1. Record Nr. UNINA990002004720403321

Autore	Ehrlich, Paul R.
Titolo	The process evolution / Paul R. Ehrlich, Richard W. Holm
Pubbl/distr/stampa	New York : McGraw-Hill Book Co., 1963
Descrizione fisica	347 p. ; 23 cm
Altri autori (Persone)	Holm, Richard W.
Disciplina	575
Locazione	DAGEN
Collocazione	61 III A.3/60
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910819585903321

Titolo	Light weight metal corrosion and modeling for corrosion prevention, life prediction and assessment : selected peer reviewed papers from the 2nd Workshop on Corrosion Modeling for Life Prediction (CMLP 2010), Rome, Italy, 18 to 20 April 2010, held under the auspices of the Office of Naval Research Global and the Universita degli Studi di Milano / / edited by Stefano Trasatti, Juliet Ippolito
Pubbl/distr/stampa	Switzerland : , : Trans Tech Publications, , [2010] ©2010
ISBN	3-03813-393-0 1-61344-673-X
Descrizione fisica	1 online resource (161 p.)
Collana	Advanced materials research, , 1662-8985 ; ; volume 138
Altri autori (Persone)	TrasattiStefano IppolitoJuliet
Disciplina	620.11223
Soggetti	Light metal alloys - Corrosion Light metal alloys - Testing Lightweight construction
Lingua di pubblicazione	Inglese

Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Enhancing the Localized Corrosion Resistance of High Strength 7010 Al-Alloy -- Electrochemical Behavior of Nickel-Aluminum Alloys in Sodium Chloride Solutions -- Characterization of Bronze Corrosion Products on Exposition to Sulphur Dioxide -- Electrochemical Methods to Assist Corrosion Control of Lightweight Alloys -- Surface Protection for Aircraft Maintenance by Means of Zinc Rich Primers -- Thin, Nanoparticulate Coatings for the Improvement of the Corrosion and Passivation Behavior of AZ Magnesium Alloys -- Electrochemical Characteristics of PEO Treated Electric Arc Coatings on Lightweight Alloys -- Hybrid Coatings Based on Conducting Polymers and Polysiloxane Chains for Corrosion Protection of Al Alloys -- A Composite Coating for Corrosion and Wear Protection of AM60B Magnesium Alloy -- Continuum Damage Model for Biodegradable Magnesium Alloy Stent -- Prediction of Morphological Properties of Smart-Coatings for Cr Replacement, Based on Mathematical Modelling -- Understanding Nanoscale Wetting Using Dynamic Local Contact Angle Method -- Two-Dimensional Numerical Modelling of Hydrogen Diffusion in Metals Assisted by Both Stress and Strain -- Approach to Iron Corrosion via the Numerical Simulation of a Galvanic Cell -- Prognostic Tools for Lifetime Prediction of Aircraft Coatings: Paint Degradation.
Sommario/riassunto	The use of lightweight metals and composites to replace heavy structural materials for military hardware and weapons systems (ships, aircraft, ground vehicles, etc.) is a new strategic consideration for defence forces; falling under Naval S&T Strategic Plans. The objectives of the workshop were to seek state-of-the-art ideas, from outside of the continental United States, in the field of low-density metallic materials and composites for structural applications, as well as modeling and simulation software tools which are capable of generating and identifying damage evolution data for health monitoring, corrosion control, life prediction and assessment of civil and military hardware systems.