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Magnetically Controlled Shape Memory Effect; Annealing Effect on Martensitic Transformation and Magneto-Structural Properties of Ni-Mn-In Melt Spun Ribbons
Influence of Magnetic Field on Magnetostructural Transition in Ni46.4Mn32.8Sn20.8 Heusler AlloyMagnetic and Martensitic Transitions in Ni2Mn1+xSn1-x Alloys; Effect of Co and Mn Doping on the Martensitic Transformations and Magnetic Properties of Fe-Pd Ferromagnetic Shape Memory Alloys; Structural, Magnetic and Transport Properties of Ni-Fe-Al Alloys; C. Magnetomechanics and Magnetocaloric Effect; Recent Developments in Ni-Mn-Ga Foam Research; Magnetoelastic Coupling in Ni-Mn-Ga Magnetic Shape Memory Alloy; Evaluation of Magnetostriction of the Single-Variant Ni-Mn-Ga Martensite
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F. Processing and EngineeringExtruded Rods with Axial Texture of Polycrystalline Ni-Mn-Ga Alloys; Twinning Behaviour of Textured Polycrystalline Ni-Mn-Ga Alloy after Hot Extrusion; Nano-Positioning with Ferromagnetic Shape Memory Alloy Actuators; Keywords Index; Authors Index

Sommario/riassunto

This work on Ferromagnetic Shape Memory Alloys contains selected peer-reviewed papers. Such materials belong to the most exciting and fastest-growing group of martensitic multifunctional materials. The selected papers cover the following topics of: Basic phenomena and theory; Structure and magnetic properties; Magnetomechanics and magnetocaloric effect; Thin films and composites; Modeling and simulations and Processing and engineering. This volume will be useful to anyone who is already working with novel advanced materials, as well as to those seeking an accessible introduction to the relativ