

Hybrid E-Tattoo - A platform for sensor fusion of smart textiles and skin adhesives for the next generation of smart wearables

The project Hybrid E-Tattoo is based on the integration of different sensors concepts inside skin adhesives and textiles. The project will show that utilizing a combination of both systems together with a multi-sensory approach, this platform technology could enable various application for future E-health application in healthcare, well-being and sports. Within the framework of this project, a platform will be created which, on the one hand, includes fundamental structures of textile assembly and connection technology, energy supply and wireless data transmission and, at the same time, considers essential requirements of economy, reusability, sustainability and disposal.

Exemplary demonstrators will be set up on the basis of a general technology platform, which will serve as a design basis for future SME projects to facilitate entry into the market.

Aims:

- Versatile hybrid plug & play wearable sensor technology platform
- Integration of different sensor concepts in both skin adhesives and textiles

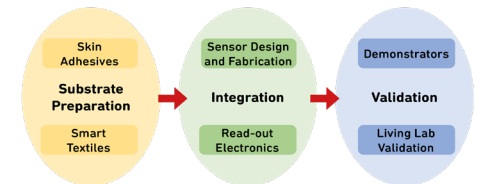


Figure 1: Value chain for the Hybrid E-Tattoo project

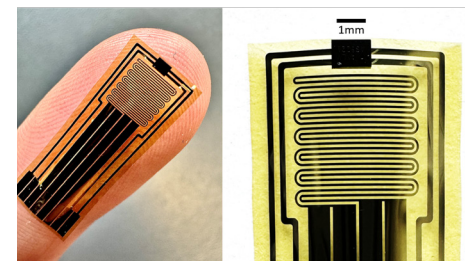


Figure 2: Flexible moisture sensor with an integrated digital temperature sensor

Projektdauer:

01/2023 - 12/2024

Projektkoordination:

Prof. Dr. Antoni Picard
Hochschule Kaiserslautern
University of Applied Sciences
Amerikastraße 1
66482 Zweibrücken
Germany

phone: +49 631/3724-5414

e-mail: Antoni.Picard@hs-kl.de



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