Record Nr. UNISALENTO991003221259707536 Autore International Conference on Biaxial/Multiaxial Fatigue and Fracture (6th : 2001 : Lisbon, Portugal) Titolo Biaxial/Multiaxial fatigue and fracture [e-book] / editors, Andrea Carpinteri, Manuel de Frietas, Andrea Spagnoli Amsterdam; Oxford: Elsevier, 2003 Pubbl/distr/stampa **ISBN** 9780080441290 0080441297 Descrizione fisica xii, 504 p.: ill.; 26 cm ESIS publication 1566-1369: 31 Collana Altri autori (Persone) Carpinteri, Andrea Freitas, Manuel de Spagnoli, Andrea Altri autori (Enti) **European Structural Integrity Society** Disciplina 620.1126 Soggetti Materials - Fatigue - Congresses Electronic books. Lingua di pubblicazione Inglese **Formato** Risorsa elettronica Livello bibliografico Monografia Note generali "This volume contains 25 peer-reviewed papers selected from those presented at the 6th International Conference on Biaxial/Multiaxial Fatigue and Fracture held in Lisbon, Portugal, 25-28 June 2001." Nota di bibliografia Includes bibliographical references and index Multiaxial fatigue of welded structures, High cycle multiaxial fatigue, Nota di contenuto Non-proportional and variable-amplitude loading, Defects, notches. crack growth, Low cycle multiaxial fatigue, Applications and testing methods The European Structural Integrity Society (ESIS) Technical Committee on Sommario/riassunto Fatigue of Engineering Materials and Structures (TC3) decided to compile a Special Technical Publication (ESIS STP) based on the 115 papers presented at the 6th International Conference on Biaxial/Multiaxial Fatigue and Fracture. The 25 papers included in the STP have been extended and revised by the authors. The conference was held in Lisbon, Portugal, on 25-28 June 2001, and was chaired by Manual De Freitas, Instituto Superior Tecnico, Lisbon. The meeting, organised by the Instituto Superior Tecnico and sponsored by the Portuguese Minesterio da Cienca e da Tecnologia and by the European Structural Integrity Society, was attended by 151 delegates from 20 countries. The papers in the present book deal with the theoretical,

numerical and experimental aspects of the Multiaxial fatigue and

fracture of engineering materials and structures. They are divided in to the following six sections; Multiaxial Fatigue of Welded Structures; High cycle Multiaxial fatigue; Non proportional and Variable-Amplitude loading; Defects, Notches, Crack Growth; Low Cycle Multiaxial Fatigue; Applications and Testing Methods. As is well-known, most engineering components and structures in the mechanical, aerospace, power generation, and other industries are subjected to multiaxial loading during their service life. One of the most difficult tasks in design against fatigue and fracture is to translate the information gathered from uniaxial fatigue and fracture tests on engineering materials into applications involving complex states of cyclic stress-strain conditions. This book is the result of co-operation between many researchers from different laboratories, universities and industries in a number of countries