1. Record Nr. UNINA9910780273503321

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| Titolo | Cities transformed [[electronic resource] ] : demographic change and its implications in the developing world / / Panel on Urban Population Dynamics, Mark R. Montgomery .. [et al.], editors ; Committee on Population, Division of Behavioral and Social Sciences and Education, National Research Council |
| Pubbl/distr/stampa | Washington, D.C., : National Academies Press, 2003 |
| ISBN | 0-309-16805-8<br>0-309-51148-8 |
| Descrizione fisica | 1 online resource (551 p.) |
| Altri autori (Persone) | MontgomeryMark <1953-> |
| Disciplina | 304.6091724 |
| Soggetti | Cities and towns - Developing countries - Growth<br>Demographic transition - Developing countries<br>Developing countries Population |
| 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 Matter""; ""Pravin Visaria (1937-2001)""; ""Acknowledgments""; ""Contents""; ""Executive Summary""; ""1 Introduction""; ""2 Why Location Matters""; ""3 Urban Population Change: A Sketch""; ""4 Urban Population Dynamics: Models, Measures, and Forecasts""; ""5 Diversity and Inequality""; ""6 Fertility and Reproductive Health""; ""7 Mortality and Morbidity: Is City Life Good for Your Health?""; ""8 The Urban Economy Transformed""; ""9 The Challenge of Urban Governance""; ""10 Looking Ahead""; ""References""; ""Appendices""; ""A Concepts and Definitions of Metropolitan Regions""<br>""B Mathematical Derivations""""C Linking DHS Surveys to United Nations City Data""; ""D United Nations Estimates and Projections""; ""E Measuring Relative Poverty with DHS Data""; ""F Recommendations for the Demographic and Health Surveys""; ""Biographical Sketches of Panel Members and Staff""; ""Index""; ""The Committee on Population"" |

2. Record Nr. UNINA9910830892503321

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| Autore | Garcia Sole J (Jose) |
| Titolo | An introduction to the optical spectroscopy of inorganic solids [[electronic resource] /] / J. Garcia Sole, L.E. Bausa, and D. Jaque |
| Pubbl/distr/stampa | Hoboken, NJ, : J. Wiley, c2005 |
| ISBN | 0-470-34187-4<br>0-470-01604-3<br>9786610272297<br>1-280-27229-5<br>0-470-86887-2 |
| Descrizione fisica | 1 online resource (305 p.) |
| Altri autori (Persone) | BausaL. E (Louisa E.)<br>JaqueD (Daniel) |
| Disciplina | 530.4/1<br>530.41<br>543.0858 |
| Soggetti | Solids - Spectra<br>Energy-band theory of solids<br>Solid state chemistry<br>Chemistry, Inorganic<br>Spectrum analysis |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Includes index. |
| Nota di contenuto | An Introduction to the Optical Spectroscopy of Inorganic Solids; Contents; Preface; Acknowledgments; Some Physical Constants of Interest in Spectroscopy; A Periodic Table of the Elements for Optical Spectroscopy; 1 Fundamentals; 1.1 The Origins of Spectroscopy; 1.2 The Electromagnetic Spectrum and Optical Spectroscopy; 1.3 Absorption; 1.3.1 The Absorption Coefficient; 1.3.2 The Measurement of Absorption Spectra: The Spectrophotometer; 1.3.3 Reflectivity; 1.4 Luminescence; 1.4.1 The Measurement of Photoluminescence: The Spectrofluorimeter; 1.4.2 Luminescent Efficiency<br>1.4.3 Stokes and Anti-Stokes Shifts1.4.4 Time-Resolved Luminescence; 1.5 Scattering: The Raman Effect; 1.6 Advanced Topic: The Fourier |

Transform Spectrometer; Exercises; References and Further Reading; 2 Light Sources; 2.1 Introduction; 2.1.1 Thermal Radiation and Planck's Law; 2.2 Lamps; 2.2.1 Tungsten and Quartz Halogen Lamps; 2.2.2 Spectral Lamps; 2.2.3 Fluorescent Lamps; 2.2.4 High-Pressure Discharge Vapor Lamps; 2.2.5 Solid State Lamps; 2.3 The Laser; 2.3.1 Lasers as Light Sources in Spectroscopy; 2.3.2 The Basic Principles of Lasers; 2.3.3 Population Inversion: the Threshold Condition
2.3.4 Pumping Techniques2.3.5 The Resonator; 2.4 Types of Lasers; 2.4.1 The Excimer Laser; 2.4.2 Gas Lasers; 2.4.3 Dye Lasers; 2.4.4 Semiconductor Lasers; 2.4.5 Solid State Lasers; 2.5 The Tunability of Laser Radiation; 2.5.1 Tunable Solid State Lasers; 2.5.2 Tunable Coherent Radiation by Frequency-Mixing Techniques; 2.5.3 Optical Parametric Oscillation and Amplification; 2.6 Advanced Topics: Site Selective Spectroscopy and Excited State Absorption; 2.6.1 Site Selective Spectroscopy; 2.6.2 Excited State Absorption; Exercises; References and Further Reading; 3 Monochromators and Detectors
3.1 Introduction3.2 Monochromators; 3.3 Detectors; 3.3.1 Basic Parameters; 3.3.2 Types of Detectors; 3.4 The Photomultiplier; 3.4.1 The Working Principles of a Photomultiplier; 3.4.2 Noise in Photomultipliers; 3.5 Optimization of the Signal-to-Noise Ratio; 3.5.1 The Averaging Procedure; 3.5.2 The Lock-in Amplifier; 3.5.3 The Photon Counter; 3.5.4 The Optical Multichannel Analyzer; 3.6 Detection of Pulses; 3.6.1 Digital Oscilloscopes; 3.6.2 The Boxcar Integrator; 3.7 Advanced Topics: The Streak Camera and the Autocorrelator; 3.7.1 The Streak Camera; 3.7.2 The Autocorrelator; Exercises
References and Further Reading4 The Optical Transparency of Solids; 4.1 Introduction; 4.2 Optical Magnitudes and the Dielectric Constant; 4.3 The Lorentz Oscillator; 4.4 Metals; 4.4.1 Ideal Metal; 4.4.2 Damping Effects; 4.5 Semiconductors and Insulators; 4.6 The Spectral Shape of the Fundamental Absorption Edge; 4.6.1 The Absorption Edge for Direct Transitions; 4.6.2 The Absorption Edge for Indirect Transitions; 4.7 Excitons; 4.7.1 Weakly Bound (Mott-Wannier) Excitons; 4.7.2 Tightly Bound (Frenkel) Excitons; 4.8 Advanced Topic: The Color of Metals; Exercises; References and Further Reading
5 Optically Active Centers

Sommario/riassunto

This practical guide to spectroscopy and inorganic materials meets the demand from academia and the science community for an introductory text that introduces the different optical spectroscopic techniques, used in many laboratories, for material characterisation.Treats the most basic aspects to be introduced into the field of optical spectroscopy of inorganic materials, enabling a student to interpret simple optical (absorption, reflectivity, emission and scattering) spectraContains simple, illustrative examples and solved exercisesCovers the theory, instrumentat