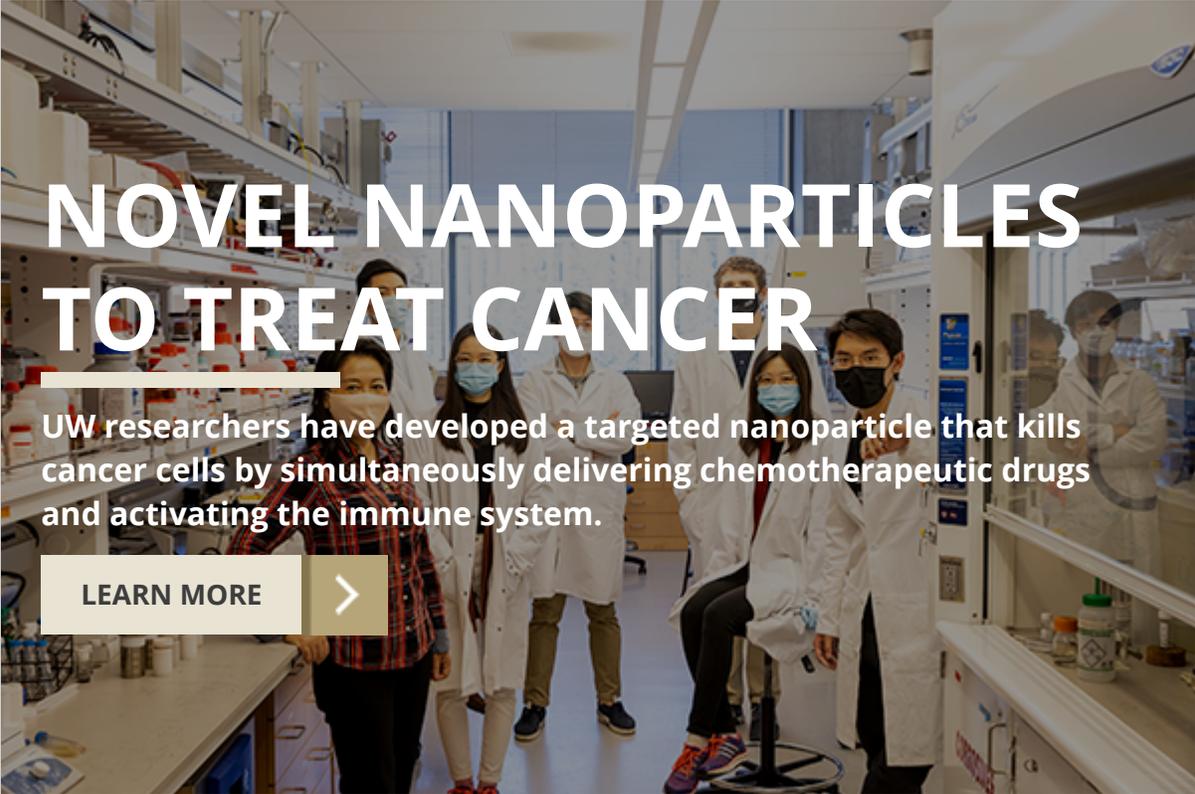


[View the web version of this message](#)



INSTITUTE FOR NANO-ENGINEERED SYSTEMS

SPRING 2022

A photograph of a group of researchers in a laboratory setting. They are wearing white lab coats and face masks. The background shows laboratory equipment and shelves.

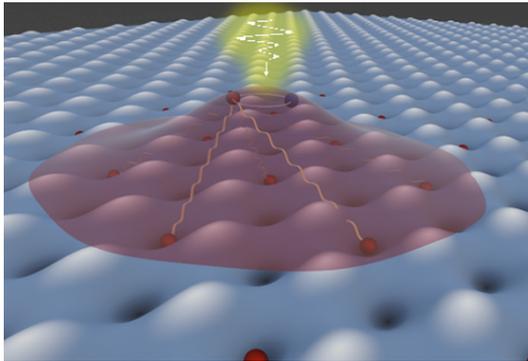
NOVEL NANOPARTICLES TO TREAT CANCER

UW researchers have developed a targeted nanoparticle that kills cancer cells by simultaneously delivering chemotherapeutic drugs and activating the immune system.

