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Multichannel Hydrataion Management Sensor

A cost-efficient, accurate, and fast-readout paper-based wearable sweat sensor provides real-time diagnostics for athletic, military, and clinical applications.

Researchers at Purdue University have developed a new highly accurate system with fast readout for measuring sweat rate. Current biometric technologies for sensing sweat are focused on steady-state analysis, but this is usually not feasible for real-time and whole body sweat rate estimates. These systems are effective for clinical settings but are usually too bulky and complex for point-of-care diagnostics. There remains a need for quickly quantifying sweat rate for athletes, first responders, soldiers in the military, and more. Purdue researchers meet this challenge with a new discrete paper-based sweat sensor design that provides accuracy, reliability, and cost-efficiency to users. As an added advantage, the device can be easily adapted as a wearable wristband.

Advantages

-Wearable

-Accurate

-Fast Readout

Applications

-Clinical Diagnostics

-Point of Care Diagnostics

-Military

-First Responders

-Athletes/Sporting

Technology Validation:

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Category
Biotechnology & Life Sciences/Biomarker Discovery & Diagnostics

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This technology is in the concept stages.

TRL: 3

Intellectual Property:

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