1. Record Nr. UNINA9910139118203321

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Titolo: Acoustic particle velocity measurements using laser : principles, signal processing and applications / / Jean-Christophe Valiere

Pubbl/distr/stampa: London, England ; ; Hoboken, New Jersey : , : ISTE Ltd : , : John Wiley & Sons, , 2014
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ISBN: 1-118-64933-8
1-118-64934-6

Descrizione fisica: 1 online resource (157 p.)

Collana: Focus Series, , 2051-249X

Disciplina: 534.42

Soggetti: Sound - Measurement
Electro-acoustics

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: Cover; Title Page; Contents; Preface; Chapter 1. Summary Of Acoustic Equations; 1.1. Basic equations; 1.1.1. Fluid- and thermodynamics; 1.1.2. Hypothesis of linear acoustics without losses; 1.2. Acoustic equations; 1.2.1. Linear acoustic equations with sources; 1.2.2. Some remarks on acoustic sources; 1.2.3. Without sources; 1.2.4. Acoustic intensity and source power; 1.2.5. Acoustic impedance and border conditions; 1.3. Constants, units and magnitude orders of linear acoustics; 1.4. Acoustic velocity measurement and applications; 1.4.1. Velocity estimation from pressure gradient
1.4.2. Intensity estimation 1.4.3. Application to impedance estimation; 1.5. Beyond linear equations; 1.5.1. Acoustic equations with mean flow; 1.5.2. High acoustic displacement; 1.5.3. Acoustic streaming; 1.6. Bibliography; Chapter 2. Some Topics On Signal Processing; 2.1. Measurement signal; 2.1.1. Random signals; 2.1.2. Statistical averages; 2.1.3. Time averages; 2.1.4. Acoustic signal model; 2.2. Reminder of Fourier analysis tools; 2.2.1. Fourier transform; 2.2.2. Uniform sampling and recovery of signals; 2.2.3. Fourier transform of discrete signals; 2.2.4. Discrete Fourier transform
2.3. Correlations and spectra 2.3.1. Definitions; 2.3.2. Stationary and ergodic process; 2.3.3. Properties of correlation functions and

Sommario/riassunto

This book concerns the presentation of particle velocity measurement for acoustics using lasers, including Laser Doppler Velocimetry (LDV or Anemometry (LDA)) and Particle Imagery Velocimetry (PIV).The objective is first to present the importance of measuring the acoustic velocity, especially when the acoustic equations are nonlinear as well as characterizing the near fields. However, these applications need to use non-invasive sensors. Some optical techniques, initially developed for fluid mechanics, have been adapted to the field of acoustics in recent years. This book summarizes 15