

InnoSense LLC is a technology firm serving the aerospace, defense, energy, and healthcare markets. We develop cutting edge innovations in chemical and biological sensing, and nanomaterial technologies. Learn more about our latest innovations at www.innosense.us



InnoSense LLC is about 15 miles from Los Angeles International Airport. We have teaming arrangements with large and small companies to transition our technologies to commercially viable products.

#### Located in Southern California





For more information, please contact us at marketing@innosense.us

2531 West 237th Street, Suite 127 Torrance, CA 90505 Phone: (310) 530-2011 Fax: (310) 530-2099 www.innosense.us

# NANOWIRE SENSOR DEVICES





## NANOWIRE SENSOR DEVICES

#### CHEMIRESISTIVE SENSOR ARRAYS - US PATENT PENDING

InnoSense LLC has developed novel sensors for a range of target chemical and biological analytes using nanotechnology and photolithographic techniques. The micronsized electrode junctions modified with nanowires are easily integrated into an array for multi-analyte detection. This array can detect desired gases, toxic chemicals, hypergolic fuels, and biomarkers for cancers and disease diagnosis.

The template-free electromechanical fabrication uses only tens of microliters of reagents. This cost-saving method creates a robust sensor, which can detect trace quantities of chemical analytes and biomolecules ranging from small peptides to large proteins.



### **TECHNOLOGICAL BENEFITS**

Conducting polymers have opened up a multitude of possibilities for developing sensors combining electromechanical, optical and conducting properties. Nanowire sensors from conducting polymers:

- Can detect a wide range of biomolecules and chemical analytes
- Are customizable platform to target specific chemical or biological analytes
- Are useful for gas and liquid phase analysis
- Can target small molecules

## **FEATURES**

- Simple to use
- Low power requirements
- Scalable process suitable for mass production
- Highly sensitive and selective
- Rapid analysis of samples (seconds to minutes)
- Robust and long operational lifetime

Adaptable multi-analyte devices. Molecular Analytes





Easy to use and read under all circumstances

## **POTENTIAL APPLICATIONS**

- Biomarker discovery and validation
- Diagnostics, prognostics, and theranostics
- Detecting hazardous and corrosive gases/ analytes
- Contamination detection and remediation
- Air and water quality monitoring



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