

Synchrotron X-ray Microprobes: An Application on Ancient Ceramics

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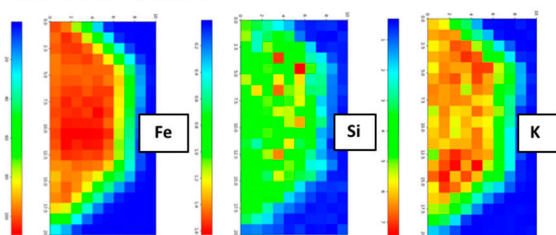
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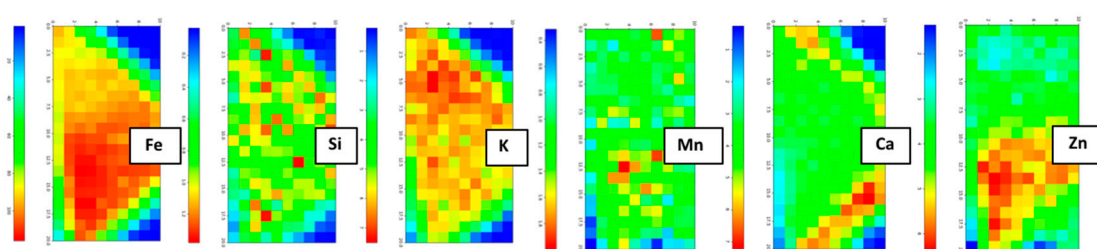
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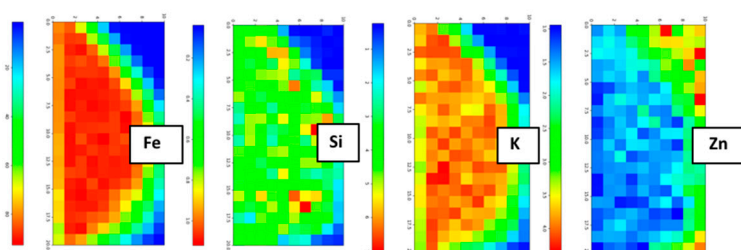
GEVN7 Attic



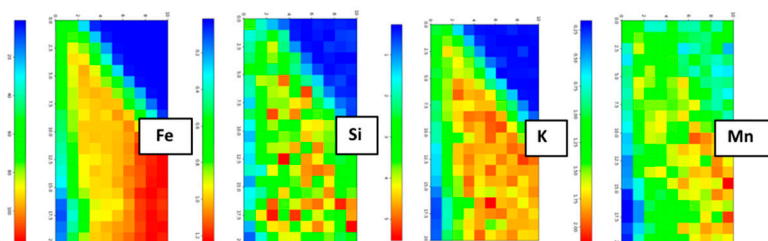
GEVN10 Chalcidian



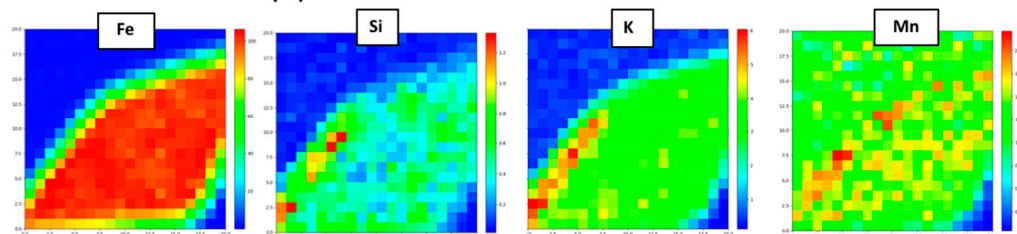
ME70 Chalcidian



GEL02. Laconic



GEVN16 Locrian(?)



