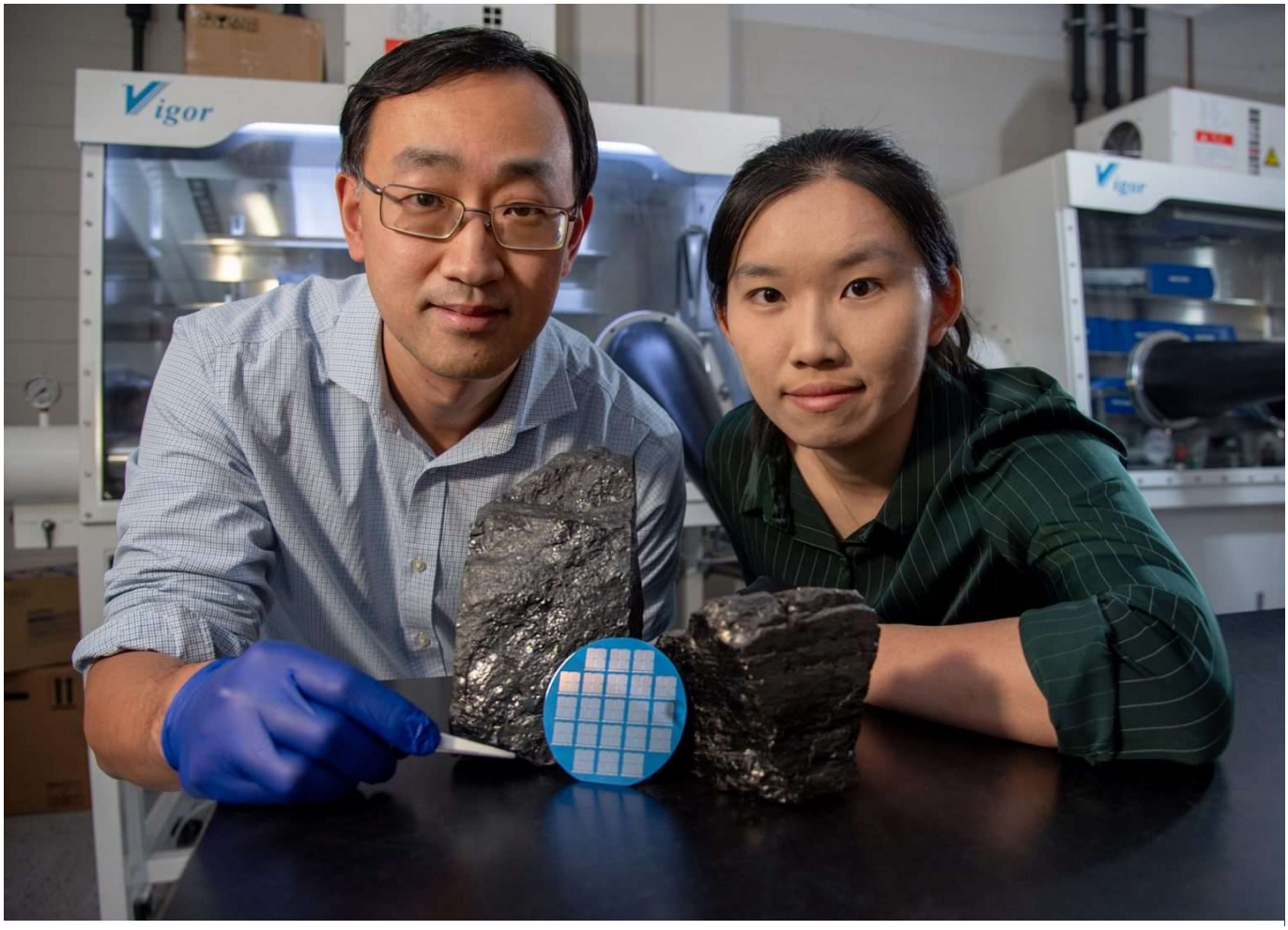
Smile Politely

A research team from U of I is turning coal into electronic devices

Julie McClure January 22, 2024 - 3:28pm



Heather Coit/Grainger Engineering

No, I am not suggesting that these scientists are performing magic, though it does sort of seem like magic to me! Professor of materials science and engineering Qing Cao, and his research group at The Grainger College of Engineering Materials Research Laboratory are part of a collaboration with the National Energy Technology Laboratory, Oak Ridge National Laboratory and the Taiwan

Smile Politely

A process developed by the NETL first converts coal char into nanoscale carbon disks called “carbon dots” that the U. of I. research group demonstrated can be connected to form atomically thin membranes for applications in both two-dimensional transistors and memristors, technologies that will be critical to constructing more advanced electronics. These results are reported in the journal Communications Engineering.

These electronics would be more advanced in a few different ways, including faster speeds, less power consumption, and better data storage.

Get the more in-depth scientific description of this work here.

SPlog | Campus | Science | Culture

Julie McClure

Managing Editor

More Articles