1. Record Nr. UNINA9910831013503321 Autore Leonard Aeriel **Titolo** Magnesium Technology 2024 / / edited by Aeriel Leonard, Steven Barela, Neale R. Neelameggham, Victoria M. Miller, Domonkos Tolnai Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 3-031-50240-X Edizione [1st ed. 2024.] 1 online resource (223 pages) Descrizione fisica The Minerals, Metals & Materials Series, , 2367-1696 Collana Disciplina 669.723 Soggetti Metals **Building materials** Aerospace engineering Astronautics Vehicles Industrial engineering Production engineering Steel, Light Metal Metals and Alloys Aerospace Technology and Astronautics Vehicle Engineering Industrial and Production Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Intro -- Preface -- Contents -- About the Editors -- Session Chairs --Reviewer Pool -- Part I Corrosion and Coatings -- 1 Different Analytical Methods to Determine the Influence of Pitting on the Residual Performance of Mg Alloys as Implant Materials -- 2 Effect of Heat Treatment on the Microstructure and Corrosion Properties of Mg-15Dy-1.5Zn Alloy with LPSO Phase -- 3 Dissolution Rate Change of Dissolving Magnesium in a Deoxygenated Environment -- 4 Evaluation of Corrosion Performance of Friction Stir Processed Magnesium Alloys

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The Magnesium Technology Symposium at the TMS Annual Meeting & Exhibition is one of the largest yearly gatherings of magnesium specialists in the world. Papers represent all aspects of the field, ranging from primary production to applications and recycling. Moreover, papers explore everything from basic research findings to industrialization. Magnesium Technology 2024 is a definitive reference that covers a broad spectrum of current topics, including novel extraction techniques; primary production; alloys and their production; integrated computational materials engineering; thermodynamics and kinetics; plasticity mechanisms; cast products and processing; wrought products and processing; forming, joining, and machining; corrosion and surface finishing; fatigue and fracture; dynamic response; structural applications; degradation and biomedical applications; emerging applications; additive manufacturing of powders; and recycling, ecological issues, and life cycle analysis.