# NANOFABRICATION FACILITY



ADVANCED SCIENCE RESEARCH CENTER

August 25, 2023

Hello Nanofab Users and PIs:

Hope you all had a productive week! Here are the ASRC Nanofabrication Facility updates for this week:

## **PI Meeting**

There will be a Nanofab PI meeting via Zoom this coming Tuesday, August 29th at 1:00PM. There will be a brief overview of what has been happening in the lab, and some future directions we will be taking. The primary purpose is to provide a forum for feedback from our user community.

If you are an active PI and have not yet received a calendar invite – apologies! Please email sroberts@gc.cuny.edu to make certain you get the Zoom invite.

## **Oxford RIE-80 Etcher**

The tool is down due to inability to strike plasma. Oxford will be onsite the middle of next week to work on this repair.

# **FEI SEM**

The chiller was repaired, and the tool is online, and fully operational. However we have had reports of computer issues. A new computer was ordered and has arrived. We are waiting for the engineer to come and do the computer install. Once we hear the schedule we will update you on Slack.

# **Oxford PECVD**

The LF generator and transformer were replaced, but neither part fixed the matching problem (high reflected power) when using low frequency

recipes. The Oxford Engineer will be onsite next week and will investigate how the cooling system may be causing this issue.

Please note: The tool is currently up for all high frequency processes, however, it will be taken offline when the engineer is here. We will continue to keep you posted on Slack with progress and updates.

#### **Plasma Asher**

The repair of the Oxford PECVD requires moving the pump for the Plasma Asher. Therefore the Plasma Asher will be offline during the middle of next week while the PECVD repair is being done.

#### More Accomplishments at the ASRC Nanofab!

Work from the research groups of Vinod Menon and Andrea Alu have recently been published in Nature. Click to see the article titled: <u>"Magneto-optics in a van der Waals magnet tuned by self-hybridized polaritons"</u>

Congratulations to all the authors! Namely: Florian Dirnberger, Jiamin Quan, Rezlind Bushati, Geoffrey M. Diederich, Matthias Florian, Julian Klein, Kseniia Mosina, Zdenek Sofer, Xiaodong Xu, Akashdeep Kamra, Francisco J. García-Vidal, Andrea Alù & Vinod M. Menon

Thank you for including ASRC Nanofabrication Facility in the acknowledgements!

## Job Opportunity at the ASRC Nanofab

We have an open position in the ASRC Nanofab as a Cleanroom Engineer/Scientist. Find the job listing online here. This is an opportunity to join a fantastic team at the ASRC. If you know of qualified and interested individuals please pass this link on.

### Acknowledgements

Please remember to acknowledge the ASRC nanofabrication facility in your publication and let us know about exciting and new publications that utilize devices made in the facility.

This concludes the ASRC Nanofab updates for August 25th. Have a great weekend.

Nanofab Staff