

1. Record Nr.	UNINA990006326130403321
Autore	Blaizot-Hazard, Catherine
Titolo	Les droits de propriete intellectuelle des personnes publiques en droit francais / Catherine Blaizot-Hazard
Pubbl/distr/stampa	Paris : L. G.D.J., 1991
Descrizione fisica	271 p. ; 24 cm
Collana	Bibliothèque de droit public ; 159
Disciplina	351.824
Locazione	FGBC
Collocazione	COLLEZ. 77 (159)
Lingua di pubblicazione	Non definito
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9911019978703321
Titolo	Full-field measurements and identification in solid mechanics / / edited by Michel Grediac, Francois Hild
Pubbl/distr/stampa	Hoboken, N.J., : ISTE Ltd./John Wiley and Sons Inc., 2013
ISBN	9781118578469 1118578465 9781299186606 1299186602 9781118576670 1118576675 9781118578476 1118578473
Descrizione fisica	1 online resource (498 p.)
Collana	Mechanical engineering and solid mechanics series
Altri autori (Persone)	GrediacMichel HildF (Francois)
Disciplina	530.41
Soggetti	Engineering mathematics Measurement

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 and index.
Nota di contenuto	Title Page; Contents; Foreword; Introduction; Chapter 1. Basics of Metrology and Introduction to Techniques; 1.1. Introduction; 1.2. Terminology: international vocabulary of metrology; 1.2.1. Absolute or differential measurement; 1.2.2. Main concepts; 1.3. Spatial aspect; 1.3.1. Spatial frequency; 1.3.2. Spatial filtering; 1.4. Classification of optical measurement techniques; 1.4.1. White light measurement methods; 1.4.2. Interference methods; 1.4.3. Sensitivity vector; 1.4.4. Synthetic sensitivity vectors; 1.4.5. The different types of interferometric measurements 1.4.6. Holography, digital holography1.4.7. Conclusion; 1.5. Bibliography; Chapter 2. Photoelasticity; 2.1. Introduction; 2.2. Concept of light polarization; 2.3. Birefringence phenomenon; 2.4. The law of optico-mechanics; 2.5. Several types of polariscopes; 2.5.1. Plane polariscope; 2.5.2. Circular polariscope; 2.5.3. White light polariscope; 2.5.4. Photoelastic coating; 2.6. Measurement of photoelastic constant C; 2.7. Analysis by image processing; 2.7.1. Using a plane polariscope; 2.7.2. Using a circular polariscope; 2.7.3. Using color images 2.8. Post-processing of photoelastic parameters2.8.1. Drawing of isostatics or stress trajectories; 2.8.2. Particular points; 2.8.3. Stress separation and integration of the equilibrium equations; 2.8.4. Comparison between experimentation and numerical modeling; 2.9. Three-dimensional photoelasticity; 2.9.1. The method of stress freezing and mechanical slicing; 2.9.2. Optical slicing; 2.9.3. Application example; 2.10. Conclusion; 2.11. Bibliography; Chapter 3. Grid Method, Moire and Deflectometry; 3.1. Introduction; 3.2. Principle; 3.3. Surface encoding; 3.4. Moire; 3.5. Phase detection 3.5.1. Global extraction procedure3.5.2. Local phase detection: phase shifting; 3.5.3. Measuring both components of the displacement; 3.6. Sensitivity to out-of-plane displacements; 3.7. Grid defects; 3.8. Large deformation/large strain; 3.8.1. Explicit method; 3.8.2. Implicit method; 3.8.3. Large strain; 3.9. Fringe projection; 3.10. Deflectometry; 3.11. Examples; 3.11.1. Off-axis tensile test of a unidirectional composite coupon; 3.11.2. Rigid body displacement; 3.11.3. SEM measurement; 3.11.4. Characterization of lens distortion; 3.12. Conclusion; 3.13. Bibliography Chapter 4. Digital Holography Methods4.1. Introduction; 4.2. Basics of wave optics; 4.2.1. Light diffraction; 4.2.2. Interference; 4.3. Basics of digital holography; 4.3.1. Recording the hologram; 4.3.2. Numerical reconstruction with the discrete Fresnel transform; 4.3.3. Numerical reconstruction using convolution with adjustable magnification; 4.3.4. Sensitivity vector; 4.4. Basics of digital holographic interferometry; 4.4.1. Phase difference; 4.4.2. Spatial filtering of the phase and phase unwrapping; 4.5. Digital holographic interferometry with spatial multiplexing; 4.5.1. Principle 4.5.2. Theory
Sommario/riassunto	This timely book presents cutting-edge developments by experts in the field on the rapidly developing and scientifically challenging area of full-field measurement techniques used in solid mechanics - including photoelasticity, grid methods, deflectometry, holography, speckle interferometry and digital image correlation. The evaluation of strains and the use of the measurements in subsequent parameter

identification techniques to determine material properties are also presented. Since parametric identification techniques require a close coupling of theoretical models and experimental m
