

TI's NEW Surface Plasmon Resonance Sensor, Spreeta: An Ideal, Low-Cost, Electronic Biosensor Platform

Analytical Sensors Microcomponents Laboratory

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Abstract: Analytical Sensors at Texas Instruments began in 1995 with the idea that the growing availability of low-cost, high-performance opto-electronic components would drive the development of miniature, low-cost measurement systems and thereby enable a transition from "centralized" to "distributed" testing. Spreeta, which is TI's first commercialized analytical sensor product, is based on a physical phenomenon called Surface Plasmon Resonance (SPR). SPR has been used in sophisticated lab equipment for over 10 years to study bio-molecular binding events in real-time.

Spreeta enables the power of SPR to be used inside AND OUTSIDE the lab by combining a low-cost SPR sensor with customizable software and electronics designs. Spreeta is currently being applied in many biosensing market spaces, including Life Sciences R&D, Medical and Veterinary Diagnostics, Food and Water Safety, and Environmental Monitoring. This presentation will describe Spreeta's past, present and future with an emphasis on its Technology Roadmap and Product Development Process.