



Online/Onsite Optical Metrology Techniques: Challenges, Trends and Solutions

Guest Editors:

Dr. Xiaobo Chen

Dr. Xiao Yang

Dr. Jinkai Zhang

Prof. Dr. Jinsong Bao

Deadline for manuscript
submissions:

closed (15 September 2023)

Message from the Guest Editors

In recent years, online and onsite optical metrology techniques have received extensive attention for many dimensional control research and industrial applications. Online and onsite optical metrology techniques have remarkable advantages in regard to accuracy, efficiency and the amount of collected data, thus changing the way the inspection applications are performed and providing new possibilities for online/onsite product quality control.

The technical scope of this Special Issue includes, but is not limited to:

- 2D and 3D optical metrology techniques;
- Accuracy and efficiency improvements for optical metrology;
- Image and point cloud processing algorithms;
- High reflective surface measurement;
- Novel vision sensors and instruments;
- Robot integrated optical metrology systems;
- AI-assisted optical metrology;
- Online/onsite optical metrology solutions;
- Vision Detection or 3D Reconstruction using UAV;
- High-precision vision measurement in vibration environment;
- Digital image correlation technology under extreme conditions.





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) / CiteScore - Q2 (Control and Optimization)

Contact Us

Machines Editorial Office
MDPI, Grosspeteranlage 5
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)