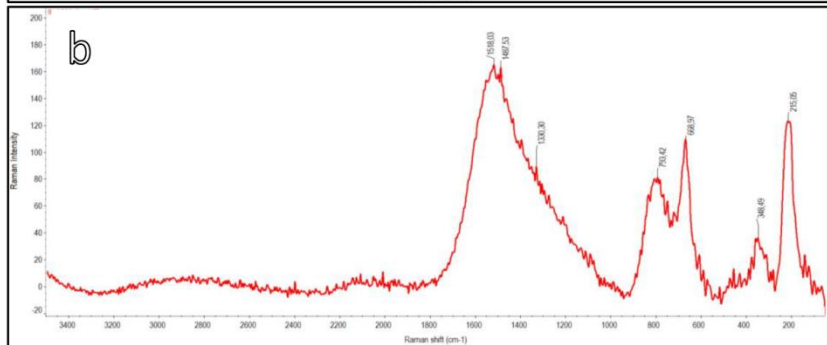
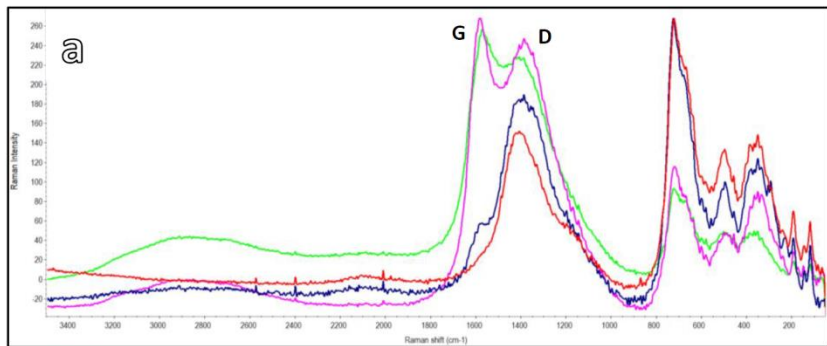


Figure 10 ctd.

