ELECTRONIC ARTICLE

Measuring discrete feature dimensions in AFM images with image SXM

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ABSTRACT

A suite of macros for the freeware image analysis program, Image SXM, are described. These macros are designed to measure the perimeter, horizontal area, and volume of discrete features in AFM images, obtaining accurate and consistent estimates. Directions for using the software and example applications are also given. Such tools allow one to perform tasks that would otherwise be extremely tedious or next to impossible. Examples include calculating reaction rates from time-series images of reacting particles or etch pits with complex shapes and classifying objects based on their dimensions.