Special Issue

Metal Plasticity at High Strain Rate

Message from the Guest Editor

The behaviour of materials at high strain rate is an important topic in many engineering fields, from crashworthiness in transportation and packaging to defense applications, from personal protections in outdoor and sport activities to high rate manufacturing processes, from civil structures subjected to blast loads to nuclear reactor containment shells. It is known that materials deformed at high rate show, more often than not, significant variations in their mechanical behaviour in terms of strength, ductility, necking or shear band formation, damage; temperature effect is also at play.

For these reasons, I would like to invite you to submit your research to the present Special Issue on “Metal Plasticity at High Strain Rate,” which is devoted to the plasticity and large deformations of metals at high strain rate, correlation with microstructure, constitutive modelling, experimental and numerical methods, simulation of fast events, damage evolution and fracture. Papers focusing on metallic foams and additively manufactured materials are encouraged as well.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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