



Flexible Tactile Sensor Array: Trends and Applications

Guest Editors:

Dr. Jorge Cabral

Centro Algoritmi, Minho
University, Guimaraes, Portugal

Dr. Edoardo Sotgiu

1. International Iberian
Nanotechnology Laboratory,
Braga, Portugal
2. Centro Algoritmi, Minho
University, Guimaraes, Portugal

Deadline for manuscript
submissions:

31 December 2024

Message from the Guest Editors

Research in flexible tactile sensors has grown due to demand in fields like robotics, wearables, and IoT. Complex tasks like object shape identification, texture recognition, and grasp stability require advanced manufacturing and materials for ensuring high-resolution, adaptability and flexibility. Furthermore, the integration of multimodal and multifunctional sensing capabilities has become another focal point, aiming to enhance the overall efficiency and versatility of these sensors.

Despite the remarkable progress achieved in the domain of flexible tactile sensor arrays, their practical incorporation into commercial applications remains somewhat limited, particularly when compared to other well-established sensing modalities. Challenges remain in sensing performance, robust hardware, sustainability, and data processing. Flexible tactile sensor arrays are in their early stages, facing hurdles in practical applications and innovation.

The Special Issue, Flexible Tactile Sensor Array: Trends and Applications, aims to showcase the latest research and breakthroughs in flexible tactile sensors and highlight their practical applications in various fields.





an Open Access Journal by MDPI

Editor-in-Chief

**Prof. Dr. Antonio J. Marques
Cardoso**

CISE—Electromechatronic
Systems Research Centre,
University of Beira Interior,
Calçada Fonte do Lameiro, P -
6201-001 Covilhã, Portugal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within *Scopus*, *SCIE (Web of Science)*, *Inspec*, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Mechanical*)

Contact Us

Machines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/machines
machines@mdpi.com
[X@Machines_MDPI](https://twitter.com/Machines_MDPI)