# **Special Issue**

# 3D Printing Technology Using Metal Materials and Its Applications

# Message from the Guest Editors

This Special Issue is an invitation to submit original articles on the following topics:

- Printing parameters.
- Accuracy of the shapes and dimensions of printed products.
- Applications of 3D printing in medicine/industry.
- 3D printing in scientific research.
- Hazards in 3D printing.
- Heat treatment after 3D printing.
- Design for 3D printing; DfAM (Design for Additive Manufacturing).
- Low-emission 3D-printing technology.
- Prototyping using 3D printing.
- Optimization of mass and mechanical strength.
- Tribological research.
- Economics of using 3D-printing technology.
- Metal powders and their properties.
- Postprocessing.
- Design and optimization of cellular and frame structures printed in 3D-printing technology.
- Data formats for 3D printing.
- Surface layer in products printed in 3D-printing technology.
- Threats in 3D-printing technology.
- Potential threats of using 3D printing in re-engineering used in 3D-printing technology in terrestrial and space conditions.
- Simulations and analyses of 3D-printing processes in metal
- Numerical and analytical analyses in the metal 3Dprinting process.

#### **Guest Editors**

Prof. Dr. Piotr Kurylo

Faculty of Engineering and Technical Sciences, University of Zielona Gora. 65-417 Zielona Góra. Poland

## Prof. Dr. Radovan Hudák

Laboratory of Additive Technologies in Medicine, Department of Biomedical Engineering and Measurement, Faculty of Mechanical Engineering, Technical University of Kosice, Košice, Slovakia



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/233569

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)