



STUDENT SENSORS RIG SEMINAR SERIES

Sensors Research Interest Group (RIG) aims to connect researchers and users of sensor materials, technologies, middleware and applications, and to provide an interface between academic and industrial research.

Student Sensors RIG led seminar series are run by a team of students and postdocs.

Interested in sensor-related research?

Want to present your work?

Want to join our team?

We want to hear from you!

Website:

<https://research.utexas.edu/vpr-initiatives/rigs/sensors/>

Email:

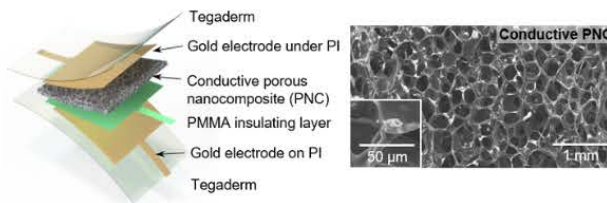
sensors_rig_students@utlists.utexas.edu

HIGHLY SENSITIVE CAPACITIVE PRESSURE SENSORS OVER A WIDE PRESSURE RANGE ENABLED BY THE HYBRID RESPONSES OF A HIGHLY POROUS NANOCOMPOSITE

October 15th, 2021

12:15 - 12:45pm

Past research aimed at increasing the sensitivity of capacitive pressure sensors has focused on developing dielectric layers with air gaps and higher dielectric constants. However, such strategies have only been effective in improving sensitivities at low pressure ranges. To overcome this obstacle, a flexible hybrid response pressure sensor composed of an conductive porous nanocomposite (PNC) laminated with an ultrathin dielectric layer was devised. The PNC exhibits hybrid piezoresistive and piezocapacitive responses, resulting in significantly enhanced sensitivities over wide pressure ranges.



Zoom link:

<https://utexas.zoom.us/j/96140589741>



KYOUNG-HO HA

MECHANICAL ENGINEERING

THE UNIVERSITY OF TEXAS AT AUSTIN

Kyoung-Ho Ha is a Ph.D. candidate under the supervision of Professor Nanshu Lu in the Mechanical Engineering Department at the University of Texas at Austin. His study focuses on developing a soft pressure sensor that can be applicable for e-skin, robotics, and bio-sensors. His interdisciplinary research is across composite synthesis, porous structures and thin films manufacturing, and analytical modeling. His recent work was published in Advanced Materials.



Youtube link:

https://youtu.be/in6KFV2_Zfk

Comments and questions will not be monitored on YouTube