Soft X-ray Microscopy at TwinMic (Elettra)

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Soft X-ray microscopy has already proven to be a very powerful tool for understanding the complex processes occurring at the submicron length scales [1]. After a brief introduction on soft X-ray Microscopy the presentation will focus on some of the recent achievements of TwinMic soft X-ray microscope installed at the Elettra synchrotron facility [2] where the low energy X-ray Fluorescence (LEXRF) set-up allows for elemental mapping of light elements, starting from B and covering the K and L edges of all elements in the energy range 190 to 2200 eV [1, 2]. The most recent outcomes in research fields, such as nanotoxicology, clinical medicine, environmental science and electrochemistry will be demonstrated through selected results [3-6]. New imaging modes in development will also be discussed and illustrated [7-9].

References:

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