

Description of Additional Supplementary Files

Supplementary Movie 1 | Closed-loop autonomous AFM feature discovery workflow.

Demonstration of the automated low-resolution scanning, real-time segmentation, feature selection, and high-resolution targeting process applied to bacterial samples.

Supplementary Movie 2 | Autonomous detection and targeting of geometric features.

Demonstration of the automated workflow applied to samples containing geometric shapes, showing real-time segmentation, classification, and adaptive high-resolution imaging.