

Postdoctoral position in 3D atom scale nanofabrication for microelectronics

We have an opening for a postdoctoral scientist to work on the science and technology of 3D additive epitaxy with nanometer scale placement accuracy and resolution. The candidate will carry out research on two aspects of the project: (i) understanding the science and technology of localized epitaxy and material deposition, where material or precursor is delivered through nanometer sized apertures, and with nanometer scale source to substrate distances; and (ii), designing and using innovative nanoelectromechanical systems techniques for nanofabrication of active apertures and miniaturized deposition systems. The candidate should have a Ph.D. in Materials Science or Applied Physics, and should have strong cleanroom nanofabrication skills. Expertise in MEMS or NEMS will be an added advantage. Ultra-high vacuum skills would be desirable but not necessary. The project is part of our research activity in developing atom scale nanofabrication techniques for future 3D microelectronics.

The position will be at Argonne National Laboratory and the candidate will be able to use facilities both at Argonne and the University of Chicago. The candidate is expected to work independently and there will be significant opportunity to interact with Argonne and U Chicago scientists.

Please contact Professor Supratik Guha (sguha@anl.gov or guha@uchicago.edu) if interested.