Special Issue

Engineering Plasticity and Impact Dynamics

Message from the Guest Editor

Engineering plasticity is a vibrant branch of research that opens new fields of interest. In recent years it was strongly enriched by fast dynamic loadings. This direction of scientific activity is generated by the needs of applications in different branches of industry (aviation, space engineering etc.). In this Special Issue we plan to collect new ideas in engineering plasticity and impact dynamics, two fields which have recently proved indispensable in a range of applications. The submitted papers should be focused on the plastic behavior of materials and structures in the wide range of rate of deformations and temperatures. Theoretical, numerical and laboratory studies are welcome. Studies may be enriched by industry applications, where a main focus could be the determination of structural safety, measured by possible fracture and damage. In particular, topics of interest include the fascinating behavior of materials under impact loading when the rate of deformation is more than 100 s−1, as well as the design of new materials (often composites) which are resistant to these loadings and can serve as protective materials and structures.

Guest Editor

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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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