LEARN MORE

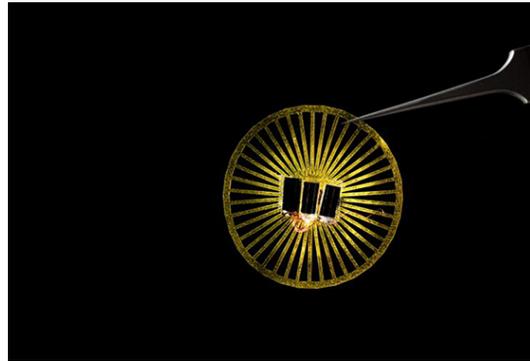


RESEARCH HIGHLIGHTS



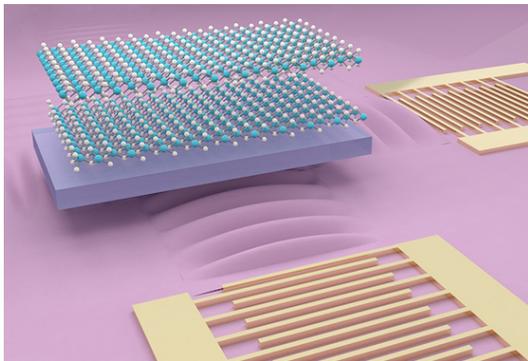
[Lasers trigger magnetism in atomically thin quantum materials](#)

A team led by [Xiaodong Xu](#), a UW professor of physics and materials science, reported in *Nature* that light — from a laser — can trigger a form of magnetism in a normally nonmagnetic material which could have applications in quantum simulation and other fields.



[Tiny battery-free devices float in the wind like dandelion seeds](#)

Inspired by how dandelions use the wind to distribute their seeds, a UW team which includes Computer Science & Engineering Assistant Professor [Vikram Iyer](#), has developed a tiny sensor-carrying device that can be blown by the wind as it tumbles toward the ground. Featured on [Science Friday](#).



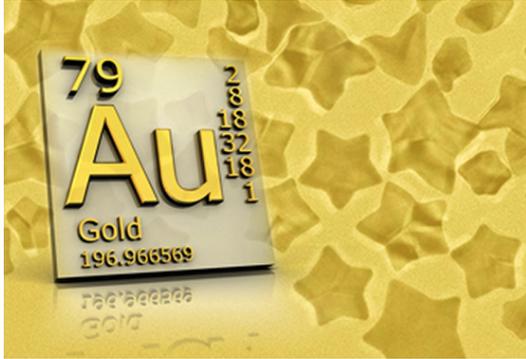
[Sound waves move 'excitons' further than ever before](#)

Researchers in the lab of UW Electrical & Computer Engineering Professor [Mo Li](#) have developed a way of using sound waves to move subatomic quasiparticles known as 'excitons' further than ever before — leading to a faster, more energy-efficient computing circuit.



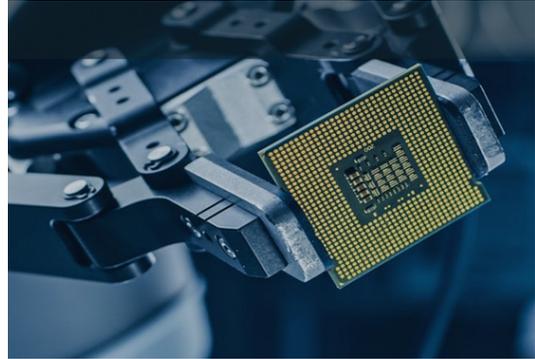
[The surprising toughness of nanofoams](#)

Bubbles for toughness? Mechanical Engineering and Aeronautics & Astronautics researchers, including NanoES faculty member [Lucas Meza](#), are collaborating to investigate and advance nanofoams, a new tiny but mighty material.



Researchers create a sea of nano-sized gold stars

Researchers from the Department of Energy's Pacific Northwest National Laboratory and the UW have successfully designed a bio-inspired molecule that can direct gold atoms to form perfect nanoscale stars. This work is an important step toward creating advanced materials with tunable properties.



Unlocking revolutionary applications in machine vision, robotics, and industrial systems

Tunoptix, co-founded by Electrical & Computer Engineering Professors [Arka Majumdar](#) and [Karl Böhringer](#), is commercializing technology that outperforms traditional optical systems by utilizing meta-optics and advanced reconstruction software.

CONGRATULATIONS



[NanoES announces awardees of Northwest Nanotechnology Infrastructure seed grants](#)

Four awardees will receive up to \$10,000 to develop new, innovative technologies using tools available in the UW's [Washington Nanofabrication Facility](#) and [Molecular Analysis Facility](#).

[Bioengineering professor Albert Folch reveals world of tiny fluidics in new book, "Hidden in Plain Sight"](#)

The book explains the technology underlying many of the everyday devices we rely on, from inkjet and 3D printers to glucose strips and COVID-19 tests.

RECENT PUBLICATIONS

[Laser refrigeration of optically levitated sodium yttrium fluoride nanocrystals](#)

Optics Letters

[Millimeter scale focal length tuning with MEMS integrated meta optics employing high throughput fabrication](#)

Nature Scientific Reports

[Reversible strain-induced magnetic phase transition in a van der Waals magnet](#)

Nature Nanotechnology

[UW HOME](#)

[NANOES](#)

[WNF](#)



[CONTACT US](#) | [PRIVACY](#) | [TERMS](#)

© 2022 Institute for Nano-Engineered Systems | Seattle, WA 98195