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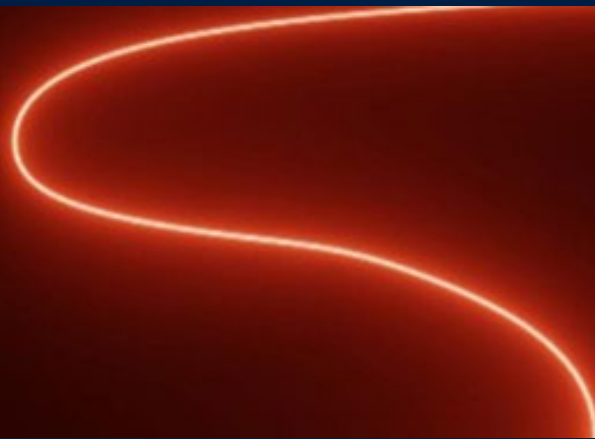
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Materials Research
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E-materials

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FEATURED STORY



RESEARCHERS ENGINEER NEW

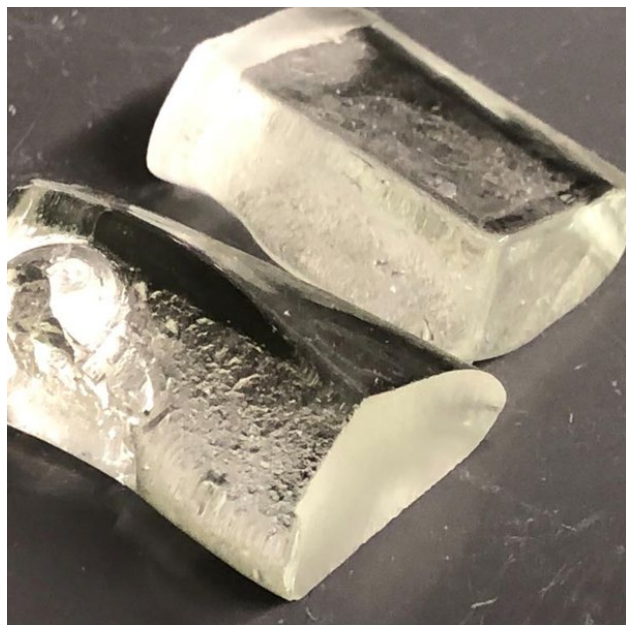
approach for controlling thermal emissions



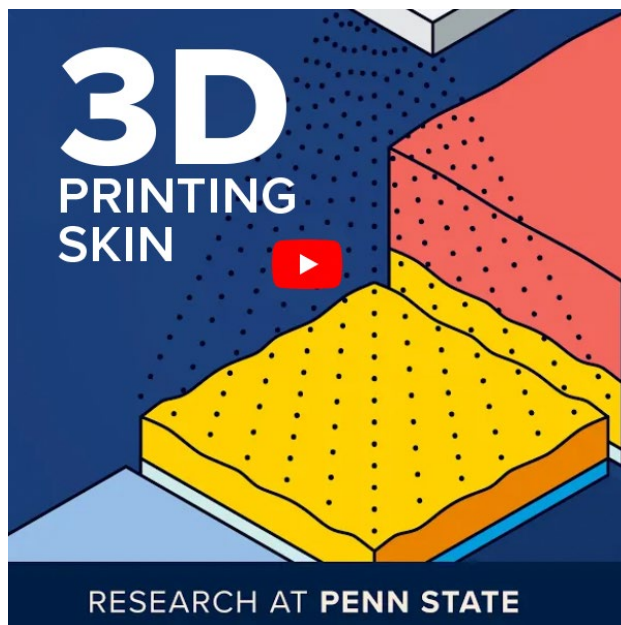
LEAD: PROFESSOR SAHIN OZDEMIR

If a material absorbs light, it will heat up. That heat must go somewhere, and the ability to control where and how much heat is emitted can protect or even hide such devices as satellites. An international team of researchers, including those from Penn State, has developed a novel method for controlling this thermal emission, with what they called promising implications for thermal management and thermal camouflage technologies.

[READ THE ARTICLE](#)



[GAP funding paves the way for research to move from lab to market](#)



[Video: 3D-printed skin closes wounds and contains hair follicle precursors](#)

