Record Nr. UNINA9910459786503321 Corrosion in power industry: special topic volume with invited peer **Titolo** reviewed papers only / / edited by Maros Halama and Jan Stoulil Pubbl/distr/stampa [Zurich, Switzerland]:,: TTP,, 2015 ©2015 **ISBN** 3-03826-746-5 Descrizione fisica 1 online resource (92 p.) Collana Materials Science Forum, , 1662-9752;; Volume 811 620.162 Disciplina Soggetti Alloys - Corrosion Corrosion and anti-corrosives Nanotechnology Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters and Nota di bibliografia indexes. Nota di contenuto Corrosion in Power Industry; Preface; Table of Contents; I. Degradation of Solar Cells; Non-Destructive Technique for Evaluation of Degradation on Solar Cells; Effect of Humidity on Selective Surface of Solar Absorber Plates; II. Corrosion of Nanoparticles; A Lifetime of Metallic Nanoparticles in Heat Exchange Liquids; III. Failure Analysis; Corrosion Protection of Infrastructure of Power Industry: Corrosion Degradation of Steel Pipes in Indirect Cooling Circuit of Gas Cleaning; Atmosphere Aggressivity State Mapping in Slovak Republic for Corrosion of **Construction Materials** IV. Surface TreatmentInfluence of Anodic Oxidation on the Polarization Resistance of Ti6Al4V Alloy after Shot Peening; Quality Evaluation of HVOF Coatings on the Basis of WC-Co in Tribocorrosive Conditions: Effect of Surface Treatment by DCPD Coating on Corrosion Resistance of Magnesium Alloy Elektron 21; V. Material Properties; Influence of Temperature on the Electrochemical Characteristics of Ti-6Al-4V; The Corrosion Properties of EN AW 7075 Aluminium Alloy in Power Industry; VI. Safety Issue; BLEVE - Cases, Causes, Consequences and Prevention; Keywords Index; Authors Index

Sommario/riassunto

Nowadays trend in application of eco policy, more strict legislative and globalisation in economy together with research and development in emerging technologies such as nanotechnology bringing also new corrosion challenges into the power industry sector. New alloys and composite materials, eco-friendly energy systems, effective monitoring techniques and sophisticated prediction methods contribute on safer and more reliable operation of energy units. All up-mentioned circumstances required interdisciplinary approach to build perspective solutions with aim to minimize degradation process of com