GEVN14 Colonial/Sicily

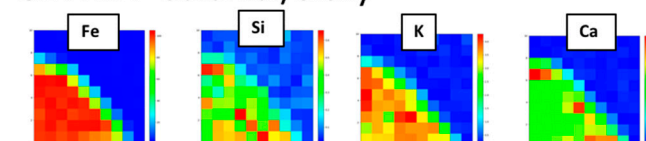


Figure S1. XRF maps acquired by Elio ©Bruker portable spectrometer on samples GEVN7, GEVN10, ME70, GEL2 and GEVN10.

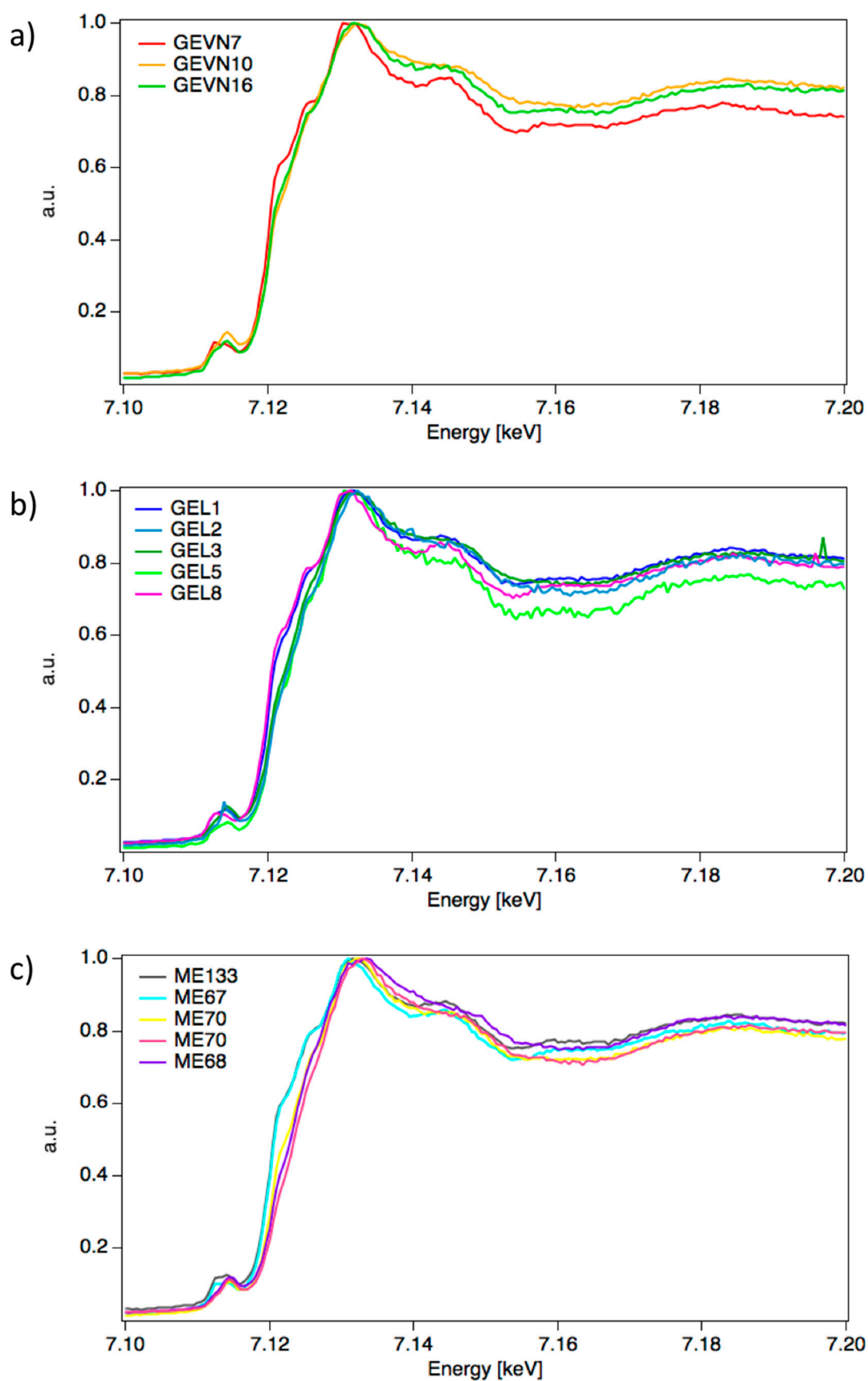


Figure S2. Fe-XANES point spectra collected on the gloss in cross-section geometry for GEVN (a), GEL (b) and ME (c) samples. The spectra were collected on