Special Issue

The State of the Art in Functionally Graded Materials

Message from the Guest Editor

Functionally Graded Materials (FGMs) are a special type of composites which have been studied since the 1980s. Studies centered on this type of material cover a very broad spectrum, from purely theoretical studies of vibrational behavior of micro-beams using modified couple stress theory to purely experimental investigations of the composition profile of additively manufactured metallic parts. This Special Issue aims to publish original research articles and review papers about all aspects of functionally graded materials. Theoretical and/or experimental research efforts in design, modeling, analysis, fabrication, and characterization of FGMs are welcome. Research areas may include, but are not limited to homogenization techniques, representation methods, mechanical response to static and/or dynamic loads, optimization of material composition distribution, fracture and crack propagation, novel and traditional fabrication processes, physical testing methods, and thermal barrier coatings. We look forward to receiving your contributions.

Guest Editor

Dr. Amir Armani

Department of Mechanical Engineering, San Jose State University, 1 Washington Square, San Jose, CA 95112, USA

Deadline for manuscript submissions

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

mdpi.com/journal/metals

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Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

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Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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