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Nota di contenuto	Modeling Thermomechanical Cyclic Deformation by Evolution of Its Activation Energy / XJ Wu, S Yandt, P Au, J-P Immarigeon -- Modeling of Deformation During TMF-Loading / EE Affeldt, J Hammer, L Cerdan de la Cruz -- Modelling of Hysteresis Loops During Thermomechanical Fatigue / R Sandstrom, HCM Andersson -- Cyclic Behavior of A1319-T7B Under Isothermal and Non-Isothermal Conditions / CC Engler-Pinto, H Sehitoglu, HJ Maier -- Cyclic Deformation Behavior of Haynes 188 Superalloy Under Axial-Torsional, Thermomechanical Loading / PJ Bonacuse, S Kalluri -- Damage and Failure Mechanisms of Thermal Barrier Coatings under Thermomechanical Fatigue Loadings / E Tzimas, P Hahner, P Moretto, SD Peteves, J Bressers -- Thermo-mechanical Creep-Fatigue of Coated Systems / L Remy, AM Alam, A Bickard -- Enhancement of Thermomechanical Fatigue Resistance of a Monocrystalline Nickel-base Superalloy by Pre-rafting / FC Neuner, U Tetzlaff, H Mughrabi -- Environmental Effects on the Isothermal and Thermomechanical Fatigue Behavior of a Near-? Titanium Aluminide / HJ Maier, FOR Fischer, H-J Christ -- Using Fracture Mechanics Concepts for a Mechanism-Based Prediction of Thermomechanical Fatigue Life / H-J Christ, R Teteruk, A Jung, HJ Maier -- Thermomechanical Fatigue Behavior of an Aluminide-Coated Monocrystalline Ni-Base Superalloy / F Grube, EE Affeldt, H Mughrabi -- Collaborative Research on Thermo-Mechanical and Isothermal Low-Cycle Fatigue Strength of Ni-Base Superalloys and Protective Coatings at Elevated Temperatures in The

Society of Materials Science, Japan (JSMS) / M Okazaki, K Take, K Kakehi, Y Yamazaki, M Sakane, M Arai, S Sakurai, H Kaneko, Y Harada, A Itoh, T Okuda, I Nonaka, K Fujiyama, K Nanba -- The Fatigue Behavior of NiCr22Co12Mo9 Under Low-Frequency Thermal-Mechanical Loading and Superimposed Higher-Frequency Mechanical Loading / M Moalla, K-H Lang, D Lohe -- Thermomechanical Response of Single Crystal Nickel-base Superalloy CM186 SX / CN Kong, CK Bullough, DJ Smith -- Thermomechanical Fatigue Behavior of Stainless Steel Grades for Automotive Exhaust Manifold Applications / P-O Santacreu, C Simon, A Coleman -- Thermomechanical Fatigue Analysis of Cast Aluminum Engine Components / X Su, M Zubeck, J Lasecki, H Sehitoglu, CC Engler-Pinto, C-Y Tang, JE Allison -- Acoustic Emission Analysis of Damage Accumulation During Thermal and Mechanical Loading of Coated Ni-Base Superalloys / Y Vougiouklakis, P Hahner, F de Haan, V Stamos, SD Peteves -- Miniature Thermomechanical Ramping Tests for Accelerated Material Discrimination / B Roebuck, MG Gee, A Gant, MS Loveday -- Improving the Reproducibility and Control Accuracy of TMF Experiments with High Temperature Transients / T Brendel, M Naderhirn, L del Re, C Schwaminger -- Two Specimen Complex Thermal-Mechanical Fatigue Tests on the Austenitic Stainless Steel AISI 316 L / K Rau, T Beck, D Lohe -- Analysis of Thermal Gradients during Cyclic Thermal Loading under High Heating Rates / EE Affeldt, J Hammer, U Huber, H Lundblad -- Author Index -- Subject Index.

Sommario/riassunto

The 21 papers cover thermodynamic deformation behavior and modeling, damage mechanisms under thermomechanical fatigue, thermomechanical fatigue behavior and cycle-of-life prediction, and experimental techniques for thermomechanical testing.