Record Nr. UNINA9910822374103321 11th International Fatigue Congress : selected, peer reviewed papers **Titolo** from the 11th International Fatigue Congress 2014, March 2-7, 2014, Melbourne, Australia / / edited by Graham Clark and Chun H. Wang Durnten-Zurich, Switzerland:,: Trans Tech Publications,, 2014 Pubbl/distr/stampa Durnten-Zurich, Switzerland;; Enfield, New Hampshire:,: distributed worldwide by Trans Tech Publications, , [date of distribution not identified] ©2014 **ISBN** 3-03826-389-3 Descrizione fisica 1 online resource (1819 p.) Advanced Materials Research, , 1662-8985; ; Volume 891-892 Collana Disciplina 620.1126 Materials - Fatique Soggetti Fracture mechanics Composite materials - Fatigue Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia indexes. Nota di contenuto 11th International Fatigue Congress; Foreword and Congress Committees: Table of Contents: I. Biomaterials: Molecular Dynamics Investigation on Shearing between Osteopontin and Hydroxyapatite in Biological Materials; Nanostructure and Fatigue Behavior of -Type Titanium Alloy Subjected to High-Pressure Torsion after Aging Treatment; II. Case Studies and Industrial Applications; Analysis and Design of Offshore Pile Foundation: Offshore Pile Foundation Subjected to Lateral Cyclic Load in Layered Soil; Fatigue Strength of Machined and Shot Peened Grey Cast Iron On Thermo-Hydro-Mechanical (THM) Fatigue Damage of Historical Stone Buildings Effect of Thermal Cycling on the Mechanical Properties of a Continuous Fibre Composite Used for Car Clutch Facings; The Role of Surface Topography on Fatigue Behaviour of Nickel Based Superalloys: Failure Analysis to Blades of Steam Turbines at Normal Conditions of Operations and Resonance; Failure Analysis of Repeat

Tooth Breakage of a 40MW Steam Turbine Load Gearbox; III. Case

Studies, Materials and Processes; Fatigue of Cold Expanded Open Hole Coupons with Pre-Existing Cracks

A Fractographic Investigation of a Failed Precombustion Chamber Nozzle from a Large Marine Diesel EngineCase Studies of Fatigue Failures in Defence Aircraft Components; The Influence of Corrosion Pits and Cold Expanded Fastener Holes on the Fatigue Life Aluminium 7075-T651; An Investigation of the Extent of Crack Closure for Crack Growth in an Aluminium Alloy; Effect of Load Spectra and Stress Magnitude on Crack Growth Behavior Variability from Typical Manufacturing Defects; A Brief History of Structural Fatigue Testing at Fishermans Bend Australia

Fatigue Life Improvement of Laser Clad 7075 Aluminium Alloy by Deep Surface Rolling TechniqueIV. Civil and Mining Structures; Fatigue Assessment of Large Thin-Walled Structures with Initial Distortions; Retrofitting for Fatigue Cracks at Connection between the Main Girder Web and Lateral Girder Flange Using the Bolting-Stop-Hole Method with Attached Plates; A Self-Heating Approach to Characterize Anisotropy Effects in Fatigue Behaviour: Application to a Nineteenth Century Puddled Iron from a French Railway Bridge Evaluation of Bonding between High Modulus CFRP Sheet and Steel after Environmental Exposure and Fatigue LoadingImproved Fatigue Life Assessment of Lighting Poles; V. Composites; A Brief Review of Fatigue Strengthening of Metallic Structures in Civil Engineering Using Fibre Reinforced Polymers: Stiffness Based Fatigue Characterisation of CFRP; Fatigue Crack Growth Rate in Mode I of a Carbon Fiber 5HS Weave Composite Laminate Processed via RTM: The Influence of Orthotropy and Taper Angle on the Compressive Strength of Composite Laminates with Scarfed Holes

Notched Fatigue Behavior under Multiaxial Stress States

## Sommario/riassunto

Collection of Selected, Peer Reviewed Papers from the 11th International Fatigue Congress 2014, March 2-7, 2014, Melbourne, Australia. The 282 papers are grouped as follows: I. Biomaterials, II. Case Studies and Industrial Applications, III. Case studies, Materials and Processes, IV. Civil and Mining Structures, V. Composites, VI. Corrosion and Fatigue, VII. Crack Closure and Shielding, VIII. Crack Growth Thresholds, IX. Creep-Fatigue, X. Cyclic Deformation and Crack Initiation, XI. Damage Evaluation and Fatigue Design, XII. Damage Tolerance/Aging Aircraft, XIII. Experimental Techniques, XIV.