a $3\ \mu\text{m} \times 5\ \mu\text{m}$ area, across Fe K-edge, as detailed in materials and methods.

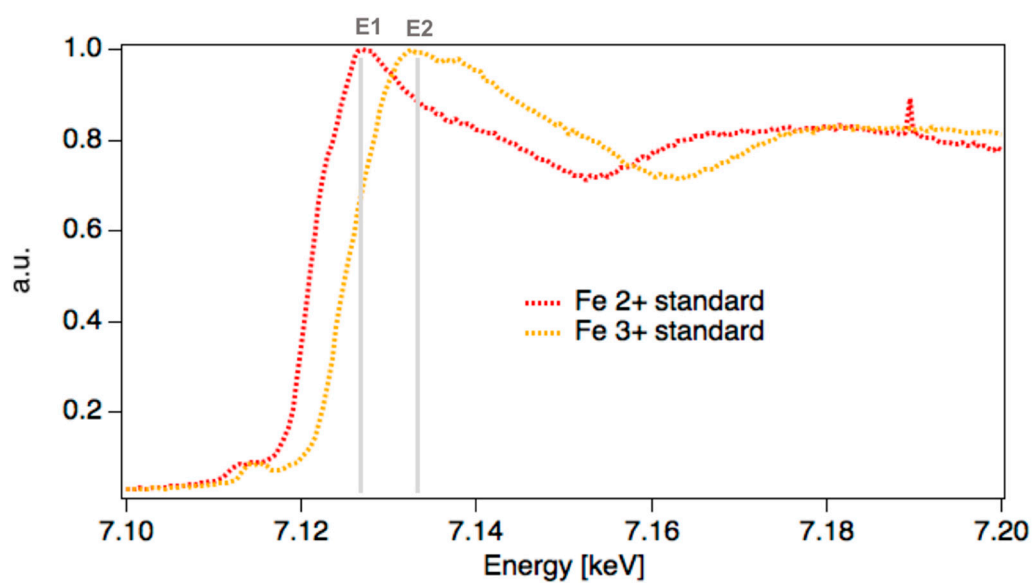


Figure S3. Fe-XANES spectra of Fe^{2+} and Fe^{3+} standard with the indication of the two energies E1 (7127 eV) and E2 (7132 eV), used to differentiate the contribution of the two phases in the XRF Fe XANES maps shown in Figure 3.

