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Nota di contenuto	Atomic, Molecular, and Optical Physics -- Copyright -- Preface -- Acknowledgments -- Contents -- Summary -- THE NATURE OF THE FIELD -- EDUCATIONAL ROLE -- CONTRIBUTIONS TO NATIONAL PROGRAMS -- RECENT ADVANCES IN BASIC ATOMIC, MOLECULAR, AND OPTICAL SCIENCE -- RESEARCH OPPORTUNITIES -- PRIORITIES OF RESEARCH -- RECOMMENDATIONS -- SUPPORT FOR THE RESEARCH INITIATIVES -- INSTRUMENTATION FOR THE PROGRAM OF RESEARCH INITIATIVES -- THEORY -- ACCESS TO LARGE COMPUTERS -- SPECIAL FACILITIES -- 1 A Program of Research Initiatives -- THE NATURE OF THE FIELD -- ORGANIZATION OF THE REPORT -- INTRODUCTION TO THE RESEARCH INITIATIVES -- INITIATIVE IN ATOMIC PHYSICS --

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National Aeronautics and Space Administration -- 4 Atomic Physics -- ELEMENTARY ATOMIC PHYSICS -- Advances in Quantum Electrodynamics -- Magnetic Moment of the Electron and Positron -- Lamb Shift of Hydrogen -- Muonium and Positronium -- Muonic and Hadronic Atoms -- Time-Reversal Symmetry -- Neutral-Current Parity Violations in Atomic Physics -- Foundations of Quantum Theory: Is Quantum Mechanics Complete? -- Studies of Time and Space -- Future Directions -- ATOMIC STRUCTURE -- Loosely Bound Atomic States -- Atoms in Strong Fields -- Double-Well Atomic Potentials -- Collective Atomic States -- Relativistic and Quantum Electrodynamic Effects in Atoms -- ATOMIC DYNAMICS -- Structure of the Electron Continuum -- Dielectronic Recombination -- Ultraslow Collisions -- Collisions with Rydberg Atoms -- Approximate Conservation Laws -- Toward the Complete Scattering Experiment -- Comparisons of Positron and Electron Scattering -- ACCELERATOR-BASED ATOMIC PHYSICS -- Atomic Coherence and Out-of-Round Atoms -- Quantum Electrodynamics of Highly Charged Systems -- Pair Production in Transient Superheavies -- Inner-Shell Molecular Orbitals and Molecular Orbital X Rays -- Charge Transfer -- Slow-Recoil Ion Production -- Tunable X Rays -- ATOMIC PHYSICS REQUIRING LARGER FACILITIES -- Accelerator-Based Atomic Physics -- Atomic, Molecular, and Optical Physics with Synchrotron Radiation -- 5 Molecular Physics -- THE NEW SPECTROSCOPY -- New Views of Electronic Structure -- Electronic-Structure Theory: Ab Initio Calculations -- Hydrogen-Bonded Molecules -- Vibrational Structure of Polyatomic Molecules -- MOLECULAR PHOTOIONIZATION AND ELECTRON-MOLECULE SCATTERING -- Molecular Photoionization -- Molecular Autoionization Dynamics -- Shape Resonances in Molecular Fields -- Resonant Multiphoton Ionization -- Electron-Molecule Collisions -- MOLECULAR DYNAMICS. State-to-State Chemistry -- Radiative Collisions -- New Ways to Understand The Dynamics of Chemical Reactions -- Variational Transition-State Theory -- Quasi-classical Trajectory Calculations -- Approximate Quantum-Scattering Calculations -- Resonances in a Simple Reaction Complex -- Bond Breaking And "Half-Collisions" -- Reactions at Very Low Temperatures -- SOME NOVEL MOLECULAR SPECIES -- Molecular Ions -- Van Der Waals Molecules -- 6 Optical Physics -- LASERS-THE REVOLUTION CONTINUES -- Excimers and Excimer Lasers -- LASER SPECTROSCOPY -- Ultraprecise Laser

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Sommario/riassunto

The goals of atomic, molecular, and optical physics (AMO physics) are to elucidate the fundamental laws of physics, to understand the structure of matter and how matter evolves at the atomic and molecular levels, to understand light in all its manifestations, and to create new techniques and devices. AMO physics provides theoretical and experimental methods and essential data to neighboring areas of science such as chemistry, astrophysics, condensed-matter physics, plasma physics, surface science, biology, and medicine. It contributes to the national security system and to the nation's programs in fusion, directed energy, and materials research. Lasers and advanced technologies such as optical processing and laser isotope separation have been made possible by discoveries in AMO physics, and the research underlies new industries such as fiber-optics communications and laser-assisted manufacturing. These developments are expected to help the nation to maintain its industrial competitiveness and its military strength in the years to come. This report describes the field, characterizes recent advances, and identifies current frontiers of research.

2. Record Nr.	UNINA9910968733503321
Titolo	Chemical dependency and intimacy dysfunction / / Eli Coleman, editor
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Altri autori (Persone)	ColemanEli
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chemical dependency and intimacy dysfunction : inextricably bound / Eli Coleman -- Child physical and sexual abuse among chemically dependent individuals / Eli Coleman -- Marital and relationship problems among chemically dependent and codependent relationships / Eli Coleman -- Shame, intimacy, and sexuality / Jeffrey A. Brown -- Assessment of boundary inadequacy in chemically dependent individuals and families / Philip Colgan -- Women, sexuality and the process of recovery / Susan Schaefer, Sue Evans -- Sexual orientation concerns among chemically dependent individuals / Susan Schaefer, Sue Evans, Eli Coleman -- Incest and chemically dependent women : treatment implications / Sue Evans, Susan Schaefer -- Identifying the male chemically dependent sex offender and a description of treatment methods / Margretta Dwyer -- Sexual compulsivity : definition, etiology, and treatment considerations / Eli Coleman -- Treatment of

dependency disorders in men : toward a balance of identity and intimacy / Philip Colgan -- Treating intimacy dysfunctions in dyadic relationships among chemically dependent and codependent clients / Sondra Smalley, Eli Coleman -- Toward a healthy sexual lifestyle post chemical dependency treatment / Sandra L. Nohre -- Intimacy, aging and chemical dependency / John Brantner.

Sommario/riassunto

The failure to deal with social-sexual issues may impair the progress of recovery in a chemically dependent individual and his or her family. The failure to deal with sexual compulsivity in intravenous drug abusers may seriously impair our ability to deal with AIDS. The failure to deal with chemical dependence may render family therapy ineffective in the treatment of sex offenders. Despite the connection between chemical dependency and intimacy dysfunction, the intimacy concerns are rarely recognized in the diagnosis, treatment, and aftercare of the chemically dependent person and his or family. In this pioneering work, experts in the fields of chemical dependence and human sexuality provide professionals with information and skills to deal with intimacy dysfunction issues--offering hope for improving treatment and rehabilitation of chemically dependent individuals and their families. Typical intimacy dysfunctions are explored, as well as treatment methods and strategies that have proven to be effective. A valuable resource guide, this comprehensive volume addresses the key issues in the multidisciplinary approach to the study of chemical dependency and intimacy dysfunction.
