

1. Record Nr.	UNINA9910480076403321
Autore	Tkachenko Nikolai V
Titolo	Optical spectroscopy [[electronic resource]] : methods and instrumentations // Niholai V. Tkachenko
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Elsevier, 2006
ISBN	1-280-62179-6 9786610621798 0-08-046172-7
Descrizione fisica	1 online resource (323 p.)
Disciplina	543.5 543/.5
Soggetti	Optical spectroscopy Optical instruments - Methodology Electronic books.
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; Title page; Copyright; Front matter; Preface; Table of contents; 1 Introduction; Absorption; Light absorption in a bulk medium; Absorption of complex samples; Electronic, vibrational and rotational levels; Wavelength, frequency and energy; Emission; Black body emission; Two level system (Einstein's coefficients); Fluorescence and phosphorescence; Light amplification; Optical spectroscopy; 2 Optics and Optical Devices; Waves; Wave equation; Harmonic waves; Plane waves; Interference; Michelson interferometer; Fabry-Perot interferometer; Interference filters and mirrors; Diffraction Fresnel formulation Fraunhofer diffraction (far field approximation); Diffraction grating; Monochromator; Calculations of optical system (matrix formulation); Geometrical optics approximation; Beam transfer matrix; Imaging and magnification; 3 Lasers for Spectroscopy Applications; Laser active medium; Laser resonators; Resonator with active medium; Resonator bandwidth; Longitudinal modes; Transverse modes; Stable and unstable resonators; Continuous wave lasers; Pulsed lasers; Q-Switched lasers; Mode-locked lasers; Laser amplifiers; Main types of lasers; Nd:YAG lasers; Ion lasers

Excimer lasers; Dye lasers; Ti:sapphire lasers; Semiconductor lasers; Other lasers used in spectroscopy applications; Non-linear optical effect in laser applications; Second harmonic; Third harmonic; Wave mixing; Parametric amplification and generation of the light; 4 Optical measurements; Noise statistics and accuracy of measurements; Systematic error and random noise; Noise statistics; Statistical approach to measurements; Noise sources; Inaccuracy of indirect measurements; Photosensitive devices; Photodetector performance parameters; Photomultiplier tubes; Semiconductor photo-detectors; Other photo-detectors; Measurements of the light power; Measurements of the pulse energy; Measurements of the pulse duration; Direct methods; Autocorrelators (indirect methods); 5 Steady State Absorption Spectroscopy; Measurements of the light absorption spectrum; Spectrophotometer schemes; Single channel scheme; Two channel scheme; Spectrophotometers with array detectors; Main characteristics of spectrophotometers; Spectrum range; Spectrum resolution; Sensitivity and absorption range; Instruments, accessories and applications; Spectrophotometer specifications; Cuvettes for absorption spectroscopy; Application notes and examples; 6 Steady State Emission Spectroscopy; Measurement of the Emission Spectrum; Fluorimeter; Optical Scheme; Use of Array Detectors; Evaluation of the Measured Signal; Spectrum Correction; Quantum yield determination by comparison method; Excitation spectrum; Sensitivity; Wavelength resolution; Samples for emission measurements; Excitation-monitoring schemes; Cuvettes; Effect of the sample absorption; Fluorimeter specifications; Water Raman scattering line as sensitivity test; Commercial Fluorimeters; Emission of molecular monolayer: An example

Sommario/riassunto

Optical Spectroscopy bridges a gap by providing a background on optics while focusing on spectroscopic methodologies, tools and instrumentations. The book introduces the most widely used steady-state and time-resolved spectroscopic techniques, makes comparisons between them, and provides the methodology for estimating the most important characteristics of the techniques such as sensitivity and time resolution. Recent developments in lasers, optics and electronics has had a significant impact on modern optical spectroscopic methods and instrumentations. Combining the newest I

2. Record Nr.	UNISA996466768003316
Autore	Hino Yoshiyuki
Titolo	Functional differential equations with infinite delay // Yoshiyuki Hino, Satoru Murakami, Toshiki Naito
Pubbl/distr/stampa	Berlin ; ; Heidelberg : , : Springer-Verlag, , [1991] ©1991
ISBN	3-540-47388-2
Edizione	[1st ed. 1991.]
Descrizione fisica	1 online resource (X, 318 p.)
Collana	Lecture Notes in Mathematics ; ; 1473
Disciplina	515.75
Soggetti	Functional equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Phase Spaces -- Fundamental theorems -- Stieltjes integrals and linear operators on ? -- General linear systems -- Linear autonomous systems -- Linear periodic systems -- Fading memory spaces and functional differential equations -- Stabilities in perturbed systems and limiting equations -- Existence of periodic solutions and almost periodic solutions.
Sommario/riassunto	In the theory of functional differential equations with infinite delay, there are several ways to choose the space of initial functions (phase space); and diverse (duplicated) theories arise, according to the choice of phase space. To unify the theories, an axiomatic approach has been taken since the 1960's. This book is intended as a guide for the axiomatic approach to the theory of equations with infinite delay and a culmination of the results obtained in this way. It can also be used as a textbook for a graduate course. The prerequisite knowledge is foundations of analysis including linear algebra and functional analysis. It is hoped that the book will prepare students for further study of this area, and that will serve as a ready reference to the researchers in applied analysis and engineering sciences.

3. Record Nr.	UNIORUON00277230
Titolo	Acqua : la civiltà arabo-islamica, il contesto giuridico-politico, gli aspetti tecnici, gestionali e finanziari della cooperazione italo-araba : Atti del Convegno Internazionale 22-23-24 febbraio 2001 / a cura di Anna Maria Di Tolla, Vincenzo Strika
Pubbl/distr/stampa	279 p., : ill. ; 24 cm
Edizione	[Napoli : Università degli Studi di Napoli "L'Orientale"]
Descrizione fisica	Nel Front.: Università degli Studi di Napoli "L'Orientale". Camera di Commercio Italo-Araba
Soggetti	IDROLOGIA - Paesi Arabi - Storia e Cultura - Congressi PAESI ARABI - Politica idrologica - Congressi
Lingua di pubblicazione	Italiano Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia