Breathable, Paper-based Epidermal Electronics

Track Code: 2019-MART-68591

Categories:
- Biomedical Engineering
- Medical/Health

Keywords:
- Biomedical Engineering
- Medical/Health
- Wearable Medical Device

Current manufacturing methods and materials for epidermal electronics are complex and expensive, which prevent their adoption as single-use medical devices. Researchers at Purdue University have developed a low-cost, omniphobic, paper-based wearable or implantable epidermal electronic to monitor health status. Whereas current metallic based skin-mountable or implantable devices are not breathable and short-circuit in high humidity situations, this porous, paper-based technology is not impacted by moisture changes and is highly breathable. Furthermore, this technology makes epidermal electronic devices accessible to high-throughput manufacturing technologies to allow the fabrication of a variety of wearable medical devices at a low cost.

Advantages:
-Breathable
-Not impacted by moisture
-Low-cost

Potential Applications:
-Wearable or implantable epidermal electronics

People:
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Intellectual Property:

Application Date: April 8, 2020
Type: PCT-Patent
Country of Filing: WO
Patent Number: (None)

Issue Date: (None)

Application Date: April 8, 2020
Type: Utility Patent
Country of Filing: United States
Patent Number: (None)
Issue Date: (None)

Application Date: April 19, 2019
Type: Provisional-Patent
Country of Filing: United States
Patent Number: (None)
Issue Date: (None)

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