# Article information:

An Integrated 3D Hydrophilicity/Hydrophobicity Design for Artificial Sweating Skin (i‐TRANS) Mimicking Human Body Perspiration - Peng - 2022 - Advanced Materials - Wiley Online Library  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/adma.202204168>

# Article summary:

1. Researchers have developed an artificial skin that mimics human body perspiration, called i-TRANS.

2. The design of i-TRANS is based on normal fibrous wicking materials and the selective surface modification with gradient of poly(dimethylsiloxane) (PDMS).

3. This artificial skin provides a proper in vitro testing platform for perspiration-relevant research, avoiding interference from the “skin” layer.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is written by a team of researchers from Stanford University and published in Advanced Materials, a reputable journal in the field of materials science and engineering. The authors provide detailed information about their research process and results, which makes it easy to evaluate the trustworthiness and reliability of the article. The authors also declare no conflict of interest, which further adds to its credibility.

The article does not appear to be biased or one-sided as it presents both sides equally and does not make any unsupported claims or missing points of consideration. All claims made are supported by evidence provided in the article, such as details about the fabrication process and results from experiments conducted using i-TRANS. Furthermore, there are no promotional content or partiality present in the article as it focuses solely on presenting scientific facts about their research findings.

The authors also note possible risks associated with their research, such as potential safety issues related to using PDMS for surface modification. They also discuss potential applications for their artificial skin beyond perspiration simulation, such as robotics and textiles. In conclusion, this article appears to be trustworthy and reliable due to its detailed description of the research process and results without any bias or unsupported claims present.

# Topics for further research:

* Artificial skin applications
* PDMS surface modification
* Robotics and textiles
* Perspiration simulation
* Safety issues related to PDMS
* Artificial skin fabrication process

# Report location:

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