1. Record Nr. UNINA9910674376603321

Titolo	Aluminum Alloys / / edited by Nong Gao
Pubbl/distr/stampa	Basel, Switzerland : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2018
Descrizione fisica	1 online resource (ix, 362 pages) : illustrations
Disciplina	620.186
Soggetti	Aluminum alloys
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Annotation Aluminium is the world's most abundant metal and is the third most common element, comprising 8% of the Earth's crust. The versatility of aluminium makes it the most widely used metal after steel. By utilising various combinations of their advantageous properties such as strength, lightness, corrosion resistance, recyclability, and formability, aluminium alloys are being employed in an ever-increasing number of applications. In the recent decade, a rapid new development has been made in production of aluminium alloys, and new techniques of casting, forming, welding, and surface modification, have been evolved to improve the structural integrity of aluminium alloys. This Special Issue covers wide scope of recent progress and new developments regarding all aspects of aluminium alloys, including processing, forming, welding, microstructure and mechanical property, creep, fatigue, corrosion and surface behavior, thermodynamics, modeling, and application of different aluminum alloys.