Record Nr. UNINA9910462881703321 XVII International Materials Research Congress: selected, peer reviewed **Titolo** papers from the XVII International Materials Research Congress. symposium 11, fracture mechanics, Cancun, Quintana Roo, August 18-21 2008 Mexico / / edited by Alexander Balankin, Jose Martinez Trinidad and Orlando Susarrey Huerta Pubbl/distr/stampa Switzerland;; United Kingdom:,: Trans Tech,, [2009] ©2009 **ISBN** 3-03813-306-X Descrizione fisica 1 online resource (104 p.) Advanced materials research, , 1022-6680;; volume 65 Collana Altri autori (Persone) BalankinAlexander Martinez TrinidadJose Francisco Susarrey HuertaOrlando Disciplina 620.11 Soggetti Materials science Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto XVII International Materials Research Congress; Committees; Preface; Table of Contents; Numerical Simulation of Multiple Scattering by Hidden Cracks under the Incidence of Elastic Waves; Fatigue Crack Growth in SAW Welded Joints of API 5L Steel Pipe in the Short Radial Direction; Transferability of the Gurson Damage Model Parameters with Charpy and Tensile Tests with Different Constrain Level; Mechanics of Randomly Folded Thin Materials; Effect of Mixed Mode Loading Induced by Asymmetrical Stress upon Crack Initiation from Corrosion Pits Evaluation of Brittle Layers Obtained by Boriding on AISI H13 SteelsShort Crack Propagation Model Applied to Shot Peened Aluminium Alloys; Effect of Boriding on the Mechanical Properties of AISI 1045 Steel; Verification of the Ultrasonic Qualification for Structural Integrity of Partially Concrete Embedded Steel Elements; Rotating

Bending Fatigue Tests on Aluminum Alloy AISI-SAE 6061-T6 at High Speed (150 Hz), and Close to Elastic Limit; Residual Strength and Fracture Path for Drilled Epoxy-Glass Composites; Keywords Index;

Authors Index

Sommario/riassunto

The subjects covered in this special collection are all related to fatigue, corrosion-fatigue, elastoplastic fracture, damage, mixed-mode loading, brittle layers, the effects of boriding, short cracks, residual strength and many other topics. In all of the cases considered, the solutions obtained are based upon theory, experimental results and, in some cases are complemented by numerical analysis. The aim of this collection, which was to bring together state-of-the-art developments related to fracture mechanics, can be said to have been very well met.