UNIVERSITY of WASHINGTON

INSTITUTE FOR NANO-ENGINEERED SYSTEMS

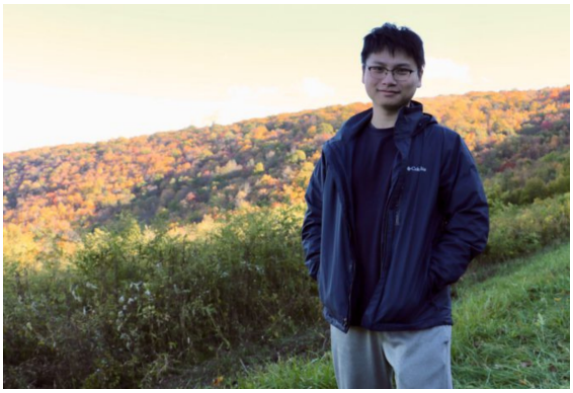
SUMMER 2024

NanoES announces 2024 Northwest Nanotechnology Seed Grant awardees

The UW Institute for Nano-engineered Systems (NanoES) has awarded three seed grants to UW researchers to use nanotechnology tools to develop new, innovative technologies and devices. Shijie Cao, professor of pharmaceutics, Ali Sadeghi, postdoctoral scholar in neurological surgery, and Shijing Sun, professor of mechanical engineering will receive up to $10,000 to carry out work in the UW's Washington Nanofabrication Facility (WNF) and

Molecular Analysis Facility (MAF).

NEWS

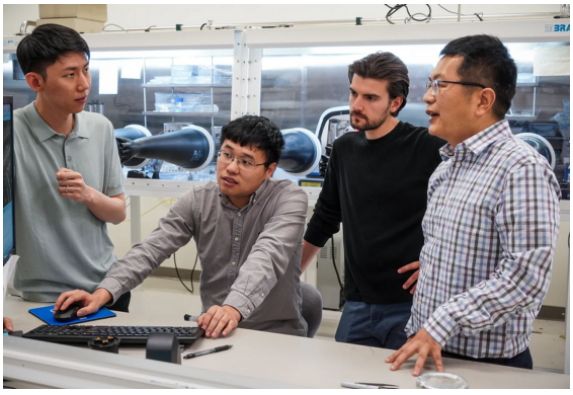


Student Scientific Achievement Award

NanoES awarded Electrical & Computer Engineering Ph.D. student Rui Chen its 2024 Student Achievement Award. Chen was recognized at the NanoES Symposium on May 23.

UW leads international group in semiconductor research and workforce development

The University of Washington is at the forefront of an international effort to innovate the semiconductor industry while building a skilled U.S.-based workforce to design and manufacture chip technology.



Physicists puzzle over emergence of strange electron aggregates

Researchers at the University of

Mouradian receives AFOSR YIP award for quantum computing research

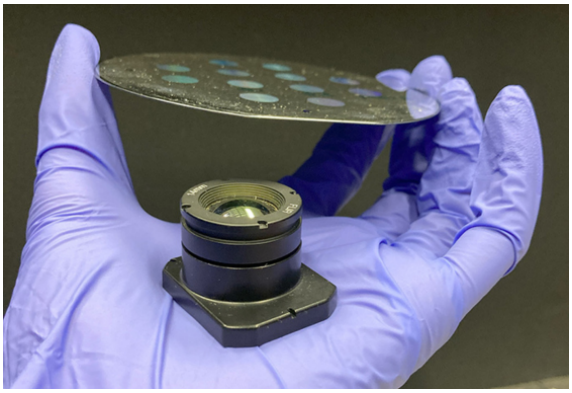
UW ECE Assistant Professor Sara

Washington found that in a stack of two atomically thin crystalline sheets offset from each other at a slight angle, electrons behaved like quasiparticles with fractional amounts of charge. This, with confirmation from MIT, was the first time that electrons had formed fractional quasiparticles without the enabling influence of a magnetic field.

Mouradian has been awarded a three-year grant from the Air Force Office of Scientific Research, through its Young Investigator Program. The grant will support work in Mouradian's Scalable Quantum Research Lab, which aims to build, understand and control trapped ion quantum systems in order to develop useful and practical quantum technologies.

Creating tougher sustainable materials

ME Assistant Professor Lucas Meza received an NSF CAREER Award to study how to create tough, sustainable materials using nanoengineering. The award is for $736,000 over five years.



Ultra-flat optics for broadband thermal imaging

A team of researchers, led by UW ECE and Physics Associate Professor Arka Majumdar, has introduced a new design framework that addresses the challenges associated with broadband meta-optics to design and experimentally demonstrate thermal imaging with meta-optics in laboratory and real-world settings.

WNF NEWS

From new instrumentation to exciting partnerships, a lot is happening in the Washington

Nanofabrication Facility. See the latest newsletter and sign up here to get future newsletters.

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