

ELIO Applications Brief

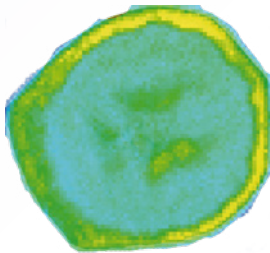
Mapping elemental nutrients

We all know we're supposed to eat nutritious foods. Health providers and other resources tell us which fruits and vegetables will give us the elemental nutrients we need.

We've learned bananas and avocados have potassium. We've also learned zucchini has phosphorus and potassium. We've even heard the expression, "An apple a day keeps the doctor away". That could be because apples provide us with calcium, potassium and sulfur which are all critical nutrients.

Did you ever wonder what part of the apple, zucchini, avocado or banana is nutrient rich? There's a lot of science behind it, but the Portable ELIO Mapping System can provide elemental EDXRF results in definitive images.

Banana slice



K XRF map
(false color scale, from blue to yellow)

Banana slice mapping of Potassium

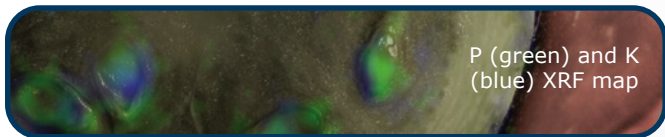
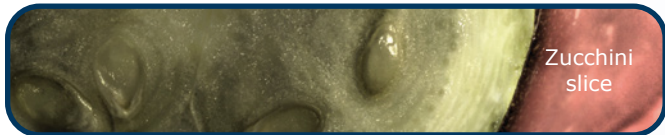
Avocado slice



Avocado slice
K XRF map
(false color scale, from blue to red)

Avocado slice mapping of Potassium

Zucchini slice



P (green) and K (blue) XRF map

Zucchini slice mapping of Phosphorus and Potassium

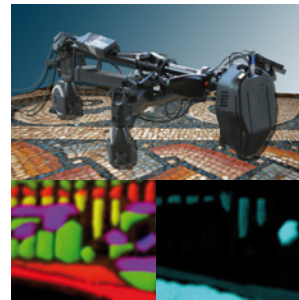
XGLAB

X and Gamma Ray Electronics

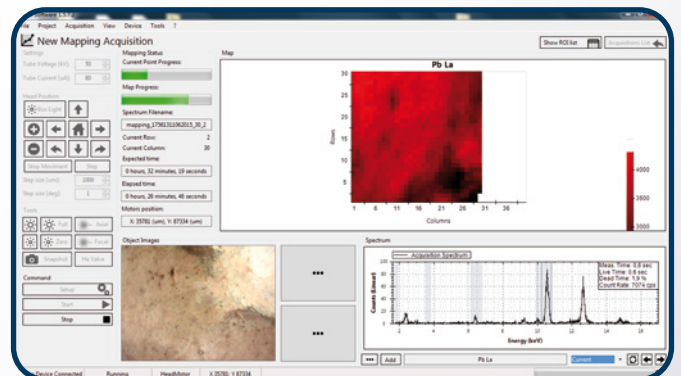


Apple Core Slice Mapping of Ca (blue), K (green) and S (red)

The ELIO is a portable, non-contact X-Ray Fluorescence (XRF) spectrometer with a 1 mm analysis spot size, excellent detector resolution, integrated video camera and a laser-based alignment system.



ELIO's Mapping System is light, compact and capable of building maps of up to 10 cm x 10 cm using the standard ELIO tripod. It provides software for acquisition and visualization of the maps. A click on the map results in a full spectrum display.



ELIO is made by XGLab, a spin-off from Politecnico di Milano.

For any information please refer to www.xglab.it or contact us at info@xglab.it



www.xglab.it

Flyer ELIO Mapping Food
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