LEAD: PROF. JOHN MAURO
LEAD: PROF. JEFFREY CATCHMARK
LEAD: PROF. TAK SING WONG

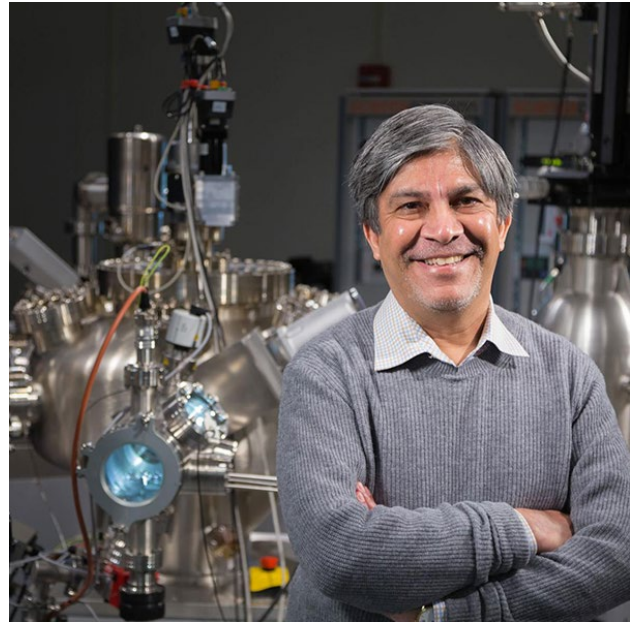
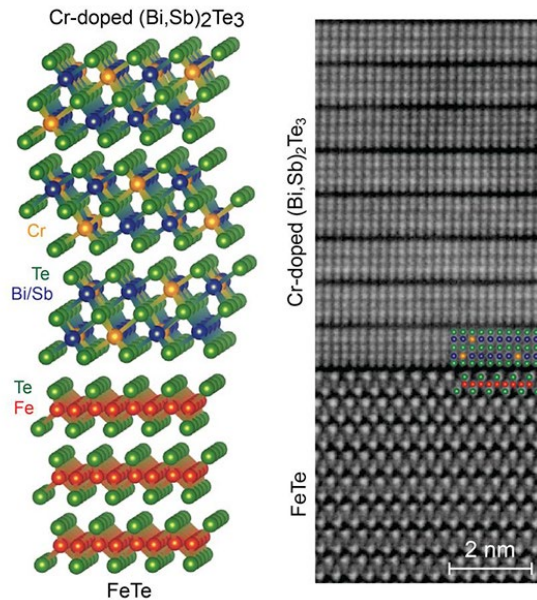
Four projects were recently awarded Penn State Commercialization GAP funding. Three of the projects focus on materials research in glass, coatings, and brochosomes.

[Read More](#)

LEAD: PROF. IBRAHIM OZBOLAT

Penn State's bioprinting research is pushing the boundaries of medical technology toward solutions for skin replacement — including hair follicles, which were previously unexpected from this technology, bone, and even internal organs.

[Read More](#)



[Combining materials may support unique superconductivity for quantum computing](#)

LEAD: PROF. CHI-ZU CHANG

A new fusion of materials, each with special electrical properties, has all the components required for a unique type of superconductivity that could provide the basis for more robust quantum computing.

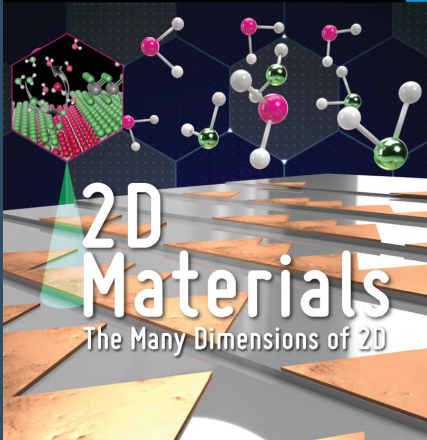
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[Nitin Samarth honored with Adler Lectureship Award from American Physical Society](#)

Nitin Samarth, Verne M. Willaman Professor of Physics, was selected for "seminal contributions to semiconductor spintronics through the development of atomically engineered materials." He will be presented with the award at the annual APS meeting in March, where he will also present an invited talk.

[Read More](#)





2D Materials

The Many Dimensions of 2D

In the brief history of two-dimensional (2D) materials, Penn State played a key role and is positioning itself to take an even bigger role in the future.

[READ THE DIGITAL MAGAZINE](#)

UPCOMING EVENTS

CONVERGENCE of MATERIALS, DATA, MANUFACTURING and the HUMAN DIMENSION



October 29-30, 2024
MaterialsDay
2 0 2 4

October 29 - 30, 2024

University Park, PA

Convergence of Materials, Data, Manufacturing, and the Human Dimension

Block off Oct. 29-30 on your calendar for the 2024 Materials Day, Penn State's marquee event for the materials research community. This year's theme is **"Convergence of Materials, Data, Manufacturing, and the Human Dimension."** With this theme in mind, the event will feature **keynote speakers, breakout sessions, graduate student poster sessions, industry-sponsored table tops, lunch, and several networking**

[ADD TO CALENDAR](#)



opportunities.

[AGENDA, KEYNOTE DETAILS, & SPONSORSHIP INFORMATION](#)

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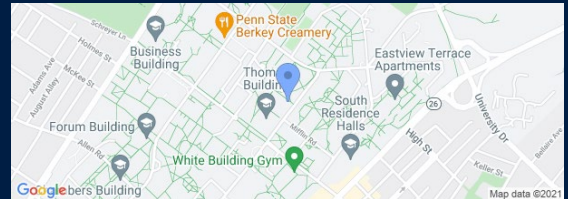
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