

Abstract Submitted
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Image processing of transmission ion microscopy webcam video with Iris software NICOLE NEWTON¹, ARTHUR PALLONE², Murray State University — Scientists and engineers build simple, low-cost, webcam-based instruments for use in many disciplines. Analysis of the optical signal received through the three broadband color filters – red, green and blue – form the basis of many of those instruments. The CMOS sensors in webcam pixels also produce signals in response to ionizing radiations – such as alpha particles from a radioactive source. Simple alpha radiography has been demonstrated with a commercially available antistatic Po-210 source and a webcam modified to expose the pixel sensors. Analysis of webcam video with the Iris software is presented as a way to demonstrate other transmission ion microscopy imaging modes.

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