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6082 Aluminium Alloy Sheet under Different Conditions of Heat Treatment, Temperature and Strain Rate; Influence of Cold Work in the Elastic Modulus of the Ti-16.2Hf-24.8Nb-1Zr Alloy Characterized by Instrumented Nanoindentation; Influence of the Milling Time on Mechanical and Magnetic Properties of Cu90Co5Ni5 Alloy Obtained by Mechanical Alloying
Sliding Wear Behavior of a Duplex Stainless Steel Creep Behaviour of Closed Cell Aluminium Foams from Stress Relaxation Tests ; A Study of the Mechanical Properties and Recrystallization of Two Types of Foil of Aluminium 1050 A; Hall-Petch Relationship of a TWIP Steel; V. Polymers; Mechanical Properties of Bioactive Hybrid Organic/Inorganic Aerogels; Mechanical Properties of Organic-Inorganic Hybrid Black Coating of Silica and Polyurethane; Creep and Stress Relaxation of Hybrid Organic-Inorganic Aerogels; Keywords Index; Authors Index

Sommario/riassunto

This special collection on the Mechanical Properties of Solids gives an accurate picture, of the distribution of current research, from the viewpoint of the mechanical properties of solids. The topics are presented in traditional form: Ceramics, Composites and models, Metals and Polymers, and the six invited talks attempt to cover the most currently important areas, such as superplasticity and superelasticity, nanostructured materials, shape-memory alloys, viscoelasticity in polymers, microcrystalline metals, mechanical behaviour of bioactive materials, etc.