

1. Record Nr.	UNINA9910557154103321
Autore	Ivanisenko Julia
Titolo	Severe Plastic Deformation and Thermomechanical Processing: Nanostructuring and Properties
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 online resource (224 p.)
Soggetti	History of engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Severe plastic deformation (SPD) is a very attractive research field for metallic materials because it provides new possibilities for manufacturing nanostructured materials in large quantities and allows microstructural design on different hierarchical levels. The papers included in this issue address the following topics: novel SPD processes as well as recent advancements in established processing methods, microstructure evolution and grain refinement in single- and multi-phase alloys as well as composites, strategies to enhance the microstructure stability at elevated temperatures, mechanically driven phase transformations, surface nanostructuring, gradient and multilayered materials, and mechanical and physical properties of SPD-processed materials.