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FEATURED STORY



Artificial eyes could bring

human-like sight to self-driving cars, robots



LEAD: PROF. HUANYU (LARRY) CHENG

Although self-driving cars and sophisticated robots use advanced cameras, computer algorithms and artificial intelligence (AI) to picture their surroundings, these artificial eyes struggle to remain reliable in mixed lighting conditions. A team of researchers, co-led by an engineer from Penn State, has proposed a solution that mimics the mechanics of the human eye to adapt from bright to dark light in seconds.

[READ THE LEAD STORY](#)

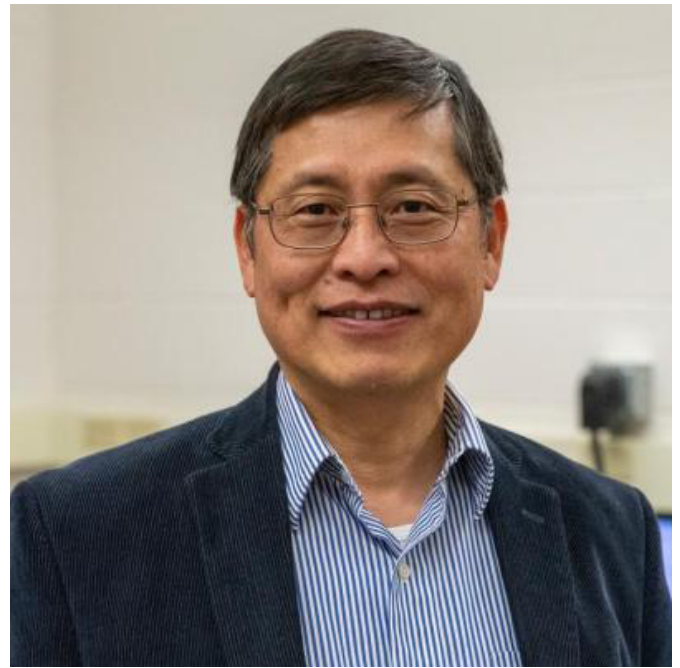
OTHER NEWS



Materials lab in national program to develop wearable eye health system

LEAD: PROF. DIPANJAN PAN

Researchers from Penn State will develop biosensors for the Closed-Loop Sensing and Microdosing for Dry Eye and Systemic Disease Management (COSMIC) team led by Lacristat, a California-based ophthalmology company.

[Read More](#)

Toyota award to support lithium-ion battery fire prevention research

LEAD: PROF. CHAO-YANG WANG

Chao-Yang Wang, William E. Diefenderfer Chair in Mechanical Engineering and professor of mechanical engineering, of chemical engineering and of materials science and engineering at Penn State, has received a three-year award from the Toyota Research Institute (TRI) through the institute's University Research Program (URP). The award will support Wang's research on redesigning liquid electrolytes to prevent lithium-ion (Li-ion) batteries from catching fire.

[Read More](#)



Yinming Shao named Downsbrough Early Career Professor of Physics

LEAD: ASST. PROF. YINMING SHAO

Yinming Shao, assistant professor of physics at Penn State, has been honored with the Downsbrough Early Career Professorship in Physics in recognition of his research contributions, teaching and service to the Department of Physics and the Eberly College of Science.

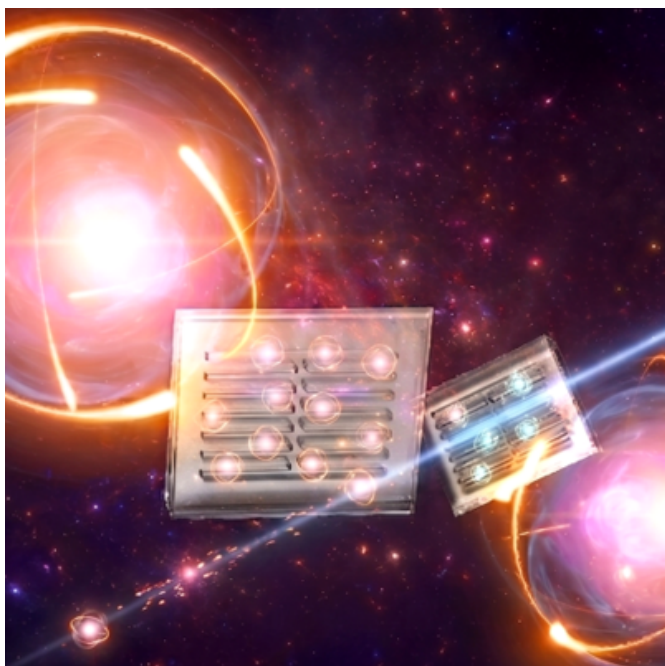
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Treats to concrete: Penn State Bakery to use grad student's carbon capture tech

LEAD: ASST. PROF. JUAN PABLO GEVAUDAN

The Penn State Bakery has long supported the University community through baked goods and desserts. Now, with a system developed by Matthew Hollingham, a third-year doctoral student in architectural engineering, the Bakery will also help pave the way for carbon capture and utilization.

[Read More](#)



Glass cells of atoms offer a new path to smarter, cheaper sensors

LEAD: PROF. DANIEL LOPEZ

Researchers at Penn State and the National Institute of Standards and Technology (NIST) have developed a new way to build tinier, smarter glass sensors filled with highly precise and stable atoms.

[Read More](#)



Air Force award supports research on electronics that can survive extremes

LEAD: ASST. PROF. BETUL AKKOPRU-AKGUN

Betul Akkopru-Akgun, assistant research professor in Penn State's Department of Materials Science and Engineering and the Materials Research Institute, has received an Air Force Office of Scientific Research Young Investigator Program award to investigate how electricity and heat move through materials used in extreme environments.

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MATERIALS DAY 2026





GAP funding awarded to 12 Penn State research commercialization projects

Twelve research projects have been selected for the 2026 Penn State Commercialization GAP Fund. Awarded projects receive \$75,000 in funding and other support to develop promising proof-of-concept research into commercial ready technology.

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REGISTRATION OPENS: JULY 1, 2026



Visit more than 20 different online tours, including an exploration of the Materials Day experience through an immersive 360° view. Delve into past materials research demos, poster sessions, flash talks, and more!

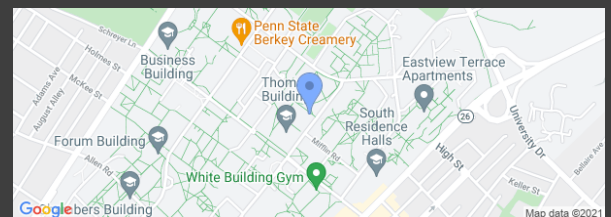
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