

ADVANCED FUNCTIONAL MATERIALS

The image features a central illustration of a human hand with four blue square sensor patches on the wrist. Surrounding the hand are several white printed circuit boards (PCBs) with blue sensor patterns. One PCB is shown with a clear hydrogel layer being applied to it. In the background, there are glowing green and blue circular patterns, a smartphone displaying a data interface, and a white face mask. The overall theme is advanced functional materials for biosensing.

HYDROGEL-ENABLED TRANSFER PRINTING

Patterning of conducting polymer poly(3,4)ethylenedioxythiophene doped with polystyrene sulfonate (PEDOT:PSS) thin films directly on hydrophobic soft substrates is challenging. Shiming Zhang, Ali Khademhosseini, and co-workers, in article number 1906016, report that hydrogels are capable of transfer-printing patterned PEDOT:PSS thin films from glass onto various soft substrates. Using this method, skin-attachable organic electrochemical transistors are developed for personalized biosensing applications.