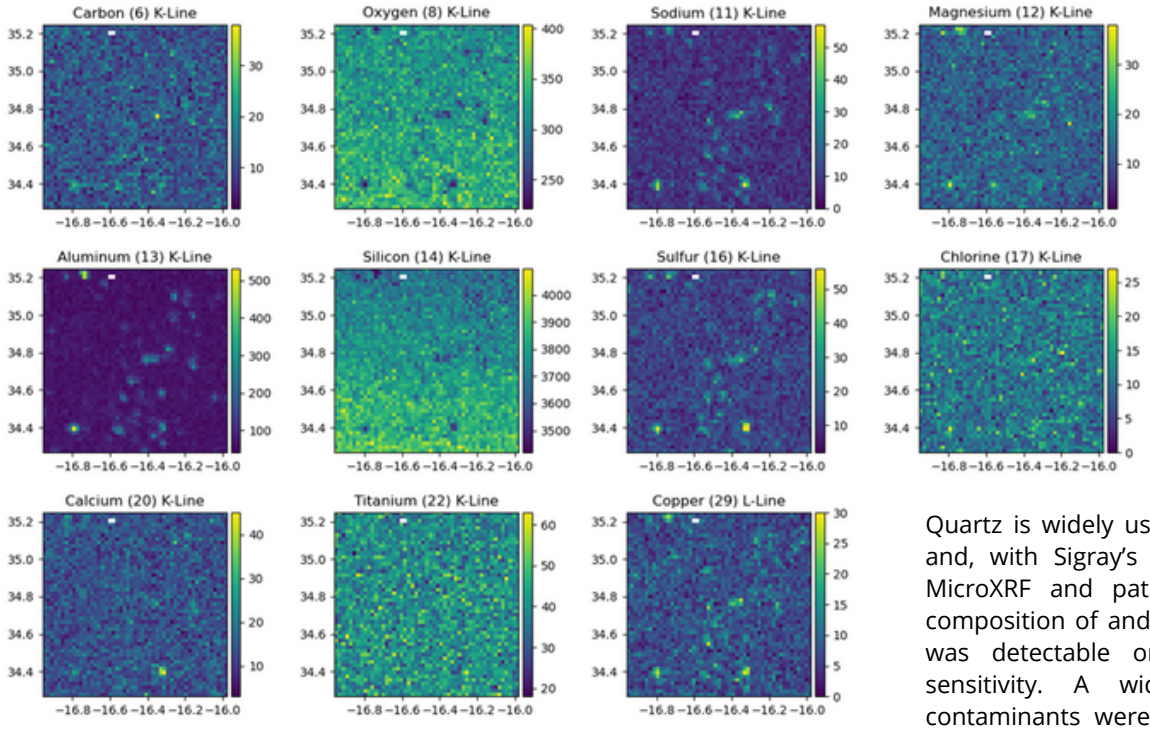
SUB-PPM CONTAMINANT DETECTION OF QUARTZ WINDOWS USED IN SPACECRAFTS

through Sigray's Attomap-310 Synchrotron Grade MicroXRF



The properties of glass used in space-based applications is very important as high heat resistance and thermal expansion are required for many applications, so understanding the composition of the glass can be vital to ensuring high performance for spacecrafts, satellites and other space vehicles.

Quartz is widely used by many space agencies and, with Sigray's high vacuum Attomap 310 MicroXRF and patented SiC X-ray tube, the composition of and contaminants in the quartz was detectable on the order of sub-ppm sensitivity. A wide range of the trace contaminants were easily detected in a small field-of-view. With the combination of high-spatial resolution and sensitivity, the Attomap-310 achieves data on par with synchrotron technology.

Sigray Attomap μ-XRF system

Highest Resolution XRF Microscope on the Market. Large Stage Travel and Enclosure

The powerful sensitivity and high resolution of the AttoMap produces synchrotron-quality elemental distribution mapping of trace elements for a wide range of research applications, spanning from the life and materials sciences to industrial use for pharmaceuticals, natural resources (oil and gas, mining) and semiconductor failure analysis.

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