

Editorial

Preface of the 4th International Conference on the Challenges, Opportunities, Innovations and Applications in Electronic Textiles (E-Textiles 2022) [†]

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[†] 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 (Preva1, UK). The second keynote talk, "Smart Textiles for Personalized Health Care", was presented by Dr Jun Chen (UCLA, USA).



Citation: Beeby, S.; Yang, K.; Torah, R.; Isaia, B.; Hughes-Riley, T. Preface of the 4th International Conference on the Challenges, Opportunities, Innovations and Applications in Electronic Textiles (E-Textiles 2022). *Eng. Proc.* **2023**, *30*, 22. <https://doi.org/10.3390/engproc2023030022>

Published: 11 July 2023



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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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