

Materials List for

Picometer-Precision Atomic Position Tracking through Electron Microscopy

Leixin Miao¹, Adrian Chmielewski¹, Debangshu Mukherjee², Nasim Alem¹

¹Department of Materials Science & Engineering, The Pennsylvania State University ²Center for Nanophase Materials Sciences, Oak Ridge National Laboratory

Corresponding Author

Nasim Alem
nua10@psu.edu

Citation

Miao, L., Chmielewski, A., Mukherjee, D., Alem, N. Picometer-Precision Atomic Position Tracking through Electron Microscopy. *J. Vis. Exp.* (173), e62164, doi:10.3791/62164 (2021).

Date Published

July 3, 2021

DOI

10.3791/62164

URL

jove.com/video/62164

Materials

Name	Company	Catalog Number	Comments
EASY-STEM	Nasim Alem Group, Pennsylvania State University		Matlab app for STEM image processing; Download link: https://github.com/miaoleixin1994/EASY-STEM.git
JoVE article example script	Nasim Alem Group, Pennsylvania State University		Example Script for sorting atoms in unit cells
Matlab Optimization Tool Box	MathWorks		Optimization add-on package in Matlab
Matlab	MathWorks		Numerical calculation software
Matlab: Image Processing Tool Box	MathWorks		Image processing add-on package in Matlab