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Titolo	Residual stresses IX : selected, peer reviewed papers from the 9th European Conference on Residual Stresses (ECRS-9), July 7-10, 2014, Troyes, France / / edited by M. Francois, [and four others]
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Collana	Advanced Materials Research, , 1662-8985 ; ; Volume 996
Disciplina	620.112
Soggetti	Residual stresses
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Residual Stresses IX; Preface, Committees and Sponsors; Table of Contents; Chapter I. Measurement Methods; I.1. Local Scale Measurements; Strain Measurement with Nanometre Resolution by Transmission Electron Microscopy; Intragranular Residual Stress Evaluation Using the Semi-Destructive FIB-DIC Ring-Core Drilling Method; Tailored Mechanical Properties and Residual Stresses of a-C:H:W Coatings; Residual Stress State in Oxide Dispersive Steel due to Irradiation by Swift Heavy Ions; Study of Microstrain and Stress in Non-Planar Palladium Membranes for Hydrogen Separation Relationship between Dislocation Density and Macro Strain of High-Heat-Load MaterialsX-Ray Line Profile Study on Shot/Laser-Peened Stainless Steel; I.2. Diffraction at Grain Scale and Multiscale Diffraction; Local Stress Analysis in an SMA during Stress-Induced Martensitic Transformation by Kossel Microdiffraction; A Profile-Based Method of Determining Intragranular Strains Using Kossel Diffraction Patterns; Matrix Method for X-Ray Stress Measurement in Single Crystals, and the Rational Planning of the Measurements; Measurement of Complementary Strain Fields at the Grain Scale Impact of Shot-Peening on a Single Crystal Nickel-Based SuperalloyEvaluation of Welding Residual Stresses Using Diffraction Spot Trace Method; Accounting for a Distribution of Morphologies and

Orientations on Stresses Analysis by X-Ray and Neutron Diffraction: Normalized Self-Consistent Modeling; Effect of Interlamellar Spacing on the Monotonic Behavior of C70 Pearlitic Steel; Experimental and Numerical Analysis of Mechanical Behaviour of AISI 316L Austenitic Stainless Steel: Two Level Homogenization - Neutron Diffraction Influence of Morphological Texture on Stresses Analysis by X-Ray and Neutron Diffraction: Accounting for Extreme Morphologies Modeling Methodology for Stress Determination by XRD in Polycrystalline Materials; New Modelling Approach for Micromechanical Modelling of the Elastoplastic Behaviour; Study of Mechanical Behaviour of Polycrystalline Materials at the Mesoscale Using High Energy X-Ray Diffraction; Distribution of Residual Deformation Effects in Shell Tubes from Ferritic-Martensitic Steels Residual Stress Tensor Distributions in Cracked Austenitic Stainless Steel Measured by Two-Dimensional X-Ray Diffraction MethodMicroscopic Stress and Strain Evolved in a Twinning-Induced Plasticity Fe-Mn-C Steel; I.3. Diffraction: Gradients and Instrumental Developments; Effects of Misalignment of Parallel Beam Optics on Thin Film Stress Analysis; New Developments of Multireflection Grazing Incidence Diffraction; Determination of Stress Profiles in Expanded Austenite by Combining Successive Layer Removal and GI-XRD Stress Gradient Analysis by Noncomplanar x-Ray Diffraction and Corresponding Refraction Correction

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#### Sommario/riassunto

Collection of selected, peer reviewed papers from the 9th European Conference on Residual Stresses, ECRS-9, July 7-10, 2014, Troyes, France. The 157 papers are grouped as follows: Chapter I. Measurement Methods, I.1. Local Scale Measurements, I.2. Diffraction at Grain Scale and Multiscale Diffraction, I.3. Diffraction: Gradients and Instrumental Developments, I.4. Mechanical Relaxation Methods, I.5. Acoustics and Electromagnetics Methods, Chapter II. Manufacturing and Materials Processing, II.1. Welding, II.2. Heat Treatment and Phase Transformation, II.3. Machining and Cold Work, Chapter III.

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