Special Issue

Advances and Trends in Nonconventional, Abrasive and Precision Machining

Message from the Guest Editors

The modern highly competitive industrial environment demands machining and production processes resulting in exceptional quality and precision. Nonconventional machining processes differ from conventional ones, as they utilize alternative types of energy, such as thermal, electrical, and chemical, to form or to remove material. Commonly, the energy source has high power density, while the process features prodigious accuracy, and the capability to produce and handle demanding shapes and geometries. Examples of nonconventional machining processes are electrical discharge machining (EDM), electrochemical machining (ECM), laser processing, and laser-assisted machining. Abrasive processes like grinding, lapping, polishing, and superfinishing are constantly developing and allow for obtaining a fine surface finish along with high efficiency. This Special Issue aims at attracting researchers to present recent advances and technologies in the aforementioned fields, indicating the future trends for nonconventional precision machining processes.

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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.

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

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