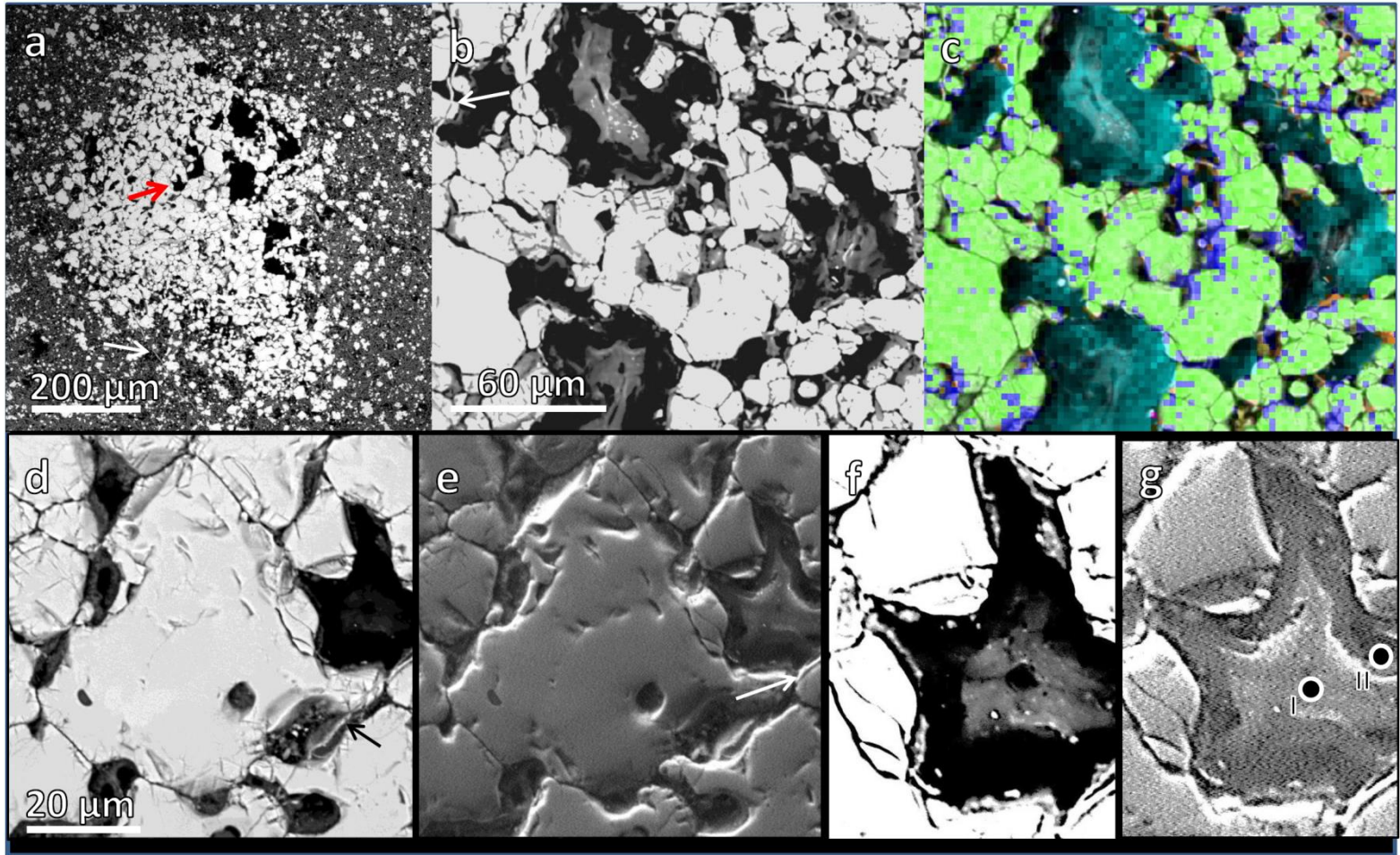
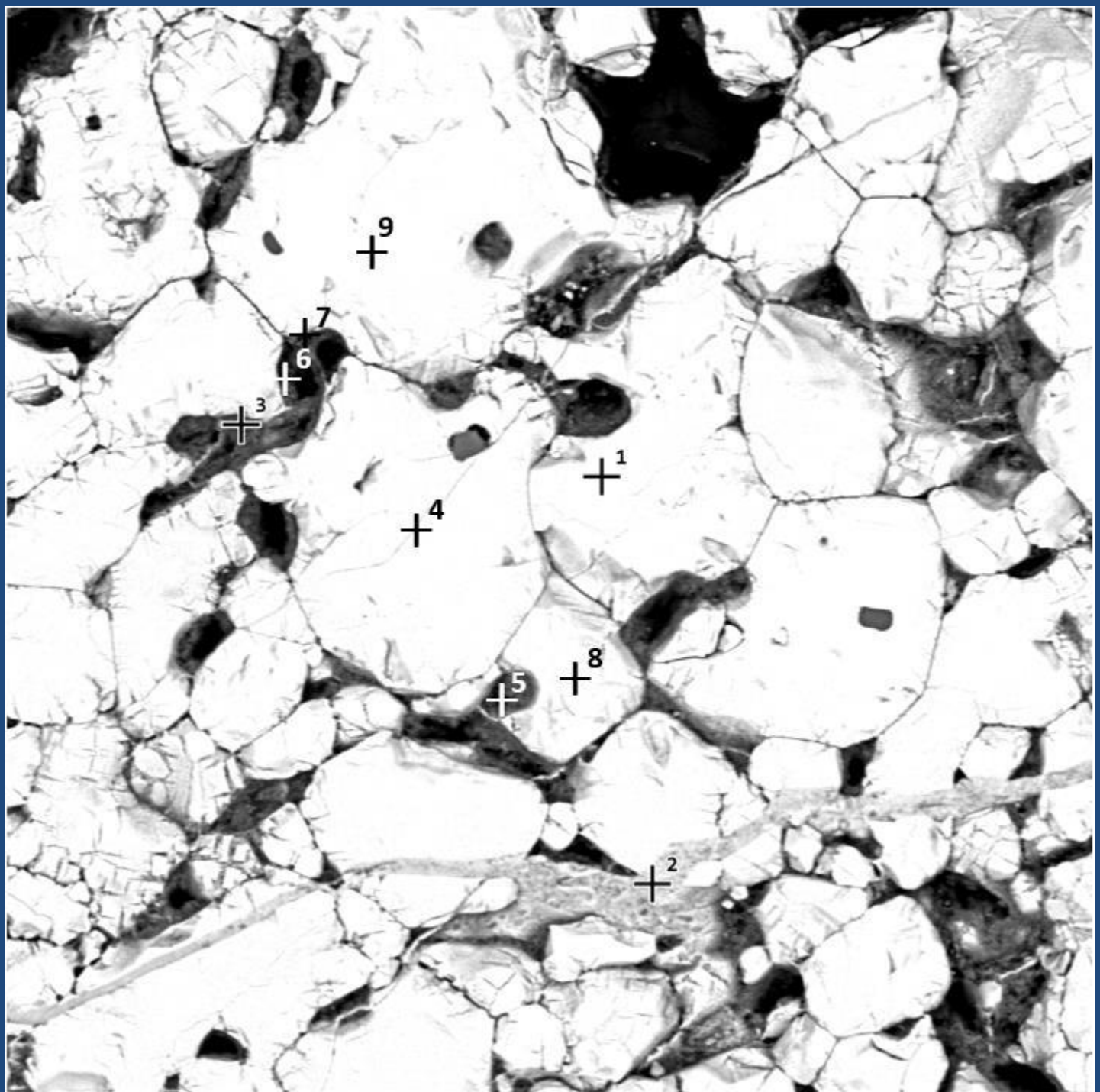
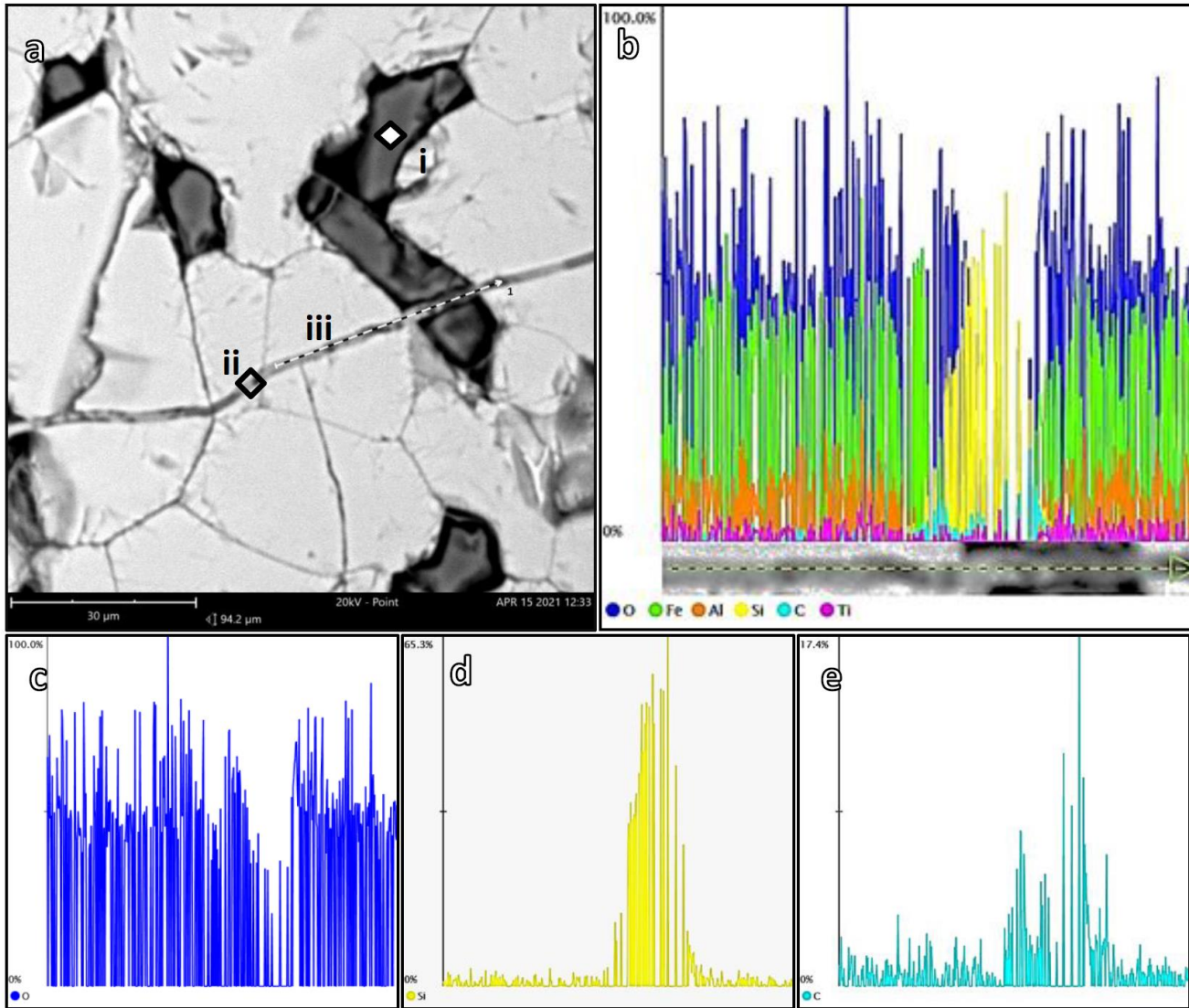


Figure 12





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35 Fig. S6

- **I massi a mullite + microdiamanti:** impattiti (impact melt), fusione shock di granuliti e metapeliti con grafite nel massiccio dell'Uveinat?
- Molto piu' materiale nell'area, ma non riconosciuto perche' sembrano rocce banali.
-
- **Abbondanza di carbonio ad alta T-P:** condizioni da "alto forno" naturale – estrema riduzione di ossidi a sub-ossidi, metalli.
- **Oltre ai microdiamanti, anche rare/nuove forme di carbonio** ("a lametta", diamond-like carbons.

Area dei vetri

- **Breccie Aly area Qaret:** fasi metalliche, silicati esotici
- **Libyan desert glass:** relitti di pirosseni granulitici; macro-scheggia “Romano” (C)
- **Hypatia:** frammento di meteorite interstellare + estremofili, metalli nativi, SiC, C amporfo, grafite, lonsdaleite, grafite
- **Regolito ferruginoso::....**

Impatti multipli: nell’Uveinat, Qaret + airbust?

Quel che e' stato fatto e' solo l'inizio!

Grazie Giancarlo, Jan....