1. Record Nr. UNINA9910787849003321

Titolo	Phase estimation in optical interferometry / / edited by Pramod Rastogi, EPFL - Swiss Federal Institute of Technology, Lausanne, Switzerland; Erwin Hack, Empa - Swiss Federal Laboratories for Materials Science and Technology, Dubendorf, Switzerla
Pubbl/distr/stampa	Boca Raton : , : CRC Press, , [2015] ©2015
ISBN	0-429-16524-2 1-4665-9831-X
Descrizione fisica	1 online resource (364 p.)
Classificazione	TEC009070TEC019000
Disciplina	535.470287
Soggetti	Interferometry - Mathematics Optical measurements Solids - Optical properties Image analysis
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	Front Cover; Contents; Preface; About the Editors; List of Contributors; Abbreviations; Chapter 1: Fourier Fringe Demodulation; Chapter 2: Windowed Fourier Transforms; Chapter 3: Continuous Wavelet Transforms; Chapter 4: The Spiral Phase Transform; Chapter 5: Regularized Phase Estimation Methods in Interferometry; Chapter 6: Local Polynomial Phase Modeling and Estimation; Chapter 7: Signal-Processing Methods in Phase-Shifting Interferometry; Chapter 8: Phase Unwrapping; Chapter 9: Uncertainty in Phase Measurements; Back Cover
Sommario/riassunto	This tutorial-style book reviews experimental approaches for the analysis of solid mechanics based on interference-optical methods, including coherent-optical techniques and photoelastic methods. Suitable for advanced students, young researchers, and practicing metrologists and engineers, it describes the theory and scope of application in everyday practice. Takes a practical approach, the book familiarizes readers with various techniques and explains how and

when to apply them--