

## Editorial

# Preface of the 4th International Conference on the Challenges, Opportunities, Innovations and Applications in Electronic Textiles (E-Textiles 2022) <sup>†</sup>

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<sup>†</sup> All papers published in the volume are presented at the 4th International Conference on the Challenges, Opportunities, Innovations and Applications in Electronic Textiles, Nottingham, UK, 8–10 November 2022.

**Abstract:** The 4th International Conference on the Challenges, Opportunities, Innovations and Applications in Electronic Textiles (E-Textiles 2022) was held in Nottingham (United Kingdom) on 8–10 November 2022.

**Keywords:** electronics; wearables; smart fabrics; electronic textiles; E-textiles; sensing; healthcare devices; textile antennas; energy harvesting; printed electronics; knitted E-textiles; functional yarns

## 1. Introduction

The United Kingdom's E-Textiles Network was established in 2018 with the goal of building the electronic textiles community and acting as a bridge between academia and industry. A key objective of the Network was to establish an international conference on the topic where the latest research and developments could be shared and disseminated. The first E-Textiles conference was held in London in 2019, and E-Textiles 2022, the 4th edition of the conference, was held in Nottingham as a hybrid virtual and in-person event. It included a mix of invited and accepted speakers from around the world. Accepted papers were peer-reviewed, and this collection of papers from the conference presents the latest work on a range of electronic textile applications and technologies.

## 2. Conference Days

The event was held in Nottingham from the 8th to the 10th of November 2022. The technical program was organized into six sessions covering the following topics: sensing and embedded systems, applications and future trends, manufacturing and standards, reliability and sustainability, design and fashion, and immersive technologies.

The first day of the conference focused on E-textiles in action, where participants could bring demonstrations to showcase, and finished with a talk on E-textiles research at Nottingham Trent University.

The next two days consisted of a mixture of in-person and remote presentations, as well as a panel discussion on "Applications and Future Trends for E-Textiles", and a poster session.

There were two keynote talks, the first being on "The Challenges of Bringing Garment Based E-Textiles to the Mass Consumer Market" by Martin Ashby (Prevayl, UK). The second keynote talk, "Smart Textiles for Personalized Health Care", was presented by Dr Jun Chen (UCLA, USA).



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Fifty-six papers were submitted to the conference, and twenty are published in a volume of MDPI's *Engineering Proceedings* [1].

### 3. E-Textiles 2022 Prizes

E-Textiles 2022 awarded three prizes, which were sponsored by MDPI *Micromachines*.

#### 3.1. Best Paper Award

**Winner:** Michelle Farrington (AFFOA, USA) "New Frontiers in Advanced Fibers and Fabrics".

#### 3.2. Best Student Paper Award

**Winner:** Xiaona Yang (Donghua University, PRC) "Direct Wet-Spun Single-Walled Carbon Nanotubes-Based p-n Segmented Filaments toward Wearable Thermoelectric Textiles".

#### 3.3. Best Student Poster Award

**Winner:** Chengning Yao (Imperial College London, UK) "Thermally conductive h-BN/polymer composites for e-textiles thermal management".

### 4. Committees

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### 5. Sponsorship

E-Textiles 2022 would like to thank the following sponsors for supporting this event:

MDPI *Micromachines*

Softmatter

Medical Technologies Innovation Facility (MTIF)

It is our great pleasure to announce that the 5th International Conference on the Challenges, Opportunities, Innovations and Applications in Electronic Textiles (E-Textiles 2023) will be held in Ghent, Belgium from the 14th to the 16th of November 2023 (<https://e-textilesconference.com/>).

**Conflicts of Interest:** The authors declare no conflict of interest.

### Reference

1. E-Textiles 2022 Conference Proceedings. Available online: <https://www.mdpi.com/2673-4591/30/1> (accessed on 21 June 2023).

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