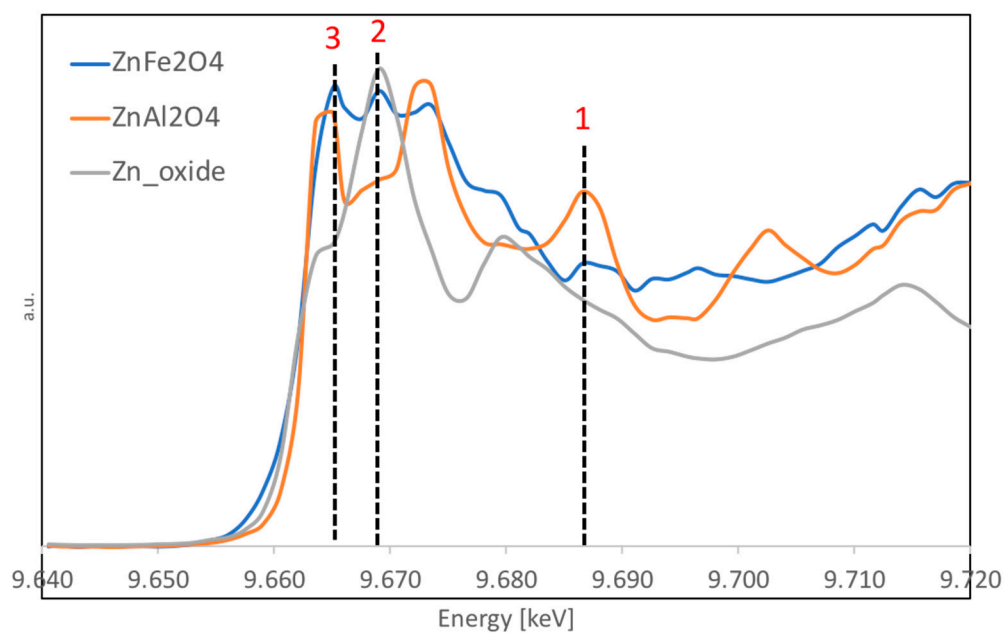


Figure S4. Zn K-edge XANES reference spectra from [43] where we indicated the energies chosen for the Zn XANES maps, later used to identify the predominant phase.

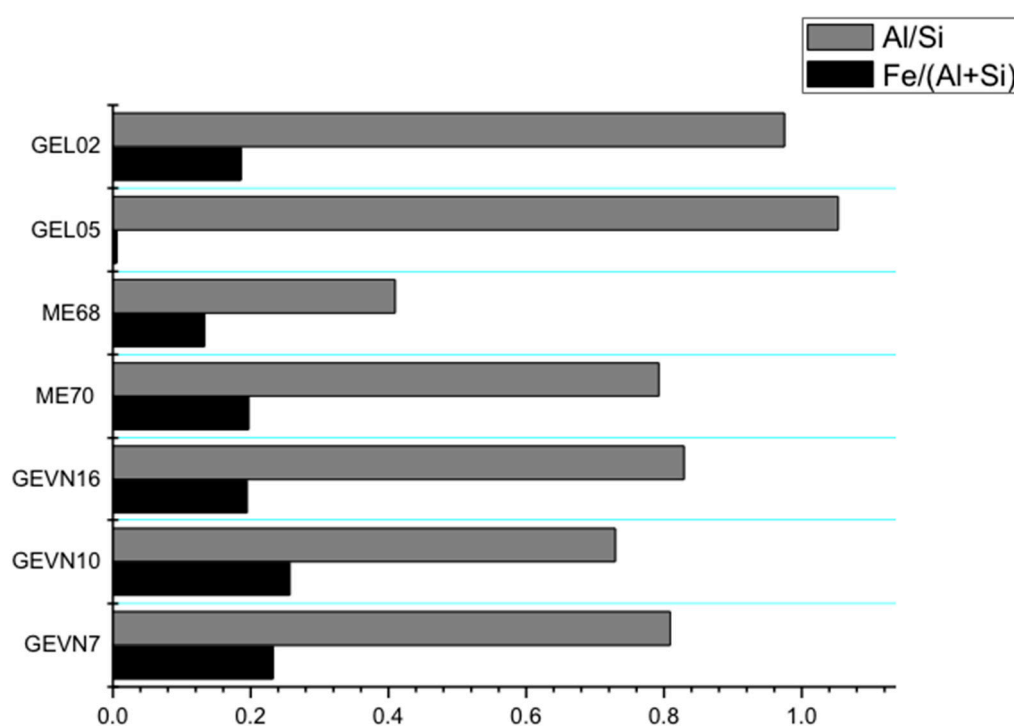


Figure S5. Si/Al and Fe(Si+Al) tenors in a selection of black gloss representative of the different identified products.