

Nano Science, Technology and Industry Scoreboard

CES 2022: Somalytics to Unveil Products Powered by World's Smallest Nano-based Capacitive Sensor

2022-01-03

New 1mm paper sensor 'feels' human presence, creating new genre of gesture-based digital interfaces, wellness monitoring and safety applications.

At CES 2022, one of the biggest breakthroughs in consumer technology this decade will be unveiled to the public by nanotechnology innovator <u>Somalytics Inc</u>. The company will introduce two remarkable products that "feel" human presence through Somalytics' unique, miniature carbon-nanotube paper composite (CPC™) capacitive sensors: the SomaControl™ gesture monitor and the SomaSense™ 3D floor mat. Somalytics will be in booth #513 at Unveiled Las Vegas on Jan. 3 and in the company's CES Central Hall booth #15879 at the Las Vegas Convention Center Jan. 5-8.

"These new products are a great example of the kind of innovation that is possible with our new kind of capacitive sensors," said Barbara Barclay, CEO of Somalytics. "We look forward to igniting discovery across many industries to pioneer better, faster and less-expensive applications for human computer interaction. Our devices will enable life-changing applications in assistive technology, health and wellness, industrial safety, and transportation in addition to better experiences in consumer electronics, gaming and wearables as well as many other areas."



SomaControl[™] from nanotechnology innovator Somalytics is a 3D gesture monitor that can enable everyday tasks at home or be integrated into gaming devices for a more immersive experience.

SomaControl™ and SomaSense™

SomaControl[™] is a 3D gesture monitor that can enable everyday tasks at home or integrated into gaming devices for a more immersive experience. It allows users to interact with and control a digital device using hand movements with no contact.

SomaSense[™] is a flexible 3D sensing floor mat that observes, monitors and reports on human wellness factors, including presence, gait and foot pressure, with applications in health tech and wellness assisting individuals with balance, movement and other challenges.

Demonstrations of these products at CES will show users firsthand ways that new and improved human-computer interface experiences are possible with Somalytics technology, including:

- Gesture control of four LED lights.
- Interactive gesture control of a desktop or laptop computer.
- Monitoring of human wellness factors, including gait and foot pressure.

New CPC™ Sensor Technology

Somalytics is promising to bring better "sense" to the digital world by creating a new genre of gesture-based digital interfaces, wellness monitoring and safety applications. Its first-of-its-kind miniature sensor is flexible and highly sensitive to the human body. Mass production of Somalytics' new capacitive sensors is expected to begin in 2022, ushering in a new era of human-machine interface applications that will save and improve lives.

Compared to existing capacitive sensors, Somalytics' are 100 times smaller and 10 times faster, with greater range for sensing proximity and pressure. Offering unprecedented sensitivity to human tissue, the sensors acknowledge human presence at up to 20 centimeters. They work with any skin tone or eye shape, recognize 3D gestures without need for any hand device, and are faster and better than infrared. All of this enables a new generation of touchless technology applicable to almost any interaction between humans and machines.

Better Eye Tracking

"Somalytics' sensors will open an entire new era for wearable eye tracking because the sensors are not camera based and there is no illumination of the eye required," added Barclay, a recognized international expert in eye tracking technology. "The processing speed is under three milliseconds, and the sampling rate is 10 times faster than best-in-class existing technologies. With Somalytics' sensors, eye tracking will evolve to accomplish the 'real feel' and 'real-time eye to eye' experience for which augmented and virtual reality users have long waited."

Read the original article on PR Newswire.