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| Altri autori (Persone) | LiaoXiaozhou ZhaoYonghao |
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| Soggetti | Nanostructured materials - Plastic properties Nanotechnology Deformations (Mechanics) |
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| Nota di contenuto | Nanostructured Materials Processed by SPD; Preface ; Table of Contents; Recent Developments of Severe Plastic Deformation Techniques for Processing Bulk Nanostructured Materials; Mechanical Properties of Nanocrystalline Materials Produced by In Situ Consolidation Ball Milling; Superplastic Behavior in Ultrafine-Grained Materials Produced by Equal-Channel Angular Pressing ; Plastic Behavior of Metals in Reverse Straining after Large Pre-Strains; Bulk Ultrafine and Nanostructured Materials from Consolidation of Particles by Severe Plastic Deformation Ultrafine and Nanostructured Refractory Metals Processed by SPD: Microstructure and Mechanical PropertiesSurface Nanocrystallization by Surface Mechanical Attrition Treatment; Synthesis of Bulk Nanocrystalline Materials and Bulk Metallic Glasses by Repeated Cold Rolling and Folding (RCR) ; Microstructure and Mechanical Properties of Nanostructured Metals Produced by High Strain Deformation; Deformation Twins and Stacking Faults in an AA5182 Al-Mg Alloy Processed by High Pressure Torsion; Keywords Index; Authors Index |
| Sommario/riassunto | Nanostructured materials, in which the structural features (e.g., grains |

and/or domains separated by low-angle grain boundaries) are smaller than 100nm in at least one dimension, have attracted worldwide research interest for more than a decade because of their unique properties. For example, the combination of high strength with high ductility has been reported for some nanostructured metals and alloys: this is a rare, if not impossible, combination of mechanical properties for coarse-grained metals and alloys. Among the many techniques available for producing nanostructured materials, severe
