

1. Record Nr.	UNINA9910688192203321
Titolo	Current Trends in Magnesium (Mg) Research // edited by Sailaja S. Sunkari
Pubbl/distr/stampa	London : , : IntechOpen, , 2022 ©2022
Descrizione fisica	1 online resource (ix, 160 pages) : illustrations
Disciplina	661.0392
Soggetti	Magnesium
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- Section 1 Magnesium -- A Multifaceted Metal -- Chapter 1 Introductory Chapter: Magnesium -- A Perspective by Abhineet Verma and Sailaja S. Sunkari -- Chapter 2 Magnesium Alloys for Sustainable Weight-Saving Approach: A Brief Market Overview, New Trends, and Perspectives by Fabrizio D'Errico, Martin Tauber and Michael Just -- Section 2 Experimental Approaches for Material Applications -- Chapter 3 Magnesium in Synthesis of Porous and Biofunctionalized Metallic Materials by Mariana Correa Rossi, Liliana Romero Resendiz and Vicente Amigo Borrás -- Chapter 4 The Role of Silane Sol-Gel Coatings on the Corrosion Protection of Magnesium Alloys by Emilia Merino, Alicia Duran and Yolanda Castro -- Chapter 5 Experimental Investigation of Mechanical and Wear Behaviour of AZ91 Magnesium Hybrid Composite Materials by Palanivel Mathiazhagan and S. Jayabharathy -- Chapter 6 Magnesium Borates: The Relationship between the Characteristics, Properties, and Novel Technologies by Fatma Tugce Senberber Dumanli.
Sommario/riassunto	Current Trends in Magnesium (Mg) Research discusses recent research activities in which magnesium plays a central role, in its several forms as composites, alloys, or compounds. Mg alloys/composites/compounds are widely used in the transportation industry (both air and ground) and medical industry (bone/dental implants) and are being tested for use in the energy sector as alternatives to Li-ion batteries. Chapters address such topics as the

role of Mg in diverse fields, the environmental impact of Mg processing technologies, Mg as a biomaterial in aiding the growth of bone tissues, corrosion protection of Mg alloys, the wear behavior of Mg hybrid composites, and synthesis of Mg compounds for practical applications in industry.
