Special Issue

Advanced Technology of Material Processing: Abrasive Water Jet Machining

Message from the Guest Editor

The Special Issue is aimed at new knowledge in the field of abrasive water jet (AWJ) application, but rather from the theoretical and experimental point of view than a statistical one. Therefore, welcome articles should address findings explaining the nature of behavior of material and jet during AWJ machining processes, i.e., cutting, turning, milling, drilling, grinding and/or polishing. The topic of papers should aim at principles of material and jet behavior in selected application, preferably with a direct link to quality evaluation, monitoring of the machining process or its control. Theoretical studies describing certain parts of the machining processes should also be valuable if they contain experimental results confirming the presented conclusions. The presentation of new measuring procedures is also welcome. They should be focused on better understanding of AWJ generation and monitoring of let propagation in the environment between cutting head outlet and machined material. Contributions on measuring methods useful for studying the material response to various machining processes can be of special interest.

Guest Editor

Prof. Libor M. Hlavac

Department of Physics, Faculty of Electrical Engineering and Computer Science, VSB-Technical University of Ostrava, Ostrava, Czech Republic

Deadline for manuscript submissions

closed (20 May 2023)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/62761

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)