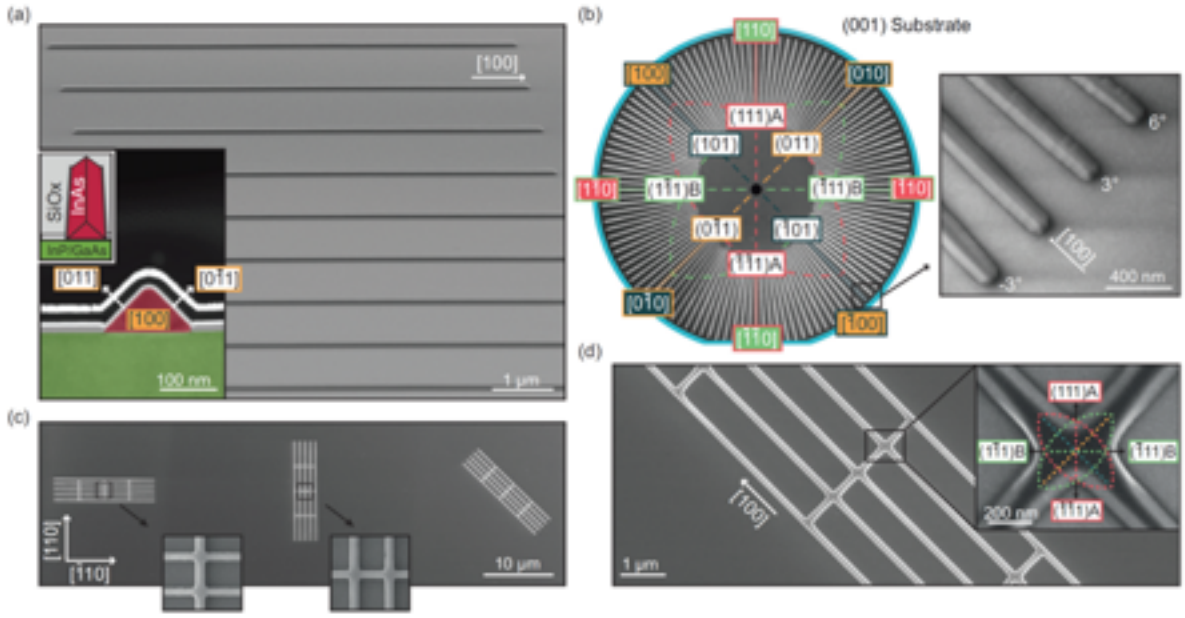
Bachelors and Masters Student Projects:

Building an advanced 3D platform for controlled growth of hybrid nanowires

Center for Quantum Devices, Microsoft Quantum Material Lab

In Microsoft Quantum Material Lab, we are working on developing quantum information processing hardware. Hybrid semiconductor-superconductor nanowires crystals hold the potential as building blocks of future quantum computers. Therefore, towards the optimization of these materials, combined efforts in the fields of quantum physics and advanced material engineering is necessary for the success of the project.



Filip Krizek *et al.* PHYSICAL REVIEW MATERIALS **2**, 093401 (2018)

The master project will focus on the development of the platform of nanowires growth, where the semiconductor-superconductor interfaces are controlled with high precision. The project will be experimental, meaning involvement with nanolithography, advanced wafer processing, and Electronic Microscopy. The Master candidate will have a good chance to have hands-on state-of-the-art instrumentation throughout the project.

If you want to know more, do not hesitate to contact:

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