

NEW TECHNOLOGY CAPABILITY ANNOUNCEMENT Elionix ELS-G100 Electron Beam Lithography System Friday, April 20, 2018 | 12pm - 1pm | Marcus Nanotech 1117-1118

This seminar will highlight the newly installed Elionix ELS-G100 Electron Beam Lithography System to the Marcus Inorganic Cleanroom. Attendees will receive a general introduction to e-beam lithography, i.e. direct-writing of user-defined CAD patterns with a beam of high-energy electrons. Additionally, the speaker will walk you through some of the advanced e-beam lithography topics by using Elionix ELS-G100 as a model system.

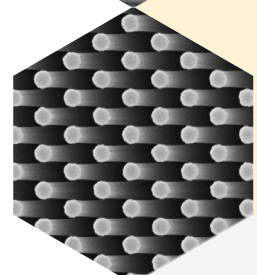
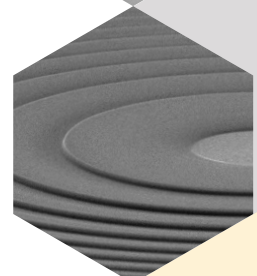
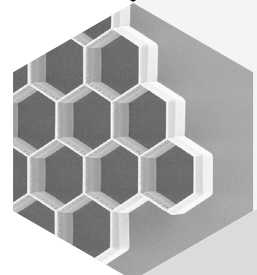
Seminar Topics

- E-beam system configuration and its components
- Principles of operation for ebeam exposure
- Limits of e-beam and its implications
- Proximity effect in ebeam exposure
- Effect of post-exposure processing

Tool Specifications

- » Generates patterns with a line width of 6nm with an 8" stage
- » Stable 1.8nm electron beam using high beam current at 100kV
- » 20bit DAC provides high beam positioning resolution
- » At a beam current of 1nA, 20nm lines can be written over an entire 500 μ m field without stitching

Speaker: Yong Sun - A dedicated and driven scientist by training, with 15 years of hands-on nanofabrication experience in the semiconductor field, Yong has worked both in academia and in industry, with research interests spanning across a variety of subjects, including sensors, microfluidics, metamaterials, Li-Ion battery and energy converters, to name a few. I am currently the Product Manager at SEMTech Solutions, collaborating with a group of dedicated engineers to advance the Elionix e-beam technology. Before joining the Elionix team, I have worked as a cleanroom manager at Princeton University, teaching users on the operation of many lithography tools, including Elionix ELS-F125.



**Pizza Lunch
will be
Provided.**



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