Special Issue

Experimental Characterization and Numerical Modelling of Materials Mechanical Behaviour

Message from the Guest Editors

Metal forming comprises industrially relevant manufacturing processes in which the characterization of the mechanical response of the materials involved in different engineering applications is a crucial task. This characterization may contribute to a more efficient use of the available resources by means of the enhancement of both the operating conditions and the process design. Therefore, this analysis encompasses not only experimental aspects but also theoretical modelling and numerical simulation, whose final goal is to achieve a realistic description of many of the usually complex physical phenomena present in these engineering problems. This Special Issue aims to collect the latest advances in modelling and numerical and experimental validation of the mechanical behavior of materials used in common engineering environments. Contributions are welcome from both academic researchers and their industrial peers, dealing with novel manufacturing applications.

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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.

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